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ACADEMIC CALENDAR

University of Alaska Fairbanks Academic Calendar 2022-2023

The academic calendar contains important dates and deadlines for students, staff and faculty.

View the 2021-2022 academic calendar (p. 11).

FALL SEMESTER 2022

| | |
|--|--------------------------------|
| Deadline to apply for admission for fall semester (international students) | Tuesday, March 1 |
| Fall 2022 course list available at UAOnline | Monday, March 21 |
| Begin fall 2022 priority registration (UAF degree students) | Monday, April 4 |
| Begin fall 2022 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, April 18 |
| Deadline to apply for admission for fall semester (UA Scholars) | Sunday, May 1 |
| Deadline to apply for admission for fall semester (most graduate students; some programs have different deadlines) | Wednesday, June 1 |
| Deadline to apply for admission for fall semester (undergraduate students) | Wednesday, June 15 |
| Financial aid is disbursed | Friday, Aug. 19 |
| Residence halls open to first-year students only, 8 a.m. | Wednesday, Aug. 24 |
| Residence halls open to all students, 8 a.m. | Thursday, Aug. 25 |
| Orientation for new students | Wednesday-Saturday, Aug. 24-27 |
| First day of instruction; late registration begins | Monday, Aug. 29 |
| Labor Day (offices closed — no classes, registration or fee payment) | Monday, Sept. 5 |
| Deadline for adding classes and late registration; 5 p.m. in person, midnight at UAOnline | Friday, Sept. 9 |
| Last day for student- and faculty-initiated drops with refund (course does not appear on academic record) | Friday, Sept. 9 |
| Deadline for tuition and fee payment; 5 p.m. in person, midnight at UAOnline | Friday, Sept. 9 |
| Midterm grades due | Monday, Oct. 10 |
| Deadline to apply for fall 2022 graduation | Saturday, Oct. 15 |
| Spring 2023 course list available at UAOnline | Monday, Oct. 31 |
| Last day for student- and faculty-initiated withdrawals (W grade appears on academic transcript) | Friday, Nov. 4 |
| Begin spring 2023 priority registration (UAF degree students) | Monday, Nov. 14 |
| Thanksgiving break (no classes, most offices closed) | Wednesday-Sunday, Nov. 23-27 |
| Begin spring 2023 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, Nov. 28 |
| Last day of instruction | Saturday, Dec. 10 |
| Final examinations | Monday-Saturday, Dec. 12-17 |
| Residence halls close, noon | Sunday, Dec. 18 |
| Deadline for faculty to post grades, noon | Wednesday, Dec. 21 |
| Winter break (no classes, most offices closed; reopen Tuesday, Jan. 3, at 8 a.m.) | Friday, Dec. 23-Monday, Jan. 2 |

SPRING SEMESTER 2023

| | |
|--|-------------------|
| Deadline to apply for admission for spring semester (international students) | Thursday, Sept. 1 |
| Deadline to apply for admission for spring semester (most graduate students; some programs have different deadlines) | Saturday, Oct. 15 |
| Spring 2023 course list available at UAOnline | Monday, Oct. 31 |
| Deadline to apply for admission for spring semester (undergraduate students) | Tuesday, Nov. 1 |
| Begin spring 2023 priority registration (UAF degree students) | Monday, Nov. 14 |
| Begin spring 2023 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, Nov. 28 |
| Financial aid is disbursed | Saturday, Jan. 7 |
| Residence halls open, 8 a.m. | Friday, Jan. 13 |
| Orientation for new students | Friday, Jan. 13 |
| Alaska Civil Rights Day (no classes, most offices closed) | Monday, Jan. 16 |
| First day of instruction; late registration begins | Tuesday, Jan. 17 |

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| Deadline for adding classes and late registration; 5 p.m. in person, midnight at UAOnline | Friday, Jan. 27 |
| Last day for student- and faculty-initiated drops with refund (course does not appear on academic record) | Friday, Jan. 27 |
| Deadline for tuition and fee payment; 5 p.m. in person, midnight at UAOnline | Friday, Jan. 27 |
| Deadline to apply for spring 2023 graduation | Wednesday, Feb. 1 |
| Deadline for UA Foundation and privately funded scholarship applications | Wednesday, Feb. 15 |
| Midterm grades due | Monday, Feb. 20 |
| Spring break (no classes) | Monday-Friday, March 13-17 |
| University holiday (most offices closed for spring break) | Friday, March 17 |
| Fall 2023 course list available at UAOnline | Monday, March 20 |
| Last day for student- and faculty-initiated withdrawals (W grade appears on academic transcript) | Friday, March 31 |
| Begin fall 2023 priority registration (UAF degree students) | Monday, April 3 |
| Begin fall 2023 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, April 17 |
| Last day of instruction | Monday, May 1 |
| Final examinations | Tuesday-Friday, May 2-5 |
| Commencement | Saturday, May 6 |
| Residence halls close, noon | Sunday, May 7 |
| Deadline for faculty to post grades, noon | Wednesday, May 10 |

SUMMER SEMESTER 2023

| | |
|---|--------------------------|
| Summer 2023 course list available at UAOnline | Monday, Feb. 6 |
| Begin summer 2023 priority registration (UAF degree students) | Monday, Feb. 13 |
| Begin summer 2023 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, Feb. 27 |
| Deadline to apply for admission for summer semester | Monday, May 1 |
| Financial aid is disbursed | Friday, May 12 |
| First day of instruction for six-week session I and full session | Monday, May 22 |
| Deadline for adding classes and late registration for six-week session I; 5 p.m. in person, midnight at UAOnline | Friday, May 26 |
| Last day for student- and faculty-initiated drops with refund for six-week session I (course does not appear on academic record) | Friday, May 26 |
| Deadline for tuition and fee payment for six-week session I; 5 p.m. in person, midnight at UAOnline | Friday, May 26 |
| Memorial Day (no classes, most offices closed) | Monday, May 29 |
| Deadline for adding classes and late registration for full session; 5 p.m. in person, midnight at UAOnline | Friday, June 2 |
| Last day for student- and faculty-initiated drops with refund for full session I (course does not appear on academic record) | Friday, June 2 |
| Deadline for tuition and fee payment for full session; 5 p.m. in person, midnight at UAOnline | Friday, June 2 |
| Last day for student- and faculty-initiated withdrawals for six-week session I (W grade appears on academic transcript) | Friday, June 9 |
| Last day of instruction for six-week session I | Friday, June 30 |
| Independence Day holiday (no classes, most offices closed) | Monday-Tuesday, July 3-4 |
| First day of instruction for six-week session II | Wednesday, July 5 |
| Deadline for adding classes and late registration for six-week session II; 5 p.m. in person, midnight at UAOnline | Tuesday, July 11 |
| Last day for student- and faculty-initiated drops with refund for six-week session II (course does not appear on academic record) | Tuesday, July 11 |
| Deadline for tuition and fee payment for six-week session II; 5 p.m. in person, midnight at UAOnline | Tuesday, July 11 |
| Deadline for registration and payment for thesis and research credits (graduate students) | Tuesday, July 11 |
| Last day for student- and faculty-initiated withdrawals for full session (W grade appears on academic transcript) | Friday, July 14 |
| Deadline to apply for summer 2023 graduation | Saturday, July 15 |
| Last day for student- and faculty-initiated withdrawals for six-week session II (W grade appears on academic transcript) | Friday, July 28 |
| Last day of instruction for six-week session II and full session, including final exams | Friday, Aug. 11 |
| Deadline for faculty to post grades, noon | Wednesday, Aug. 16 |

Academic Calendar 2021-2022

Fairbanks Campus Academic Calendar 2021-2022

This academic calendar lists important dates and deadlines for the Fairbanks campus of the University of Alaska Fairbanks. For academic calendar information for UAF's community campuses, contact the campuses directly or visit the Campuses webpage (<https://uaf.edu/uaf/about/campuses/>).

View the 2020-2021 academic calendar (<https://catalog.uaf.edu/archives/2020-2021/calendar/>) or the 2022-2023 academic calendar (p. 9).

AUGUSTMESTER AND FALL SEMESTER 2021

| | |
|--|----------------------------------|
| Deadline to apply for admission for fall semester (international students) | Monday, March 1 |
| Fall 2021 course list available at UAOnline | Monday, March 22 |
| Begin AUGUSTmester and fall 2021 priority registration (UAF degree students) | Monday, April 5 |
| Begin AUGUSTmester and fall 2021 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, April 19 |
| Deadline to apply for admission for fall semester (UA Scholars) | Saturday, May 1 |
| Deadline to apply for admission for fall semester (most graduate students; some programs have different deadlines) | Tuesday, June 1 |
| Deadline to apply for admission for fall semester (undergraduate students) | Tuesday, June 15 |
| AUGUSTmester courses begin; attendance required | Monday, Aug. 9 |
| Deadline for adding AUGUSTmester classes; 5 p.m. in person, midnight at UAOnline | Monday, Aug. 9 |
| Deadline for AUGUSTmester tuition and fee payment and refunds; 5 p.m. in person, midnight at UAOnline | Monday, Aug. 9 |
| Late payment fees begin for AUGUSTmester | Tuesday, Aug. 10 |
| Financial aid is disbursed | Friday, Aug. 13 |
| Deadline for AUGUSTmester student- and faculty-initiated withdrawals (W grade appears on academic transcript) | Monday, Aug. 16 |
| Residence halls open to first-year students only, 8 a.m. | Wednesday, Aug. 18 |
| Residence halls open to all students, 8 a.m. | Thursday, Aug. 19 |
| Orientation for new students | Wednesday-Saturday, Aug. 18-21 |
| Last day of AUGUSTmester instruction and finals | Friday, Aug. 20 |
| First day of instruction; late registration begins | Monday, Aug. 23 |
| Deadline for faculty to post AUGUSTmester grades, noon | Wednesday, Aug. 25 |
| Deadline for adding classes and late registration; 5 p.m. in person, midnight at UAOnline | Friday, Sept. 3 |
| Last day for student- and faculty-initiated drops with refund (course does not appear on academic record) | Friday, Sept. 3 |
| Deadline for tuition and fee payment; 5 p.m. in person, midnight at UAOnline | Friday, Sept. 3 |
| Labor Day (offices closed — no classes, registration or fee payment) | Monday, Sept. 6 |
| Early progress reports due | Monday, Oct. 4 |
| Deadline to apply for fall 2021 graduation | Friday, Oct. 15 |
| Spring 2022 course list available at UAOnline | Monday, Oct. 25 |
| Last day for student- and faculty-initiated withdrawals (W grade appears on academic transcript) | Friday, Oct. 29 |
| Begin spring 2022 priority registration (UAF degree students) | Monday, Nov. 8 |
| Begin spring 2022 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, Nov. 22 |
| Thanksgiving break (no classes, most offices closed) | Wednesday-Sunday, Nov. 24-28 |
| Last day of instruction | Saturday, Dec. 4 |
| Final examinations | Monday-Saturday, Dec. 6-11 |
| Residence halls close, noon | Sunday, Dec. 12 |
| Deadline for faculty to post grades, noon | Wednesday, Dec. 15 |
| Winter break (no classes, most offices closed; reopen Monday, Jan. 3, at 8 a.m.) | Thursday, Dec. 23-Sunday, Jan. 2 |

SPRING SEMESTER 2022

| | |
|--|--------------------|
| Deadline to apply for admission for spring semester (international students) | Wednesday, Sept. 1 |
| Deadline to apply for admission for spring semester (most graduate students; some programs have different deadlines) | Friday, Oct. 15 |
| Spring 2022 course list available at UAOnline | Monday, Oct. 25 |

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|---|-------------------------------|
| Deadline to apply for admission for spring semester (undergraduate students) | Monday, Nov. 1 |
| Begin spring 2022 priority registration (UAF degree students) | Monday, Nov. 8 |
| Begin spring 2022 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, Nov. 22 |
| Financial aid is disbursed | Monday, Jan. 3 |
| Residence halls open, 8 a.m. | Friday, Jan. 7 |
| Orientation for new students | Friday, Jan. 7 |
| First day of instruction; late registration begins | Monday, Jan. 10 |
| Alaska Civil Rights Day (no classes, most offices closed) | Monday, Jan. 17 |
| Deadline for adding classes and late registration; 5 p.m. in person, midnight at UAOnline | Friday, Jan. 21 |
| Last day for student- and faculty-initiated drops with refund (course does not appear on academic record) | Friday, Jan. 21 |
| Deadline for tuition and fee payment; 5 p.m. in person, midnight at UAOnline | Friday, Jan. 21 |
| Deadline to apply for spring 2022 graduation | Tuesday, Feb. 1 |
| Deadline for UA Foundation and privately funded scholarship applications | Tuesday, Feb. 15 |
| Early progress reports due | Monday, Feb. 21 |
| Spring break (no classes) | Monday-Friday, March 7-11 |
| University holiday (most offices closed for spring break) | Friday, March 11 |
| Fall 2022 course list available at UAOnline | Monday, March 21 |
| Last day for student- and faculty-initiated withdrawals (W grade appears on academic transcript) | Friday, March 25 |
| Begin fall 2022 priority registration (UAF degree students) | Monday, April 4 |
| Begin fall 2022 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, April 18 |
| Last day of instruction | Monday, April 25 |
| Final examinations | Tuesday-Saturday, April 26-30 |
| Commencement | Saturday, April 30 |
| Residence halls close, noon | Sunday, May 1 |
| Deadline for faculty to post grades, noon | Wednesday, May 4 |

SUMMER SEMESTER 2022

| | |
|---|-------------------------------------|
| Summer 2022 course list available at UAOnline | Monday, Feb. 7 REVISED DATE |
| Begin summer 2022 priority registration (UAF degree students) | Monday, Feb. 14 REVISED DATE |
| Begin summer 2022 open registration (all UAF, UAA and UAS students, including nondegree students) | Monday, Feb. 28 REVISED DATE |
| Deadline to apply for admission for summer semester | Sunday, May 1 |
| Financial aid is disbursed | Tuesday, May 10 |
| First day of instruction for six-week session I and full session | Monday, May 16 |
| Deadline to register for six-week session I; attendance required on this day | Friday, May 20 |
| Deadline for refund of tuition and fees for six-week session I | Friday, May 20 |
| Late payment fees begin for six-week session I | Saturday, May 21 |
| Deadline to register for full session; attendance required | Friday, May 27 |
| Deadline for refund of tuition and fees for full session | Friday, May 27 |
| Late payment fees begin for full session | Saturday, May 28 |
| Memorial Day (no classes, most offices closed) | Monday, May 30 |
| Last day for student- and faculty-initiated withdrawals for six-week session I (W grade appears on academic transcript) | Friday, June 10 |
| Last day of instruction for six-week session I | Friday, June 24 |
| First day of instruction for six-week session II | Monday, June 27 |
| Deadline to register for six-week session II; attendance required on this day | Friday, July 1 |
| Last day for refund of tuition and fees for six-week session II | Friday, July 1 |
| Last day for registration. Deadline for thesis and research credit payment (graduate students). | Friday, July 1 |
| Independence Day holiday (no classes, most offices closed) | Monday-Tuesday, July 4-5 |
| Late payment fees begin for six-week session II | Wednesday, July 6 |
| Last day for student- and faculty-initiated withdrawals for full session (W grade appears on academic transcript) | Friday, July 8 |

| | |
|--|--------------------|
| Deadline to apply for summer 2022 graduation | Friday, July 15 |
| Last day for student- and faculty-initiated withdrawals for six-week session II (W grade appears on academic transcript) | Friday, July 22 |
| Last day of instruction for six-week session II and full session, including final exams | Friday, Aug. 5 |
| Deadline for faculty to post grades, noon | Wednesday, Aug. 10 |

WELCOME

The catalog is a complete guide to studying at the University of Alaska Fairbanks. The catalog includes the academic calendar, information on admission and graduation requirements, and program and course listings for occupational endorsement, certificate, associate, bachelor's, graduate certificate, graduate licensure, master's and Ph.D. degree students.

The catalog is updated each academic year to reflect changes in academic rules and degree requirements. If you are looking for a different academic year than the one listed above, view our archived catalogs (<http://catalog.uaf.edu/archives/>).

OVERVIEW

The catalog is a complete guide to studying at the University of Alaska Fairbanks. The catalog includes the academic calendar, information on admission and graduation requirements, and program and course listings for occupational endorsement, certificate, associate, bachelor's, graduate certificate, graduate licensure, master's and Ph.D. degree students.

The catalog is updated each academic year to reflect changes in academic rules and degree requirements. If you are looking for a different academic year than the one listed above, view our archived catalogs (<http://catalog.uaf.edu/archives/>).

Programs approved after this catalog was published are available in the addendum (p. 15). Students enrolling for the first time should also refer to the registration guide (<https://www.uaf.edu/handbook/register/>). Search for courses available for registration using the UAOnline class schedule search tool (https://uaonline.alaska.edu/banprod/owa/bwck2sch.p_disp_dyn_sched/). For a schedule of classes at any of UAF's community campuses, contact the campus directly. Addresses and phone numbers of campuses and UAF offices can be found using the People Directory (<https://people.alaska.edu/>).

Accreditation

UAF is accredited by the Northwest Commission on Colleges and Universities (<https://www.nwccu.org/>). Additionally it has the following specialized accreditations, certifications and standards:

- AACSB International
- ABET – Engineering Accreditation Commission
- ABET – Computing Accreditation Commission
- Alaska Police Standards Council
- American Alliance of Museums
- American Bar Association
- American Chemical Society
- Automotive Service Excellence Education Foundation
- Commission on Accreditation of Allied Health Education Programs: Medical Assistant and Paramedic Program
- Council for Accreditation of Counseling and Related Educational Programs
- Council for the Accreditation of Educator Preparation
- Council on Social Work Education
- Federal Aviation Administration
- National Association for the Education of Young Children
- North American Process Technology Alliance

Catalog Addendum

There are no catalog addenda at this time.

Campuses

All UAF campuses are tobacco-free as of Dec. 31, 2015.

Fairbanks Campus

The 2,250-acre Fairbanks campus (also known as the Troth Yeddha' (p. 17) campus) offers limitless opportunities for activity and recreation. The main campus has two lakes and 26 miles of trails as well as a major student recreation complex for indoor sports. Facilities are available for basketball, volleyball, badminton, tennis, calisthenics, dance, gymnastics, judo and karate. There are rifle and pistol ranges; courts for handball, racquetball and squash; a jogging track; a swimming pool; weight training and modern fitness equipment areas; an ice arena for recreational skating and hockey; a special aerobics area; a two-story indoor climbing wall; and an outdoor climbing tower covered with ice in the winter. UAF sponsors intercollegiate athletic teams in men's and women's basketball, men's and women's cross-country running and skiing, coed rifle, men's ice hockey and women's volleyball and swimming.

The Wood Center is the focus of many extracurricular activities. With a pub, dining facilities, meeting rooms, lounge and games area, the Wood Center is a gathering place for the entire university community.

UAF has some of the best facilities in the state. Performances are scheduled almost every weekend during the academic year in Davis Concert Hall or Salisbury Theatre. The Rasmuson Library, Alaska's largest library, offers extensive resource materials in print and online. An array of computer databases provides access to hundreds of academic journals, and internet connections allow students at remote rural sites to use library resources. The UA Museum of the North is not only one of the top visitor attractions in the state but also a resource for students. Its vast collections are used for demonstration and comparative studies in classrooms and labs.

The Fairbanks campus is the statewide university system's principal research center. Internationally respected institutes provide students with an opportunity to see science in action and participate in research activities.

FAIRBANKS AREA

Fairbanks, Alaska's second-largest city, sits on the banks of the Chena River in the heart of Alaska. The downtown district is easily accessible via the local bus system and a network of bike trails. The city is steeped in a history of riverboat captains and gold seekers. Its character has been shaped by a large military presence, construction of the trans-Alaska oil pipeline and the continuing oil economy, and a thriving university. It is a city where old quietly blends with new. Striking modern buildings sit side-by-side with log cabins built in the early part of the last century.

With an area population of some 97,000, Fairbanks offers the conveniences of a big city, yet millions of acres of rolling hills and spectacular Alaska panoramas are only minutes away. Whether the sport is canoeing, climbing, running, dog mushing, skiing or fishing, nowhere else compares with Alaska. Denali (Koyukon Athabascan for "The High One"), the tallest mountain in North America, is often visible from many UAF residence hall windows.

TRANSPORTATION TO FAIRBANKS

Fairbanks is easily accessible by land or air. Anchorage is 365 miles away via the Parks Highway or the Alaska Railroad, and Seattle is 2,300 miles away via the Alaska Highway. Major airlines offer several daily flights between Fairbanks and Anchorage, Seattle and many other destinations.

The Alaska Railroad provides a special one-way fare between Anchorage and Fairbanks for all full-time UAF students in summer or regular sessions. Students must ask for the special rate when making reservations and present their student ID to the ticket agent at check-in. For reservations, contact the Alaska Railroad at 907-458-6025 or 800-544-0552.

ECAMPUS

Since 1963, UAF has been a leader in offering distance courses and programs for students throughout Alaska and the world. eCampus offers more than 350 courses in 60 disciplines. Additionally, eCampus offers full degrees and certificates completely online. Internet-based courses let students increase their educational opportunities, further their education and earn their degree without the constraint of classroom attendance. eCampus courses are academically rigorous, meet during regular semesters and count toward degree and program requirements.

For more information, contact eCampus (<https://ecampus.uaf.edu>) in the Bunnell Building on the Fairbanks campus, by phone at 800-277-8060 or 907-455-2087, and via email at uaf-ecampus@alaska.edu.

Community Campuses

In addition to the Fairbanks campus, UAF has community and rural campuses in downtown Fairbanks, Bethel, Dillingham, Kotzebue and Nome, and maintains six community centers through its Interior Alaska Campus in Fairbanks. These branches are central to fulfilling the UAF mission of providing educational opportunities throughout the state. Credits earned at any UAF campus or center are recognized at all UAF campuses, meaning that students may change campuses and transfer all UA credits.

BRISTOL BAY CAMPUS IN DILLINGHAM

The Bristol Bay Campus serves 32 rural communities in the Bristol Bay region within a 55,000-square-mile area. The campus includes 12 coastal communities served by the Aleutian-Pribilof outreach center in Unalaska/Dutch Harbor: the Aleutian archipelago, lower Alaska Peninsula, the Shumagin Islands, and the Pribilof Islands. The campus' administrative center is in Dillingham (about 322 air miles from Anchorage and 570 air miles from Fairbanks), with centers in King Salmon, Togiak and New Stuyahok. Enrollment at Bristol Bay Campus ranges from 500 to 800 students each semester. The campus offers an Associate of Arts degree in general studies and Associate of Applied Science degrees in allied health, applied business, applied accounting, community health, early childhood education, human services, information technology, interdisciplinary studies and renewable resources. Bachelor's degree programs include elementary education, interdisciplinary studies, rural development and social work. Master's degrees are offered in rural development and education. Other programs include Adult Basic Education, providing adult basic education through high school-level instruction for Bristol Bay adults, and the Marine Advisory Program.

The Bristol Bay Campus also provides educational opportunities for communities in its service area, including vocational-technical, community interest and graduate courses. Classes are offered by distance delivery (audio conference, video conference, correspondence

or Internet) and by instructors using traditional methods. For more information, visit the Bristol Bay Campus website (<https://www.uaf.edu/bbc/>).

CHUKCHI CAMPUS IN KOTZEBUE

The Chukchi Campus is located 26 miles north of the Arctic Circle on the shores of the Chukchi Sea. The campus serves Kotzebue and 10 villages in a region of more than 36,000 square miles. Chukchi offers Associate of Arts as well as Associate of Applied Science degrees, and courses leading to baccalaureate degrees in education, rural development and social work. Courses are offered by local instructors and through the College of Rural and Community Development audio-conferencing and live internet instructional systems. For more information, visit the Chukchi Campus website (<https://www.uaf.edu/chukchi/>).

COMMUNITY AND TECHNICAL COLLEGE IN FAIRBANKS

The Community and Technical College is a comprehensive community college serving students in Fairbanks and outlying areas across the state of Alaska. Its core purpose is to provide community-driven education to meet needs for workforce development, academic preparation and lifelong learning. CTC helps prepare Alaskans for Alaska's jobs.

CTC offers more than 40 certificate and degree programs through nine different locations throughout Fairbanks and the surrounding area.

CTC's downtown location (604 Barnette St.) provides a one-stop shop that enables students to take care of all of their university-related needs in one convenient location. Services include academic and financial aid advising, support to register and pay for courses, and placement testing. Students can even obtain parking passes and their student IDs. CTC's downtown location also contains a tutoring and learning center, open computer labs, and specialized classrooms and labs to support programs in health care, business, cybersecurity and IT support, construction management, early childhood education, and paralegal studies.

CTC provides services and education through eight other locations, several of which are specialized facilities equipped with industry-specific equipment and technology to support workforce and hands-on education programs such as culinary arts; EMS/paramedicine; firefighting; law enforcement; oil, gas and mining process technologies; automotive; diesel/heavy equipment; aviation maintenance; and welding.

- Aviation Maintenance Program Hangar: 3504 University Ave. South
- Bunnell House Early Childhood Lab School: 1793 Chatanika Dr.
- Fairbanks Pipeline Training Center: 3600 Cartwright Ct.
- Hutchison Institute of Technology: 3750 Geist Rd.
- University Park Building: 1000 University Ave.
- Offices on Fort Wainwright and Eielson Air Force Base
- Partnership office at Delta Career Advancement Center in Delta Junction

For more information, contact CTC at 907-455-2800 or visit the CTC website (<https://www.ctc.uaf.edu>).

INTERIOR ALASKA CAMPUS

The Interior Alaska Campus in Fairbanks serves 46 communities and villages in the Doyon and Tanana Chiefs Conference regions throughout the interior of Alaska, an area about the size of France. The Interior Alaska Campus is the most decentralized of the UAF campuses. Although the director's office and some faculty are located in Fairbanks, there are Interior Alaska Campus staff in Anchorage, Fort Yukon, Kenai Peninsula and Tok. Courses are offered online and by audio conference, on site by

local or visiting instructors, and via intensive sessions in Fairbanks and Anchorage. The campus offers a range of degree programs, including occupational endorsements, certificates, and Associate of Arts and Associate of Applied Science degrees. Math and English tutors are available for all students taking courses through the campus. For more information, visit the Interior Alaska Campus website (<https://www.uaf.edu/iac/>).

KUSKOKWIM CAMPUS IN BETHEL

The Kuskokwim Campus is located in Bethel and serves approximately 25,000 people in the Yukon-Kuskokwim Delta, which includes 47 remote Alaska Native Yup'ik and Cup'ik Eskimo and Athabascan villages with 56 tribes in a 57,000-square-mile-area the size of Illinois. Bethel is a community of about 6,000 people 80 miles inland on the Kuskokwim River. KuC also operates one remote learning center based in Hooper Bay, a Yup'ik Eskimo community of 1,000 on the Bering Sea coast. KuC offers academic, vocational and community-interest courses, as well as courses leading to associate, baccalaureate and master's degrees, including a Bachelor of Arts degree in Yup'ik language and culture, the home language of many families in the region. The Emerging Scholars Program assists all full-time freshmen in the transition to college, both academically and socially, and in the completion of certificates and degrees. Students may attend classes on campus and through distance delivery. Housing on campus is available in Sackett Hall, which provides suites with space for four students in each. For more information, visit the Kuskokwim Campus website (<https://www.uaf.edu/bethel/>).

NORTHWEST CAMPUS IN NOME

Northwest Campus is located in Nome, a community of 3,500 that is the service hub for the 15 villages of the Bering Strait region. This 44,000-square-mile region extends from Shishmaref on the northern edge of the Seward Peninsula to Stebbins on the southern rim of Norton Sound. It includes communities on St. Lawrence and Little Diomed islands. The area contains 570 miles of coastline, which includes all of Norton Sound and portions of the Bering and Chukchi seas.

The Northwest Campus serves a total population of nearly 10,000. Certificates and associate, bachelor's and master's degrees are offered to the region's residents, with courses taught both traditionally and by distance delivery. The campus responds to vocational, business development, cultural preservation and academic needs of the Bering Strait region. Many courses, programs and degrees are offered in cooperation with regional health and tribal organizations, school districts and corporations. Northwest Campus offers the high-latitude range management certificate program supporting reindeer herding and husbandry. For more information, visit the Northwest Campus website (<https://www.uaf.edu/nwc/>) or NWC on Facebook (<http://www.facebook.com/UAF.NWC/>).

Troth Yeddha'

In February 2013 the U.S. Board on Geographic Names officially recognized Troth Yeddha' as the name of the ridge on which the Fairbanks campus sits. In the Lower Tanana Athabascan language, this name means "Indian potato ridge" and refers to the plant with an edible root — *Hedysarum alpinum* — that is a traditional food for Native people throughout Alaska.

The Athabascan, or Dene, languages have ancient ties to the Tanana Valley. Athabascan geographic names are functional, rule-driven and shared across neighboring languages. Numerous Tanana Valley

Athabascan experts have shared the Troth Yeddha' place name with pride.

In 1994, the late Chief Peter John of Minto said Athabascan people long ago would gather on Troth Yeddha' to talk and advise one another. When they learned this place would be used for a university, he said, they decided that the school would carry on a traditional use of this hill — a place for thinking and working together.

In recent years, numerous facts about the Chena Athabascans of Troth Yeddha' have been assembled. Until the 1840s, a small village was located near a pond at the base of the ridge, where the UAF Physical Plant building is now. Athabascan place names for the nearby lakes and streams, some of which incorporate the ridge's name, have also been identified.

UAF celebrates and honors the historical place of Alaska's first peoples. In 2008, the UA Board of Regents set aside seven acres next to the UA Museum of the North as Troth Yeddha' Park. The park is a venue to recognize the rich cultures of Alaska Natives and their presence on the Fairbanks campus.

For more information visit the Troth Yeddha' initiative website (<https://www.uaf.edu/trothyeddha/>).

Colleges and Schools

UAF colleges and schools offer programs leading to occupational endorsements, certificates and associate, bachelor's and master's degrees in the arts, sciences and professions. Doctoral programs are available in areas of particular strength, such as sciences and mathematics.

Business and Security Management

The College of Business and Security Management is a global learning community where innovation in teaching, discovery and service prepares students for professional success that benefits our community, the state of Alaska and the nation. The college's programs include bachelor's degrees in accounting, applied management, business administration, homeland security and emergency management, and sport and recreation business, as well as 10 undergraduate minors and an occupational endorsement in homeland security. An undergraduate postbaccalaureate certificate in accounting is available. Graduate degrees include a Master of Business Administration, a Master of Security and Disaster Management, and a Ph.D. in natural resources and sustainability. The college offers five graduate-level certificates in the field of homeland security and emergency management. The Army Reserve Officers' Training Corps program is housed within the college.

The College of Business and Security Management is accredited by the Association to Advance Collegiate Schools of Business International and is one of only approximately 1.5% of schools worldwide with an additional specialized accreditation in accounting.

Going beyond the classroom, CBSM embraces experiential learning by encouraging students to be active participants in their education through involvement in student organizations, paid internships and events.

For more information, visit the CBSM website (<https://www.uaf.edu/cbsm/>) or call 907-474-7461.

Community and Technical College

The Community and Technical College fulfills UAF's community college mission in the greater Fairbanks and outlying area by offering high-quality certificate, degree and specialized training programs. Its core purpose is to provide community-driven education to meet needs for workforce development, academic preparation and lifelong learning. CTC helps prepare Alaskans for Alaska's jobs.

CTC offers more than 40 certificate and degree programs that prepare students for high-demand careers in health care; business; cybersecurity and IT support; construction management; culinary arts; early childhood education; EMS/paramedicine; firefighting; law enforcement; paralegal studies; oil, gas and mining process technologies; automotive; diesel/heavy equipment; aviation maintenance; and welding.

CTC benefits from strong partnerships with local employers in business, industry and organized labor. Many CTC faculty come from active workplace settings, ensuring that CTC students learn from people at the forefront of their professions.

Many CTC classes are held during evenings or weekends; the college also offers a growing array of courses online. CTC specializes in meeting the needs of nontraditional students who have been away from college or whose work and family obligations make full-time student status

challenging, as well as traditional students entering college for the first time.

CTC programs are delivered at nine different locations throughout the Fairbanks and surrounding area. CTC's downtown location (604 Barnette St.) provides a one-stop shop that enables students to take care of all of their university-related needs in one convenient location. Each CTC location contains specialized facilities and equipment to support the industry experience and the hands-on education provided through programs such as aviation maintenance, automotive technology, culinary arts, diesel/heavy equipment maintenance, paramedicine and more.

For more information contact CTC at 907-455-2800 or visit the CTC website (<https://www.ctc.uaf.edu>).

Education

The School of Education is dedicated to culturally responsive, place-based teaching, counseling, research and service for Alaska's diverse communities. Coursework and fieldwork in a broad range of undergraduate and graduate programs are available to students in Fairbanks and Anchorage and by distance delivery across the state. School of Education programs are fully accredited by the Council for the Accreditation of Educator Preparation and the Council for Accreditation of Counseling and Related Educational Programs.

Undergraduate degree programs and postbaccalaureate endorsement programs lead to state of Alaska teaching certificates in elementary and secondary education. A postbaccalaureate K-12 special education program leads to State of Alaska initial teacher certification or an additional endorsement in special education. Our school counseling program leads to a State of Alaska Type C Special Services certificate. Our clinical mental health counseling program provides the coursework required to be a licensed professional counselor in Alaska. Graduate degree programs leading to a Master of Education include school or clinical mental health counseling, elementary education, secondary education and special education certification and endorsement programs.

School of Education staff and faculty work closely with colleagues at UAF's rural campuses and with school districts across the state to prepare well-qualified educators and to offer professional development opportunities to education and counseling practitioners. Research, outreach and collaborative efforts focus on issues related to Alaska Native people and communities, Indigenous populations, cross-cultural contexts, place-based education, distance education, mental health and rural issues.

The School of Education advising office offers experienced, full-time personnel who provide advice about SOE programs on a drop-in or appointment basis and provide appropriate referrals for financial aid and other information that students and interns need. SOE's partnership with rural school districts, under the umbrella of the Alaska Indigenous Teacher Initiatives, provides various types of support for rural and Alaska Native students seeking to pursue education careers. For more information, call 907-474-7341 or visit t (<http://www.uaf.edu/educ/>) the School of Education website (<https://www.uaf.edu/soe/>).

Engineering and Mines

The College of Engineering and Mines includes the academic departments of civil, geological and environmental engineering; computer science; electrical and computer engineering; mechanical engineering; mining and mineral engineering; and petroleum engineering. The research

enterprise of the college, the Institute of Northern Engineering, houses the Arctic Infrastructure Development Center, the Mineral Industry Research Laboratory, the Petroleum Development Laboratory, and the Water and Environmental Research Center.

CEM offers students a challenging academic experience that will allow them to contribute, compete and succeed in today's global economy. The college offers programs leading to undergraduate and graduate degrees in civil engineering, computer engineering, computer science, electrical engineering, geological engineering, mechanical engineering, mining engineering, petroleum engineering, and water and environmental science. In addition to these degree programs, concentrations in many areas, including Arctic engineering, are available. An engineering Ph.D. program is also offered.

The baccalaureate degree programs in computer science and civil, computer, electrical, geological, mechanical, mining and petroleum engineering are accredited by ABET.

CEM's academic programs provide a basis for advanced study or specialized careers. CEM students benefit from small class sizes through increased interactions with faculty and other students and excellent access to instructional laboratories. The college provides opportunities for undergraduate and graduate students to participate in research. Theoretical and practical hands-on knowledge, in tandem with discipline-related research, gives CEM students the expertise and training they need for their chosen career path.

CEM departments are active in outreach activities such as Engineering Week, the Alaska Summer Research Academy, the Alaska Native Science and Engineering Program, educational workshops, the fundamentals of engineering examination review course, and a range of short courses for the professional engineering community. Visit the CEM website (<https://www.uaf.edu/cem/>) or call 907-474-7730 for more information.

Fisheries and Ocean Sciences

The College of Fisheries and Ocean Sciences is responsible for statewide academic, research and service programs relating to Alaska's marine and freshwater environments and fisheries.

For undergraduate degrees, CFOS offers a minor and a Bachelor of Arts in fisheries, a Bachelor of Science in fisheries and marine sciences, and minors in marine science and fisheries. Fieldwork and internship opportunities are available to undergraduate students through cooperating tribal, state and federal agencies, nonprofit entities and industry fishery partners. Undergraduate fisheries and marine sciences majors are prepared for graduate study or to enter management, private industry or other fields.

Graduate degrees offered by CFOS include Master of Science and doctoral degrees in oceanography, marine biology and fisheries, and a non-thesis Master of Marine Studies. Graduate students prepare for careers in university research and education, or research or management with tribal, state and federal agencies and private industry. As part of their degree programs, graduate students conduct research in collaboration with faculty, often in remote locations around Alaska and beyond.

Education, research and extension work on freshwater and marine systems are conducted by the departments that make up CFOS. The Institute of Marine Science (<https://www.uaf.edu/cfos/research/institute-of-marine-scienc/>), with major laboratory facilities in Fairbanks and Seward, focuses on oceanographic and marine biological research. The Kasitsna Bay Laboratory (<https://www.uaf.edu/cfos/about-us/locations/>), near Homer, is the site for coastal research on intertidal and subtidal communities.

The Juneau Center (<https://www.uaf.edu/cfos/about-us/locations/juneau/>) focuses on fisheries research and education. CFOS also operates the oceanographic vessel *Sikuliaq*, a global-class research vessel designed to work in the ice-laden waters of polar regions. The *Sikuliaq* is based in Seward.

For more information, visit the CFOS website (<https://www.uaf.edu/cfos/>) or call 907-474-7210.

Graduate School

The Graduate School is responsible for the oversight and management of graduate programs at UAF. The Graduate School works with UAF's colleges and schools that offer the graduate programs leading to professional licenses, graduate certificates, master's degrees and doctoral degrees in a broad range of disciplines. The school also manages the graduate portion of the UAF Interdisciplinary Studies program, where students can pursue individualized graduate degrees (both master's and doctoral) that draw on multiple disciplines.

The Graduate School advocates for graduate students and their programs. The school provides information and guidance for prospective and current graduate students, professional support and training for graduate assistants, and several scholarships and fellowships.

For more information, contact the Graduate School at 907-474-7607 or visit the Graduate School website (<https://www.uaf.edu/gradsch/>).

Liberal Arts

As one of the largest colleges at Alaska's research university, the College of Liberal Arts supports scholarship for further understanding of Alaska and the circumpolar region in a changing global context.

CLA offers a classic liberal arts course selection and functions as a hub for degree students and their university education requirements. The core curriculum courses provide breadth to the general education of all UAF undergraduates, while liberal arts undergraduate and graduate programs ground students in their disciplines. Extensive research and creative work inform our teaching to provide students with opportunities to become knowledgeable in and across the arts and humanities, Alaska Native and global languages, and social and behavioral sciences; to develop expertise in specific areas of concentration; and to participate in exciting research both as a graduate student and as an undergraduate.

The college provides interdisciplinary learning opportunities beyond the classroom to foster responsibility, comprehension of vital issues, and commitment to the study and understanding of the human dimension in the circumpolar North.

More information is available at the CLA website (<https://www.uaf.edu/cla/>) or by calling 907-474-7231.

Natural Science and Mathematics

The College of Natural Science and Mathematics offers undergraduate and graduate degrees in the physical and life sciences, including atmospheric sciences, biology and wildlife, chemistry and biochemistry, geosciences, and physics; statistics and mathematics; natural resources and environment; and education. It also hosts a cooperative 2+2 program in veterinary medicine with Colorado State University. CNSM provides most UAF undergraduate courses in science and mathematics, including the general education curriculum and a variety of outreach programs. The college is known for its modern teaching technologies, access to

professors and quality undergraduate student advising. CNSM also offers minors in each of its major disciplines.

Academic programs provide a foundation for professional careers or advanced study, and help students develop critical thinking and analytical skills. CNSM majors enjoy close working relationships with faculty and other students. The college provides opportunities for undergraduate and graduate students to work with faculty on research projects. Unique opportunities are available through UAF research centers and institutes, including the CNSM Division of Research, the Geophysical Institute, the Institute of Arctic Biology, the UA Museum of the North, the International Arctic Research Center, and the Agricultural and Forestry Experiment Station. The fundamental knowledge gained through courses and by working on practical, discipline-related projects gives CNSM graduates the skills and experience they need to enter the job market or continue their education.

CNSM is home to the Biomedical Learning and Student Training program, Alaska Native Science and Engineering Program, and K–12 outreach programs, including the Science Potpourri, the Alaska Summer Research Academy, Inspiring Girls Expeditions and GeoFORCE. In these and other programs, high school and university students work with CNSM faculty on original research projects aimed at improving the quality of life in Alaska.

At the graduate level, CNSM offers master's and doctoral degrees in the natural sciences, mathematics, and natural resources and sustainability. These advanced programs provide students with research opportunities in laboratory and field settings throughout Alaska. CNSM's doctoral programs provide opportunities for advanced study leading to academic and professional positions. For more information, visit the CNSM website (<https://www.uaf.edu/cnsm/>) or call 907-474-7608.

Rural and Community Development

The College of Rural and Community Development focuses on the needs of nontraditional students, including students who seek skills and degrees suited to the economy and well-being of rural communities. CRCDC promotes workforce preparation, economic development, lifelong learning and community development. CRCDC campuses provide general and vocational-technical education at the occupational endorsement, certificate and associate degree levels, baccalaureate degrees in rural development and child development/family studies, and a master's in rural development. In cooperation with the College of Liberal Arts and the School of Education, CRCDC offers baccalaureate and graduate degrees in cross-cultural studies, education and social work as well as a Ph.D. in Indigenous studies. CRCDC also offers workshops, continuing education and short-term courses, developmental studies, credit for prior learning and other nondegree student services.

CRCDC community campuses include Northwest (<https://www.nwc.uaf.edu/>) (Nome), Kuskokwim (<https://www.bethel.uaf.edu/>) (Bethel), Bristol Bay (<https://www.uaf.edu/bbc/>) (Dillingham), Chukchi (<https://www.uaf.edu/chukchi/>) (Kotzebue) and Interior Alaska (<https://www.uaf.edu/iac/>) (Fairbanks, which administers five centers throughout the Interior).

CRCDC serves nearly two-thirds of Alaska, encompassing 160 primarily Alaska Native Arctic, sub-Arctic and coastal communities. At least 16 Indigenous languages are spoken in the region served by CRCDC, and the economy spans subsistence hunting and fishing, small-scale village development and cooperatives, and large-scale international corporate development. The College of Rural and Community Development focuses on responding to students and partners to develop the economic and

social well-being of Alaska Native communities and beyond. For more information, visit the CRCDC website (<https://www.uaf.edu/rural/>) or call 907-474-7143.

Research Institutes, Centers and Consortia

UAF's location in Interior Alaska provides easy access to glaciers, permafrost, the Pacific and Arctic oceans, and other elements of a sub-Arctic climate. Accordingly, several research centers and academic departments focus their scholarly work on issues particular to the North. These include the environmental impact of human activities, development of renewable and nonrenewable resources and energy sources, and the understanding and preservation of Indigenous Northern cultures.

The vice chancellor for research oversees all university research activities and has primary responsibility for the university's research mission. The VCR office directs the development of university research policies and monitors sponsored programs, research integrity, and intellectual property and licensing.

Assistantships are available for graduate students working on research with faculty in many research institutes and centers. Each researcher has a joint appointment with an academic department. Any student interested in specific faculty research projects and the availability of assistantships should contact the appropriate academic department.

Learn more about other research entities at UAF (<https://www.uaf.edu/research/research-entities/>).

Agricultural and Forestry Experiment Station

The Agricultural and Forestry Experiment Station conducts research to enhance the quality of life in Alaska through development of natural, economic and human resources. Research emphasizes factors typical of high latitudes and is designed to provide the information and technology needed to manage renewable resources for the economic and social well-being of Alaskans. This work includes studies of natural and manipulated ecosystems, sustainable soil productivity, food production, food security, genetics for improved plant and animal productivity, and enhanced livestock production. Additional research involves economic and legal aspects of resource use, silviculture and forest management, resource use for tourism and recreation, and education and communications in resources management.

AFES, in cooperation with state and federal agencies, conducts research at sites in Fairbanks, Palmer, Delta Junction and Nome. AFES faculty have a leadership role in the Long-Term Ecological Research program funded by the National Science Foundation. This research, which is determining the structure and function of northern boreal forest ecosystems, forms the basis for sustainable forest management practices.

AFES researchers represent the disciplines of agronomy, animal science, economics, forestry, horticulture, land use planning, outdoor recreation, plant pathology, range science, resource policy and law, and soil science. For more information, visit the AFES website (<https://www.uaf.edu/afes/>) or call 907-474-5211.

Alaska Center for Energy and Power

The Alaska Center for Energy and Power is a statewide, university-led, applied research program. ACEP excels at being responsive to immediate and long term needs of residents, industries and agencies and focuses

on research related to community and industry-scale power generation, transmission, heating, and transportation fuels. ACEP prioritizes its work on areas where Alaska has specific needs or where Alaska has a strategic advantage due to resource availability, unique circumstances, or location.

ACEP strives to develop and disseminate practical, cost-effective, and innovative energy solutions for Alaska and beyond. Their three primary products are information, technology and a prepared, professional workforce. ACEP houses the Alaska Hydrokinetic Energy Research Center (<https://acep.uaf.edu/programs/alaska-hydrokinetic-energy-research-center.aspx>).

For more information, visit the ACEP website (<https://acep.uaf.edu>) or call 907-474-5402.

Alaska Cooperative Fish and Wildlife Research Unit

The Alaska Cooperative Fish and Wildlife Research Unit is jointly sponsored and financed by the U.S. Geological Survey, UAF, the Alaska Department of Fish and Game, the U.S. Fish and Wildlife Service, and the Wildlife Management Institute. The unit supports and guides graduate training in fisheries and wildlife biology and management.

Wildlife research is directed toward habitat relationships, avian ecology, wildlife population dynamics, and the impact of northern development on wild animals and their habitats. Fisheries research focuses on the ecology and fisheries of Alaska freshwater ecosystems, and evaluation and development of cold-water fisheries techniques.

For more information, visit the Alaska Cooperative Fish and Wildlife Research Unit website (<https://www.akcfwru.uaf.edu>) or call 907-474-7661.

Alaska Native Language Center

The Alaska Native Language Center was established by state legislation in 1972 to document and preserve the 20 Indian, Aleut and Eskimo languages in Alaska. It is the major center in the United States for the study of Eskimo and northern Athabaskan languages. ANLC publishes its findings in dictionaries, grammars, story collections and research papers. The Alaska Native Language Archive houses a valuable collection of manuscript materials in and on Alaska Native languages, including word lists and documentation dating to the late 1700s. The archive is available to scholars and students and is housed at the Rasmuson Library.

As part of the College of Rural and Community Development (<https://uaf.edu/rural/>), ANLC's teaching program includes a B.A. in Yup'ik or Inupiaq Eskimo, an A.A.S. degree or certificate in Native language education, and special classes in language literacy. A B.A. in Yup'ik language and culture teaches major courses entirely in the Yup'ik language.

For more information, visit the ANLC website (<https://www.uaf.edu/anlc/>) or call 907-474-7874.

Alaska Quaternary Center

The Alaska Quaternary Center, established in 1982, is a focal point for interdisciplinary Quaternary studies and research at UAF. The Quaternary Period spans the past two million years, a time of glacial-interglacial climate oscillations, floral and fauna migrations, mammalian extinctions and human evolution. Quaternary studies thus encompass scientific

investigations of geologic, climatic, biologic and human systems of the past and present. The AQC comprises researchers in the anthropology, biology and wildlife, and geology and geophysics departments, the Institute of Agriculture, Natural Resources and Extension, the Institute of Marine Science, the Institute of Arctic Biology and the Geophysical Institute.

The AQC is housed within the Department of Geology and Geophysics (<https://www.uaf.edu/geology/>) and the College of Natural Science and Mathematics (<https://www.uaf.edu/cnsm/>). The center sponsors seminars and workshops and hosts visiting speakers from countries throughout the world. Quaternary scholars from UAF regularly collaborate with Canadian, Russian and European colleagues conducting research in Alaska, Siberia and the Yukon, as well as Africa, Mongolia and western Europe. The AQC plays an important role in Northern science during this time of increasing interest in studies of global change, biodiversity and other aspects of Arctic climates and ecosystems.

For more information, call 907-474-5433 or visit the AQC website (<https://www.uaf.edu/aqc/>).

Alaska Sea Grant

Alaska Sea Grant is a partnership between the National Oceanic and Atmospheric Administration and the University of Alaska Fairbanks.

Alaska Sea Grant enhances the sustainable use and conservation of Alaska's marine and freshwater resources through research, outreach and education.

ASG supports researchers and university graduate students contributing new knowledge about healthy coastal ecosystems, sustainable fisheries and resilient coastal communities. Alaska Sea Grant also recruits students into career-building national and state scholarships and fellowships in marine policy, fisheries population dynamics and other marine fields.

Alaska Sea Grant Marine Advisory Program faculty, located in coastal communities across Alaska, build partnerships that provide technical assistance to support economic development, marine literacy, workforce development and resource management. Thousands of adults and youth across the state attend workshops and presentations by ASG each year.

As part of its education mission, ASG supports marine literacy among K-12 teachers and students through curriculum and other learning resources and training. ASG produces publications and website resources available via an online bookstore that help the public understand Alaska's diverse marine ecosystem. ASG also keeps scientists connected through community-based regional scientific conferences and through scientific symposia, including the international Lowell Wakefield Fisheries Symposium series.

For more information visit the Alaska Sea Grant website (<https://alaskaseagrant.org/>) or call 907-474-7086.

Center for Cross-Cultural Studies

Established in 1971, the Center for Cross-Cultural Studies is a teaching, research and development unit administered through the UAF College of Liberal Arts. It promotes programs that concentrate on the needs of Alaska's Indigenous societies, with particular regard to education and rural issues.

The center offers academic degree programs and course work in cross-cultural studies. It designs and conducts basic and applied research projects, develops and evaluates alternative educational strategies for Alaska schools, and disseminates findings on current research in education and rural community development.

The center gives technical support and information to school districts, social service agencies, Native corporations, tribal governments, community colleges, and state and federal agencies in rural Alaska. It provides direction for improving educational, professional and community development opportunities for rural Alaskans, and it is a forum for examining those issues. Curricula incorporating Indigenous knowledge and Native ways of knowing are available through the Alaska Native Knowledge Network (<https://www.uaf.edu/ankn/>) on the web.

For more information, visit the Center for Cross-Cultural Studies website (<https://www.uaf.edu/cxcs/>), call 907-474-1902 or email uaf-cxcs@alaska.edu.

Center for One Health Research

The UAF Center for One Health Research seeks to engage participants from UAF, Alaska and the circumpolar North to build and support as well as collaborate on research, education and outreach programs to address the large, multifocal issues facing these regions.

UAF is seeking to significantly expand these efforts by building interdisciplinary teams that will approach their investigations from a One Health perspective using constructionist, integrative approaches to help manage problems at their source rather than their outcome. UAF has a One Health Master's program focused on understanding and putting One Health concepts into practice, and is in the process of building an undergraduate and Ph.D. program.

For more information, visit the Center for One Health Research website (<https://www.uaf.edu/onehealth/>) or call 907-474-6610.

Geophysical Institute

Founded in 1948, the Geophysical Institute is a world-renowned center for the study of geophysics from the sun to the center of the Earth.

Proximity to the Arctic provides excellent opportunities for high-latitude geosciences. Major research programs are underway in space physics, atmospheric science, seismology, volcanology, satellite remote sensing, tectonics and sedimentation. The institute operates a rocket range for space research and a satellite ground station with processing and archiving capabilities for earth science support. In addition, the Alaska Volcano Observatory (<https://avo.alaska.edu/>), the Alaska Earthquake Center (<https://earthquake.alaska.edu/>), Alaska Climate Research Center (<https://climate.gi.alaska.edu/>) and the Alaska Center for Unmanned Aircraft Systems Integration (<https://acuasi.alaska.edu/>) are located at the institute. More than 75,000 books, 350 journals and other specialized media are maintained at the Keith B. Mather Library (<https://www.gi.alaska.edu/facilities/mather-library/>).

GI faculty and students benefit from the coupled activities of education and research. Undergraduate and graduate students find work in research programs while gaining academic credit toward their degrees. Most GI faculty have joint appointments, providing teaching opportunities at the College of Natural Science and Mathematics or the College of Engineering and Mines.

The institute focuses on the needs of Alaska, using geophysical data as the basis for decision-making tools. Examples include monitoring earthquakes and volcanic eruptions leading to hazard alerts to federal and state agencies. Remote sensing specialists use satellite and airborne observations to help fight forest fires and monitor the health of Alaska's ecosystems. Institute scientists run computer simulations of tsunamis, aiding coastal communities in developing emergency evacuation plans. The institute has programs reaching out to K-12 schools with scientific curricula to educate and motivate potential science students.

More than 500 permanent field sites are operated throughout Alaska and are associated with the Poker Flat Research Range, the Alaska Earthquake Center, the Alaska Volcano Observatory and the Permafrost Research Laboratory.

For more information, visit the Geophysical Institute website (<https://www.gi.alaska.edu>) or call 907-474-7558.

Institute of Arctic Biology

The Institute of Arctic Biology is Alaska's principal research and educational unit for investigating high-latitude biological systems and providing policymakers knowledge to interpret, predict and manage biological systems through integration of research, student education and service to Alaska and the nation.

IAB research focuses on wildlife and conservation biology, including caribou, moose, polar bears and wildfowl; ecology, biogeochemistry, ecosystems and modeling of Arctic landscapes; climate change; physiology, including hibernation and thermogenesis; evolutionary biology; human, plant and animal genetics; plant-animal interactions; and human health disparities, nutrition and physical activity using a community-based, participatory approach.

IAB, established by the Alaska Legislature and the UA Board of Regents in 1962, is a world leader in Arctic research and is an academic gateway to study of the circumpolar Arctic. IAB administers several specialized research programs and facilities. Toolik Field Station (<https://toolik.alaska.edu/>) is an internationally recognized Arctic research station that annually hosts hundreds of scientists from around the world. The Center for Alaska Native Health Research (<https://www.uaf.edu/canhr/>) investigates weight, nutrition and health in Alaska Natives. The Bonanza Creek Long-Term Ecological Research program (<https://www.lter.uaf.edu/>) focuses on the long-term consequences of climate change and disturbance in Alaska boreal forests. The Alaska IDEa Networks of Biomedical Research Excellence program seeks to enhance biomedical research infrastructure in Alaska and fund research and student training focused on the interface of health, disease and the environment in people and animals. The Alaska Cooperative Fish and Wildlife Research Unit (<https://www.akcfwru.uaf.edu/>), part of the U.S. Geological Survey, promotes research and graduate student training in the ecology and management of fish and wildlife. The Alaska Geobotany Center (<https://www.geobotany.uaf.edu/>) is dedicated to understanding northern ecosystems through GIS, remote sensing and field experiments. The Spatial Ecology Lab provides state-of-the-art spatial analysis of ecological data and development, testing, and application of spatially explicit ecological models. IAB's research greenhouse provides a year-round environment for research and education. The Core DNA Lab keeps UAF at the cutting edge of molecular analysis.

For more information, call 907-474-7640 or visit IAB's website (<https://www.iab.uaf.edu>).

Institute of Marine Science

The Institute of Marine Science conducts marine science studies in the world's oceans, with special emphasis on Arctic and Pacific sub-Arctic waters.

The faculty provide expertise in chemical, geological and physical oceanography and marine biology. Instruction is carried out through a minor in marine science and the graduate program in marine sciences and limnology in the College of Fisheries and Ocean Sciences, where degrees are offered at the master's and doctoral levels.

Research efforts cover a wide range of disciplines, and some projects are components of large national and international cooperative programs that are worldwide in extent. Institute of Marine Science researchers also participate in the broad marine science community through service on a variety of national and international steering committees, boards, panels and advisory committees.

Research facilities include laboratories on the Fairbanks campus; the Seward Marine Center (<https://www.uaf.edu/cfos/about-us/locations/seward/>), a major coastal facility in Seward; the Kasitsna Bay Laboratory (<https://www.uaf.edu/cfos/about-us/locations/kasitsna-bay/>), a marine biology field station on Kachemak Bay; and the 261-foot global class, ice-strengthened Research Vessel *Sikuliaq*. The Seward Marine Center supports a high-quality seawater system and excellent biological and chemical laboratories, and is the *Sikuliaq's* home port. The Alaska SeaLife Center, a private, state-of-the-art mammal and bird research and exhibition facility adjacent to the Seward Marine Center, also offers outstanding research facilities.

Institute of Marine Science research programs include the Virtual Tsunami Center; Alaska Natural Geography in Shore Areas, Census of Marine Life; Ocean Acidification Research Center, Gulf of Alaska CTD Time Series, Gulf of Alaska Integrated Ecosystem Research Program, Russian-American Long-Term Census of the Arctic; and NEWNET/ORION, a radiation and climatological monitoring program through autonomous stations in Fairbanks, Seward, Nome, Kotzebue, Point Hope and Barrow. Laboratories and specialists cover areas including acoustics; algae, biological, chemical, fisheries, geological and physical oceanography; marine biology; mammals; pathology and ecosystems; remote sensing; seagrass studies; and underwater instrumentation.

For more information, visit the IMS website (<https://www.uaf.edu/cfos/research/institute-of-marine-science/>) or call 907-474-7210.

Institute of Northern Engineering

The Institute of Northern Engineering is the research enterprise for the College of Engineering and Mines. INE faculty and students are engineering solutions for the world's cold regions and beyond. The institute is home to many of the world's leading researchers in cold weather and cold climate science and engineering. INE research and support span the engineering disciplines, offering studies and expertise in energy production, modeling and testing of mechanical systems, and environmental engineering and hydrology, as well as Arctic infrastructure, and mining and petroleum development. INE also participates in many cross-institute endeavors.

The institute includes the Arctic Infrastructure Development Center (<https://autc.uaf.edu/>), Mineral Industry Research Laboratory (<https://ine.uaf.edu/mirl/>), Petroleum Development Laboratory (<https://ine.uaf.edu/pdl/>), and Water and Environmental Research Center (<https://ine.uaf.edu/werc/>).

ine.uaf.edu/werc/). WERC serves as the home of the Alaska Stable Isotope Facility. External grant and research support for INE programs has been more than \$20 million annually since 2011. Most of INE's researchers are full-time faculty in the College of Engineering and Mines, allowing research results to reach the classroom quickly.

INE offers diverse interdisciplinary research opportunities, challenging students to tackle wide-ranging engineering topics. Students gain knowledge and experience through hands-on engagement, setting them apart in the engineering job market.

To get started with your northern engineering research or studies, visit the INE website (<https://www.uaf.edu/ine/>) or call 907-474-5457.

International Arctic Research Center

The International Arctic Research Center was founded in 1997 as a cooperative research institute supported by both the U.S. and Japanese governments. Funding comes from the National Science Foundation, the Department of Energy, and the National Oceanic and Atmospheric Administration in the U.S., and from the Japan Agency for Marine-Earth Science and Technology, and Japan Aerospace Exploration Agency.

IARC serves as a focal point of excellence for international collaboration and provides the Arctic research community with an unprecedented opportunity to share knowledge about science in the Arctic, with an emphasis on global climate change research. IARC's mission is to foster Arctic research in an international setting to help the nation and the international community to understand, prepare for, and adapt to the pan-Arctic impacts of climate change. In order to fulfill that mission, IARC provides an integrated science and service program for the benefit of the Arctic community.

Key elements of that program include analysis, synthesis and provision of Arctic climate information, including Arctic Ocean hydrographic information for scientists, students, decision-makers and the public; support and coordination of Arctic system modeling; and serving as a gateway or Arctic climate science coordination center for Alaska and the Arctic research community, with special attention to collaboration with international scientists and institutions.

IARC conducts an internationally popular summer school for young researchers and holds workshops on the integration and synthesis of research. IARC also supports several K–12 outreach projects.

IARC is located in the Akasofu Building. For more information, call 907-474-6016 or visit the IARC website (<https://www.iarc.uaf.edu>).

Lena Point Fisheries Facility, College of Fisheries and Ocean Sciences

The Lena Point Fisheries facility is almost 31,000 square feet and has space for 13 faculty, four research assistants and 34 graduate students enrolled in the B.A., B.S., M.S. and Ph.D. fisheries and marine biology programs. Four UAS biology and marine biology faculty hold joint appointments in the UAF Department of Fisheries and supervise UAF graduate students based in Juneau, Alaska.

Faculty supervise students' research on a broad array of biological problems in laboratories that specialize in quantitative stock assessment, biology and ecology of marine and freshwater species, molecular genetics, behavioral ecology, marine policy, and other fields of study. Laboratories at the Lena Point Fisheries include specialized facilities for

seawater culture of marine animals and plants, quantitative (computer) analysis and fisheries stock assessment, geographic information systems, molecular genetics, salmon culture, and marine ecology. Students also work in laboratories and facilities of other agencies in Juneau such as NOAA Fisheries' Auke Bay Laboratory and Ted Stevens Marine Research Institute, the U.S. Geological Survey's Glacier Bay Field Station, and the Alaska Department of Fish and Game's Mark, Tag and Age Lab.

The facility is adjacent to the National Marine Fisheries Service Ted Stevens Marine Research Institute. For more information, visit the Lena Point Fisheries website (<https://www.uaf.edu/cfos/about-us/locations/juneau/>) or call 907-796-5443.

UArctic

UAF is a founding member of UArctic (originally the University of the Arctic), a cooperative network of universities, colleges and other organizations committed to higher education and research in the North. The consortium's goal is to create a strong, sustainable circumpolar region by empowering northerners and northern communities through education and shared knowledge. As part of this network, UAF participates in research and teaching partnerships and is a member of the student exchange program north2north, which provides opportunities for students from UArctic member institutions to experience different northern regions firsthand, and to share experiences face-to-face by allowing students to study at other UArctic institutions. For more information visit the UArctic website (<https://www.uaf.edu/uarctic/>) or call 907-474-6516.

University of Alaska Museum of the North

Voted the "Best Museum in Alaska," the University of Alaska Museum of the North is a vital component of UAF's research and education facilities as well as a thriving visitor attraction.

The museum's research collections hold more than 1.4 million artifacts and specimens representing millions of years of biodiversity and more than 11,000 years of cultural traditions in the North. These collections form the foundation for the museum's exhibits and education programs and serve as a critical source of data for issues unique to the circumpolar North. Using the collections, university students work with the museum's faculty curators on original research aimed at interpreting the region's dynamic environment and cultures.

The museum's Rose Berry Alaska Art Gallery features 2,000 years of Alaska art — from ancient ivory carvings to contemporary sculptures. In the Gallery of Alaska, exhibit highlights include the state's largest gold display, extensive displays of Alaska Native art and artifacts, and Blue Babe, a 36,000-year-old mummified steppe bison.

The museum also hosts several special exhibits each year. In addition, the museum presents artists' residencies, lectures and family programs on a variety of Alaska topics, and runs the museum store, featuring Alaska jewelry, books and Alaska Native artwork.

For more information, visit the University of Alaska Museum of the North (<https://www.uaf.edu/museum/>) online or call 907-474-7505.

The UAF Experience

UAF – Then and Now

UAF's Fairbanks campus, also known as the Troth Yeddha' (p. 17) campus, is four miles west of downtown Fairbanks, on a low ridge overlooking the Chena and Tanana river floodplains. Artifacts found on the bluff tell us tribal groups used the hill beginning perhaps 3,500 years ago. It offered a wide view of the flats below and probably served as a base camp for hunting and gathering.

THE EARLY YEARS

Gold discoveries in the early 1900s brought sudden changes to the Tanana Valley. In 1906 the hill where UAF now stands became part of a federal Agricultural Experiment Station, and in 1915 the U.S. Congress approved money and transferred a piece of land from this station to establish a school of higher education. The institution began as the Alaska Agricultural College and School of Mines, focusing on research and teaching in support of agriculture and mining. Two years later the Alaska Territorial Legislature added funding, and in 1922, when the first building was completed, the college opened its doors to students. In the first semester, a faculty of six offered 16 classes to a student body of 12. Commencement in 1923 consisted of a single graduate.

The institution quickly began to grow. In 1931 the federal government transferred the entire Agricultural Experiment Station to the college. In 1935 the Alaska Territorial Legislature changed the institution's name to the University of Alaska to reflect the school's expanding role in research, teaching and public service for all Alaska. By then, faculty and course offerings had grown to include liberal arts, science and engineering.

World War II brought a rapid influx of population and development to the territory. Wartime national awareness of the need for scientific polar research in the interests of defense and communications led to the establishment in 1946 of the Geophysical Institute. Since its inception, the GI has earned an international reputation for studies of the Earth and the physical environment at high latitudes. The university awarded its first Ph.D. degree to a geophysics student in 1955.

STATEHOOD AND BEYOND

The University of Alaska had a significant role in the statehood movement of the 1950s, when the Constitutional Convention was held on campus. The Alaska Constitution was drafted in what is now Constitution Hall and signed in stately Signers' Hall, now the home of UAF student service and administrative offices. Alaska became the nation's 49th state in 1959.

Research expanded broadly in the decade of the 1960s with the establishment of institutes in several disciplines. The Alaska Legislature created the Institute of Marine Science in 1960 and the Institute of Arctic Biology two years later. Since 1969 the Geophysical Institute has operated Poker Flat Research Range, providing launch facilities for NASA and the Department of Defense. Poker Flat is the only university-owned rocket range in the world.

In 1970 the university was designated a federal Sea Grant institution for marine research. Alaska Sea Grant develops and supports research, education, and outreach programs and partnerships to help sustain economic development, traditional cultural uses, and conservation of Alaska's marine, estuarine and coastal watershed resources. Stations in Kodiak and Juneau are also actively involved in marine and fisheries research.

In 1972 the Alaska Legislature established the Alaska Native Language Center and provided operating funds. Since then the university has supported research, documentation and teaching of the state's 20 Native languages.

To meet the need for expanding services for all Alaskans, the University of Alaska statewide system was created in 1975. Campuses in Anchorage and Juneau were assigned their own chancellors and central staffs, with the statewide administration and overall university president remaining in Fairbanks.

Meanwhile, the campus in Fairbanks continued to expand. The University of Alaska Museum of the North, one of the state's most popular visitor attractions, moved into the Otto Geist Building in 1980. An expansion completed in 2006 nearly doubled the museum's size and added a research center, learning center and Alaska art gallery. The museum's unique collection offers the public a view of the rich and varied cultures of the North.

In 1981 UAF enrollment topped 5,000 students for the first time. The university also began to emphasize its shared scholarship and global education efforts in a series of agreements with schools in Japan, Denmark, Canada, India, People's Republic of China, Russia and other countries. The institution branched out to include campuses in Bethel, Dillingham, Kotzebue, Nome and the Interior. Learning centers in other communities such as Fort Yukon, Galena, McGrath, Nenana, Tok and Unalaska provide additional education services to rural Alaskans.

UAF's public service role is filled in part by the statewide Cooperative Extension Service with its 13 district offices. Public broadcasting stations KUAC FM and TV, the first public stations in the state, are headquartered at UAF.

In 1991 NASA named UAF a Space Grant institution for aerospace research, making it a Land, Sea and Space Grant institution, one of only a handful of triple-crown universities in the country.

TODAY

UAF's colleges and schools offer degrees and certificates in 106 disciplines with a variety of vocational and technical programs. Graduate degrees are available in a wide range of academic study. UAF is internationally known for its Pacific Rim and circumpolar North research. It is consistently among the top 100 universities in the nation for funding from the National Science Foundation. UAF is the primary doctoral degree-granting institution in Alaska, offering Ph.D. degrees in anthropology, Indigenous studies, several of the physical and natural sciences, mathematics and engineering. Master's degrees are offered in more than 40 fields in the humanities, social sciences, Arctic and Northern studies, and physical and natural sciences, and in professional fields such as engineering, justice, education and business administration. Interdisciplinary programs are possible for students who have a research focus in areas where UAF has faculty expertise and research facilities.

In 2017 UAF celebrated 100 years of making important contributions to Alaska, helping find solutions to the state's unique challenges in areas like Arctic engineering, wildlife biology, health care and education. UAF helps power Alaska's economy by turning students into professionals for Alaska's workforce.

Students

Individualism and diversity are Alaska traditions. At UAF, students find not only a broad mix of cultures and ages, but also a climate of respect

for individual rights and preferences. A student from a rural Alaska village can share knowledge and insights with others from places as distant as Tallahassee or Tokyo. UAF's enrollment in fall 2021 was 7,471 students. Of those, 62% are female, 37% male and 1% are unknown; 87% are undergraduate and 13% are graduate students. UAF students hail from 49 states and 53 foreign countries.

Many UAF students are nontraditional. They study at night or after work, and balance schoolwork with family responsibilities. The university offers a wide variety of evening and weekend classes. UAF students can attend classes through distance delivery from remote areas of Alaska or from anywhere in the world. Using computers, telephones and the Internet, students can take courses or work toward their degrees without leaving home.

Many students take advantage of UAF's exchange programs to study at colleges and universities around the world, or through the National Student Exchange program, which offers studies at universities throughout the United States. There are more than 100 different student organizations on campus, with that number going up all the time. Students produce the online Polaris News site, run the KSUA radio station and participate in scores of special interest groups.

Faculty

At UAF, you find faculty members who are among the best in the country. Because of the low 10:1 student-faculty ratio, you receive more personal attention here than you would at almost any other public university in the nation. Once you have chosen a major, you will be assigned a faculty advisor from your academic department. Your advisor will help you choose classes each semester and will explain programs and requirements. You will get to know the faculty not just as professors but also as friends, advisors and mentors. Education is an individual process, different for each person. At UAF, you are an individual, not just a face in the crowd.

UAF's Mission and Vision

The University of Alaska Fairbanks is a Land, Sea, and Space Grant university and an international center for research, education, and the arts, emphasizing the circumpolar North and its diverse peoples. UAF integrates teaching, research, and public service as it educates students for active citizenship and prepares them for lifelong learning and careers.

CORE THEMES

- **Educate:** Undergraduate and graduate students and lifelong learners
- **Research:** Create and disseminate new knowledge, insight, technology, artistic and scholarly works
- **Prepare:** Alaska's career, technical and professional workforce
- **Connect:** Alaska Native, rural and urban communities by sharing knowledge and ways of knowing
- **Engage:** Alaskans through outreach for continuing education and community and economic development

VISION STATEMENT

Excellence through transformative experiences

The University of Alaska Fairbanks is renowned for its Arctic research, Alaska Native and Indigenous programs, entrepreneurship, workforce development, and hands-on, personalized learning. UAF provides a world-class, inclusive experience — energized by innovative research, community engagement, student-centered teaching and creative expression.

Commitment to Quality

UAF has been accredited since 1934 by the Northwest Commission on Colleges and Universities. UAF acts continually to assess and improve the educational experience for its students. Students evaluate their teachers at the end of each semester; those student opinion reports are available online (<https://asuaf.com/archives/teacher-and-course-evaluations/>). Faculty and administrators evaluate courses in the core curriculum every year. Each degree program and certificate is assessed at least every five years. Results are used to change and improve the education provided by UAF. The learning outcomes expected for each degree program can be viewed on the provost's website (<https://www.uaf.edu/provost/assessment-review/assessment/>).

UAF Facts and Figures

Here are some quick facts and figures about UAF. See more on the UAF Facts and Figures site (<https://www.uaf.edu/facts/>).

- Originally founded in 1917 when Alaska was still a territory, today UAF is America's northernmost Land, Sea and Space Grant institution.
- UAF encompasses the central campus in Fairbanks (also known as the Troth Yedha' (p. 17) campus); Bristol Bay Campus in Dillingham; Chukchi Campus in Kotzebue; Interior Alaska Campus, covering the Interior; Kuskokwim Campus in Bethel; Northwest Campus in Nome; and the Community and Technical College in Fairbanks.
- UAF's geographically diverse student body represents 49 states and 53 foreign countries.
- UAF offers 143 degrees and 44 certificates in 106 disciplines.

- As America's Arctic university, UAF offers a number of unique programs and degrees particularly focused on the biology, climate, natural resources and peoples of northern latitudes, the circumpolar North and the Pacific Rim.
- The UAF mascot is the Nanook, a derivation of "nanuq," the Inupiaq Eskimo word for polar bear. Up until the mid-70s, the men's basketball team was known as the "Flying Nanooks" because of the regular, and long, airplane rides they took in order to compete with other college teams. Since 1963 all University of Alaska Fairbanks sports teams have been called Nanooks.

Degrees Conferred, Spring 2021

- 108 licensures and occupational endorsements
- 993 certificates and associate or baccalaureate degrees
- 234 master's and doctoral degrees

Student Profile, Fall 2021

ENROLLMENT

| | |
|--|-------|
| Fairbanks Campus | 5,302 |
| Community and Technical College | 2,108 |
| Bristol Bay Campus | 280 |
| Chukchi Campus | 172 |
| Interior Alaska Campus | 255 |
| Kuskokwim Campus | 407 |
| Northwest Campus | 219 |
| eCampus | 4,337 |
| University of Alaska Fairbanks (total ¹) | 7,471 |

¹ Some students attend more than one campus and are not counted twice in the total.

| | |
|-------------------------------|-----|
| Female | 62% |
| Male | 37% |
| Unknown | 1% |
| Alaska Native/American Indian | 21% |
| Undergraduate | 87% |
| Graduate | 13% |
| Median Age | 25 |

Estimated 2022-2023 UAF Annual Costs

FIRST-YEAR STUDENTS AND SOPHOMORES

| | Alaska Resident | Non-Resident | WUE ² |
|---|-----------------|--------------|------------------|
| Tuition and fees ³ (30 credits, 100-200-level classes) | \$9,870 | \$27,540 | \$13,770 |
| Room and board (double room and meal plan) | \$10,650 | \$10,650 | \$10,650 |
| ANNUAL TOTAL | \$20,520 | \$38,190 | \$24,420 |

JUNIORS AND SENIORS

| | Alaska Resident | Non-Resident | WUE² |
|---|------------------------|---------------------|------------------------|
| Tuition and fees ³ (30 credits, 300-400-level classes) | \$10,800 | \$28,470 | \$14,700 |
| Room and board (double room and meal plan) | \$10,650 | \$10,650 | \$10,650 |
| ANNUAL TOTAL | \$21,450 | \$39,120 | \$25,350 |

GRADUATE STUDENTS

| | Alaska Resident | Non-Resident | WUE² |
|---|------------------------|---------------------|------------------------|
| Tuition and fees ³ (18 credits, 600-level classes) | \$11,160 | \$21,762 | |
| Room and board (double room and meal plan) | \$9,902 | \$9,902 | |
| ANNUAL TOTAL | \$21,062 | \$31,664 | |

² Western Undergraduate Exchange (see Financial Aid (p. 60) page)

³ Includes consolidated, UA facilities and UA network fees. Does not include specific course fees, health insurance, books, supplies, parking, travel, miscellaneous expenses or special costs associated with international or exchange students. Costs are subject to change.

GETTING STARTED

Applying for Admission: Occupational Endorsement Programs

When to Apply

Applications for admission to occupational endorsement programs are due no later than June 15 for fall semester, Nov. 1 for spring semester and May 1 for summer semester.

How to Apply

To be admitted to UAF, a student must:

1. **Submit an application for admission**

Apply online (<https://www.uaf.edu/admissions/>). Applications must be received before the published deadlines. There is no fee to apply for an occupational endorsement program.

2. **Submit transcripts**

Most applicants to occupational endorsement programs are not required to submit high school, GED or college transcripts, but all are strongly encouraged to do so. Transfer students who want to receive credit for prior work must submit official transcripts and need to work with their advisor to request courses that will apply toward the occupational endorsement.

Admission Requirements

For admission to occupational endorsement programs, official documentation must be provided showing that the applicant meets program age requirements by the first day of the semester (see individual program descriptions (<https://catalog.uaf.edu/endorsements/occupational-endorsement-programs/>) for minimum age requirements).

Program Completion

Occupational endorsement programs require between 9 and 29 credit hours that will be posted to the student's transcript upon completion and approval by the academic department. The credit hours may be applied to other undergraduate degree programs when applicable. Some occupational endorsement programs are not eligible for financial aid. Students should check with an advisor for the specific requirements for their program.

Where to Get More Information

Office of Admissions

University of Alaska Fairbanks
2nd floor, Signers' Hall
P.O. Box 757480
Fairbanks, AK 99775-7480
Email: uaf-admissions@alaska.edu
Telephone: 907-474-7500
Toll free: 800-478-1823
Fax: 907-474-7097

Applying for Admission: Certificate or Associate Degree Programs

When to Apply

Applications for admission to certificate or associate degree programs are due no later than June 15 for fall semester, Nov. 1 for spring semester and May 1 for summer semester.

High school seniors are encouraged to apply for admission as early as the first semester of their senior year and should provide a high school transcript including a list of courses in progress. Transfer students should apply at least three to four months before the beginning of the semester in which they plan to enroll to allow for additional time for processing of transfer credit, and should submit transcripts for all colleges attended.

How to Apply

To be admitted to UAF, a student must:

1. **Submit an application for admission**

Apply online (<https://www.uaf.edu/admissions/>). Applications must be received before the published deadlines, along with a \$40 nonrefundable application fee. Applications submitted after the published deadlines may not be processed by the beginning of the semester.

2. **Submit transcripts**

Most applicants to certificate and associate degree programs are not required to submit high school, GED or college transcripts, but all are strongly encouraged to do so. Transfer students who want to receive credit for prior work must submit official transcripts.

3. **Submit official test results**

Certificate and associate degree applicants must submit the results of the ACT, SAT or ACCUPLACER test taken within the last two years for English and composition placement. Students will also need to submit ALEKS test scores taken within the last year for placement into math, or any course that requires a math prerequisite. Contact Testing Services at 907-474-5277 or your high school guidance office for information concerning the ACT, SAT or ACCUPLACER tests. Visit [here](https://www.alaska.edu/aleks/) to take the ALEKS test (<https://www.alaska.edu/aleks/>).

INTERNATIONAL STUDENTS

See Applying for Admission: International Students (p. 36) page for additional information.

Admission Requirements

For admission to associate/certificate programs, official documentation must be provided showing that the applicant:

- A. is at least 18 years old, or
- B. has a high school diploma, or
- C. has a General Educational Development (GED) diploma.

Applicants under the age of 18 who will not have a high school diploma or GED before the start of their first semester are not admissible but may take courses as a nondegree student. Please note that in order to qualify for federal financial aid, students must have either a high school diploma or a GED.

TRANSFER STUDENTS

Transfer students are eligible for admission if they left their previous accredited institution(s) in good standing. Admission status will be determined on an individual basis if a student attended an unaccredited/nonregionally accredited postsecondary institution.

HIGH SCHOOL STUDENTS

High school students may take classes at UAF. There are two enrollment options for students interested in certificate or associate degree programs: Secondary Student Enrollment and TECH PREP. Both have specific registration requirements but do not require admission to UAF.

HOME-SCHOOLED STUDENTS

Home-schooled students may be admitted to an associate or certificate program if the student is at least 18 years old, holds a GED, graduated from a state-sponsored correspondence program with a high school diploma, or with the approval of the director of admissions.

After Acceptance

Qualified applicants will receive a letter of acceptance once all items are received and evaluated. Acceptance to UAF is final only when the Office of Admissions has approved all necessary credentials.

For additional program-specific application requirements, please see program descriptions (<https://catalog.uaf.edu/certificates-associate-summary-of-certificate-and-associate-degree-requirements/>).

REQUEST TO POSTPONE

An offer of admission to UAF is valid for the semester for which the applicant applied. Requests to postpone admission until a later semester may be made to the Office of Admissions. Admission may be postponed for up to one calendar year.

READMISSION OF FORMER DEGREE STUDENTS

Undergraduate degree students who choose not to enroll for a semester or more may be eligible to re-enroll in their original degree program without reapplying for admission. Students remain eligible to register for classes if:

- they have not been academically disqualified,
- they have not attended a non-UA institution since they were last enrolled at UAF,
- their lapse in enrollment is less than two years, and
- they are continuing with the same degree program.

Students who meet all of the above requirements should consult with their academic advisor and register for classes. Students who do not meet all of these requirements should submit a new application for admission along with the \$40 application fee and transcripts of any non-UA course work taken. Students who are unsure about their status should contact the Office of Admissions.

FRESH START FOR RETURNING STUDENTS

Fresh Start can offer a new beginning for students who performed poorly at UAF and have taken at least a two-year break from classes. Students who withdrew from school or were dismissed for academic reasons may apply for readmission through the Fresh Start program and request that their entire prior academic record be disregarded. Students who qualify for Fresh Start will begin their college study anew, with no

credits attempted or earned and no quality points reflected in future GPA calculations. Fresh Start can be used only once.

All prior course work will remain part of the student's overall academic record and appear on transcripts, but none of the previously earned credits can be used in a new program. These credits will be included only in GPA computations for graduation with honors (see Graduation with Honors (p. 136)). A student admitted under Fresh Start may be allowed advanced standing or a waiver of requirements just as any other student, but will not be allowed credit by exam for courses lost in Fresh Start. Students interested in Fresh Start should contact the Office of Admissions.

READMISSION OF SERVICE MEMBERS

The Higher Education Opportunity Act of 2008 requires that students who left school to serve in the uniformed services be readmitted into the same program with the same standing they had when they left. UAF allows for special readmission of these students. More information is available at Military and Veteran Services (<https://www.uaf.edu/veterans/>).

Where to Get More Information

Office of Admissions

University of Alaska Fairbanks
2nd floor, Signers' Hall
P.O. Box 757480
Fairbanks, AK 99775-7480
Email: uaf-admissions@alaska.edu
Telephone: 907-474-7500
Toll free: 800-478-1823
Fax: 907-474-7097

Applying for Admission: Bachelor's Degree Programs

When to Apply

First-year and transfer students apply for admission to bachelor's degree programs by June 15 for fall semester, Nov. 1 for spring semester and May 1 for summer semester. Applications are available for admission one year prior to the deadline: June 16 for fall semester, Nov. 2 for spring semester and May 2 for summer semester.

Applications are processed in the order they are received. Applications received after the published deadlines may not be processed by the beginning of the semester.

High school seniors are encouraged to apply for admission as early as the first semester of their senior year and should provide a high school transcript including a list of courses in progress, and are encouraged to submit ACT and/or SAT scores. Transfer students should apply at least three to four months before the beginning of the semester in which they plan to enroll to allow for additional time for processing of transfer credit, and should submit transcripts for all colleges attended.

How to Apply

To be admitted to UAF, a student must:

1. Submit an application for admission

Apply online at the Office of Admissions website (<https://www.uaf.edu/admissions/>). Applications must be received before the published deadlines, along with a \$50 nonrefundable application fee. Applications submitted after the published deadlines have a \$75 nonrefundable application fee and are processed in the order they are received. They may not be processed by the beginning of the semester.

2. Submit transcripts

To be considered official, transcripts must arrive in sealed envelopes from each institution attended.

High school transcripts — Applicants with no college coursework or fewer than 30 semester credit hours of college credit must submit official high school transcripts. Students currently enrolled in high school may submit unofficial, in-progress transcripts for admissions review. Acceptance becomes final when official transcripts with degree earned are received.

College transcripts — Applicants who have college-level coursework will need to submit unofficial, in-progress college or university transcripts to UAF for admissions review. Official transcripts are required for applying transfer credit and in order to be fully admitted.

International — See Applying for Admission: International Students (p. 36) page for additional information.

3. Submit official test results

First-year and transfer applicants with fewer than 30 semester credit hours are encouraged to submit the results of either the ACT or the SAT examination. Please note that the ACCUPLACER, ASSET, COMPASS, ALEKS or other placement tests do not satisfy this requirement. Applicants are also encouraged to send in official results of Advanced Placement (AP), International Baccalaureate (IB) and/or CLEP scores.

INTERNATIONAL STUDENTS

See Applying for Admission: International Students (p. 36) page for additional information.

Admission Requirements

For admission to baccalaureate-level programs, applicants must:

- a. have a high school diploma, and
- b. pass the 16-credit high school core curriculum (see High School Entrance Requirements (p. 32)) with a GPA of at least 2.5 and
- c. have a cumulative GPA of 2.5.

Admission to a specific bachelor's degree program is based on a combination of your high school GPA and completion of specific high school courses. See High School Entrance Requirements (p. 32) to specific colleges and schools within the university.

HIGH SCHOOL ENTRANCE REQUIREMENTS FOR ALL BACHELOR'S DEGREE PROGRAMS

High School Core Curriculum

Required for all first year students; 2.50 GPA in core; 16 credits total, which must include:

| English | Math | Social Sciences | Natural/Physical Sciences | Foreign Language ¹ |
|--|---|-----------------|--|-------------------------------|
| 4 cr | 3-4 cr in college preparatory mathematics (selected from Algebra I, II, geometry, trigonometry, elementary functions, precalculus or calculus) | 3-4 cr | 3-4 cr (includes 1-cr lab science course in biology, chemistry or physics) | 2 cr |
| College of Engineering and Mines • College of Natural Science and Mathematics • College of Fisheries and Ocean Sciences | | | | |
| 4 cr | Algebra-2 cr; Geometry-1 cr; Trigonometry-1 1/2 cr; At least an additional 1/2 cr of advanced math is recommended for computer science, mathematics, physics, statistics and engineering. | 3-4 cr | Physics or Chemistry-1 cr; Natural Sciences-1 cr; Elective-1cr. Both physics and chemistry are strongly recommended for engineering. | Same as high school core |
| College of Liberal Arts • College of Business and Security Management • College of Rural and Community Development • General Studies (undecided or exploratory) | | | | |
| 4 cr | Same as high school core; College of Business and Security Management students should be well-prepared in mathematics with at least Algebra II, but precalculus or higher is preferred. | 3-4 cr | Same as high school core | Same as high school core |

¹ Recommended but not required.

PRE-MAJOR

Students who have not met the minimum requirements for admission to a baccalaureate degree program will be admitted to pre-major in general studies.

Students will be changed to major status when they are in good standing and have completed 14 credits at the 100 level or above with a C (2.0) average or higher; 9 of the 14 credits must satisfy the general education requirements.

GENERAL STUDIES

Incoming students are not required to choose a degree program and have the option of choosing general studies - undeclared. These students are advised by the Academic Advising Center and will work with them on transitioning into a declared major. Students receiving GI assistance or veterans' benefits may be required to change to a declared major to keep their benefits award.

HOME-SCHOOLED STUDENTS

Home-schooled students who have gone through a state-recognized program and have a valid high school diploma may be admitted to a bachelor's program according to UAF admission standards. See How to Apply section (p. 31) for more information.

For home-schooled students who have not gone through a state-recognized program, admission to a bachelor's degree is through an

individual review by the director of admissions (or a designee). Applicants are encouraged to submit scores from either the SAT or ACT. Additional supporting documentation, such as letters of recommendation, may be requested for review by the director of admissions. In some cases, files will be shared with deans, department chairs or faculty for further review.

Students who have not met the minimum requirements for admission to a bachelor's degree program may be admitted to Pre-major status. Students will be changed to major status when their admissions file is complete, they are in good standing, and they have completed 14 credits at the 100 level or above with a C (2.0) average or higher, 9 credits of which must satisfy baccalaureate general education requirements (GER).

TRANSFER STUDENTS

A transfer student is defined as someone coming into the university who has been a degree student at any other institution prior to the semester applied for. Students with more than 30 university semester credit hours must submit official transcript(s) from every college or university previously attended. Students with less than 30 semester credits must submit high school transcripts and are encouraged to submit test scores (ACT or SAT) in addition to their college transcripts, and will be evaluated based on all transcripts. Transfer students are eligible for admission to a bachelor's program if they have a 2.0 GPA in their previous coursework and left their previous institution(s) in good standing. If applying to a technical or scientific program, students may need to present a higher grade average and proof that they have completed

appropriate background courses before they will be admitted. Admission status for students who have attended an unaccredited postsecondary institution will be determined on an individual basis. See Transferring Credits (p. 38) for more information.

PROBATIONAL ACCEPTANCE

Applicants with previous college coursework may be admitted with probationary status or an academic warning if their cumulative or most recent term grade point average is less than C (2.0).

Dual Enrolled/High School Students HIGH SCHOOL STUDENTS

High school students (<https://uaf.edu/admissions/apply/highschool.php>) may take classes at UAF. The Alaska Higher Education Admission Decision (AHEAD) program requires formal admittance to UAF. Other enrollment options are Secondary Student Enrollment, Alaska Advantage Program, North Star College and TECH PREP, which have specific registration requirements but do not require admission to UAF.

AHEAD PROGRAM

The Alaska Higher Education Admission Decision (AHEAD) program allows qualified high school students to be formally admitted to UAF as general studies students. AHEAD students are assigned an academic advisor and follow the registration timeline for degree students. To qualify, students must have completed three-fourths of their high school core curriculum and have a cumulative 3.0 GPA or higher. Students who wish to apply to the AHEAD program may get a program application from the Office of Admissions (<https://uaf.edu/admissions/apply/highschool.php>).

ALASKA ADVANTAGE PROGRAM

The Advantage program (<https://ecampus.uaf.edu/highschool/>) provides dual-enrollment students access to a unique virtual middle college opportunity featuring UAF's high-quality online courses. The program offers comprehensive student support for high school students and competitive package pricing to students from our partner districts. Students interested in the Alaska Advantage program can contact UAF eCampus for help getting started.

NORTH STAR COLLEGE

North Star College is a middle college partnership between UAF and FNSBSD. Participating students will have the opportunity to earn 7-15 transcripted college credits per semester that also apply towards Fairbanks North Star Borough School District (FNSBSD) graduation requirements. Interested students should apply directly through FNSBSD. Qualified students are selected by lottery.

After Acceptance

INCOMPLETE AND FINAL ACCEPTANCE

Qualified applicants will receive a letter of acceptance once all required items are received and evaluated. Applicants who are currently enrolled in high school or another college, or who have not submitted all required official transcripts, may be granted "incomplete" admission. Students with incomplete admission are not permitted to receive financial aid and may not register for future semesters. Acceptance becomes final when the Office of Admissions receives all required documents. For first-year students, that includes a final official high school transcript showing the student has satisfactorily completed all work in progress and that a high school diploma or GED has been earned. For transfer students,

that includes a final official transcript from every college or university previously attended.

REQUEST TO POSTPONE

An offer of admission to UAF is valid for the semester for which the applicant applied. Requests to postpone admission until a later semester must be made in writing to the Office of Admissions. Admission may be postponed for up to one calendar year. Students are required to notify the Office of Admissions if they are attending another school outside the University of Alaska statewide system.

APPLYING FOR A SECOND BACHELOR'S DEGREE

Upon official acceptance to a UAF undergraduate degree program, a student who earned a bachelor's degree from a regionally accredited institution will be considered to have completed the equivalent of the baccalaureate general education requirements (GER).

READMISSION OF FORMER DEGREE STUDENTS

Undergraduate degree students who choose not to enroll for a semester or more may be eligible to re-enroll in their original degree program without reapplying for admission. Students remain eligible to register for classes if:

- they have not been academically disqualified,
- they have not attended a non-UA institution since they were last enrolled at UAF,
- their lapse in enrollment is less than two years, and
- they are continuing with the same degree program.

Students should be aware that poor academic performance at other campuses in the UA system may affect academic standing upon their return to UAF. Students who meet all of the above requirements should consult with their academic advisor and register for classes. Students who do not meet all of these requirements should submit an undergraduate application for admission along with the application fee and transcripts of any non-UA coursework taken. Students who are unsure about their status should contact the Office of Admissions.

Fresh Start for Returning Students

Fresh Start can offer a new beginning for students who performed poorly at UAF when they last attended and who have taken at least a two-year break from classes. Those who withdrew from school or were dismissed for academic reasons may apply for readmission and request that their entire prior academic record be disregarded. Students who qualify for Fresh Start begin their college study anew with no credits attempted or earned, and no quality points reflected in future GPA calculations. Fresh Start can be used only once.

All prior coursework will remain part of the student's overall academic record and appear on transcripts, but none of the previously earned credits can be used in a new program. These credits will be included only in GPA computations for graduation with honors (see Graduation with Honors (p. 200)). A student admitted under Fresh Start may be allowed advanced standing or a waiver of requirements just as any other student, but will not be allowed credit by exam for courses lost in Fresh Start.

Readmission of Service Members

The Higher Education Opportunity Act of 2008 requires that students who left school to serve in the uniformed services be readmitted into the same program with the same standing they had when they left. UAF allows for special readmission of these students. More information is available

at the Military and Veteran Services website (<https://www.uaf.edu/veterans/>).

Where to Get More Information

Office of Admissions

University of Alaska Fairbanks
2nd floor, Signers' Hall
P.O. Box 757480
Fairbanks, AK 99775-7480
Email: uaf-admissions@alaska.edu
Telephone: 907-474-7500
Toll-free: 800-478-1823
Fax: 907-474-7097

Applying for Admission: Graduate Degree Programs

When to Apply

Applicants should apply to a graduate degree program at least six to nine months before the beginning of the semester in which they plan to enroll. Most departments require earlier submission of credentials for acceptance to their program. Contact the department for specific deadlines. The number of students accepted for graduate study is limited.

Graduate students are strongly encouraged to apply early. Applications received near deadline will be processed as time permits or may be considered for the following semester.

How to Apply

To be admitted to UAF, a student must:

1. Submit an application for admission

Apply online (<https://www.uaf.edu/admissions/>). Applications must be received before the published deadlines, along with a \$75 nonrefundable application fee. Applications submitted after the published deadlines have a \$100 nonrefundable application fee. Departmental deadlines may allow for applications past the published deadlines.

2. Submit official transcripts

The Office of Admissions requires official transcripts of all college-level coursework. To be considered official, transcripts must arrive in sealed envelopes or by a secure electronic service from each institution attended.

Transcripts for International Applicants

See Applying for Admission: International Students (p. 36) page for additional information.

3. Submit official test results

Not all departments require Graduate Record Exam (GRE) scores if the student has earned a GPA of 3.0 or higher. The UAF school code for the GRE is 4866. Refer to the admission requirements of your prospective degree program to determine which tests are required.

4. Submit resume/curriculum vitae

Include work and research experience, publications, patents, honors, professional and civic memberships, and foreign travel.

5. Submit statement of academic goals

Write a statement indicating why study is desired in a particular program. Include qualifications and educational experience. For applicants to M.Ed. or education licensures/certificate programs, a four-to-five-page self-evaluation essay is required.

6. Submit three letters of recommendation

Send at least three letters of recommendation from people able to vouch for the applicant's academic work, character and ability to undertake graduate study and research.

ADDITIONAL APPLICATION INFORMATION

• Master of Fine Arts Applicants

Master of fine arts applicants must submit writing samples when applying for admission to the creative writing program. An art portfolio (usually slides) must be submitted when applying to the program in art.

• Interdisciplinary Applicants

Submit a Proposed Graduate Study Plan (<https://www.uaf.edu/gradsch/prospective/interdisciplinary-program/admissions-procedure/>) and a comprehensive research proposal. Applicants must also obtain a commitment from UAF faculty members to serve as an advisory committee. Contact the Graduate School for specific interdisciplinary procedures.

- **International Students**

See Applying for Admission: International Students (p. 36) page for additional information.

- **Students in Western Regional Graduate Programs**

Students from Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming may be eligible for resident tuition through the Western Regional Graduate Program/Western Interstate Commission for Higher Education. This program is for students pursuing a graduate degree in administration of justice, Arctic and Northern studies, or rural development. For more information about this program, contact the Graduate School (<https://www.uaf.edu/gradsch/>) at 907-474-7464 or uaf-grad-school@alaska.edu. Students with questions may also contact the WICHE Student Exchange Program (<http://wiche.edu/wrgp/>) at P.O. Box 9752, Boulder, CO 80301-9752, or 303-541-0210.

requests to postpone are subject to approval by the department to which the student is applying.

Where to Get More Information

Office of Admissions

University of Alaska Fairbanks
2nd floor, Signers' Hall
P.O. Box 757480
Fairbanks, AK 99775-7480
Email: uaf-admissions@alaska.edu
Telephone: 907-474-7500
Toll free: 800-478-1823
Fax: 907-474-7097

Graduate School

University of Alaska Fairbanks
202 Eielson Building
PO Box 757560
Fairbanks, AK 99775-7560
Email: uaf-grad-school@alaska.edu
Telephone: 907-474-7464

Admission Requirements

In general, applicants may be admitted to a graduate program if they have a bachelor's degree from an accredited institution with at least a 3.0 (B) cumulative undergraduate GPA and a 3.0 (B) GPA in their major. The undergraduate major should provide suitable preparation for continuation of studies in the field of choice. Some programs require the Graduate Record Exam (GRE) or Graduate Management Admission Test (GMAT) and other special criteria for admission.

For the purposes of admission to graduate study, all grades, including those generated from retaking a course, are included in calculating GPA.

If an applicant meets the minimum requirements for the university, the Office of Admissions sends the complete application to the academic department. Program heads and/or committees in fields of interest will determine the adequacy of the student's preparation and whether or not departmental facilities are sufficient for their aims.

Information on specific degree programs is available from academic departments or by contacting the Graduate School (<https://www.uaf.edu/gradsch/>) at 907-474-7464, uaf-grad-school@alaska.edu.

After Acceptance

Qualified applicants can be accepted for admission while enrolled in their last semester at another college. Acceptance is incomplete, pending receipt of the final transcript indicating satisfactory completion of work in progress and the completion of graduation requirements prior to enrollment at UAF.

Final acceptance to UAF is complete only when the Office of Admissions receives and accepts all credentials.

REQUEST TO POSTPONE

An offer of admission to UAF is valid for the semester for which the applicant applied. Requests to postpone admission until a later semester should be sent to uaf-admissions@alaska.edu. Admission may be postponed for up to one calendar year with the approval of the academic department and the dean of the graduate school. All graduate student

Applying for Admission: International Students

When to Apply

International students may apply for admission to associate, bachelor and graduate-level degrees. Applications for admission from international students are due no later than March 1 for the fall semester and Sept. 1 for the spring semester. For graduate applicants, it is important to note that certain departments maintain earlier deadlines.

International students must complete all UAF application requirements to be admitted and meet U.S. immigration agencies' requirements to receive a Certificate of Eligibility for Non-immigrant Student Status, or Form I-20.

UAF does not issue immigration documentation Form I-20 to students entering academic programs that are offered only through distance delivery, certificate programs, occupational endorsement programs or the A.A.S. degree program in professional piloting.

Admission Requirements

More information regarding the process for application to associate, bachelor or graduate programs can be found in the Getting Started (p. 29) section.

UNDERGRADUATE APPLICANTS

To be admitted to UAF, a student must:

1. Apply online (<https://uaf.edu/admissions/apply/international.php>). Applications must be received before the published deadlines, along with a \$50 nonrefundable application fee. Applications submitted after the published deadlines have a \$75 nonrefundable application fee and are processed in the order they are received.
2. Send official secondary school and/or university transcripts to World Education Services (WES) (<http://www.wes.org/>). University coursework also needs to be evaluated with a comprehensive course-by-course credential report through a NACES-approved evaluation service. Transcripts from Canadian institutions (excluding Quebec) are exempt from this requirement; they may be sent directly from the issuing institution.
3. Submit certified official secondary school and/or university transcripts and English translations. It is required that official transcripts of all high school and/or college-level coursework be signed and sealed by a registration official of the institution(s) attended.
4. Submit official TOEFL or IELTS test scores.
5. Submit a copy of the passport identification page.
6. Complete the UAF Financial Statement for International Applicants and submit it with supporting financial documentation. This is a requirement for immigration documentation I-20 issuance, not for admission.

GRADUATE APPLICANTS

To be admitted to UAF, a student must:

1. Apply online (<https://uaf.edu/admissions/apply/international.php>). Applications must be received before the published deadlines, along with a \$75 nonrefundable application fee. Applications submitted after the published deadlines are only accepted upon a department's request and have a \$100 nonrefundable application fee.

2. Review your department's department-specific requirements and application deadlines.
3. Send official university transcripts to World Education Services (WES) (<http://www.wes.org/>). University coursework also needs to be evaluated with a comprehensive course-by-course credential report through a NACES-approved evaluation service. Transcripts from Canadian institutions (excluding Quebec) are exempt from this requirement; they may be sent directly from the issuing institution.
4. If the transcript does not show that a bachelor's degree has been or will be awarded, a diploma must also be sent.
5. Submit official GRE or GMAT test scores. Not all departments require GRE or GMAT scores if the student has earned a GPA of 3.0 or higher. Refer to the admission requirements of your prospective degree program to determine which tests are required.
6. Submit a resume/curriculum vitae. Include work and research experience, publications, patents, honors, professional and civic memberships, and foreign travel.
7. Submit a statement of academic goals. Write a statement indicating why study is desired in a particular program. Include qualifications and educational experience. (For applicants to M.Ed. programs or education licensures/certificates, a four- to five-page self-evaluation essay is required.)
8. Submit three letters of recommendation. Send at least three letters of recommendation from people able to vouch for the applicant's academic work, character and ability to undertake graduate study and research.
9. Submit official TOEFL or IELTS test results.
10. Submit a copy of the passport identification page.
11. Complete the UAF Financial Statement for International Applicants and submit it with supporting financial documentation. This is a requirement for immigration documentation I-20 issuance, not for admission.

Required Funding Amounts

The minimum estimated cost for one school year at UAF for an international student is \$39,363 for undergraduate students and \$39,209 for graduate students. (Students taking College of Engineering and Mines courses: \$40,755 undergraduate and \$41,153 graduate. College of Business and Security Management courses: \$41,091 undergraduate and \$41,639 graduate.) This covers tuition, fees, room and board on campus, books, health insurance, and a reasonable amount of personal expenses. It does not include transportation to and from Alaska, summer living or winter clothing costs.

Residents of countries that hold approved sister city/sister province agreements qualify for resident tuition. A complete list of sister cities and provinces is listed below. Students on an F-1 visa who are not from a UA sister city or province are not eligible for resident tuition. For international students who are residents of a sister city, the estimated cost for one school year at UAF is \$25,779 for an undergraduate and \$29,021 for a graduate student. (Students taking College of Engineering and Mines courses: \$27,171 for undergraduate and \$30,965 for graduate students. College of Business and Security Management courses: \$25,507 undergraduate and \$31,451 graduate.)

UA SISTER CITIES AND PROVINCES

| Country | City or Province |
|---------------|--|
| Australia | Darwin |
| Canada | Inuvik, Northwest Territory and Whitehorse, Yukon Territory |
| China | Harbin, Heilongjiang Province |
| Great Britain | Whitby, England |
| India | Pune |
| Japan | Chitose, Hokkaido Prefecture, Kanayama, Nemuro, Noshiro, Obihiro, Saroma, Teshio |
| Korea | Inchon |
| Mongolia | Erdenet City |
| Norway | Hammerfest, Mo, Tromsø |
| Philippines | Camiling |
| Russia | Khabarovsk Region, Magadan, Mirnyy, Noglicki, Okha, Providenya, Vladivostok, Yakutsk, Yeliso |
| Taiwan | Chiayi Township |

Immigration Requirements

Once a student has been accepted, UAF International Student and Scholar Services (ISSS) will issue immigration documentation Form I-20, which must be presented at a U.S. embassy or consulate in the country of citizenship in order to obtain an F-1 (student) visa. Form I-20 requires the university to certify to U.S. immigration agencies that a student has been accepted for full-time enrollment and has sufficient funds to meet estimated expenses for an academic program.

If a student is already in the United States on an F-1 visa, the Student and Exchange Visitor Information System record may be transferred as long as the record is in SEVIS active status. The student must contact ISSS before requesting a SEVIS record transfer to UAF.

English Proficiency Requirements

Students on an F-1 visa are required to submit scores from the TOEFL (Test of English as a Foreign Language) or the IELTS (International English Language Testing System) exam. Some permanent residents (green card holders) are not required to submit TOEFL or IELTS scores (see exceptions below). English proficiency may be demonstrated by:

1. A minimum TOEFL score of 79.
2. A minimum IELTS score of 6.5.
3. Completion of secondary education in Great Britain, New Zealand, Australia or Canada (excluding Quebec).

Requests for exception to this policy may be submitted via email to the Office of Admissions. Acceptable grounds for waiving this requirement may include:

1. Successful completion (C or higher) of a college-level, non-ESL English composition course.
2. A comparable score on another approved exam such as the ACT, SAT or ACCUPLACER exam.
3. Long-term permanent residents of the U.S. who are able to provide adequate documentation (transcripts, test scores, etc.) demonstrating academic readiness for WRTG 111x.

Request to Postpone

If applicants are unable to attend, they must notify the Office of Admissions and International Programs and Initiatives. Students may request to postpone their admission for up to one calendar year. For graduate applicants, acceptance is not guaranteed for a future semester. An updated financial statement and current supporting financial documents will be required from all students.

Where to Get More Information

Office of Admissions

University of Alaska Fairbanks
2nd floor, Signers' Hall
P.O. Box 757480
Fairbanks, AK 99775-7480
Email: uaf-admissions@alaska.edu
Telephone: 907-474-7500
Toll free: 800-478-1823
Fax: 907-474-7097

International Student and Scholar Services

University of Alaska Fairbanks
215 Eielson Building
P.O. Box 757760
Fairbanks, AK 99775-7760
Email: uaf-iss@alaska.edu
Telephone: 907-474-7583

Transferring Credits

Overview and Alternate Ways to Earn Credit

Credit accepted at UAF that has been earned from other regionally accredited institutions, earned through military educational experiences or accepted by special approval is considered transfer credit. Where possible, transfer credit is equated with UAF courses. See the Table of GER Substitutions (p. 39): UA System (p. 39) for a list of substitutions within the University of Alaska system and the Table of GER Substitutions: Non-UA Institutions (p. 39) for substitutions from non-UA institutions.

UAF's transfer credit resource website (https://uaonline.alaska.edu/banprod/owa/bwsk2tcr.P_Tcs_Selmau/) shows most courses previously evaluated by UAF and is an unofficial reference for undergraduate students who are considering transferring to UAF. An official evaluation of transfer credits will be provided after formal application and admission to a degree program at UAF.

International transfer students, please refer to the admissions requirements for international students (<https://catalog.uaf.edu/getting-started/admission-international-students/>) to ensure your previous coursework is transferred correctly.

Alternate Ways to Earn Credit

For other options for earning credit, including UAF Advanced Placement Testing, Credit for Prior Learning, UAF Credit by Exam & Competency Testing, College-level Examination Program (CLEP), College Board Advanced Placement Exams (AP), International Baccalaureate (IB), Credit for Language Testing and Dantes Standardized Subject Tests (DSST), see the Alternate Ways to Earn Credit (p. 42) section.

Regulations

The following regulations apply to transfer of credit:

1. Students are eligible for transfer of credit when they have been admitted to an undergraduate degree or certificate program.
2. The applicability of transfer credit to a student's major and/or minor requirements is subject to approval by the major and/or minor department. Transfer students must fulfill the UAF graduation and residency requirements, including those specific to their programs.
3. Undergraduate credits earned at the 100 level or above with a C- grade or higher at institutions accredited by one of the six regional accrediting agencies will be considered for transfer. Transfer credit is not granted for courses with doctrinal religious content or for graduate courses (for undergraduate programs).
 - **Note:** For information about transferring graduate credits to meet graduate program requirements, contact the Graduate School at uaf-grad-school@alaska.edu or 907-474-7464.
4. Transfer credit is awarded for courses in which the student received grades of C- or better. Instructor permission may be required for purposes of registration if the transfer credit courses have not satisfied the prerequisite requirements.
5. Any student who has completed a bachelor's degree from a regionally accredited institution will be considered to have completed the equivalent of the baccalaureate general education requirements, the Associate of Arts general education requirements and the Associate of Science general education requirements when officially accepted to a bachelor's, Associate of Arts or Associate of Science program at UAF. These students will also be considered to have completed the communication, computation and human relations requirements for the Associate of Applied Science and the certificate.
6. Any student who has completed an Associate of Arts or an Associate of Science degree from a regionally accredited institution will be considered to have satisfied the 100- and 200-level UAF general education requirements.
7. Any transfer student from a regionally accredited institution who has completed an associate degree specifically developed for transfer and is listed as such in the transferring institution's catalog and has completed at least 26 general education semester credit or 39 general education quarter credit requirements as part of the curriculum for the associate's degree at their previous institution(s) will be considered to have satisfied the UAF general education requirements.
8. Any transfer student who has completed the baccalaureate general education requirements at any regionally accredited institution will be considered to have completed the baccalaureate general education requirements at UAF. The student is responsible for providing an official statement and documentation certifying general education requirements completion at the previous institution.
9. Transfer credit is not included in the computation of the UAF GPA.
10. Class standing (e.g., freshman, sophomore) is based on the number of college credits accepted in transfer by UAF, combined with any courses completed in residence at UAF.
11. A student will be awarded credit for currently valid government and professional certifications that have been reviewed and approved for designated course equivalencies at UAF. A list of these programs (https://docs.google.com/spreadsheets/d/1SePj2xAeyrq58I9_Qbk913i-vPRbeW7KEPu0jwAwyl/edit?usp=sharing) is available in the Office of Admissions.
12. Credit may also be awarded for satisfactory completion of training programs, based on recommendations of the American Council on Education. ACE college credit recommendations can be found online (<http://www2.acenet.edu/credit/?fuseaction=search.main>). The award of credit is subject to review and approval of appropriate UAF faculty.

Military Credit

Credits may be awarded for formal service schooling and military occupational specialties (MOS) based on recommendations published by the American Council on Education. ACE military credit recommendations can be found online (<http://www.acenet.edu/news-room/Pages/Military-Guide-Online.aspx>). Credit completed through the Community College of the Air Force or Department of Defense courses is included in the category of military experience.

Non-University of Alaska GER Substitutions

TABLE OF GER SUBSTITUTIONS: NON-UNIVERSITY OF ALASKA INSTITUTIONS

This table describes courses accepted by transfer to UAF from institutions outside the University of Alaska system that may substitute for UAF's general education requirements. Students transferring from either UAA or UAS should consult Table of GER Substitutions: UA System (p. 39), or visit the Transfer to UAF webpage (<https://www.uaf.edu/admissions/apply/transfer.php>).

| UAF General Education Courses | Transfer Courses |
|--|---|
| WRTG F111X | the required first-semester composition course at the 100 level (must be basic freshman composition and not developmental) |
| WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X | the second half of the introductory composition series at the 100 level or above |
| COJO F121X, COJO F131X or COJO F141X | a 100-level or above performance course in fundamentals of speech communication, public speaking or small group communication |
| Arts (3 credits) | an introductory course in the arts |
| Humanities (3-5 credits) | an introductory course in the humanities |
| Social Sciences (6 credits) | introductory courses in different social sciences disciplines |
| Additional Arts/Humanities/Social Sciences (3-5 credits) | see Arts, Humanities, Social Sciences above |
| MATH F113X, MATH F122X, MATH F151X, MATH F152X or MATH F156X or; | a 100-level or above mathematics course having a prerequisite of at least two years of high school algebra |
| MATH F230X, MATH F251X, MATH F252X, MATH F253X or STAT F200X | a calculus or statistics course at the 100 level or above |
| Natural Sciences (8 credits) | courses in basic natural sciences (biology, chemistry, earth sciences, physics) with labs, at the 100 level or above. Non-lab courses are transferable only as a second natural science course. To fulfill general education requirements, a transfer student must complete two lab courses or two labs. Transfer of credit for courses in a natural science other than those listed requires approval of the dean of the College of Natural Science and Mathematics. |

University of Alaska GER Substitutions

TRANSFERRING CREDITS WITHIN THE UNIVERSITY OF ALASKA SYSTEM

In general, undergraduate credits earned at the 100 level or above at a University of Alaska institution will transfer to UAF. In addition, to serve students who transfer among the three institutions that make up the University of Alaska system, UAF, UAA and UAS have identified fully transferable general education requirements for baccalaureate degrees.

Credit for course work successfully completed at one UA institution which applies to general education requirements will fulfill the same categories at all other UA institutions. This applies even if there is no directly matching course work at the institution to which the student transfers.

Transfer students from UAA or UAS who have completed all general education requirements in the baccalaureate program before transferring to UAF will have completed all requirements for the UAF baccalaureate general education requirements. Courses taken to complete the baccalaureate general education requirements at UAA or UAS will meet UAF baccalaureate general education requirements according to the current Table of GER Substitutions: UA System (p. 39). Students should notify the UAF Office of Admissions if they completed the general education requirements at UAA or UAS prior to enrollment in a major program of study at UAF.

In accordance with UA Board of Regents policy, completion of the 38-44 credits of the UAF general education requirements meets the general education requirements at UAA and UAS.

For more information about transfer credit visit the Transfer to UAF website (<https://www.uaf.edu/admissions/apply/transfer.php>).

TABLE OF GER SUBSTITUTIONS: UA SYSTEM

Use this course substitution table to determine how individual courses that meet UAA or UAS general education requirements may substitute for individual UAF general education requirements. This table applies only to courses taken within the University of Alaska system. Students transferring

courses from outside the UA system should consult Table of Substitutions: Non-UA Institutions (p. 39) or visit the Transfer to UAF webpage (<https://www.uaf.edu/admissions/apply/transfer.php>).

WRITTEN COMMUNICATION (6 CREDITS)

| To meet these UAF General Education course requirements | Use any of these UAA general education courses | Use any of these UAS general education courses |
|---|--|--|
|---|--|--|

WRITTEN COMMUNICATION (3 cr)

| | | |
|------------|-----------|-----------|
| WRTG F111X | WRTG A111 | WRTG S111 |
|------------|-----------|-----------|

WRITTEN COMMUNICATION (3 cr)

| | | |
|--|--|----------------------|
| WRTG F211X, WRTG F212X, WRTG F213X, WRTG F214X | WRTG A211, WRTG A212, WRTG A213, WRTG A214 | WRTG S211, WRTG S212 |
|--|--|----------------------|

ORAL COMMUNICATION (3 CREDITS)

| To meet these UAF General Education course requirements | Use any of these UAA general education courses | Use any of these UAS general education courses |
|---|--|--|
|---|--|--|

ORAL COMMUNICATION (3 cr)

| | | |
|------------------------------------|--|--|
| COJO F121X, COJO F131X, COJO F141X | COMM A111, COMM A235, COMM A237, COMM A241 | COMM S111, COMM S235, COMM S237, COMM S241 |
|------------------------------------|--|--|

ARTS (3 CREDITS)

| To meet these UAF General Education course requirements | Use any of these UAA general education courses | Use any of these UAS general education courses |
|---|--|--|
|---|--|--|

ARTS (3 cr)

Complete one of the following:

| | | |
|--|--|--|
| ACNS F223X, ANS F161X, ANS F202X, ANS F223X, ART F105X, ART F200X, ART F261X, ART F262X, COJO F105X, COJO F217X, ENGL F217X, FLPA F105X, FLPA F121X, FLPA F161X, FLPA F200X, FLPA F215X, FLPA F217X, HUM F201X, MUS F103X, MUS F125X, MUS F200X, MUS F223X | AKNS A215, AKNS A216, AKNS A261, ART A160, ART A261, ART A262, DNCE A170, MUS A100, MUS A110, MUS A121, MUS A215, MUS A216, MUS A224, THR A111, THR A121, THR A214, THR A215 | ART S105, ART S160, ART S181, ART S201, ART S260, ART S261, ART S262, MUS S123, THR S111, THR S211, THR S212 |
|--|--|--|

HUMANITIES (3-5 CREDITS)

To meet these UAF General Education course requirements **Use any of these UAA general education courses** **Use any of these UAS general education courses**

HUMANITIES (3-5 cr)

Complete one of the following:

| | | |
|--|--|---|
| ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X, ENGL F201X, ENGL F270X, FL F200X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | AKNS A101A, AKNS A101B, AKNS A101C, AKNS A101D, AKNS A101E, AKNS A101F, AKNS A101H, AKNS A101I, AKNS A102A, AKNS A102B, AKNS A102C, AKNS A102D, AKNS A102E, AKNS A102F, AKNS A102H, AKNS A102I, AKNS A114A, AKNS A114B, AKNS A114E, AKNS A114F, AKNS A114H, AKNS A114I, AKNS A201, AKNS A230, AKNS A240A, AKNS A240F, AKNS A240H, AKNS A240I, ASL A101, ASL A102, ASL A201, ASL A202, ENGL A121, ENGL A200, ENGL A203, ENGL A205, ENGL A206, ENGL A245, FREN A101, FREN A102, FREN A201, FREN A202, GER A101, GER A102, GER A201, GER A202, HIST A101, HIST A102, HIST A121, HIST A122, HIST A131, HIST A132, HNRS A192, HUM A211, HUM A212, JPN A101, JPN A102, JPN A201, JPN A202, LING A101, PHIL A101, PHIL A201, PHIL A211, PHIL A212, PHIL A301, PHIL A305, PHIL A313, PHIL A314, PS A331, PS A332, PS A333, RUSS A101, RUSS A102, RUSS A201, RUSS A202, SPAN A101, SPAN A102, SPAN A201, SPAN A202, THR A211, THR A212 | AKL S105, AKL S106, AKL S107, AKL S108, AKL S109, AKL S110, AKL S205, AKL S206, AKL S207, AKL S208, AKL S209, AKL S210, COMM (was JOUR) S101, ENGL S200, ENGL S215, ENGL S217, ENGL S226, ENGL S261, ENVI S120, FREN S101, FREN S102, HIST S105, HIST S106, HIST S131, HIST S132, HUM S120, PHIL S101, PHIL S201, PHIL S301, SPAN S101, SPAN S102, SPAN S201, SPAN S202 |
|--|--|---|

SOCIAL SCIENCES (6 CREDITS)

To meet these UAF General Education course requirements **Use any of these UAA general education courses** **Use any of these UAS general education courses**

SOCIAL SCIENCES (6 cr)

Complete two courses in two different disciplines
from the following:

| | | |
|---|---|---|
| ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X, ECE F104X, ECE F107X, ECE F210X, ECE F229X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, HIST F100X, HIST F102X, HIST F110X, HIST F122X, HIST F132X, HUMS F125X, JUST F110X, JUST F125X, JUST F251X, NRM F111X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, PSY F123X, RD F200X, SOC F101X, SOC F201X, SPRT F281X, SWK F103X, WGS F201X | ANTH A101, ANTH A200, ANTH A202, ANTH A250, BA A151, CEL A292, COMM A255, COMM A280, ECON A101, ECON A102, ECON A120, ECON A210, ECON A256, EDEC A105, ENVI A212, GEOG A101, HNRS A292, INTL A101, JPC A104, JUST A110, JUST A175, JUST A251, LEGL A101, LSSS A111, PS A101, PS A102, PS A311, PSY A111, PSY A150, PSY A200, SOC A101, SOC A201, SOC A202, SWK A106, SWK A243, URS A121, WSGS A200 | ANTH S101, ANTH S202, ANTH S211, ECON S100, ECON S201, ECON S202, GEOG S101, HIST S105, HIST S106, HIST S131, HIST S132, PS S101, PS S102, PS S202, PS S251, PSY S111, PSY S250, SOC S101, SOC S201 |
|---|---|---|

ADDITIONAL ARTS/HUMANITIES/SOCIAL SCIENCES (3-5 CREDITS)

To meet these UAF General Education course requirements **Use any of these UAA general education courses** **Use any of these UAS general education courses**

Additional ARTS/HUMANITIES/SOCIAL SCIENCES (3-5 cr)

Complete one additional course from the Arts,
Humanities or Social Sciences courses listed
above.

MATHEMATICS (3-4 CREDITS)

To meet these UAF General Education course requirements **Use any of these UAA general education courses** **Use any of these UAS general education courses**

MATHEMATICS (3-4 cr)

Complete one of the following:

MATH F113X, MATH F122X, MATH F151X, MATH F152X, MATH F156X, MATH F230X¹, MATH F251X¹, MATH F252X¹, MATH F253X¹, STAT F200X

MATH A104, MATH A115, MATH A121, MATH A151, MATH A152, MATH A155, MATH A221, MATH A251, MATH A252, MATH A253, STAT A200, STAT A253, STAT A307

MATH S113, MATH S151, MATH S152, MATH S251, MATH S252, STAT S200

¹ Or any math course having one of these as a prerequisite.

NATURAL SCIENCES (8 CREDITS)

To meet these UAF General Education course requirements **Use any of these UAA general education courses** **Use any of these UAS general education courses**

NATURAL SCIENCES (8 cr)

Complete two of the following:

ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, BIOL F240X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, ES F100X + ES F100L, GEOS F101X, GEOS F102X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X, SCIA F101L

(OR complete UAA requirement of 7 cr, one of which must be a lab course) **Lab Courses:** ANTH A205 / ANTH A205L, ANTH A211 / ANTH A211L, ASTR A103 / ASTR A103L, ASTR A104 / ASTR A104L, BIOL A102, BIOL A103, BIOL A108, BIOL A111, BIOL A111L, BIOL A112, BIOL A112L, BIOL A178 / GEOL A178, BIOL A179 / GEOL A179, CHEM A103 / CHEM A103L, CHEM A104 / CHEM A104L, CHEM A105 / CHEM A105L, CHEM A106 / CHEM A106L, ENVI A211 / ENVI A211L, GEOL A111 / GEOL A111L, GEOL A115 / GEOL A115L, GEOL A221, LSIS A102, PHYS A123 / PHYS A123L, PHYS A124 / PHYS A124L, PHYS A211 / PHYS A211L, PHYS A212 / PHYS A212L **Non-lab Courses:** ANTH A205, ANTH A211, ASTR A103, ASTR A104, BIOL A100, BIOL A102, BIOL A178, BIOL A200, CHEM A103, CHEM A104, CHEM A105, CHEM A106, ENVI A111, ENVI A211, GEOG A111, GEOL A111, GEOL A115, GEOL A178, PHYS A101, PHYS A123, PHYS A124, PHYS A211, PHYS A212

(OR complete UAS requirement of 7 cr, one of which must be a lab course) **Lab Courses:** BIOL S103, BIOL S104, BIOL S105, BIOL S106, BIOL S111, BIOL S112, BIOL S115, BIOL S116, CHEM S103, CHEM S105 & CHEM S105L, CHEM S106 & CHEM S106L, ENVS S102, GEOL S104, PHYS S123, PHYS S124, PHYS S211, PHYS S212 **Non-lab Courses:** ANTH S205, CHEM S100, CHEM S105, CHEM S106, GEOL S105, OCN S101, PHIL S206, PHYS S165

Alaska Native-Themed Substitutions: UA System

If a student has satisfied the Alaska Native-themed requirement at either University of Alaska Anchorage or University of Alaska Southeast, that course will be used to satisfy the Alaska Native-themed requirement at UAF.

Alternate Ways to Earn Credit

Alternate Ways to Earn Credit

EXAM SERVICES

As a national test center, UAF eCampus Exam Services administers paper-and-pencil and computer-based exams. The office advises UAF students, prospective students and the community on national testing matters for college admissions and placement and for career and professional certification. eCampus Exam Services also coordinates credit by examination for local tests and for the College-Level Examination Program (CLEP). The office also does private proctoring. For more information and registration materials, contact eCampus Exam Services (<https://ecampus.uaf.edu/testing-services/>), 122 Bunnell Building, 907-455-2060, or uaf-testing@alaska.edu.

CREDIT FOR NATIONAL EXAMS

There are several ways to earn college credit by receiving a passing score on a national exam. UAF currently accepts the following exams:

- College-level Examination Program (CLEP)
- College Board Advanced Placement Exams (AP)
- International Baccalaureate (IB)
- Credit for Language Testing
- Dantes Standardized Subject Tests (DSST)

For any of the following exam options, grades are not computed in the UAF GPA. Credit received for exams is not considered UAF residence credit and is not considered to be part of the semester course load for classification as a full-time student. Credit is awarded to current or previously enrolled degree students at UAF. Rules that apply to transfer courses (including the tables of substitutions) also apply to course credit received through a national exam. The credit for national exam options are briefly outlined here.

All exams from the exam services listed above will be awarded credit. Departments may review exams for direct equivalencies. If no equivalencies are determined, students will receive elective credit for successful completion, as determined under each exam section. Courses may be added as General Education Requirements (GER) based on exam documentation per the professional judgment of the Office of Admissions

UAF Advanced Placement Credit

- **English**

Students with ACT or SAT scores that place them in WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X (see Writing Course Placement Scores (p. 57) table) may receive local advanced placement credit for WRTG F111X upon completion of WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X with a grade of C or better.

Students who have received transfer credit that substitutes for WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X with a grade of C or better and who meet the ACT or SAT test score requirement may also receive credit for WRTG F111X.

To receive this credit, students must submit the Application for WRTG F111X Credit form to the Office of the Registrar. The form is available at the Office of the Registrar or the English Department.

- **Alaska Native Language**

After completing a course in which the student was placed (above 101) and earning a B grade or higher, the student may ask to receive credit for the two immediately preceding prerequisite courses, if any. However, credit cannot be awarded for such courses if university credit has already been granted. Credit will not be awarded for special topics courses, individual study courses, literature or culture courses, conversation courses, or any course taught in English.

Credit for Prior Learning

The Academic Advising Center administers the credit for prior learning program, wherein students may earn undergraduate credit based on university-level learning they have obtained outside the classroom. Students can document the university-level learning they have gained through employment, volunteer service or other life experiences with a portfolio or copies of licenses and certificates earned. Certificate, associate or bachelor's degree students may earn up to 25 percent of total program requirements through the credit for prior learning program.

Credentials for admitted degree students who are currently enrolled are reviewed by faculty from participating departments who determine if this process is appropriate and make recommendations for awarding prior learning credit. Review is based on equivalency to courses listed in this catalog. Credit received for prior learning does not affect your GPA and is not considered residence credit. The university will award transfer credit for specified national and state authorizations, certificates, credentials and/or examinations (see Transferring Credits (p. 38)) that do not need credit for prior learning review. For further information or assistance, contact the Academic Advising Center, 510 Gruening Building, 907-474-6396 or uaf.advising@alaska.edu. The credit for prior learning student handbook is available in a pdf format (<https://uaf.edu/advising/files/cpl/CPL-Handbook-2016.pdf>).

UAF Credit by Exam

Credit by exam can be earned at UAF by students who are currently enrolled. It is up to the discretion of the department to decide which courses are available for credit by exam, the testing method and grading procedures (excluding those courses ending -90 through -99). Credit by exam may not duplicate a course for which credit has already been granted or in which the student is currently enrolled. Credit by exam may not be requested for audited courses until one year has passed since the end of the semester in which the course was audited.

There is a \$40 per credit hour non-refundable fee that will be placed on the student's account when the form is processed by the Office of the Registrar.

The credit by examination form is available on the Office of the Registrar forms page (<https://www.uaf.edu/reg/forms.php>). For more information on credit by exam, contact the Office of the Registrar.

UAF COMPETENCY TESTING

Students with appropriate background experience may complete certain components of the UAF general education requirements via competency testing. Credit by exam is not available.

- **Library Competency Exam**

The Library Competency Exam, administered by UAF eCampus Exam Services, is offered to fulfill the bachelors' degree requirement for LS F101X. The LCE, offered daily in eCampus Exam Services for \$30, is designed to test or verify a student's knowledge of standard library functions, services and organization. While no credit is awarded for passing this exam, a score of at least 70 percent will fulfill the bachelors' degree requirements for LS F101X. Please contact eCampus Exam Services at 907-455-2060, uaf-testing@alaska.edu or 122 Bunnell Building for more information.

- **Computer Skills Placement Exam**

The Computer Skills Placement Exam, administered by UAF eCampus Exam Services, is offered to fulfill the degree requirement for AIS F101, required by students seeking a B.B.A. or B.A.M. degree at UAF. The CSP, offered daily in eCampus Exam Services for \$30, is designed to test or verify a student's knowledge of information technology and file management procedures; word processing (Word), spreadsheets (Excel), databases (Access) and presentation (PowerPoint) software; and information and communication skills. While no credit is awarded for passing this exam, a score of at least 70 percent will fulfill the degree requirement for AIS F101. Please contact eCampus Exam Services at 907-455-2060, uaf-testing@alaska.edu or 122 Bunnell Building for more information.

- **Oral Communication Competency Exam**

Requests for competency testing for COJO F141X will be considered only if, in the opinion of a member of the Communication and Journalism Department faculty, a student presents evidence of substantive prior experience in formal public speaking situations (competency testing is not available for COJO F131X). Neither prior oral intensive course work nor COJO F432 is considered evidence of substantive prior experience. If the prior experience is sufficient, the individual will be asked either: a) to provide a video (not audio) recording of a formal public speaking presentation at least 10 minutes in length, or b) to present a 10-minute persuasive speech before a live audience, with at least one member of the Communication and Journalism Department faculty present. This process may be attempted only once. The date for live speeches will be established each semester, at a single time during the fourth to sixth week of classes. While no credit is awarded for passing this exam, a grade of at least a B (3.0) for either type of presentation will fulfill the general education requirements for COJO F141X. For more information and an application for competency testing, contact eCampus Exam Services at 907-455-2060, 122 Bunnell Building, or the Department of Communication and Journalism at 907-474-7761 or 101 Bunnell Building.

College-Level Examination Program (CLEP)

- The College-Level Examination Program (CLEP) is a national testing program that awards college credit for some introductory courses. The exams cost \$120 each (cost subject to change) and are administered by appointment only.

See a list of CLEP general and subject exams approved for credit at UAF below. To register for a CLEP exam or for more information, contact UAF eCampus Exam Services at 907-455-2060 or uaf-testing@alaska.edu. The following criteria apply to CLEP exams:

- Students can earn up to 6 semester credits upon successful completion of a general CLEP exam in the discipline of college mathematics, humanities, natural sciences or social sciences/history. Students who have earned less than 6 credits in the discipline (or 3 credits for mathematics), from any source, will be awarded the difference in credits upon successful completion of the exam. Students who already have 6 or more credits in the discipline (or 3 credits for mathematics) will not receive credit for the exam. General CLEP exams previously evaluated by departments are listed in bold font in the CLEP Exams Currently Evaluated table.
- All CLEP exams are approved for credit. Departments may review exams to determine whether or not the exam is a direct equivalent to a current UAF course. If the exam is not a direct equivalent to a current UAF course, the exam will transfer in as an elective and can be counted towards GER at the discretion of the Office of Admissions. All exams that were previously evaluated for a direct equivalent are listed below. Please refer to the Transfer Credit website (<https://uaf.edu/reg/transfer-credit.php>) for the most recent equivalencies posted.
- Students may not duplicate a course for which credit has already been earned or in which the student is currently enrolled.
- Students must wait at least one year after the end of an audited course before taking the CLEP subject exam for that course.
- The minimum passing score for approved CLEP exams is 50, with the exception of the following foreign languages scores: **French** semester I and II minimum 50, semesters III and IV minimum 59; **German** semester I minimum 39, semester II minimum 50, semester III minimum 55, semester IV minimum 60; **Spanish** semester I minimum 39, semester II minimum 50, semester III minimum 57, semester IV minimum 63.

COLLEGE-LEVEL EXAMINATION PROGRAM EXAMS CURRENTLY EVALUATED

| Examination Name | UAF Course Equivalent | Credits |
|---|---|---------|
| Algebra (College) | MATH F122X or MATH F151X | 3 or 4 |
| American Government | PS F101X | 3 |
| Calculus | MATH F251X | 4 |
| Chemistry | CHEM F105X/CHEM F106X | 8 |
| College Composition | WRTG F111X | 3 |
| College Mathematics¹ | Mathematics elective credits | 3 |
| Financial Accounting | ACCT F261X | 3 |
| French Language | FREN F101X/FREN F102X | 4/3 |
| | FREN F201/FREN F202 | 3/3 |
| German Language | GER F101X/ GER F102X | 4/3 |
| | GER F201/GER F202 | 3/3 |
| History of the United States I | HIST F131 ² | 3 |
| History of the United States II | HIST F132X | 3 |
| Human Growth and Development | PSY F240 ² | 3 |
| Humanities¹ | Humanities elective credits³ | 6 |
| Introductory Business Law | ABUS F241 | 3 |
| Natural Sciences¹ | Natural sciences elective credits | 6 |
| Precalculus | MATH F151X/MATH F152X | 4/3 |
| Principles of Marketing | ABUS F260 | 3 |
| Principles of Macroeconomics | ECON F102X | 3 |
| Principles of Microeconomics | ECON F101X | 3 |
| Principles of Management | ABUS F232 | 3 |
| Psychology (Introductory) | PSY F101X | 3 |
| Social Sciences/History¹ | Social sciences elective credits² | 6 |
| Sociology (Introductory) | SOC F101X | 3 |
| Spanish Language | SPAN F101X/SPAN F102X | 4/3 |
| | SPAN F201/SPAN F202 | 3/3 |
| Western Civilization I: Ancient Near East to 1648 | HIST F101 ² | 3 |
| Western Civilization II: 1648 to Present | HIST F102X | 3 |

- ¹ General CLEP Exam. Students who have earned less than 6 credits in the discipline (or 3 credits for mathematics), from any source, will be awarded the difference in credits upon successful completion of the exam. Students who already have 6 or more credits in the discipline (or 3 credits for mathematics) will not receive credit for the exam.
- ² Can be used to meet the social sciences general education requirement.
- ³ Can be used to meet the humanities general education requirement.

X = Course meets general education requirement.

The Table of GER Substitutions: Non-UA Institutions (p. 39) guidelines determine which courses may meet general education requirements.

Must have a minimum score of 50 in order to receive UAF credit, with the exception of foreign language exams (p. 46), where score determines the number of credits awarded.

College Board Advanced Placement Exams (AP)

UAF grants advanced credit for exam results of 3 or higher, or a score of 4 or 5 (effective fall 2016) for Calculus AB or BC, on the College Board (CEEB) Advanced Placement Tests (see the College Board Advanced Placement (AP) Exams Currently Accepted table below). These exams are usually taken during the junior or senior year in high school.

To receive CEEB advanced placement credit, ask that an official report of the exam results be sent to the Office of Admissions from the College Board. Credits may be earned for more than one advanced placement exam.

COLLEGE BOARD ADVANCED PLACEMENT (AP) EXAMS CURRENTLY ACCEPTED

| Examination Name | UAF Course Equivalent | Credits |
|--|---|---------|
| Art: History | ART F261X/ART F262X | 6 |
| Art, Studio: 2-D | Art electives ^{1,3} | 6 |
| Art, Studio: 3-D | Art electives ^{1,3} | 6 |
| Art, Studio: Drawing | Art Electives ^{1,3} | 6 |
| Biology | BIOL F115X/BIOL F116X | 8 |
| Calculus AB | MATH F251X | 4 |
| Calculus BC | MATH F251X/MATH F252X | 8 |
| Chemistry | CHEM F105X/CHEM F106X | 8 |
| Chinese Language and Culture | CHNS F101X/CHNS F102X | 10 |
| Computer Science A | CS F201 | 3 |
| English Language & Composition | WRTG F111X or GER humanities elective | 3 |
| English Literature & Composition | WRTG F111X or GER humanities elective | 3 |
| Environmental Science | Natural sciences elective (meets general education requirement) | 4 |
| European History | HIST F101 ² /HIST F102X | 6 |
| French Language and Culture | FREN F101X/FREN F102X | 7 |
| German Language and Culture | GER F101X/GER F102X | 7 |
| Government and Politics: Comparative | PS F201X | 3 |
| Government and Politics: United States | PS F101X | 3 |
| Human Geography | GEOG F101X | 3 |
| Italian Language and Culture | Foreign Language electives ³ | 8 |
| Japanese Language and Culture | JPN F101X/JPN F102X | 10 |
| Latin | Foreign Language electives ³ | 6 |
| Macroeconomics | ECON F202X | 3 |
| Microeconomics | ECON F201X | 3 |
| Music Theory (score of 3) | MUS F103X | 3 |
| Music Theory (score of 4 or 5) | MUS F131 ³ /MUS F133 ³ | 5 |
| Physics 1 | PHYS F123X | 4 |
| Physics 2 | PHYS F124X | 4 |
| Physics C: Electricity and Magnetism | PHYS F212X | 4 |
| Physics C: Mechanics | PHYS F211X | 4 |
| Psychology | PSY F101X | 3 |
| Russian Language and Culture (Prototype) | RUSS F101X/RUSS F102X | 8 |
| Spanish Language and Culture | SPAN F101X/SPAN F102X | 7 |
| Spanish Literature and Culture | Spanish electives (200 level) ³ | 2 |
| | SPAN F201 ³ | 3 |
| Statistics | STAT F200X | 3 |
| United States History | HIST F131 ² /HIST F132X | 6 |
| World History | HIST F100X | 3 |

¹ Portfolios may be submitted to the Art Department for further evaluation.

² Can be used to meet the social sciences general education requirement.

³ Can be used to meet the humanities general education requirement.

X = Course meets general education requirement.

The Table of GER Substitutions: Non-UA Institutions (p. 39) guidelines determine which courses may meet general education requirements.

Must have a minimum score of 3, or a score of 4 or 5 for Calculus AB or BC, in order to receive UAF credit.

International Baccalaureate

The International Baccalaureate Diploma Program is a two-year curriculum for students ages 16 to 19 and is similar to the final year of secondary school in some countries in Europe. UAF grants advanced credit, with a waiver of fees, for IB higher-level and some standard-level exams on which students have earned a score of 4 or higher, or a score of 5 or higher for mathematics (see the International Baccalaureate Exams Currently Accepted table below). To receive IB credit, students should submit an official copy of their IB exam results to the Office of Admissions.

INTERNATIONAL BACCALAUREATE EXAMS CURRENTLY ACCEPTED

| Examination Name | Level | UAF Course Equivalent | Credits |
|---|-------|--|---------|
| Biology | HL | BIOL F115X/BIOL F116X | 8 |
| Chemistry | SL | CHEM F103X/CHEM F104X | 8 |
| Chemistry | HL | CHEM F105X/CHEM F106X | 8 |
| Classical Greek | HL | Humanities electives ¹ | 6 |
| French | SL | FREN F101X/FREN F102X | 7 |
| French | HL | FREN F101X/FREN F102X | 10 |
| | | FREN F201 ¹ /FREN F202 ¹ | 6 |
| German | SL | GER F101X/GER F102X | 7 |
| German | HL | GER F101X/GER F102X | 10 |
| | | GER F201 ¹ /GER F202 ¹ | 6 |
| History of Europe & the Islamic World | HL | HIST electives ² | 6 |
| Japanese | SL | JPN F101X/JPN F102X | 8 |
| Japanese | HL | JPN F101X/JPN F102X | 10 |
| | | JPN F201 ¹ /JPN F202 ¹ | 10 |
| Language A1 (English) | HL | WRTG F111X and | 3 |
| | | ENGL electives | 3 |
| Language A: Language & Literature | | Not Accepted for Credit | - |
| Language A: Literature | | Not Accepted for Credit | - |
| Literature and Performance | | Not Accepted for Credit | - |
| Latin | HL | LAT F101X/LAT F102X | 6 |
| Mathematics | HL | MATH F251X | 4 |
| Mathematics w/Series & ODE option | HL | MATH F251X | 4 |
| | | MATH F252X | 4 |
| Mathematics and Further Math | HL | MATH F251X, MATH F252X | 8 |
| | SL | MATH electives | 3 |
| Philosophy | HL | PHIL F102X | 3 |
| Physics | SL | PHYS F123X | 4 |
| Physics | HL | PHYS F123X/PHYS F124X | 8 |
| Russian | SL | RUSS F101X/RUSS F102X | 8 |
| Russian | HL | RUSS F101X/RUSS F102X | 8 |
| | | RUSS F201 ¹ /RUSS F202 ¹ | 8 |
| Social & Cultural Anthropology | SL | ANTH electives | 6 |
| | HL | ANTH F242 ² | 3 |
| Spanish | SL | SPAN F101X/SPAN F102X | 7 |
| Spanish | HL | SPAN F101X/SPAN F102X | 7 |
| | | SPAN F201 ¹ /SPAN F202 ¹ | 6 |
| Theatre | SL | FLPA F200X | 3 |
| Theatre | HL | FLPA F200X | 3 |
| | | FLPA electives | 1 |
| 20th-C World History: History of Africa | HL | HIST F100X substitute | 3 |
| | | HIST electives | 3 |
| 20th-C World History: History of the Americas | HL | HIST F100X substitute | 3 |
| | | HIST electives | 3 |
| 20th-C World History: History of Asia & Oceania | HL | HIST F100X substitute | 3 |

| | | | |
|---|----|---|---|
| | | HIST electives | 3 |
| 20th-C World History: History of Europe & the Middle East | HL | HIST electives ² | 6 |
| Visual Arts | HL | ART F105X ^{1,3} /ART F161 ¹ | 6 |

¹ Can be used to meet the humanities general education requirement.

² Can be used to meet the social sciences general education requirements.

³ Can be used to meet the arts general education requirement.

X = Course meets general education requirement.

The Table of GER Substitutions: Non-UA Institutions (p.) guidelines determine which courses may meet general education requirements.

If an international baccalaureate exam is not in this table, contact the Office of Admissions at uaf-admissions@alaska.edu for more information.

Must have a minimum score of 4 (or a score of 5 in mathematics) to receive UAF credit.

Credit for Language Testing

UAF accepts successful test results from Brigham Young University or other national testing programs (subject to approval from the Department of Foreign Languages and Literatures) in languages for which no CLEP test is available, for a maximum of 12 credits. The first 10 credits may be applied to the general education Humanities and/or Additional Arts/Humanities, Social Sciences requirement, and any additional credits will be awarded general humanities elective credit. Results must be submitted directly to the Office of Admissions by the testing agency. For more information on foreign language testing opportunities, contact UAF eCampus Exam Services at 907-455-2060 or uaf-testing@alaska.edu.

Students who are speakers of non-English languages transferring from foreign partner universities to UAF are exempted from taking a foreign language test to demonstrate fluency in that language. Complete the language exemption/GER credit waiver form and file it with the Office of the Admissions. Upon approval, 3 credits of general education humanities and/or 3 credits of additional arts/humanities/social sciences general education requirements will be waived. This applies only to students participating in formalized articulation agreements established between UAF and partner institutions.

Dantes Standardized Subject Tests

Dantes Standardized Subject Tests (DSST), a national program, offers exams in traditional academic, vocational/technical and business subject areas. Credit is awarded for successfully completing the tests, as recommended by the American Council on Education. All DSST exams are approved for credit. Departments may review exams to determine whether or not the exam is a direct equivalent to a current UAF course. If the exam is not a direct equivalent to a current UAF course, the exam will transfer in as an elective and can be counted towards GER at the discretion of the Office of Admissions. DSST exams cost \$120 each (cost subject to change). Contact UAF eCampus Exam Services at 907-455-2060 or uaf-testing@alaska.edu about the availability of DSST testing.

A list of DSST exams that are currently approved for transfer can be found here (https://docs.google.com/spreadsheets/d/1SRP5-LZr3CEg8cNHunt-tv6nxD7jMsF__pHa0eZh3wg/edit/?usp=sharing).

Registration

In order to attend a class, students must be either registered or wait-listed. Credit for classes may be earned only when tuition and fees are paid in full. Registration is held each semester on dates published in the academic calendar (<https://catalog.uaf.edu/calendar/>).

Details about procedures and schedules for registering are published online and in separate publications at each campus. Registration instructions for the Fairbanks campus are provided in the UAF registration guide (<https://www.uaf.edu/register/>).

The first day of instruction for all semester-length courses is the date indicated in the official semester academic calendar. That date might not be the first day that a class meets.

If you register for courses, the university holds you financially responsible for payment of your tuition and fees. The university **may drop your registration** if you do not pay. Other consequences for nonpayment include not being able to receive your grades or transcripts.

Academic Advising Is Required

Academic advising is an important part of planning for your education. Degree students must obtain an academic advisor's signature every semester to begin the registration process. All undergraduate degree and certificate students are required to have an academic advisor. You will work in tandem with your academic advisor to develop a viable educational plan that reflects your academic interests and goals. Your academic advisor will assist you in determining the best options, alternatives and sequences of classes to take. Academic advising is available at several campuses. See Services and Resources (p. 92) for more information.

Graduate Students

First-semester graduate students must meet with their advisor, or, if no advisor is assigned, then they should meet with the department or program chair to begin their registration process.

Continuing graduate students who meet the registration requirement as found under the How to Earn a Graduate Degree (p. 409) section of the catalog need to confer with their advisor as to what courses to enroll in for each semester but are not required to meet with their advisor prior to registration.

Nondegree Students

Anyone who wants to attend classes at UAF as a nondegree student may register as long as they have the appropriate permissions. New nondegree students who are at least 18 years old must complete a free nondegree application (<https://uaf.edu/admissions/apply/#now>) in order to be eligible to register.

Nondegree students may also see an academic advisor, and it is recommended for those taking 9 or more credits in a semester or for those who have accumulated 30 or more UAF credits.

Nondegree students are subject to placement examination requirements for courses. Any nondegree student who wants to be considered a degree candidate must submit an application for admission, meet regular admission requirements and submit transcripts. Nondegree students are not eligible for financial aid or priority registration.

It's important for potential graduate students to understand that credits earned as a nondegree student might not be accepted for use toward a graduate degree program. Please see the transfer credit section of How to Earn a Graduate Degree (p. 409).

High School and Secondary School Students

High school and secondary students may take classes at UAF either as degree or nondegree students.

• Secondary Student Enrollment

The secondary student enrollment process allows secondary school students to register for UAF classes. A student meeting course prerequisites may enroll in university classes. Students must consult their appropriate school district officials and school counselors for approval prior to registration if they wish to use university courses to meet high school graduation requirements.

Registering for courses at UAF establishes a permanent academic record that reflects student academic performance in all courses attempted. Students must submit the free nondegree application (<https://uaf.edu/admissions/apply/#now>) and must obtain a parent's or guardian's permission (https://uaf.edu/reg/files/forms/REC_Secondary%20Student%20Parent%20Guardian%20Agreement.pdf) to enroll.

A parent or guardian may not attend a course in which their secondary school student is registered unless and until the parent or guardian is also officially registered for the course.

Note: Enrollment in UAF courses as a secondary student does not constitute formal admission to the university for the purposes of earning a certificate or degree. Please note that in order to qualify for federal financial aid, you must have either a high school diploma or a GED.

• TECH PREP Opportunities

The TECH PREP program allows students to earn credits toward a UAF certificate or associate degree by completing career and technical education classes in high school that have been approved for college credit by UAF. The classes available for credit vary from school to school, but in general, they are taken from the following areas: applied business; automotive; airframe and powerplant; human services; computer information office systems; allied health; drafting; emergency medical services; and welding. For more information, contact your high school counselor or the Community and Technical College at 907-455-2800.

• Alaska Higher Education Admission Decision (AHEAD) program

The AHEAD program allows qualified high school students to be admitted to UAF as general studies students. AHEAD students are assigned an academic advisor and follow the registration timeline for degree students.

To qualify, students must submit an AHEAD program application (<https://uaf.edu/admissions/apply/highschool/>). They must have completed three-fourths of their high school core curriculum and have a cumulative 3.0 GPA or higher. (To qualify for federal financial aid, you must have either a high school diploma or a GED.)

Adding, Dropping and Withdrawing from Classes

Information about the add/drop process can also be found at UAOnline (<https://uaonline.alaska.edu>) and at the Office of the Registrar website (<https://www.uaf.edu/reg/>). Adds, drops and withdrawals are not final until the student has completed the appropriate procedure, paid any relevant fees or tuition and submitted all necessary paperwork to the Office of the Registrar. If you drop a class within specified time frames, the course will not be part of your academic transcript. Important deadlines are listed in Important Registration Change Deadlines (p. 54) table.

Important Registration Change Deadlines

FULL TERM SECTIONS

| Action ¹ | Begins ² | Ends | Notes |
|---|---|---|---|
| Adding a class | First day of registration for the semester | Last day of the second week of instruction for the semester | Advisor's signature not required. |
| Credit/No-credit option | First day of registration for the semester | Friday of the third week of instruction for the semester | Undergraduates only; only electives not specified in a student's core, major, minor and degree programs are eligible for this option. |
| Dropping one or more class(es) (class does not appear on transcript) | First day of registration for the semester | Last day of the second week of instruction for the semester | |
| Faculty-initiated drop (class does not appear on transcript) | First day of registration for the semester | Last day of the second week of instruction for the semester | Faculty member will notify the Office of the Registrar. |
| Withdrawing from a class (class appears on transcript with W grade) | After the last day of the second week of instruction for the semester | Last day of the tenth week of instruction for the semester | |
| Withdrawing from all classes (total withdrawal) | After the last day of the second week of instruction for the semester | Last day of the tenth week of instruction for the semester | Advisor's signature required for student in degree program; total withdrawal form must be completed. |
| Faculty-initiated withdrawal (class appears on transcript with W grade) | After the last day of the second week of instruction for the semester | Last day of the tenth week of instruction for the semester | Faculty member will notify the Office of the Registrar. Student will receive an email notification at their UAF account. |
| Appeal for late withdrawal from a class ³ | After the last day for student-initiated withdrawals | 30 days after the first published day of instruction for the next regular semester. | Advisor's signature is required for students in a degree program and must complete appeal for late withdrawal paperwork; reviewed by a campus appeals committee. Late withdrawals are allowed for exceptional cases only and approval is not automatic. |

Note: Add/drop, total withdrawal and credit/no-credit requests must be completed by the appropriate deadlines.

¹ Add, drop, withdrawal and credit/no-credit option deadlines will be adjusted proportionally for courses that are less than a semester in length. See next two tables.

² The first day of instruction for all semester-length courses is the date indicated in the official semester academic calendar. It might not be the first day that a class meets.

³ Late withdrawals are allowed for exceptional cases only, and approval is not automatic.

SECTION IS MORE THAN 4 WEEKS, BUT LESS THAN THE FULL SEMESTER

| Action ¹ | Begins ² | Ends | Notes |
|---|--|--|---|
| Adding a class | First day of registration for the semester | Five business days after the class begins | Advisor's signature not required. |
| Dropping one or more class(es) (class does not appear on transcript) | First day of registration for the semester | Five business days after the class begins | |
| Faculty-initiated drop (class does not appear on transcript) | Published first date of semester | Five business days after the class begins | Faculty member will notify the Office of the Registrar. |
| Credit/No-credit option | First day of registration for the semester | Friday of the third week of instruction for the semester | Undergraduates only; only electives not specified in a student's core, major, minor and degree programs are eligible for this option. |
| Withdrawing from a class (class appears on transcript with W grade) | Six business days after the class begins | Before 60% of the scheduled length of the course has elapsed | |
| Faculty-initiated withdrawal (class appears on transcript with W grade) | Six business days after the class begins | Before 60% of the scheduled length of the course has elapsed | Faculty member will notify the Office of the Registrar. Student will receive an email notification at their UAF account. |

SECTION IS LESS THAN 4 WEEKS

| Action ¹ | Begins ² | Ends | Notes |
|---|--|--|---|
| Adding a class | First day of registration for the semester | First day of class | Advisor's signature not required. |
| Dropping one or more class(es) (class does not appear on transcript) | First day of registration for the semester | First day of class | |
| Faculty-initiated drop (class does not appear on transcript) | Published first date of semester | First day of class | Faculty member will notify the Office of the Registrar. |
| Credit/No-credit option | First day of registration for the semester | Friday of the third week of instruction for the semester | Undergraduates only; only electives not specified in a student's core, major, minor and degree programs are eligible for this option. |
| Withdrawing from a class (class appears on transcript with W grade) | Second day of class | Before 60% of the scheduled length of the course has elapsed | |
| Faculty-initiated withdrawal (class appears on transcript with W grade) | Second day of class | Before 60% of the scheduled length of the course has elapsed | Faculty member will notify the Office of the Registrar. Student will receive an email notification at their UAF account. |

NON-ATTENDANCE DROP POLICY

Students are expected to begin attending classes on the first day of instruction. Some departments, in trying to find space for students on waitlists, require that you attend the first class session or notify the department in advance that you cannot attend the first class. If you miss the first class without notifying the department, you may be dropped from the course, and the space may be assigned to a student on the waitlist.

Because of the high demand for composition and basic speech courses listed below, students who fail to attend either of the first two meetings of a basic course will be dropped even if they registered in advance and paid their fees. If space becomes available in a class from which you have been dropped by the department, you need to follow the add procedure to re-enroll.

| Code | Title | Credits |
|--------------------|-------------------------|---------|
| Composition | | |
| WRTG F111X | Writing Across Contexts | |

WRTG F213X Writing and the Sciences

ENGL F414 Research Writing

Basic Speech

COJO F131X Fundamentals of Oral Communication: Group Context

COJO F141X Fundamentals of Oral Communication: Public Context

WITHDRAWING

• Withdrawing from a Class

If you withdraw from a full-semester class later than the second Friday after the first day of instruction (last day to drop classes), a grade of W appears on your academic record. The W grade does not affect your GPA. However, it may impact your financial aid. Be sure to check with the Financial Aid Office before withdrawing from classes. The last day you can withdraw from a class is the 10th Friday after

the first day of instruction. For specific dates, see the academic calendar (p. 9). Fees and tuition are not automatically refunded for W grades. See the tables above for classes lasting less than a full semester.

- **Withdrawing from a Class Shorter than the Full Semester**

Withdrawal must be done by the 60 percent point of instruction.

- **Total Withdrawal from All Classes**

If you want to withdraw from all your classes later than the second Friday after the first day of instruction (last day to drop classes), use a Total Withdrawal form available at the Office of the Registrar forms page (<https://www.uaf.edu/reg/forms/>) or through the Office of the Registrar in Signers' Hall on the Fairbanks campus. You'll receive a W grade for all classes, which does not impact your GPA. A student-initiated total withdrawal is subject to the same deadlines as withdrawal from a class. For specific dates, see the academic calendar (p. 9). Fees and tuition are not automatically refunded for W grades.

WITHDRAWALS AFTER THE DEADLINE

Appeals for a late withdrawal after the student-initiated withdrawal deadline — the tenth Friday after the first day of instruction — are exceptions to policy and are allowed only in exceptional cases. Approval is not automatic, and you need to provide documented evidence to support your request. Acceptable serious and compelling reasons may include:

1. death in the immediate family;
2. serious illness or injury of the student or immediate family; and
3. factors outside of the student's control (for example, fire or flood).

Failing a course, avoiding an unsatisfactory grade or ignorance of policies are not serious and compelling reasons for seeking a late withdrawal and will not be approved.

Appeals for late withdrawals must be submitted within 30 class days after the beginning of the next regular semester. Forms for an appeal for late withdrawals are available at the Office of the Registrar forms page (<https://www.uaf.edu/reg/forms/>), through the Office of the Registrar in Signers' Hall on the Fairbanks campus, or through local campus student services offices. Once received, the appeal will be evaluated by a campuswide committee, which will return a decision to the student. The decision of the university is final, and a student who files a written appeal under these procedures shall be expected to abide by the final disposition of the review, as provided, and may not seek a further appeal of the matter under any other procedure within the university.

FACULTY-INITIATED DROP OR WITHDRAWAL

Instructors have the right to drop students who do not meet course prerequisites, did not obtain a grade of C- or better in all prerequisite courses, or who have not participated substantially in a class. Faculty-initiated drops submitted prior to the last day to drop classes will not appear on the student's transcript. Faculty-initiated withdrawals may occur between the last day to drop classes and the 10th Friday after the first day of instruction. A grade of W will appear on the student's transcript for faculty-initiated withdrawals. Fees and tuition are not automatically refunded for W grades.

DIRECTED AND INDIVIDUAL STUDY

Directed study courses allow a student to contract with an instructor to enroll individually in a course that is listed in the catalog but in a semester in which the course is not offered in the regular schedule.

For example, a directed study proposal may be approved if the course is not being offered that semester and the student needs to complete the course for graduation. The title for the directed study course will include DS.

Individual study courses provide students with opportunities to improve their knowledge in areas of study not listed in the current catalog. A student who requests or is advised to undertake such an individual study should present a brief proposal and syllabus to the appropriate faculty member. The syllabus must be attached to an individual study form. This requirement does not apply to directed study courses. An individual study course number will end in 97.

Registration for directed and individual study courses is not available via the web. To register for a directed or individual study course, download the request form (<https://www.uaf.edu/reg/forms/>) or pick up a copy at the Office of the Registrar. Submit the completed form to the Office of the Registrar.

Where to Get More Information

Office of the Registrar (<https://www.uaf.edu/reg/>)
 University of Alaska Fairbanks
 1810 Salcha Street | 102 Signers' Hall
 P.O. Box 757495 | Fairbanks, AK 99775-7495
 Email: uaf-registrar@alaska.edu
 Telephone: 907-474-6300

Course Placement

Placement Requirements

Many UAF courses require placement. All students planning to take courses with specific placement requirements must meet those requirements before registering for those courses. Specific writing, reading and math placement requirements are listed in the sections below.

Students need mathematics placement at MATH F105 or above and writing placement at WRTG F111X or above to register for natural science general education requirement courses unless otherwise noted.

Placement Tests

Test results are required for first-time degree or certificate students, transfer students with fewer than 30 transfer credits, or students planning to take 100-level English, reading, mathematics, natural sciences and many general education courses. UAF mathematics placement test results must be on file with the Office of the Registrar or the local regional campus registration office before you can register for developmental math, math, statistics or general education natural science classes. Results from American College Testing Program (ACT) or the Scholastic Aptitude Test (SAT) or, for associate degree or certificate students, the ASSET, or ACCUPLACER test must be on file with the Office of the Registrar before you can register for classes. UAF also offers a separate writing placement that can be done online (<https://sites.google.com/alaska.edu/wrtg-placement/home/>). Your ability to register will be blocked if you have not submitted the required test scores.

Students who enroll in any course without meeting placement or prerequisite requirements may be dropped or withdrawn from the course through the faculty-initiated withdrawal process.

Writing placement exams should be taken within two calendar years before the start of a course; mathematics placement exams must be taken within one calendar year prior. Students enrolling in developmental or lower-division general education requirement courses must have completed any prerequisite courses within two calendar years of their enrollment.

Course Prerequisites

Course prerequisites indicate what previous preparation is needed to enroll in a course. An instructor has the right to waive a course prerequisite if the instructor documents that the student possesses the background required to succeed in the class. Instructors also have the right to drop any students from a course if they do not meet the prerequisite or have not received a grade of C- or better in all prerequisite courses. Students who take a course at a higher level than a corresponding prerequisite course required for a degree program are not exempt from taking that required course.

Writing

Placement into writing courses requires either prerequisite course credit (a grade of C- or better) or a standardized placement test that measures academic skills such as critical thinking and reading. The score from any of the tests (see Writing Course Placement Scores (p. 58) table) places the student in the appropriate writing class. A writing sample, given on the first day of class, may modify this placement. Degree or certificate students placed in developmental writing or reading courses (F050-F110) should register for them during their first semester. These courses help students gain the competencies necessary to succeed in college-level courses. If the student's standardized test scores are below the minimums for WRTG F111X on the Writing Course Placement Scores (p. 58) table but the student's high school cumulative GPA is 3.0 or higher, the student may be given permission to enroll in WRTG F111X by the director of University Writing, the director of Student Success and Instruction at the UAF Community and Technical College, or rural campus writing faculty.

On the basis of test scores, students may be required to take developmental writing and/or developmental studies courses. These courses help students gain the competencies necessary for success in college-level courses.

Writing Course Placement Scores

| Courses | ACT English + Reading Total Combined Score | SAT Redesigned ¹ Evidence Based Reading + Writing Total Combined Score | ACCUPLACER Classic ³ Sentence Skills + Reading Comprehension Total Combined Score | ACCUPLACER Next Generation ⁴ Writing & Reading | ASSET Form B2 Writing Skills + Form B2 Reading Skills Total Combined Score | EdReady |
|---|---|---|--|---|---|--------------------|
| WRTG F211X , WRTG F212X, WRTG F213X or WRTG F214X ² | 60-72 | 710-800 | N/A | N/A | N/A | N/A |
| WRTG F111X | 36-59 | 480-700 | 170-240 | Writing: 265-300, Reading: 265-300 | 82-107 | 70+ ⁶ |
| WRTG F111X and WRTG F068 | N/A | N/A | N/A | N/A | N/A | 65-69 ⁶ |
| WRTG F110 | 30-35 | 430-470 | 140-169 | Writing: 250-264, Reading: 250-264 | 76-81 | 60-64 ⁶ |
| WRTG F090 | 26-29 | 390-420 | 110-139 | Writing: 235-249, Reading: 235-249 | 70-75 | 55-59 ⁶ |
| WRTG F080 | 18-25 | 330-380 | 80-109 | Writing: 200-234, Reading: 200-234 | 66-69 | >55 ⁶ |
| Adult Basic Education ⁵ | 2-17 | 200-320 | 40-79 | N/A | 46-65 | N/A |

¹ The SAT Redesigned first administered March 2016.

² Students with ACT or SAT scores that place them in WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X may receive local advanced placement credit for WRTG F111X upon completion of WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X with a grade of C or better. To receive this credit, students should submit the Application for WRTG F111X Credit form to the Office of the Registrar.

³ ACCUPLACER Classic will no longer be administered after January 2019. It is being replaced by Accuplacer Next Generation effective fall 2018.

⁴ ACCUPLACER Next Generation placement is based on the lowest of the two separate Writing & Reading Scores.

⁵ Adult Basic Education program listing (<http://www.jobs.alaska.gov/abe/>) can be found here (<http://www.jobs.alaska.gov/abe/>).

⁶ EdReady scores starting Spring 2023.

Note: WRTG F111X-plus pairs a section of WRTG F111X with WRTG F068. Qualifying students are those who have a combined ACCUPLACER Classic score between 130-169 or an ACCUPLACER Next Generation score between 490-529 and are referred by their academic advisor to Jennifer Tilbury <jtilbury@alaska.edu> at UAF Community and Technical College or the appropriate WRTG F111X-plus instructor of record to interview for the program. WRTG F068 is a writing support group tutorial class, recommended based on the student's needs for writing assistance along with any WRTG course listed in the table. Students may take up to three credits of WRTG F068 per semester for as many semesters as needed.

Foreign Language

Students may not register for foreign language classes higher than F101 unless they have received credit through CLEP, AP, transfer or another UAF-approved test for the prior levels. With the approval of the Department of Foreign Languages and Literatures, students may enroll in the level of a language at which they are competent, based on prior experience.

Mathematics

Mathematics course placement varies according to the type of degree the student is planning to pursue and the corresponding math course(s) needed. (See the degree program requirements (p. 198) for more detail.) The UAF mathematics placement test is used to determine math placement. Minimum test scores for placement in math and developmental math courses are listed in Math, Statistics and Developmental Math Placement Scores (p. 59) table.

Students who have limited access to or limited experience with the Internet should contact the Department of Mathematics and Statistics or the Department of Developmental Education for assistance.

Math, Statistics and Developmental Math Placement Scores

| Courses | ALEKS PPL |
|---|-----------|
| MATH F251X | 78-100 |
| MATH F211, MATH F230X | 70-100 |
| MATH F152X, MATH F156X | 65-77 |
| STAT F200X | 55-100 |
| MATH F122X, MATH F151X ¹ | 55-77 |
| MATH F113X | 30-100 |
| MATH F105 ² , MATH F105N, MATH F113X (MATH F071, MATH F105G, MATH F105H, MATH F105J) | 30-54 |
| MATH F055 (MATH F055D, MATH F055E, MATH F055F, MATH F061, MATH F062, HLTH F116, TTCH F131) | 17-29 |
| MATH F068 | 10-29 |
| MATH F054 (MATH F056, ABUS F155) | 0-16 |

¹ Placement for BIOL F115X, BIOL F116X, CHEM F105X, CHEM F106X.

² Placement for all general education requirements for natural sciences courses except those listed different in the catalog.

Note: Academic advisors should check test score and prerequisite course dates on BANNER or UAOnline and instruct students to retest if their test scores are more than **ONE** year old for the placement test date and **TWO** years old for the course prerequisite date. Students who enroll in any course without meeting placement or prerequisite requirements may be dropped or withdrawn from the course through the faculty-initiated withdrawal process.

Note: Completion of MATH F068 will meet the requirements needed to enter MATH F071, MATH F105 and MATH F105N.

Note: MATH F051 is appropriate for students needing a review of basic math skills.

Note: MATH F065 assists students in reviewing and reinforcing course concepts covered by MATH F054, MATH F055, MATH F062, MATH F071, MATH F105 and MATH F105N.

Note: Students, in consultation with their academic advisor or course instructor, may opt to take a course lower than their placement.

COSTS AND FINANCIAL AID

Financial Aid

What Is Financial Aid

Most students will need financial aid to help pay for the cost of attending college. Financial aid in the form of scholarships, grants, loans and employment is available at UAF to eligible students who need assistance to attend school.

Financial aid can be used to help pay for tuition, fees, books, supplies and living expenses such as room and board.

The Financial Aid Office provides counseling and information to students and parents, and administers a comprehensive program of financial assistance. Specific information regarding financial aid programs at UAF is on the Financial Aid website (<https://www.uaf.edu/finaid/>). The Financial Aid Office is in 107 Eielson. Contact Financial Aid at 907-474-7256, toll free at 888-474-7256 or at uaf-financialaid@alaska.edu.

Who Receives Financial Aid

To receive financial aid you must:

1. Be admitted to a financial aid-eligible certificate or degree program at UAF;
2. Be a U.S. citizen or eligible noncitizen (F-1 and J-1 students are not eligible for state or federal financial aid, but may apply for University of Alaska Foundation or UAF privately funded scholarships, and graduate fellowships or assistantships);
3. Have a valid social security number;
4. Be making satisfactory academic progress as defined by the Financial Aid Office policy (policies and forms are available online (<https://www.uaf.edu/finaid/>));
5. Not be in default on any federal education loan and not owe a refund because of overpayment of a previous federal grant or loan at any college or university;
6. Have earned a high school diploma, GED or equivalent.

How to Apply for Financial Aid

The forms to apply for federal, state and UAF financial aid programs are available at the Financial Aid Office or Financial Aid website (<https://www.uaf.edu/finaid/>).

All students must complete the Free Application for Federal Student Aid to be considered for grants, scholarships, tuition waivers, loans and work study.

FAFSA forms may be completed at the FAFSA website (<http://www.fafsa.ed.gov/>). The earliest date students may begin completing the form is Oct. 1.

The priority application deadline for UAF is Feb. 15. If you miss the deadline, you may still apply for financial aid, but you might not be eligible for institutional scholarships or some state/federal grants.

Costs of Attending UAF

The information in the Estimated UAF Living Expenses (p. 60) table for a typical full-time undergraduate student for the school year will help you estimate the total cost of attending UAF.

ESTIMATED UAF LIVING EXPENSES

| | Single student living alone off campus | Single student living in UAF residence hall |
|-------------------------------|--|---|
| Tuition and fees ¹ | \$9,870 | \$9,870 |
| Books, supplies | \$2,000 | \$2,000 |
| Room and board ² | \$12,450 | \$10,650 |
| Transportation | \$2,000 | \$ 400 |
| Misc./personal | \$2,250 | \$2,250 |
| TOTAL | \$28,570 | \$25,170 |

¹ Estimate includes Alaska resident tuition costs for freshmen/sophomores. Includes consolidated, UA facilities and UA network fees. Does not include specific course fees, health insurance, books, supplies, parking, travel, miscellaneous expenses or special costs associated with international or exchange students. Add \$17,670 for nonresident tuition. Costs are subject to change.

² Double room and meal plan

Standard budgets do not always fit everyone. Financial Aid staff will try to provide methods of covering unusual expenses such as medical bills, special child care or emergency items. Since eligibility is based on prior income, you may request a review of your eligibility if your income changes from loss of job, divorce, death or disability.

How Eligibility Is Determined

After the FAFSA is filed, the Financial Aid Office receives a student aid report from the U.S. Department of Education. The information on this form is used to determine a student's eligibility for financial aid at UAF.

Once the office has received this report, students will receive an email either requesting more information (such as copies of income tax forms, proof of citizenship, etc.) or an award notice detailing your eligibility for financial aid. This information is also available via UAOnline (<https://uaonline.alaska.edu>). Students should respond to requests for more information promptly to avoid delays.

The total amount of financial aid awarded will be based on the FAFSA results and the student's cost of attendance.

Scholarships, Grants and Tuition Waivers

Grants are usually based on financial need, whereas scholarship awards are based on academic achievement as well as financial need. These types of aid do not have to be repaid. Most grants and scholarships are designed for undergraduate students.

• Nanook Pledge Scholarship

The Nanook Pledge is a four-year merit scholarship for incoming first-year, transfer and readmitted students at UAF. Awards range from \$500 to \$10,000 per year and are based on high school GPA, test scores, tuition rate and transfer GPA. Students must be admitted to a UAF baccalaureate program and enrolled full time to be eligible for the Nanook Pledge Scholarship. The Nanook Pledge is available for up to four years for continuous enrollment at UAF.

• Nanook Commitment Scholarship

The Nanook Commitment is a four-year need-based scholarship for incoming first-year, transfer and readmitted students at UAF. Awards are based on high school or transfer GPA, tuition rate and need as determined by the Free Application for Federal Student Aid (FAFSA). Students must be admitted to a UAF baccalaureate program

and enrolled full time to be eligible for the Nanook Commitment Scholarship. The Nanook Commitment is available for up to four years for continuous enrollment at UAF.

- **University of Alaska Scholars Program**

UA Scholars are exceptional graduates of Alaska high schools who are offered a unique opportunity to attend the University of Alaska with an \$12,000 scholarship paid over eight semesters at \$1,500/semester. The UA Scholars Program encourages Alaska's high school graduates to pursue their advanced education in the 49th state. Alaska high schools designate the top 10 percent of the junior class at the end of their junior year for the UA Scholars Award. UA Scholars may use their awards at any of the UA system campuses. The award may also be applied to costs of qualified student exchange programs. Contact the UA Scholars coordinator at the Office of Admissions at 907-474-7500 or 800-478-1823.

- **Alaska Performance Scholarship**

The Alaska Performance Scholarship is available to Alaska residents who graduated from an Alaska high school (public, private or home school) in 2011 or later. Students must complete high school, achieve a high school GPA of at least 2.5, earn a minimum score on a college or career readiness test, enroll at least half time, remain in good standing, and have qualifying education costs remaining after using all other nonloan aid. Students can receive up to eight semesters of award with three maximum annual award levels of up to \$2,378, \$3,566 and \$4,755. To qualify, students must complete the FAFSA as soon as possible. For more information visit the Alaska Performance Scholarship website (http://acpe.alaska.gov/FINANCIAL_AID/Grants_Scholarships/Alaska_Performance_Scholarship/) or call 800-441-2962.

- **UAF Privately Funded Scholarships**

Several hundred privately funded scholarships are available to all prospective and current students in a variety of academic majors. You may apply online (<http://alaska.academicworks.com>). New and prospective students must also apply for admission to UAF to be considered for scholarships. For more information contact the Office of Financial Aid at 907-474-6228 or 888-474-7256.

- **University of Alaska Foundation Scholarships**

Scholarships are available for students attending any campus in the UA system. Applications are submitted online (<http://alaska.academicworks.com>). The deadline is Feb. 15. For information telephone 907-450-8033 or visit the University of Alaska Foundation website (<https://www.alaska.edu/foundation/>).

- **Army ROTC Scholarships**

The U.S. Army awards four-year scholarships to high school students based on nationwide competitions. Students may use these scholarships to attend the university of their choice, provided that university is also host to an Army ROTC program. The UAF Army ROTC program supports campus-based competition for two-, three- and four-year scholarships for qualified UAF students. These scholarships may be used for undergraduate or graduate programs. Army ROTC scholarships pay UAF tuition and mandatory fees, \$900 annually for books and supplies, and a monthly stipend for living expenses ranging from \$300-\$500 depending on the length of the scholarship.

For more information about the Army scholarship program, eligibility requirements and the application process, contact the Department of Military Science at 907-474-6852 or email uaf-army-rotc-dept@alaska.edu.

- **Bureau of Indian Affairs and Native Corporation Scholarships**

The federal Bureau of Indian Affairs offers grants to undergraduate full-time students. Applicants must be at least one-quarter American

Indian or Alaska Native. These grants supplement other financial aid and are based on financial need. Grants range from \$50-\$3,000 or more each year. The average grant at UAF is \$1,600. More information on BIA grants can be obtained from the BIA Regional Office, 1675 C Street, Anchorage, AK, 99501-5198, or by telephone at 907-271-4115. Some regional and village corporations provide scholarships to shareholders. Contact your local corporation for details on eligibility and application procedures.

- **Pell Grant**

The federal Pell Grant is a need-based grant available to undergraduate students to help pay college costs. Since this grant is based on financial need, students must complete the Free Application for Federal Student Aid. A federal processor will send applicants a student aid report indicating whether they qualify. Federal Pell Grants award up to \$6,895 for the 2022-2023 academic year.

- **Federal Supplemental Educational Opportunity Grant**

This grant is for exceptionally needy undergraduate students. Award amounts range from \$500-\$1,000 each year.

- **Alaska Education Grant**

The AlaskAdvantage need-based grant is awarded to Alaska residents attending Alaska institutions. Priority is given to students pursuing degrees in Alaska workforce priority programs (such as allied health, social and community services, or teaching) or who have an ACT score of 25 or higher or SAT score of 1180 or higher. Part-time awards range from \$500-\$1,000 per academic year. Full-time awards range from \$1,000-\$4,000 per academic year.

- **Western Undergraduate Exchange Award**

UAF participates in the Western Undergraduate Exchange administered by the Western Interstate Commission for Higher Education. Only new undergraduate degree applicants claiming residency in Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington or Wyoming are considered for a WUE award that reduces nonresident tuition to 1.5 times the resident tuition rate. WUE award applicants must submit an application for admission and clearly mark their interest in WUE on the form. Priority deadline for reviewing WUE applications is Feb. 15. For more information contact the Office of Admissions at 800-478-1823, 907-474-7500, or through the Office of Admissions website (<https://www.uaf.edu/admissions/>). **Note:** Students attending any campus of the University of Alaska system under the Western Undergraduate Exchange program are assumed to be receiving the benefit of reduced tuition because of their residency in a partner state. Therefore, time spent in WUE does not count toward the time required to establish residency in Alaska for tuition purposes. If students end their participation in WUE, they could begin establishing residency for tuition purposes as set forth in the resident and nonresident tuition policy (p. 64).

Graduate Assistantships

You must be admitted to a graduate program to receive an assistantship. Research and teaching assistantships are awarded to qualified graduate students by each department or program. For application information, contact the department or program directly. For more information, see *How to Earn a Graduate Degree* (p. 409).

Fellowships are available through the University of Alaska Foundation, the Graduate School and private organizations. A limited number of these awards are granted each year, and the amounts vary. For information, contact the UA Foundation, 907-474-7687, or the Graduate

School, 907-474-7464, or visit the Graduate School website (<https://www.uaf.edu/gradsch/>).

Loans

Loans represent a major source of assistance as you try to meet the full costs of your education. Educational loans generally have long-term repayment schedules and offer low interest rates. They often have provisions for deferring payments and may offer more benefits related to financial need.

Any student who borrows money for college should understand the specific conditions and requirements regarding disbursements, deferments and repayment options. Students who fail to meet the conditions of the satisfactory academic progress policy may be denied all federal aid.

UAF participates in the Federal Student Loan Program. The Federal Stafford Loan provides loans from the federal government. The program offers subsidized and unsubsidized loans. Subsidized loans are for students who have financial need; the government makes interest payments on the loan while the student is in school, in grace period or in deferment. Unsubsidized loans are those for which interest accrues while in school. A student may receive subsidized federal loans for up to 150 percent of his/her program's published length. If a student exceeds this time frame, his/her loans will lose the interest subsidy and interest will begin to accrue on those loans. Loan repayment calculations are available at the program website (<http://www.finaid.org>).

Students must be enrolled in at least 6 credits to qualify for a state or federal loan. Yearly limits for dependent students are \$5,500 for first-year students, \$6,500 for second-year students and \$7,500 for upper-level undergraduates. Independent students may borrow, including the subsidized federal loan, up to \$9,500 as first-year students, \$10,500 as second-year students and \$12,500 as third- or fourth-year students. Graduate students may borrow \$20,500. The interest rate varies annually and is capped at 8.25 percent.

The Federal Parent Loan for Undergraduate Students is a program for parents of dependent students. The cost of attending UAF determines the annual loan limits. A variable interest rate or finance charge, not to exceed 9 percent, is determined each year for the federal PLUS programs.

The Alaska Commission on Postsecondary Education offers a state loan program. These loans are available to all students attending UAF. State loans include the Alaska Supplemental Education Loan, the Family Education Loan and the Winn Brindle Scholarship Loan.

Student Employment

Campus jobs help many UAF students pay college costs. Many student positions are available across UAF campuses, as well as the University of Alaska statewide system offices in Fairbanks. More than 1,000 students are employed in these jobs. Full-time student status is not required unless specified by a department. However, students who are less than full time are subject to FICA withholding, and departments that hire part-time student employees are subject to the applicable benefit rate charge.

Student employees may work up to 20 hours each week while classes are in session and up to 40 hours when classes are not in session. Pay rates are based on the job classification. The average pay varies from \$300-\$500 each month. Since there is no "pool" for workers, students apply directly to the departments with position vacancies. Job announcements and information on how to apply for positions are available from Career

Services, 302i Eielson, 907-474-7596, or from Human Resources, Administrative Services Center, 907-474-7700, or at the Careers at UAF website (<https://alaska.edu/jobs/>).

The Federal Work Study program provides jobs for graduate and undergraduate students with financial need. Job placement and working conditions are similar to regular student employment. To qualify for FWS, students must be eligible for federal financial aid as determined based on information provided on the required FAFSA form.

Veteran Services

The UAF Department of Military and Veteran Services monitors the educational progress and status of veterans who attend UAF using VA educational benefits. They also help veterans, service members and eligible dependents with the paperwork needed to begin and continue certification under the various GI Bill® benefits. If you qualify and wish to use your benefits, you must be fully admitted to UAF and in a state-approved degree or certificate program. A complete list of benefit programs is available at the DMVS website (<https://www.uaf.edu/veterans/va-educational-benefits/>). If you are unsure whether you are entitled to GI Bill benefits, contact the Department of Veterans Affairs in Muskogee, Oklahoma, at 888-442-4551 (888 GI BILL 1) or through the Department of Veterans Affairs website (<http://www.gibill.va.gov>). Specific questions regarding vocational rehabilitation should be directed to the Fairbanks Vet Center, 540 Fourth Ave., Suite 100, Fairbanks, AK 99701, or call 907-456-4238.

Because the Department of Veterans Affairs processes benefit payments as a reimbursement, you should initiate your VA paperwork 60-90 days before your classes start. You can apply for veteran benefits online (<https://www.va.gov/>). You can request certification for your UAF VA educational benefits at the DMVS website (<https://www.uaf.edu/veterans/forms/>), or visit our office at 107 Eielson, call 907-474-7400 or email uaf-va@alaska.edu.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website (<https://www.benefits.va.gov/gibill/>).

Remaining Eligible for Aid

Students receiving financial aid are required to maintain satisfactory academic progress. Undergraduate students must satisfactorily complete a minimum of 67 percent of total credits attempted each year and have a cumulative grade point average of 2.00 (3.00 for graduate students).

Students may appeal the suspension of aid. Appeals must be in writing and must state the reasons for failure to maintain satisfactory standards of progress, as well as the steps the student will take to meet those standards in the future. Appeals should be directed to the Financial Aid Office, which will determine if the requirements for satisfactory academic progress will be waived. Academic progress requirements are subject to changes in federal or state law and institutional policy. A complete description is available at the Financial Aid Office (<https://www.uaf.edu/finaid/>).

Payment to the Student

Disbursement of financial aid is usually in equal amounts by semester. Students are given half the total award at the beginning of each semester. Tuition, fees and all other amounts due to UAF at the time financial aid is

released to the student must be paid before the balance of aid is released to the student.

All financial aid checks as well as checks from outside organizations (such as Native corporations, clubs, etc.) are initially credited to the student's account to pay for any debt owed to the university. Any balance remaining is refunded to the student in accordance with the university's refund policy. Students who receive federal financial aid and totally withdraw from classes during a semester may have to pay back a portion of the federal financial aid received for that semester. The amount to be repaid is based on the number of class days attended before withdrawal compared to the total days in the semester and amount of federal aid received. If the withdrawing student is entitled to a refund of tuition and fee charges, all or part of the refund may be returned to the federal financial aid programs. The amount of a refund, repayment or return of federal financial aid is based on U.S. Department of Education regulations concerning return of federal financial aid. Any refund or repayment calculation exceeding the amount of refund determined by university policy will be charged to the student. Financial aid recipients are strongly encouraged to confirm the amount of any personal liability before processing a total withdrawal from classes.

Important Financial Aid Dates

- **Oct 1**
Apply for federal aid with the Free Application for Federal Financial Aid. It is best to apply well before the time you will need the financial aid.
- **February**
Apply for admission to UAF. Financial aid cannot be processed for students who have not been admitted to a UAF degree or certificate program.
- **Feb. 15**
UAF scholarship application due. This application includes three short essays which may be revised at any time, so applicants should start early. Apply online (<http://alaska.academicworks.com>).
- **May to July**
Federal student loan borrowers should complete federal loan promissory note and entrance counseling online (<http://www.studentloans.gov>). Processing time is approximately one week. If sent to UAF in time, loans will be disbursed 10 days before the first day of class each semester.
- **June 1 for fall; Oct. 15 for spring**
Deadline for admission to graduate programs, with all supporting documentation, transcripts and test scores.
- **June 15**
Deadline for undergraduate admission to UAF for the fall semester. This is an absolute MUST. UAF cannot process financial aid for students who have not been admitted. Application for fall Nanook Pledge and Nanook Commitment scholarships due (included in the Application for Admission)

Rights and Responsibilities of Accepting Financial Aid

As a financial aid recipient at UAF, you have the right to:

1. Know what financial programs are available to you.
2. Know how to apply, how eligibility is determined and what terms and conditions are related to your aid.

3. Know how the university determines whether you are making satisfactory academic progress toward your degree and what happens if you are not making such progress.
4. Request an explanation of your financial aid package, including what portion is gift and what portion must be repaid and the terms of repayment.
5. Know the costs of attending UAF and the refund policy for students who withdraw.

For continued receipt of financial aid you must:

1. Complete and file all financial aid forms accurately and on time.
2. Read and understand all documents you sign. You should also keep copies for your records.
3. Know the limits and conditions of financial aid programs.
4. Notify the Financial Aid Office of any change of address, name, marital status, attendance status or receipt of additional financial awards.

Where to Get More Information

Office of Financial Aid

University of Alaska Fairbanks
107 Eielson Building
P.O. Box 756360
Fairbanks, AK 99775-6360
Email: uaf-financialaid@alaska.edu
Telephone: 907-474-7256
Toll free: 888-474-7256

Tuition and Fees

Tuition

Tuition is determined by the number of credit hours in which the student is enrolled, the level of the courses and the student's residency status (see the 2022-2023 tuition table below).

- Undergraduate students are considered full time at 12 or more credits.
- Graduate students are considered full time at 9 or more credits.
- Students enrolled in no more than 4 credits per semester pay tuition at the resident rate.

2022-2023 TUITION

| | Resident | Nonresident | WUE |
|---|--------------|---------------|--------------|
| Fairbanks 100-200-level courses ¹ | \$260/credit | \$826/credit | \$390/credit |
| Community Campus 100-200-level courses ² | \$234/credit | \$800/credit | \$351/credit |
| All 300-400-level courses | \$289/credit | \$855/credit | \$419/credit |
| All 600-level courses | \$539/credit | \$1105/credit | N/A |

WUE Western Undergraduate Exchange; 150% of Alaska resident rate.

¹ Applies to 100-200-level courses offered through the Rural College and Fairbanks Troth Yeddha' campus.

² Applies to 100-200-level courses offered through the Community and Technical College and Bristol Bay, Chukchi, Interior Alaska, Kuskokwim and Northwest Campuses.

Note: Audited credits are charged at the same rate as other credits.

RESIDENT AND NONRESIDENT TUITION

Students eligible for Alaska resident tuition generally include:

- an Alaska resident, defined as a person who is a U.S. citizen or eligible noncitizen who has been physically present in Alaska for at least the past two years;
- students who received a State of Alaska Permanent Fund Dividend within the last 12 months and can certify they have been in Alaska for the past 12 months;
- military personnel on active duty, their spouses and dependent children;
- members of the National Guard, their spouses and dependent children;
- veterans of the U.S. armed forces, and their dependents, who are eligible for Veterans Affairs educational benefits;
- dependent children of a person who graduated and holds an associate, bachelor's, master's or doctoral degree from the University of Alaska;
- dependent children of an Alaska resident as evidenced by the most current federal income tax return filed within the past 16 months;
- students participating in the Western Interstate Commission on Higher Education Western Regional Graduate Program;

- students enrolled in 4 or fewer credit hours within the UA system during a semester;
- students from other states or provinces whose public universities waive nonresident tuition surcharges for Alaska residents, or who are from foreign cities and provinces with established Alaska sister city or sister province relationships;
- students designated by the UA Scholars Program as UA Scholars;
- participants of the University of Alaska College Savings Plan;
- spouse or dependent children of a University of Alaska employee; or
- students who graduated within the past 12 months from a qualified Alaska high school.

Students will be considered nonresident if within two years prior to applying for residency they:

- were absent from Alaska for an aggregate of more than 120 days for other than documented absences due to illness or attendance at another educational institution while maintaining Alaska residency;
- committed any act inconsistent with Alaska residency, such as claiming residency in another state or voting as a resident of another state;
- registered as a resident in an educational institution in another state; or
- paid tuition at the University of Alaska at the Western Undergraduate Exchange program rate.

To prove physical presence, students must provide documentation of one of the following:

- student moved household goods to Alaska at least two years ago;
- student's lease, rental or ownership of real property in Alaska for at least the prior two years;
- student's permanent employment in Alaska for at least the prior two years; or
- other documentation of Alaska residency for the two prior years deemed satisfactory by the UAF Office of Admissions.

Students applying for resident tuition assessment must file a residency form with the Office of Admissions before the published end of the add/drop period for regular semester-length courses for the semester for which residency is sought. Failure to file and provide adequate proof of physical presence by this date will waive any claim that the student was eligible for resident tuition assessment for that semester or prior semesters unless otherwise determined by the Office of Admissions.

Residency criteria, as paraphrased above, are determined by UA Board of Regents residency policy and regulations (<https://www.alaska.edu/bor/policy/05-10.pdf>). For more information and applications, students should contact the Office of Admissions (<https://www.uaf.edu/admissions/>).

Basic Student Fees

Basic Student Fees

(per semester unless otherwise indicated)

Fairbanks Campus and Rural

Campus Consolidated Fees

UAF, CTC, Juneau Fisheries and eCampus \$53 per credit

CRCD Campuses (Rural College, Bristol Bay, Interior Alaska, Kuskokwim, Northwest, Chukchi) \$21 per credit

UA Facilities \$6 per credit

UA Network

4 percent of tuition varies (\$9-\$45 per credit)

Parking Permit

8 credits or fewer \$51

9 or more credits \$88

Annual permit \$153

Spring/summer \$153

Multivehicle additional \$10

Course Fees varies

Note: All fees are subject to change.

CONSOLIDATED FEE

Cost: \$53 per credit for UAF, CTC, Juneau Fisheries and eCampus

The nonrefundable consolidated fee provides students access to a variety of services that enhance their educational experience beyond the classroom and ensures the continuation and expansion of critical universitywide services for all students. The consolidated fee paid by each student supports these specific services: student government, student health and counseling center, student sustainability, student activities and services, libraries and digital resources, student recreation center, technology, eCampus delivery, and transportation. **The consolidated fee is mandatory and cannot be negotiated, waived or reduced.**

Cost: \$21 per credit for CRCD campuses (Rural College, Bristol Bay, Interior Alaska, Kuskokwim, Northwest, Chukchi)

The nonrefundable consolidated fee provides students access to a variety of services that enhance their educational experience beyond the classroom and ensures the continuation and expansion of critical universitywide services for all students. CRCD campus students are assessed a reduced fee due to their distance from the Fairbanks campus, but they do receive access to UAF services through online or other methods. The consolidated fee paid by each student supports these specific services: telehealth and counseling, virtual recreation classes, streaming of sporting events, libraries and digital resources, and technology. **The consolidated fee is mandatory and cannot be negotiated, waived or reduced.**

DETAILED LIST OF SERVICES PROVIDED BY THE CONSOLIDATED FEE:

ASUAF

The Associated Students of the University of Alaska Fairbanks represent student views and concerns to the university administration, University of Alaska Board of Regents and Alaska Legislature. ASUAF also partially funds the publication of the UAF student online newspaper, the Polaris News; the student-managed ASUAF Concert Board; KSUA, the student radio station; and other media. Other services provided through ASUAF include a free half-hour attorney consultation, academic travel funding, subsidized student club activities, regular free coffee service and much more. Contact ASUAF at 907-474-7355 or visit the ASUAF website (<https://www.asuaf.com/>).

ATHLETICS

Provides admission to all home athletic competitions and livestreaming of Nanook sporting events. Admission will only be guaranteed until the start of each event. The fee does not include postseason competition. For further details regarding event and ticket policies, visit the Alaska Nanooks website (<https://www.alaskananooks.com/>).

LIBRARIES AND DIGITAL RESOURCES

Provides library services such as research assistance and instruction, online and digital resources, subscriptions for databases and journals, and improvements to library materials and spaces (physical and virtual) used by students.

RECREATION

Provides membership to the Student Recreation Center (SRC), Patty ice arena, Patty pool, Outdoor Adventures and virtual recreation classes. The SRC is a comprehensive fitness facility with equipment, courts, track, group fitness, intramurals and a climbing wall. The Patty ice rink provides recreational ice skating sessions. The Patty pool provides lap swim sessions. Outdoor Adventures has discounted equipment rentals, trips and an outdoor rock/ice wall. Some extra programs have additional fees associated; consult Nanook Recreation staff for details. Anyone under the age of 18 using the SRC and its facilities must be accompanied by a parent or guardian whose minimum age is 21 unless they are a full-time UAF student. Call 907-474-5886 for more information.

STUDENT ACTIVITIES AND SERVICES

Supports Nanook traditions such as Starvation Gulch, Winter Carnival and SpringFest as well as student activities and student life programs that enhance the out-of-class experience of students, and will provide ongoing operational and capital funding for programs.

STUDENT HEALTH AND COUNSELING CENTER

Provides basic medical and counseling services, including telehealth and counseling, at the Student Health and Counseling Center on the Fairbanks campus. See the Student Health and Counseling Center website (<https://www.uaf.edu/chc/>) for more information. You can contact the Student Health and Counseling Center at 907-474-7043.

STUDENT SUSTAINABILITY

Invests in energy-efficiency programs and renewable energy projects at UAF.

SUMMER ACTIVITY

Supports student activities.

ECAMPUS

Funds go toward academic and advising support, online student resources, exam proctoring services, technology upgrades, and enhancements to course delivery.

TECHNOLOGY

Supports technology initiatives including implementation of and access to UAF's wireless network, delivering university-licensed software to all students, increasing the number of technology-enabled classrooms and computing spaces, and expanding and improving online and self-service environments.

TRANSPORTATION

Covers a portion of the costs of operating shuttle buses that provide transportation throughout campus and to various university facilities off campus.

UA FACILITIES FEE

Cost: \$6 per credit

Who pays: All students

What's covered: The UA facilities fee is assessed to all undergraduate and graduate students to address the capital reinvestment for university facilities and academic equipment. Capital reinvestment funds construction that modernizes university classrooms, laboratories, residence halls and other buildings so students have learning and living facilities that enhance the academic experience.

What's covered: Some courses require special equipment, supplies or services and charge a materials fee in addition to tuition.

HEALTH INSURANCE

Student health insurance is not mandatory at UAF except for international students studying in F-1 or J-1 immigration statuses. The university does not provide a student health insurance program except for international students and students who are contracted with the Graduate School as teaching or research assistants on stipends or who are receiving graduate fellowships. Students without insurance who would like to obtain a plan may visit the Student Health and Counseling Center website (<https://www.uaf.edu/chc/>) for more information on shopping for a policy.

International students in F-1 or J-1 status are required to enroll in either the UAF-sponsored insurance plan or in a plan of their choice that meets regulatory compliance rules. Students must provide documentation of enrollment to International Programs and Initiatives before the fee payment deadline each semester. Students who do not enroll in an insurance plan approved by International Programs and Initiatives by the appropriate semester deadline will be dropped from classes at UAF.

Contracted teaching and research assistants on stipends and those receiving graduate fellowships are automatically enrolled in the UAF-sponsored plan as part of their benefits package. More information on this plan can be found at the Graduate School's website (<https://www.uaf.edu/gradsch/>).

The UAF-sponsored international student plan meets the Department of State insurance requirements for exchange visitors in J-1 status. However, this plan is not compliant with the federal Affordable Care Act (ACA). If you have questions, contact International Programs and Initiatives. The graduate insurance plan is ACA-compliant but does not meet the Department of State insurance requirements for exchange visitors in J-1 status.

UA NETWORK FEE

Cost: 4 percent of tuition

Lower-division: \$9-\$10 per credit

Upper-division: \$12 per credit

Graduate: \$22 per credit

Nonresident rate: \$32-\$33 per lower-division (000-200 level) credit

Nonresident rate: \$35 per upper-division (300-400 level) credit

Nonresident rate: \$45 per graduate credit

Who pays: All students

What's covered: The UA network charge covers rapidly rising costs, especially in the maintenance and enhancement of the universitywide technology infrastructure. The 4 percent network charge is applied on a per credit hour basis (rounded to the nearest dollar) to tuition, nonresident surcharges if applicable, and fees in lieu of tuition for credit and noncredit courses. The minimum network charge per course is \$9.

COURSE FEES

Cost: Varies

Who pays: Students enrolled in courses with special fees. See the class schedule for individual classes

PARKING PERMIT

Cost: Fall 2022/spring 2023, single vehicle, \$51 for 8 or fewer credits; \$88 for 9 or more credits; \$153 annual permit. With any of

these permit options, two or more vehicles (up to a total of four) may be registered for the multivehicle option for an additional \$10. The hangtag allows one vehicle to be parked on campus at a time. (Campus residents may not purchase the multivehicle option. Employees are not eligible to purchase parking permits at student rates.)

Costs are based on the combined total credit hour enrollment at UAF, Community and Technical College, eCampus, or any class held at a UAF location where credit is given through another location.

Who pays: Students who park a vehicle at any on- or off-campus UA, UAF or Community and Technical College location are required to have a parking permit or permit displayed on the vehicle at all times, including evenings.

What's covered: Parking in permit-required and general use lots and spaces at any on- or off-campus UA, UAF, or Community and Technical College location in Fairbanks

How to get your permit: Request your permit through UAF's online parking system (<https://uaf.edu/bursar/parkingservices/>). Select the type of parking permit(s) needed, your delivery option and the payment method. You may instantly print a two-week temporary permit you can use until your permit arrives in the mail or you pick it up. Permits can also be purchased and picked up at the Bursar's Office in Signers' Hall. Please bring your current vehicle registration with you to ensure correct information for your file. Debit and credit card payments will no longer be accepted in person or over the phone at the Bursar's Office. You can pay with either cash or check, or you can have the charge added to your Banner account.

How to pay: Complete your permit purchase at UAF's online parking system (<https://uaf.edu/bursar/parkingservices/>). Payment options are all major credit cards or "student account," if you have added parking to your student account.

It is the responsibility of all students parking a vehicle on any UAF property (on or off campus) to know UAF parking regulations (<https://uaf.edu/bursar/parkingservices/>). For more information, call 474-7384 or email uaf-bursar@alaska.edu.

Other Fees

| Other Fees | |
|--|--|
| (per use unless otherwise indicated) | |
| Application for Admission | |
| Certificate or associate degree | \$40 |
| Baccalaureate | \$50 (\$75 if late) |
| Graduate | \$75 (\$100 if late) |
| Application for Graduation | \$50 (\$80 if late) |
| Campus Housing | |
| Residence halls (per semester) | \$2,550-\$4,233 ¹ |
| Fairbanks campus employees, family, and graduate housing | \$1,173-\$1,821 per month ² |
| Kuskokwim Campus housing | Contact campus |
| Campus Mail Box | |
| Semester | \$75 |
| Summer Only | \$30 |
| Credit by Examination | \$40/credit |
| Credit Card Transaction | 2.85 percent (\$3 minimum) |
| Credit for Prior Learning | \$50 plus \$10/credit |
| Duplicate Tuition/Fees Receipt | \$5/copy |
| Graduate Student Reinstatement | \$50 |
| Late Add/Late Registration | \$50 |
| Late Payment Fees | \$50; \$125, \$175 |
| Late Placement Test or Guidance Test | \$5 |
| Meal Plans (per semester) | \$610-\$2,695 |
| New Student Orientation (Fairbanks area) | |
| Fall | \$150 |
| Spring | \$35 |
| Payment Plan | \$65-\$90 |
| Records Duplication | \$0.25/page |
| Reinstatement Fee | \$100 |
| Residence Life Programming Fee | \$25 |
| Returned Check Fee | \$30 |
| Textbooks (approximate) | \$250-\$1,100/semester |
| Transcripts | |
| Electronic, \$12; paper, \$15 | \$12-\$15 |
| Expedited paper | \$30 |
| Unofficial | \$5 |
| UAF CBSM Tuition Surcharge | 25 percent of tuition (\$72-\$135/credit) ³ |
| UAF CEM Tuition Surcharge | 20 percent of tuition (\$47-\$108) |

¹ Plus one-time application fee of \$40

² Plus one-time application fee of \$75 and a refundable \$600 damage deposit

³ Only applies to upper-division (300-499) and graduate-level courses

Note: All fees are subject to change.

APPLICATION FOR ADMISSION

Cost: \$40-\$75 (add \$25 if late)

Who pays: Applicants to certificate and associate degree programs are charged \$40; applicants to baccalaureate programs \$50; applicants to graduate programs, \$75. There is a \$25 late fee charged for all baccalaureate and graduate program applications submitted after the published deadlines.

What's covered: Assessment and processing of prospective student applications

APPLICATION FOR GRADUATION

Cost: \$50 (\$80 if late)

Who pays: Students planning to graduate in a given semester must apply for graduation. Early applications are encouraged and can be submitted the semester before expected graduation. Application deadlines are Oct. 15 for fall, Feb. 15 for spring and June 15 for summer graduation.

What's covered: Credit check, degree requirement audit and certification of eligibility to graduate

CAMPUS HOUSING

For complete rate information, please go to the Residence Life website (<https://uaf.edu/reslife/rates/>).

Residence Life Programming Fee

Cost: \$25 per semester

Who pays: Residential students and employees

What's covered: Fee revenues will be used to modernize the student experience by better serving university residents by providing sustainable funding for community councils and the Residence Hall Association.

How to apply: Send your completed application and application fee to the UAF Department of Residence Life. Applications are available online (<https://www.uaf.edu/reslife/apply/>). Room rent and meal plan fees, along with all other fees, are due in full by fee payment end. Information about Residence Life is available at 907-474-7247, uaf-housing@alaska.edu or on the Residence Life website (<https://www.uaf.edu/reslife/>).

Kuskokwim Campus Housing

For information about campus housing at the Kuskokwim Campus in Bethel, visit the Kuskokwim Campus website (<https://www.bethel.uaf.edu>) or call 907-543-4562.

CAMPUS MAILBOX

Cost: \$75 per box per semester, \$30 summer only. Limited numbers of larger boxes are available for an additional cost.

Who pays: Students who wish to receive U.S. Postal Service mail on campus must rent a campus mailbox at the Campus Mail Center in Constitution Hall. USPS mail is delivered on campus to post office boxes only, not to street addresses. The fee can be paid at UAOnline or at the Bursar's Office in Signers' Hall. Fees renew automatically each semester until the rental agreement is canceled and keys are returned.

What's covered: Mailbox space, postal and mail forwarding services

CREDIT BY EXAMINATION

Cost: \$40 per credit hour

Who pays: Students using the credit-by-exam option for earning UAF course credit

What's covered: The fee pays for coordinating the exam or other evaluation requirements between student and professor, grade recording and transcription.

CREDIT CARD TRANSACTION FEE

Cost: 2.85 percent (\$3 minimum)

Who pays: Anyone making credit or debit card payments via UAOnline. Note: credit and debit card payments are not accepted in person, by mail or over the phone.

What's covered: Fees charged by credit card companies. Note: The university does not receive any of this fee.

CREDIT FOR PRIOR LEARNING

Cost: \$50 fee payment plus \$10/credit hour for credits earned

Who pays: Students using the credit-for-prior-learning option to earn UAF course credits

What's covered: The fee pays for the portfolio or license/certificate review by faculty evaluation committee. If credit is awarded, the fee per credit hour earned pays for grade recording and transcription.

GRADUATE STUDENT REINSTATEMENT

Cost: \$50

Who pays: Graduate students who do not meet registration requirements and fail to file an approved leave of absence may request reinstatement from the dean of the Graduate School and will be charged \$50.

What's covered: Reinstatement processing

LATE ADD/LATE REGISTRATION

Cost: \$50

Who pays: Students given permission to add a class after the last day to pay tuition and fees will be charged a late registration fee of \$50 that must be paid within five business days. This includes drop/add (swap) courses. No late fee will be charged when:

- you add a late-start course during the regular registration period for that course, or
- you are moved into a class for which you were waitlisted, or
- you change from one section to a different section of the same course, or
- you add graduate thesis or research credits, or
- you add a course to replace a canceled course in which you were previously enrolled, or
- you are moved to a lower or higher level of a course (e.g., MATH F151X to MATH F105) due to instructor's recommendation.

This fee is refundable only if all classes for which you have registered are canceled. See the Registration Guide (<https://www.uaf.edu/handbook/register/>) for the procedure for adding a class.

What's covered: Processing of late registration

LATE PAYMENT FEES

Cost: \$125 for first; \$175 for second; \$50 per month for late payment plan payments

Who pays: All students who have missed the fee payment deadline and have a balance of \$300 or more. An additional \$175 fee will be added to accounts not paid by the withdrawal deadline.

What's covered: Processing of late payments

LATE PLACEMENT TEST OR GUIDANCE TEST

Cost: \$5

Who pays: Students who take a placement or guidance test outside of scheduled testing sessions

What's covered: Test oversight, administration and recording

MEAL PLANS

Cost: \$610-\$3,050

Who pays: All students living in residence halls and Cutler Apartments are required to purchase a meal plan, with the exception of graduate students. UAF also offers meal plans to commuter students, including residents of family housing and students living off campus. Students who do not live on campus but are interested in purchasing a meal plan can contact Dining Services at 907-474-6661 or uaf-dining@alaska.edu. Please review your dining contract for more details. All prices are per semester.

What's covered (per semester): See Dining Services (p. 90) page for details of specific meal plans and how to purchase plans.

Note: The Wood Center food court is closed for campus holidays. Dining locations are limited during UAF winter and spring breaks.

NEW STUDENT ORIENTATION

Cost: \$115 for fall semester, covers all programs except special Outdoor Adventures activities; \$10 for one-day fall transfer student orientation, and \$25 (plus \$10 for each additional guest) for two-day fall family orientation. \$35 for spring orientation.

Who pays: Any new student may participate in New Student Orientation on the Fairbanks campus. NSO is required for all first-time bachelor's degree students (regardless of the number of earned college credits) and international students (undergraduate F-1 and international exchange J-1 status). Domestic transfer students are also encouraged to attend.

What's covered: All materials, sessions, general entertainment and meals not included in student meal plans

PAYMENT PLAN

Cost: \$65-\$90 depending on when you sign up. Discount only applies to online enrollment via UAOnline.

Who pays: Students unable to pay all tuition and fees at the beginning of a semester

What's covered: Budgeting by distributing the costs of tuition and fees across two or more payment dates. See the Bursar's Office website (<https://www.uaf.edu/bursar/>) for more information.

RECORDS DUPLICATION

Cost: \$0.25 per page

Who pays: Anyone who requests copies of their own academic records

What's covered: Copies of records in your academic file in the Office of the Registrar (except transcripts from another school). Students need to submit a written request for copies. The Office of the Registrar provides document copies as time permits. All copies provided through this service are stamped "unofficial."

REINSTATEMENT FEE

Cost: \$100

Who pays: Students dropped from classes due to nonpayment will be charged \$100 to have classes reinstated

What's covered: Reinstatement processing

RETURNED CHECK FEE

Cost: \$30

Who pays: If a check is returned for any reason, a hold will be placed on the student's account which will prevent the student from registering, viewing grades, participating in graduation activities and receiving transcripts until the check clears and a \$30 fee is paid.

What's covered: Processing returned checks

TEXTBOOKS

Cost: Varies according to course load. You can expect to pay about \$250-\$1,100 per semester for textbooks. The cost for books averages about \$90-\$115 per course.

Who pays: Students in classes with required texts

What's covered: Texts, assigned readings or other course materials assigned by instructors

TRANSCRIPTS

Cost: \$12-\$30

Electronic = \$12

Paper = \$15

Expedited paper = \$30

Who pays: Anyone who requests their own transcripts from the Office of the Registrar

What's covered:

- **Official transcripts** can be issued electronically (secure PDF delivery to an email address) or on special transcript paper in a sealed envelope sent by U.S. mail. Official transcript requests are handled by Parchment (accessible

via UAOnline) and by the Office of the Registrar. Electronic transcripts can be delivered within minutes of the request as long as there are no holds on the student account. Processing time for paper transcripts is normally three to five business days. Transcript requests are processed as they are received and cannot be held for grades or degrees.

- **Unofficial transcripts** are accessible via UAOnline.

UAF CBSM TUITION SURCHARGE

Cost: 25 percent of tuition (\$72-\$135/credit)

Who pays: Students enrolled in upper-level and graduate courses in College of Business and Security Management departments. **Please note:** Tuition waivers do not cover tuition surcharges.

UAF CEM TUITION SURCHARGE

Cost: 20 percent of tuition (\$47-\$108/credit)

Who pays: Students enrolled in lower-level, upper-level, and graduate courses in the College of Engineering and Mines departments. **Please note:** Tuition waivers do not cover tuition surcharges.

PAYING TUITION AND FEES

Students are not considered registered for any classes until all tuition and fees are paid or other payment arrangements have been made by the fee payment deadline. Please note that the payment due dates may vary if you are taking classes from multiple campuses. This includes room rent, meal plan costs, student activity fees, health fees and deposits. Any charges unpaid at the end of the previous semester are also due and must be paid before you can re-enroll. If you owe money to the university and submit an enrollment form and payment for the current semester, you will not be enrolled in your classes; instead, the payment will be applied toward your outstanding balance.

Other than tuition and fees, which are due according to every semester's payment schedule, any charges owed to the university are due within 30 days.

A \$30 charge and a hold will be placed on your account if your check is returned. This will prevent you from registering, viewing grades, receiving transcripts and graduation activity.

CONSEQUENCES OF NOT PAYING

Failure to pay in full or make other payment arrangements by the fee payment deadline may result in the cancellation of your class schedule. UAF may withhold transcripts, grades and other services, and cancel meal plans and housing if you do not pay your financial obligations. If the university takes such action, *you will still be responsible for your account balance in full.*

Registration may be withheld from any student who is delinquent in paying any amount due to the university. The registration process is not complete until the student has paid all fees and charges due. UAF may drop you from your courses after the fee payment deadline if you owe a balance to the university. A \$100 reinstatement fee will be charged to re-enroll in any dropped courses.

FAILURE TO MEET FINANCIAL OBLIGATIONS

University policy requires a financial hold to be placed on your student account if you fail to meet your financial obligations. The hold will prevent any registration, transcript or graduation activity.

Past due accounts will be sent to a collection agency. Interest, late fees and/or collection costs will be added to your account. Past due balances may be reported to a local credit bureau. The university is authorized to garnish Alaska Permanent Fund Dividends for payment of past due accounts.

TUITION WAIVERS

Note: Tuition waivers do not cover tuition surcharges.

• Senior Citizen Tuition Waiver

UA Board of Regents policy waives regular tuition for Alaska residents at the age of eligibility for full Social Security retirement benefits. You are eligible to use the senior citizen tuition waiver and enroll in UAF courses if:

- you are a permanent resident of Alaska;
- you are age-eligible to receive full Social Security retirement benefits; and
- there is space (i.e., no waitlist) in the class or classes you want.

If you are using a senior tuition waiver, you may not register until the first day of instruction of the semester. You must meet both age and residency requirements by one of the following dates to be eligible for the corresponding semester: Sept. 1 for fall; Jan. 1 for spring; May 1 for summer. Reimbursements will not be made to senior citizens who pay for a course and then request a waiver.

• Employee Tuition Waiver

Employee tuition waivers pay only for tuition. Tuition waiver forms must be turned in by the fee payment deadline. The employee is responsible for all other fees. Employees who pay for a course and later become eligible for a waiver will not be reimbursed. Late fees and payment deadlines apply. More information is available at the Bursar's Office website (<https://www.uaf.edu/bursar/>).

Refunds

TUITION AND FEES

Students may drop courses in UAOnline or submit an add/drop form to the Office of the Registrar per published deadlines in the academic calendar (p. 9). The following conditions apply:

- If UAF cancels a course, students' tuition and fees will be refunded in full.
- Refund processing is automatic for students who officially drop courses by the refund deadlines.
- It is the responsibility of each student to review their course dates and be aware of the published refund deadlines for their particular courses.
- The first day of instruction for full-semester courses is the first day of instruction listed in the academic calendar.
- **Full semester courses (fall and spring):** 100% of tuition and course fees are automatically refunded when the drop is completed by the second Friday of the semester.
- **Courses meeting at least four weeks but less than the full semester:** Students may drop within five business days of the first class

meeting (as listed in UAOnline) to receive 100% refund of tuition and fees.

- **Courses meeting less than four weeks:** Students may drop on the first day the class meets (as listed in UAOnline).
- **Summer courses:** Please refer to the academic calendar (p. 9) for summer registration and fee payment deadlines.

REFUND PROCESSING

Financial aid will start to be disbursed to student accounts 10 days before the first day of class, and the Bursar's Office will begin processing refunds at that time. Submit an Advance of Funding (<https://nextgensso.com/sp/startSSO.ping?PartnerIdpId=urn:mace:incommon:alaska.edu&TargetResource=https%3a%2f%2fdynamicforms.ngwebsolutions.com%2fSubmit%2fStart%2ffdf12a6-e312-4608-9a57-61df7c5a0dd8>) if you need your funds for books and supplies. Refund processing is automatic for students who officially drop courses by the published refund deadlines. Remember to return parking permits if you drop during the 100 percent refund time.

All refunds are processed electronically or by mail. The Bursar's Office does not issue refund checks for amounts less than \$10. It is your responsibility to check your account and contact the Bursar's Office to receive your refund as cash or to apply it to your PolarExpress card as a nonrefundable payment.

If tuition and fees are paid for the semester by credit card, the credit card will be refunded (up to the amount paid). Any remaining credit balances will be refunded by check or direct deposit.

If your tuition was paid through external sources such as financial aid, federal loans, scholarships or grants, you will receive your refund as a check sent to your mailing address of record or direct deposited in your bank account.

Once processed by the Bursar's Office, direct deposit takes three to five business days to disburse to your bank account. Check refunds will take at least 10 business days to be received in the mail.

Your refund is subject to federal regulations. If you receive a refund due to dropped classes or a total withdrawal, you may no longer qualify to receive scholarships or financial aid. In that case, the funds may be returned to the lender or grantor pursuant to all applicable rules and regulations.

If you paid by cash or check, a refund check will be sent to your mailing address of record or direct deposited in your bank account. If you notify the Bursar's Office that you have not received the check due to an incorrect address, **a fee of \$18.50 will be charged for all checks reissued due to a stop-pay request by the student.** Please be sure we have your current mailing address.

If you paid your tuition and fees by check, refund processing will begin after your check has cleared the bank.

Any balance owed to the university will be deducted from your refund.

Students who drop during the 100 percent refund period and want to maintain health insurance coverage should contact the Student Health and Counseling Center at 907-474-7043.

DIRECT DEPOSIT OF REFUNDS

Enrolling in direct deposit allows your refunds to be electronically deposited into your bank account. It's simple, safe and convenient. Enrollment is available through our secure self-service website.

Sign up for direct deposit of your refund through UAOnline (<https://uaonline.alaska.edu>) by following these steps:

- At the "Student Services & Accounting Information" menu select the "Direct Deposit Enrollment" link.
- Select "1st time setup of direct deposit"
- Select the account type
- Enter the bank routing code
- Enter account number
- Re-enter account number
- Select "Submit"

EXCEPTION TO POLICY: APPEAL FOR REFUND OF TUITION

Appeals for a refund of tuition are exceptions to policy and are only approved in events that are unanticipated and unavoidable. Approval is not automatic, and you need to provide documented evidence to support your request (physician's note, letters of support from instructors, etc.). Acceptable unanticipated and unavoidable reasons may include:

1. death in immediate family;
2. serious illness or injury of student or immediate family member; and
3. factors outside of the student's control (e.g., fire, flood).

Work-related issues, personal hardships, changing your mind about college, poor academic performance, disciplinary withdrawal, not receiving expected financial assistance or failure to read UAF's published documents are considered to be the result of personal choices and actions and will not be considered.

Appeals for refund of tuition must be submitted within 30 class days after the beginning of the next regular semester. Forms for an appeal for refund of tuition are available online (<https://www.uaf.edu/bursar/forms/>), through the Bursar's Office in Signers' Hall on the Fairbanks campus or at CTC. Once received, the appeal will be evaluated by a campuswide committee which will return a decision to the student. The decision of the committee is final, and a student who files a written appeal under these procedures shall be expected to abide by the final disposition of the review, as provided, and may not seek further appeal of the matter under any other procedure within the university. Submission of appeals and appropriate documentation after published deadlines will not be considered. Contact the Bursar's Office for more information.

HOUSING

Students who move off campus or withdraw from the university will receive room refunds according to the schedule on their housing agreement.

Any refund of room charges will be based upon the housing agreement.

MEALS

Please refer to your meal plan agreement for specific information about meal plan refunds.

Where To Get More Information

Office of the Bursar

University of Alaska Fairbanks
130 Signers' Hall
P.O. Box 757640
Fairbanks, AK 99775-7640
Email: uaf-bursar@alaska.edu

Telephone: 907-474-7384
Fax: 907-474-5898

ACADEMICS AND REGULATIONS

To encourage a positive learning environment and high academic standards, universities establish specific scholastic requirements and community rules. At UAF, academic regulations address issues such as grading, academic standing, and student rights and responsibilities. Since policies change from time to time, it's important for students to stay informed about current requirements. By enrolling at UAF, a student agrees to abide by university rules, regulations and academic standards.

- Communication via Email (p. 73)
- Class Standing (p. 73)
- Full- or Part-Time Status/Study Load (p. 74)
- Undergraduate Credit Loads and Overloads (p. 74)
- Grading Options (p. 75)
- Grading System and Grade Point Average Computation (p. 76)
- Attendance (p. 78)
- Midterm Grades (p. 79)
- Academic Standards (p. 79)
- Appeal of Academic Decisions (p. 81)
- Students' Rights and Responsibilities (p. 82)
- Information Release and FERPA (p. 83)
- Nondiscrimination Policy and Disclaimer (p. 84)
- Veterans Affairs Educational Benefits, Tuition and Fees (p. 86)

Communication via Email

UAF uses email to communicate with students about many important matters. Email is often the only way some information is distributed, so it's important to check email frequently and read messages sent from the university. For example, if a student is waitlisted for a class, an email will be sent when a seat becomes available. If action isn't taken on the email within a specified time frame, the student risks losing that seat to the next student on the waitlist.

The university automatically assigns each student an official University of Alaska email account. Although each student is able to indicate a preferred email address in UAOnline, many faculty and departments at UAF will communicate only through the alaska.edu address. Each student is responsible for knowing — and, when appropriate, acting on — the contents of all university communications sent to the university-generated email address.

If a student prefers to use another email account, rather than the university-generated one, there are three steps to take to ensure receipt of all official communications:

1. Log in to UAOnline (<https://uaonline.alaska.edu/>) and enter or update the preferred email address under the "Personal Information" menu.
2. Log in to the University of Alaska email account (<https://www.alaska.edu/google/>) and set up a forward to the preferred account.
3. When switching active email accounts, repeat steps 1 and 2 to ensure the preferred email is always current.

Class Standing Undergraduate Students

Class standing is determined by the total credits you have earned.

| | |
|------------|--------------------|
| First-year | 0-29 credits |
| Sophomore | 30-59 credits |
| Junior | 60-89 credits |
| Senior | 90 or more credits |

Transfer students are given class standing based on the number of transfer credits accepted by UAF. Nondegree students are registered without class standing.

Postbaccalaureate Students

Students are given the class standing of "postbaccalaureate" only after being officially admitted to a postbaccalaureate degree.

Graduate Students

Students are given the class standing of "graduate" only after being officially admitted to a graduate degree or certificate program.

Full- or Part-Time Status/Study Load Undergraduate Students

Undergraduate students registered for 12 or more semester credits are classified as full-time students, and those enrolled in 6 credits are considered part-time students. **To complete an undergraduate program in four years, 15 or more credits need to be completed each semester.**

Students in good standing may enroll in up to 18 credits in the fall and spring semesters without special permission. To enroll in more than 18 credits, a 3.0 cumulative GPA and an overload advisor approval are required.

Students in good standing may enroll in up to 15 credits in the summer semester without special permission. To enroll in more than 15 credits, a 3.0 cumulative GPA and an overload advisor approval are required.

Credits carried at any UA unit (or any combination of UAF/UAA/UAS) are used to determine study-load hours and full-time or part-time classification. Audited courses and courses taken for credit by examination are not included in the study-load computation.

Graduate Students

A graduate student registered for 9 or more semester credits, with 3 or more at the 600 level, is classified as a full-time student. A graduate student enrolled in 5-8 credits is classified as part-time. Credits carried at any UAF department are considered in determining study-load hours and full-time or part-time classification. Audited courses are not included in the study-load computation.

Except in unusual circumstances, enrollment in the fall/spring semesters is limited to 1 credit per week. Students may enroll in up to 14 credits per semester without special permission. To enroll in 15-19 credits, a student must be in good standing and obtain an overload approval from the student's advisor and department chair. Enrollment in more than 19 graduate credits will be allowed only in extraordinary circumstances and requires good standing and overload approval from the student's advisor, department chair, college/school and the dean of the Graduate School.

Undergraduate Credit Loads and Overloads

Undergraduate students in good standing may take up to 18 credits in a regular (fall/spring) semester. Students who are on academic probation are limited to 13 credits per regular semester.

| FINANCIAL AID TERM | MAX CREDITS |
|--------------------|-------------|
| Fall | 18 |
| Spring | 18 |
| Summer | 15 |

Fall/spring: Students who wish to take more than 18 credits in a regular fall/spring semester must have a cumulative GPA of 3.0 or higher. Any student in good standing seeking an overload of 19 to 23 credits must get advisor approval; for more than 23 credits, or for any student with less than a 3.0 GPA, the dean of the student's college or school must also approve.

Summer: Students who wish to take more than 15 credits in a summer semester must have a cumulative GPA of 3.0 or higher. Any student in good standing seeking an overload of 16 to 20 credits must get advisor approval; for more than 20 credits, or for any student with less than a 3.0 GPA, the dean of the student's college or school must also approve.

Grading Options

Auditing

Students who want to enroll in one or more courses for informational purposes may only register as an auditor if space is available and auditing is permitted in the class. The student pays for the course tuition and fees, but the course credits are not included in the computation of study load for full-time/part-time determination or for overload status.

The requirement, acceptance and review of work, and lab privileges are at the discretion of the instructor. A grade of AU (audit) is granted to students who complete an audited course, but no credit is awarded. Audited courses do not apply to degree requirements, and they will not transfer to other institutions.

When registering, the student should indicate on the registration form the desire to audit a course. Students who want to change from audit to credit must request the change before the deadline to add a course. Requests made after the third Friday after the first day of instruction must be approved by the instructor of the course. All changes must be made before the deadline for student-initiated withdrawals.

Instructors set the requirements under which an AU grade is to be recorded. Faculty can give a W grade for auditors not meeting the established auditing requirements. After auditing a class, at least one year must pass before requesting local credit by exam for that class.

CHANGING FROM CREDIT TO AUDIT

Courses that have the audit option available may be changed from credit to audit (or audit to credit) status prior to the add/drop deadline without the permission of the instructor. Changes after the add/drop deadline can be made with approval by the instructor until the last day for student-initiated withdrawals.

Credit/No-Credit Option

Undergraduates only — The credit/no-credit option encourages students to explore areas of interest not necessarily related to their major. This option may be used for one undesignated elective (an elective that is not specifically required for the student's major) each semester. The deadline for choosing the credit/no-credit option is the third Friday after the first day of instruction in a semester. The instructor does not know the student's status in the course, and the course is completed the same way as other students in the class. Credit for the course is awarded if the student's performance is at the C- grade level or higher; if the performance falls below that level, the course will not appear on the student's academic record. In either case, the course will not be included in any GPA calculations. If credit is granted, a CR grade will be entered for the course.

Under the credit/no-credit option, students may take undesignated elective courses or courses to meet the minimum credit requirements for a degree. Major or minor requirements and those specified as foundation courses are not allowed.

Grading System and Grade Point Average Computation

Grading System Defined

All course grades are letter grades unless otherwise specified in the class schedule. The method of grading (letter or pass/fail) is an integral part of the course structure and is included in the course description. Instructors are expected to state their grading policies in writing at the beginning of each course. Grades appearing on academic records are:

| | |
|-----------------------|--|
| A ¹ | "A" (including A+ and A-) indicates a thorough mastery of course content and outstanding performance in completion of course requirements. ¹ |
| B ¹ | "B" (including B+ and B-) indicates a high level of acquired knowledge and performance in completion of course requirements. ¹ |
| C ¹ | "C" (including C+ and C-) indicates a satisfactory level of acquired knowledge and performance in completion of course requirements. ¹ |
| D ¹ | "D" (including D+ and D-) indicates a minimal level of acquired knowledge and minimal performance in completion of course requirements. This grade does not satisfy requirements for courses in the major, minor, core or graduate programs. ¹ |
| F | "F" indicates failure to meet a minimal level of understanding of course content and/or performance in completion of course requirements. All F grades, including those earned in pass/fail courses, are included in the GPA calculations. |
| P | Pass — The pass grade indicates satisfactory completion of course requirements at either the undergraduate or graduate level. A pass grade does not affect a student's GPA but credits earned with pass grades may meet degree requirements and may be used as a measure of satisfactory progress. Satisfactory performance is the equivalent of a C grade (2.0) or better in undergraduate coursework and B grade (3.0) or better in graduate courses. The entire class must be graded pass/fail, with the grading system noted in the class schedule. |
| CR | Indicates credit was given under the credit/no-credit option. |
| DF | Deferred — This designation is for courses such as theses and special projects that require more than one semester to complete. It indicates that course requirements cannot be completed or that institutional equipment breakdown resulted in noncompletion by the end of the semester. Credit may be withheld without penalty until the course requirements are met within an approved time. For undergraduate courses, the grade will automatically change to a W (withdrawn) after two years unless an extension is requested and granted by the registrar. |
| AU | Audit — A registration status indicating that a student has enrolled for informational instruction only. No academic credit is granted. A W may be given if a student fails to attend an audited course. |
| W | Withdrawn — Indicates withdrawal from a course after the first two weeks of a semester. |
| I ² | Incomplete — An incomplete is a temporary grade used to indicate that the student has satisfactorily completed (C (2.0) or better) the majority of work in a course but for personal reasons beyond the student's control, such as sickness, has not been able to complete the course during the regular semester ² |
| NB | No Basis — Instructors may award a No Basis grade if there is insufficient student progress and/or attendance for evaluation to occur. No credit is given, nor is NB calculated in the GPA. This is a permanent grade and may not be used to substitute for the Incomplete. It cannot be removed by later completing outstanding work. |
| NS | Not Submitted — Grade not submitted by instructor. |
| NG | Non-Graded — Used for sections that are not graded, usually continuing education units (CEUs) or lab sections. Has no impact on GPA calculation. |

¹ The letter grades A, B, C and D may include a "+" or "-" to indicate that a student's level of performance is slightly higher or lower than that of the letter grade alone.

² Normally, an incomplete is assigned in a case when the student is current in the class until at least the last three weeks of the semester or summer session. Negligence or indifference are not acceptable reasons for an I grade. Normally, a student will initiate a request for an incomplete. If approving the request, the instructor will send a copy of the approval, a statement of the work remaining and the timeline for making up the incomplete to both the student and the Registrar. The instructor must complete a Notice of Incomplete form available on the Office of the Registrar website. An incomplete must be made up within one year or it will automatically be changed to an F grade. One year is the longest amount of time allowable for completion of the I. The I grade is not computed in the student's GPA until it has been changed to a regular letter grade by the instructor or until one year has elapsed, at which time it will be computed as an F. A senior cannot graduate with an I grade in either a university or major course requirement. To determine a senior's GPA for honors at graduation, the I grade will be computed as a failing grade. In extraordinary circumstances which are beyond the student's control (such as military deployment or major and extended illness of the student), an extension may be granted. The student must request the extension in writing prior to the original deadline date and the request must be approved by: the instructor, the dean, and the provost.

Grade Points and Computing GPA's

Grade point average (GPA) is a student's weighted numerical average of the grades earned in courses at UAF. To compute GPA, divide the total number of credits attempted into the total number of grade points earned. Grade points are calculated by multiplying the number of grade points awarded, according to the chart below, by the number of credits attempted for the course. The following grades are figured in a student's GPA: A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D- and F. Grades of I, DF, W, P, NB, AU and CR do not carry grade points and do not affect a student's GPA.

Noncredit courses, transfer credits and credit by examination do not affect the GPA calculations. "Graduating GPA" is a student's cumulative grade point average at the time of graduation. If, after earning a bachelor's degree, more classes are taken from UAF as a nondegree student, grades for those courses won't be factored into the official graduating GPA. The exception is students who are officially admitted to a second degree program.

| Grade | Grade points per credit |
|-----------------|-------------------------|
| A+ | 4.0 |
| A | 4.0 |
| A- | 3.7 |
| B+ | 3.3 |
| B | 3.0 |
| B- | 2.7 |
| C+ | 2.3 |
| C | 2.0 |
| C- ¹ | 1.7 |
| D+ | 1.3 |
| D | 1.0 |
| D- ² | 0.7 |
| F | 0.0 |

¹ Minimum grade possible for a course to count toward general education requirements, major, minor or degree requirements, or as a prerequisite for another course

² Minimum grade possible to earn credit for a course

Note: Some degree programs require C or higher for their major or minor requirements. Check program listings for specific degree requirements.

EXAMPLE OF GRADE POINT AVERAGE COMPUTATION

| Course | Credits | Grade | Credits x Grade points per credit | = Grade Points |
|--------------|-----------|-------|-----------------------------------|----------------|
| BIOL F111X | 4 | A | 4 cr × 4 pts | 16 |
| COJO F131X | 3 | D+ | 3 cr × 1.3 pts | 3.9 |
| WRTG F111X | 3 | C- | 3 cr × 1.7 pts | 5.1 |
| MATH F122X | 3 | B- | 3 cr × 2.7 pts | 8.1 |
| HIST F131 | 3 | F | 3 cr × 0 pts | 0 |
| Total | 16 | | | 33.1 |

33.1 grade points ÷ 16 credits = 2.07 GPA

Repeating Courses

All grades (original and retakes) for a course completed at UAF are included on a student's academic record, but only the last grade earned for a course is computed in the GPA unless the course is one that can be repeated for credit. For purposes of calculating honors for graduation, all courses (even those repeated) are included in the GPA.

Grade Error Policy

A grade other than an incomplete or deferred submitted by the instructor after a course is completed is the final grade and becomes part of the student's permanent academic record. A grade will not be changed unless the instructor made a legitimate error in calculating the grade. If an error has occurred, contact the instructor immediately. Grade error corrections must be received within 30 class days after the beginning of the next regular semester, and must be approved by the instructor's department head and dean. This is not an appeal of an academic decision.

Attendance

UAF is committed to student success and academic integrity. UAF faculty expect that students are committed to academic achievement. You are expected to adhere to the class attendance policies set by your instructors.

General Absences: If you miss class, you are responsible for conferring with your instructor as soon as possible concerning your absence, and to discuss the possibilities for arranging alternative learning opportunities. Note that some departments drop students who miss the first day of class and who fail to obtain their instructor's prior approval for the absence.

UAF-Sanctioned Absences: If you are scheduled to miss class for an academic requirement or to represent UAF in an official capacity (e.g., NCAA athletic competition, music performance, research opportunities), you must notify your instructor in writing within the first five days classes are in session in the semester in which the absences will occur. The notification should list all scheduled absences and bear the signature of a UAF school official.

Instructors are encouraged to make reasonable accommodations for students who miss class to participate in these official, UAF-recognized activities. However, it is your responsibility to follow up the notification of absence by discussing alternative learning opportunities with your instructors before the end of the drop/add period (typically the second Friday of the semester). Doing so will allow you to drop the class and to add another if, after a good faith effort, you and your instructor cannot arrange for comparable learning opportunities that would enable you to be successful in the class.

Extended Absences: The University of Alaska Fairbanks recognizes that students may need to miss more classes than allowed by a particular instructor as specified in course policies.

Extended absences are defined as missed classes or course work by students beyond what is permissible by the instructor's written course policies. Students may need to miss class and/or course work for a variety of reason, including, but not limited to:

- Bereavement
- Personal illness or injury
- Serious illness of a friend, family member or loved one
- Military obligations
- Jury service
- Other emergency or obligatory situations

When practicable, students should first contact their instructor to ask about the possibilities for taking an extended absence. If assistance from the instructor is not immediately available, students may wish to request formal assistance from the Center for Student Rights and Responsibilities (<https://www.uaf.edu/csrr/>).

To request an extended absence, students must submit a form as soon as practicable after realizing their need to miss class and/or course work. The request may be made by filling out the electronic form (https://cm.maxient.com/reportingform.php?UnivofAlaska&layout_id=13) that is

processed by the Center for Student Rights and Responsibilities, stopping by the office or calling 907-474-7317.

The Center for Student Rights and Responsibilities shall verify the request utilizing supporting documentation, e.g., note from a health care provider, obituary, jury summons, etc. This is followed by a letter being sent to the requesting student's instructors with a request to work with the student. The letter shall be signed by a university official. A copy of the letter shall be sent to the student's assigned advisor. In the event the student does not have an assigned advisor, the copy of the letter shall be sent to the Vice Provost.

The instructor and student will each make a good faith effort to strategize how the student may be successful in the course in spite of an extended absence. Options include, but are not limited to:

- Alternative learning opportunities
- Makeup exams
- Submitting assignments late
- Other reasonable accommodations

In the event that the instructor and student are unable to reach a mutual agreement in spite of their good faith efforts, the student may withdraw from the class before the withdrawal deadline, submit an appeal for late withdrawal after the deadline, may be eligible to request an incomplete (I) grade, or receive a no basis (NB) grade. Students should consult with their assigned academic advisor and/or contact the Center for Student Rights and Responsibilities for assistance. Students must realize that their extended absence may have other, nonacademic impacts, including but not limited to:

- Financial aid
- Scholarships
- Health insurance
- University housing

Midterm Grades

Midterm grades help students gauge their class performance and, if necessary, seek assistance early in the term. Instructors are responsible for ensuring that students are aware of the grading policy for a course and that homework, exams and other assignments are returned to students in a timely manner. Instructors are asked to submit midterm grades within the first four to six weeks of the semester.

Academic Standards

UAF's scholastic standards are designed to help students take action before their academic record deteriorates to the point that readmission to UAF or another institution is difficult. In all cases involving poor scholarship, students are encouraged to consult with their advisor, instructors or dean.

Undergraduate and certificate students are subject to scholastic action if they fail to earn a GPA of 2.0 at the end of the semester. Scholastic action may result in warning, probation or disqualification from the university.

Catalog Year

UAF defines catalog year as beginning in the fall and ending at the conclusion of the summer semester. For example, the 2022-2023 catalog year includes fall 2022, spring 2023 and summer 2023.

Good Standing

Undergraduate students — You are in good standing if your cumulative GPA and most recent semester GPA are 2.0 or better.

Graduate students — To maintain good academic standing in UAF graduate programs, students must:

- a. Maintain a cumulative GPA of 3.0 in courses taken since admission to graduate school. Before advancing to candidacy, however, a cumulative GPA of 3.0 is required. You must earn at least a B grade in 400-level courses.
- b. Be registered at UAF with a minimum of six graduate or 400-level credits per year unless on an approved leave of absence.
- c. Abide by all parts of the Student Code of Conduct.
- d. Have a current graduate study plan or an advancement to candidacy submitted and approved unless you are within the first year of graduate study.
- e. Have on file with the Graduate School by May 15 of each year an annual report from the graduate advisory committee certifying satisfactory progress. This is the responsibility of the student. Students starting in January need not submit an annual report until May of the next academic year. If a satisfactory annual report is not filed as specified, the student may be placed on probation.
- f. Pass any required qualifying exams or comprehensive exams. Departments may set the number of times a student may retake an exam.

Academic Honors

Undergraduate and certificate students — To be eligible for academic honors at the end of a semester, you must be a full-time student in a UAF undergraduate degree or certificate program who has completed at least 12 UA institutional credits graded with the letter grades A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D- or F. If you have received an incomplete or deferred grade, your academic honors cannot be determined until those grades have been changed to permanent grades. Academic honors are recorded on your permanent record. You will make the chancellor's list with a semester GPA of 3.9 or better, or the dean's list with a GPA of 3.5-3.89. UAF announces the students who have earned honors each semester. Students with incompletes or deferred grades that are changed after publication of honors will not be announced separately. If you've requested that information not be released about you (under FERPA), your name will not be released to the media.

Warning

Students who have either a semester or a cumulative GPA below 2.0 are placed or continued on academic warning. Students on academic warning will be contacted and instructed to meet with an advisor to discuss academic support resources.

Probation

Undergraduate students — Students whose semester and cumulative GPA falls below 2.0 after any semester, including the summer session, will be put on academic probation. Students on probation may not enroll in more than 13 credits a semester unless an exception is granted by the appropriate dean. Probation may include additional conditions as determined by the dean of the college or school in which the student's major is located. Students on probation will be referred for developmental advising/education and/or to an advising or support counseling center. The student should work with an academic advisor to prepare an academic plan for achieving a higher GPA. Removal from probation requires the student's cumulative and semester GPAs to be at least 2.0.

Graduate students — Probationary status indicates a student is not in good standing. When a student is placed on probation, the dean of the school or college and the advisory committee will tell the student what requirements are necessary to return to good standing. If a student does not return to good standing by the end of two semesters, he or she may be dismissed from the degree program.

Academic Disqualification

Undergraduate Academic Disqualification — Academic Disqualification is the status assigned to those undergraduate students who begin a semester on academic probation (including students admitted on probation for that term) or are continuing on probation and fail to earn a semester GPA of 2.0 or higher. Academically disqualified students are ineligible for most types of financial aid.

The student's program will be changed to inactive and the student will not be allowed to attend UAF for one academic (fall or spring) semester. After non-attendance for either fall or spring semester, the student may complete a form for readmission. A student may appeal the academic disqualification immediately.

Readmission — An academically disqualified student who desires to continue admittance to the same program or another baccalaureate program may submit a request for readmission after not attending the University of Alaska Fairbanks for one academic semester. The student should complete a form for readmission, which includes a plan for academic success. This form must be reviewed and approved by an academic advisor. Completed readmission forms must be submitted to the Office of the Registrar no later than the first day of instruction in the semester for which a student wishes to be reinstated. An academically disqualified student must successfully be readmitted within two years of disqualification or will need to reapply for admission.

If readmission is granted, the student will remain on probation and be required to meet with an advisor prior to registration for classes until their cumulative GPA is 2.0 or above. Students must achieve a term GPA of 2.0 or above for each term. Readmitted students who achieve a term GPA of below 2.0 will again be disqualified and will not be allowed to attend UAF for one academic year.

Baccalaureate students who wish to continue attending may apply to the UAF Community and Technical College (CTC) or College of Rural

and Community Development (CRCD) for admission into an associate-level degree, certificate or occupational endorsement program with dean approval. This process can be completed with a full plan for academic success that has been developed with an academic advisor.

Readmitted students will have a maximum semester course load limit of 13 credits.

Appeal of Academic Disqualification — A student who wishes to appeal an academic disqualification decision and remain in their current undergraduate program may submit an appeal form, available at the Office of the Registrar. Appeals must be initiated no later than the first day of instruction in the semester for which a student wishes to be reinstated. The appeal form with a full academic plan for success will be reviewed by a committee for a first-step approval and will then be approved by the dean of the college or school where readmission is being requested.

Should a second academic disqualification be received, the student will be required to sit out one year before being readmitted to UAF, CTC or CRCD.

Should a third academic disqualification be received, the student will be required to sit out two years before being readmitted to UAF, CTC or CRCD.

UAF honors the academic status decisions of the University of Alaska Anchorage and the University of Alaska Southeast. Any student required to sit out at UAA or UAS will be eligible to register for UAF courses after the sit-out period.

Academic Dismissal

Graduate students — If recommended by the department chair, graduate advisory committee and dean of the college or school, and approved by the dean of the Graduate School, a student will be dismissed because of unsatisfactory performance. Unsatisfactory performance is deemed as one or more of the following:

- Exceeding maximum time limit for degree.
- Not being registered at UAF for a minimum of six credits per year unless on approved leave of absence.
- Having less than a 3.0 cumulative GPA for courses taken since admission to graduate school.
- Being on probationary status for more than two consecutive semesters.
- Violating the Student Code of Conduct.
- Lacking progress as judged by the advisory committee and documented on the student's annual report.
- Having substantive inaccuracies in the original application for admission.

If the student does not have a graduate advisory committee, dismissal can occur upon the recommendation of the department chair and the dean of the college or school, with approval from the dean of the Graduate School.

Appeal of Academic Decisions

The University of Alaska appeals policies can be found in the Regents' Policy and University Regulation Part IX — Student Affairs, Chapter 09.03, Student Dispute Resolution, available online at the Board of Regents policy and university regulation website (<https://www.alaska.edu/bor/policy-regulations/>).

Grade Appeals Policy

A student who wishes to appeal a faculty decision on a final grade must submit a grade appeal form, available at the Office of the Registrar. There are only two valid reasons for appeal of a grade:

1. an error in calculation of the grade, or
2. arbitrary and capricious grading.

Evidence of either must be documented for an appeal to be successful. Merely wanting a higher grade is not sufficient grounds to justify an appeal.

The full text of the grade appeals policy can be found at the Faculty Senate policies and procedures website (<https://www.uaf.edu/uafgov/faculty-senate/policies-procedures/>). The grade appeal form is on the registrar's form website (https://www.uaf.edu/reg/forms/grade_appeal.pdf). Grade appeal forms are also available at the Office of the Registrar and at the Center for Student Rights and Responsibilities office.

Academic Decisions Other Than Grades

Students have the right to appeal academic decisions other than grades. Decisions that fall into this category include, but are not limited to, denial of admission, faculty-initiated withdrawal, dismissal from program or pass/fail decisions of a faculty committee on non-course examinations (such as qualifying, comprehensive or thesis examinations).

Before beginning the informal or formal appeal process, the student should first address the person who made the decision. Often problems can be resolved and misunderstandings cleared up through this step. If the student does not find the outcome acceptable, the next step is an informal appeal.

The informal appeal must be submitted to the academic leader of the department or program within 15 class days after the beginning of the next regular semester. An extension to the deadline may be approved by the academic leader with a written request and supporting documentation from the student. A deadline extension will be limited to one semester, but every effort should be made to complete the appeal process within the current semester.

If the student wishes to appeal the decision of the academic leader, the student can file a formal appeal with the Office of the Provost. The formal appeal must be made in writing within five class days after the student has learned the outcome of the informal review. By submitting a formal request for review, the student acknowledges that no additional mechanisms exist within the university for the informal review of the decision.

Detailed "Appeals Policy for Academic Decisions Other Than Assignment of Grades" can be found at the Faculty Senate policies and procedures website (<https://www.uaf.edu/uafgov/faculty-senate/policies-procedures/>).

The academic appeals advisor helps undergraduate students with the policies and procedures associated with grade appeals, appeals policy for academic decisions other than assignment of grades, academic petitions and financial aid satisfactory progress appeals.

The academic appeals advisor is a professional academic advisor in the Academic Advising Center. The academic appeals advisor helps students determine whether the appeal or petition is appropriate, reviews documentation relevant to the appeal or petition, and navigates the process for the appeal or petition submission. In the preceding sentence, "appropriate" does not refer to whether an appeal is likely to be successful, but rather whether the appeal falls within the purview of the grade or academic decisions appeal process. The academic appeals advisor does not guarantee the appeal or petition will be successful and will not comment on the likelihood of acceptance. Students are responsible for writing the appeal or petition, for gathering and recording relevant documentation, and for submitting the appeal or petition with the proper signatures.

Contact the Academic Advising Center at 907-474-6396 or uaf-advicing@alaska.edu.

Students' Rights and Responsibilities

The university respects and upholds the principles of due process and a fair and equitable process as specified in the Board of Regents' Policy 09.02 Student Rights and Responsibilities. For more information regarding the rights and responsibilities of students, refer to the Center for Student Rights and Responsibilities website (<https://www.uaf.edu/csrr/>). You are encouraged to read the Board of Regents' policy carefully to fully understand your responsibilities to our community.

We strive to create a safe and respectful environment for all members of our community. If you have questions about expectations of you as a student or believe your rights are being violated, we encourage you to reach out to the Center for Student Rights and Responsibilities for help. UAF reserves the right to suspend, expel or take other necessary and appropriate action in cases where a student is unable or unwilling to uphold community standards.

Student Code of Conduct

1. As with all members of the university community, the university requires students to conduct themselves honestly and responsibly and to respect the rights of others. Students may not engage in behavior that disrupts the learning environment, violates the rights of others or otherwise violates the Student Code of Conduct (09.02), university rules, regulations or procedures. Students and student organizations are responsible for ensuring that they and their guests comply with the code while on property owned or controlled by the university or at activities authorized or sponsored by the university.
2. Sexual and gender-based misconduct is addressed separately in accordance with Regents' Policy and University Regulation 01.04, which provides policies and regulations for the reporting and investigation of alleged sexual and gender-based misconduct. Sanctions for sexual and gender-based misconduct are imposed according to the student code of conduct.
3. The university may initiate disciplinary action and impose sanctions on any student or student organization found responsible for committing, attempting to commit, or intentionally assisting in the commission of any of the following prohibited forms of conduct:
 - a. cheating, plagiarism or other forms of academic dishonesty;
 - b. forgery, falsification, alteration or misuse of documents, funds, property or electronic records;
 - c. damage or destruction of property;
 - d. theft of property or services;
 - e. harassment;
 - f. discrimination;
 - g. hazing;
 - h. endangerment, assault or infliction of physical harm;
 - i. gender-based or sexual misconduct;
 - j. disruptive or obstructive actions;
 - k. mistreatment of animals;
 - l. misuse of firearms, explosives, weapons, dangerous devices or dangerous chemicals;
 - m. failure to comply with university directives;
 - n. misuse of alcohol;
 - o. misuse of drugs or other intoxicants;
 - p. violation of regents' policy, university regulation, rules or procedures; or

q. any other actions that result in unreasonable interference with the learning environment or the rights of others.

4. Examples of actions that constitute these prohibitions will be described in the university regulation and major administrative unit rules and procedures.
5. This policy and university regulation and major administrative unit rules and procedures are not intended to define prohibited conduct in exhaustive terms but rather to set forth examples to serve as guidelines for acceptable and unacceptable behavior.

The university has established procedures for enforcing the UA code of conduct. Each student at the university shall be afforded due process in all disciplinary matters. For a complete guide to these procedures, please refer to Board of Regents Policy and University Regulation 09.02 (<https://www.alaska.edu/bor/policy/09.02-Student%20Rights%20and%20Responsibilities.pdf>) (PDF).

For additional information and details about the student academic misconduct policy, please visit the Center for Student Rights and Responsibilities (<https://www.uaf.edu/csrr/>).

Student Behavioral Standards

Education at the university occurs inside and outside the classroom, with the goal to enhance personal self-improvement and development. Generally, UAF behavioral expectations are designed to help you work efficiently in courses and live responsibly in the campus environment. They are not designed to ignore your individuality but rather to encourage you to exercise self-discipline, accountability and awareness of social responsibility. These expectations, in most instances, were developed jointly by staff and students. Contact the Center for Student Rights and Responsibilities (<https://www.uaf.edu/csrr/>) for more information.

For students wanting to address complaints about faculty or staff conduct, UAF provides one level of administrative oversight for decisions made by university employees. The Center for Student Rights and Responsibilities can assist students with addressing concerns and complaints and, in situations where it is appropriate, can provide mediation for a situation. Individuals are encouraged to first attempt informal resolution with the employee making the decision or the employee's supervisor. An individual seeking further review has the option of filing a written request with the employee's supervisor for decisions made by university employees that are not covered in other university policies, regulations and procedures. The request must be signed and include all relevant information to be considered during the review. The supervisor will consider the information available at the time of the review and provide written notification of the outcome to the individual who filed the request. The supervisor's written response will be the final decision within the university.

Information Release and FERPA

The Office of the Registrar is responsible for keeping student education records. The Family Educational Rights and Privacy Act of 1974, as amended, protects the privacy of education records, establishes the right of students to inspect and review their education records, and provides guidelines for the correction of inaccurate or misleading data through informal and formal hearings.

FERPA affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's education records within 45 days of the day the university receives a request for access. Students should submit a written (letter or fax) request to the Office of the Registrar that identifies the record(s) they wish to inspect. The registrar will make arrangements for access and notify the student of the time and place where records may be inspected. If the records are not maintained by the Office of the Registrar, registrar-designated staff will refer the student to the appropriate personnel or office to access the record.
2. The right to request the amendment of a record they believe is inaccurate or misleading. A student may ask the university to amend the student's education records if he/she believes they are inaccurate or misleading or otherwise in violation of the student's privacy or other rights. If the university decides not to amend the record as requested by the student, the university will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. If the university denies the amendment request after the hearing, the student is given the right to insert a statement in the education record.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. The university may release, without consent, certain directory information.

The university discloses education records without a student's written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person designated by the university to perform an assigned function on behalf of the university, including an individual employed by the university as an administrator, supervisor, instructor or administrative staff member (including law enforcement unit personnel and health staff) or a volunteer; a person or company with whom the institution has contracted to perform a service instead of using university employees (such as an auditor, attorney or other third party); a member of the board of regents; a government entity or any other entity with which a student is placed as part of his or her education; or a student serving on an official committee (such as a judicial or academic review committee or scholarship committee) or helping another university official perform his or her tasks. A university official has a legitimate educational interest if the official needs the student's education record to perform work appropriate to his or her position.

Upon request, the university also discloses education records without consent to officials of another school in which a student seeks or intends to enroll, or where the student is already enrolled.

The following information is designated as directory information by the university:

- a. Names of students
- b. Dates of attendance at the university
- c. Program/major field(s) of study
- d. Degrees and certificates received including dates
- e. Participation in officially recognized university activities
- f. Academic and co-curricular awards, honors, and scholarships received and dates received
- g. Weight and height of students on athletic teams
- h. Students' email addresses
- i. Hometown, city and state

Students may inform the Office of the Registrar in writing that they do not give permission for the university to release their directory information, or they may submit the request through UAOnline (<https://uaonline.alaska.edu>). The request is valid until a subsequent request to release directory information is received in writing or through UAOnline (<https://uaonline.alaska.edu>).

Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the university to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5920

The University of Alaska Board of Regents' policy and university regulation 09.04 regarding education records can be reviewed at the University of Alaska Regents' Policy and University Regulations site (<https://www.alaska.edu/bor/policy-regulations/>).

Honors and Scholarships

Names of students receiving awards or scholarships or who appear on the dean's list or chancellor's list are released to the media unless a student has requested that no directory information be released. Instructions for electing FERPA confidentiality (<https://www.alaska.edu/studentservices/ferpa/>) are available online.

Nondiscrimination Policy and Disclaimer

Notice of Nondiscrimination

(BOR POLICY & REGULATION 01.02.020 ([HTTPS://ALASKA.EDU/BOR/POLICY-REGULATIONS/](https://alaska.edu/bor/policy-regulations/)))

The University of Alaska does not discriminate on the basis of race, religion, color, national origin, citizenship, age, sex, physical or mental disability, status as a protected veteran, marital status, changes in marital status, pregnancy, childbirth or related medical conditions, parenthood, sexual orientation, gender identity, political affiliation or belief, genetic information, or other legally protected status.

When implementing this commitment, the University is guided by Title VI and VII of the Civil Rights Act of 1964 and Civil Rights Act of 1991; Title IX of the Education Amendments of 1972; Executive Order 11246, and Executive Order 11375, as amended; Equal Pay Act of 1963; Age Discrimination in Employment Act of 1967 and Age Discrimination Act of 1975; Vietnam Era Veterans Readjustment Assistance Act of 1974; Americans with Disabilities Act (ADA) of 1990; the Americans with Disabilities Act Amendments Act of 2008; Genetic Information Nondiscrimination Act of 2008; Pregnancy Discrimination Act; Immigration Reform & Control Act; Vocational Rehabilitation Act of 1973 and other federal laws or Alaska Statutes which guarantee equal opportunity to individuals and protected classes within our society.

The University's commitment to nondiscrimination, including against sex discrimination, applies to students, employees, and applicants for admission and employment.

This policy therefore affects employment policies and actions, as well as the delivery of educational services at all levels and facilities of the University. Further, the University's objective of ensuring equal opportunity will be met by taking affirmative action: i.e., making intensified, goal-oriented efforts to substantially increase the participation of groups where their representation is less than proportionate to their availability; providing reasonable accommodations to employees and students with disabilities; and ensuring that employment opportunities are widely disseminated to agencies and organizations that serve underrepresented protected classes.

The following person has been designated to handle inquiries regarding the nondiscrimination policies:

University of Alaska Anchorage
Director, Office of Equity and Compliance
3890 University Lake Drive, Suite 102
Anchorage, AK 99508
Phone: 907-786-0818
E-mail: uaa_titleix@uaa.alaska.edu
Website: <https://www.uaa.alaska.edu/about/equity-and-compliance/>

University of Alaska Fairbanks
Director, ADA/504 Coordinator, Department of Equity and Compliance (<https://www.uaf.edu/equity/>)
Constitution Hall 3rd Floor, 1692 Tok Lane
PO Box 756910
Fairbanks, AK 99775-6910
Phone: 907-474-7300
E-mail: uaf-deo@alaska.edu

Website: <https://www.uaf.edu/equity/>

University of Alaska Southeast
UAS Title IX Coordinator
11066 Auke Lake Way
Juneau, AK 99801
Phone: 907-796-6371
E-mail: uas.titleix@alaska.edu
Website: <https://www.uas.alaska.edu/titleix/>

For sex discrimination claims or other inquiries concerning the application of Title IX of the Education Amendments of 1972 and its implementing regulations, individuals may contact the University's Title IX Coordinator or the Assistant Secretary in the U.S. Department of Education Office of Civil Rights, or both:

UAA Title IX Coordinator
3890 University Lake Drive, Suite 102
Anchorage, AK 99508
Phone: 907-786-0818
E-Mail: uaa_titleix@uaa.alaska.edu
Website: www.uaa.alaska.edu/about/equity-and-compliance/

UAF Title IX Coordinator (<https://www.uaf.edu/titleix/>)
Constitution Hall 3rd Floor, 1692 Tok Lane
Fairbanks, AK 99775
Phone: 907-474-7300
E-Mail: uaf-tix@alaska.edu
<https://www.uaf.edu/equity/>

UAS Title IX Coordinator
11066 Auke Lake Way
Juneau, AK 99801
Phone: 907-796-6371
E-Mail: uas.titleix@alaska.edu
<https://www.uas.alaska.edu/titleix>

Office for Civil Rights, Seattle Office (<http://www2.ed.gov/about/offices/list/ocr/docs/howto.html>)
U.S. Department of Education
915 Second Ave., Room 3310
Seattle, WA 98174-1099
Phone: 206-607-1600
TDD: 800-877-8339
E-mail: OCR.Seattle@ed.gov
Website: <http://www2.ed.gov/about/offices/list/ocr/docs/howto.html>

For employment or educational discrimination, students, parents, employees and applicants for employment may file a complaint with the U.S. Department of Education within 180 calendar days of the alleged discriminatory act.

Office for Civil Rights, Seattle Office (<http://www2.ed.gov/about/offices/list/ocr/docs/howto.html>)
U.S. Department of Education
915 Second Ave., Room 3310
Seattle, WA 98174-1099
Phone: 206-607-1600
TDD: 800-877-8339
E-mail: OCR.Seattle@ed.gov
Website: <http://www2.ed.gov/about/offices/list/ocr/docs/howto.html>

For employment discrimination, employees and applicants for employment may file a complaint with the Equal Employment Opportunity

Commission at the below addresses within 180 calendar days of the alleged discriminatory act.

Equal Employment Opportunity Commission (<http://www.eeoc.gov/employees/charge.cfm>)
Federal Office Building
909 First Avenue
Suite 400
Seattle, WA 98104-1061
Phone: 800-669-4000
Fax: 206-220-6911
TTY: 800-669-6820
Website: <http://www.eeoc.gov/employees/charge.cfm>

For educational discrimination, individuals may file a complaint with the U. S. Department of Justice (<http://www.justice.gov/crt/how-file-complaint/#three>)

U.S. Department of Justice Civil Rights Division
950 Pennsylvania Avenue, N.W.
Educational Opportunities Section, PHB
Washington, D.C. 20530
Phone: 202-514-4092 or 1-877-292-3804 (toll-free)
Fax: 202-514-8337
E-mail: education@usdoj.gov
Website: <http://www.justice.gov/crt/how-file-complaint#three>

For employment or educational discrimination, individuals may file a complaint with the State of Alaska:

Alaska State Human Rights Commission (<http://humanrights.alaska.gov>)
800 A Street, Suite 204
Anchorage, AK 99501-3669
Anchorage Area: 907-274-4692
Anchorage Area TTY/TDD: 907-276-3177
Toll-Free Complaint Hot Line (in-state only): 800-478-4692
TTY/TDD Toll-Free Complaint Hot Line (in-state only): 800-478-3177
Website: <http://humanrights.alaska.gov>

For discrimination related to a Department of Labor funded grant, individuals may file a complaint with the U. S. Department of Labor (<http://www.dol.gov/oasam/programs/crc/>) within 180 calendar days of the alleged discriminatory act.

U.S. Department of Labor
ATTENTION: Office of External Enforcement
Director, Civil Rights Center
200 Constitution Avenue, NW
Room N-4123
Washington, DC 20210
Fax: 202-693-6505, ATTENTION: Office of External Enforcement (limit of 15 pages)
E-mail: CRCEXternalComplaints@dol.gov
Website: <http://www.dol.gov/oasam/programs/crc/index.htm>

For discrimination related to a National Science Foundation funded grant, individuals may file a complaint with the National Science Foundation within 90 calendar days of the alleged discriminatory act on the basis of race, sex (including sexual harassment), color, national origin and disability. Age discrimination complaints may be filed within 180 calendar days of the alleged discriminatory act.

National Science Foundation
NSF Awardee Compliance Manager

Office of Diversity & Inclusion (<http://www.nsf.gov/od/odi/>) (ODI)
2415 Eisenhower Avenue
Alexandria, VA 22314
Phone: 703-292-8020
E-mail: ProgramComplaints@nsf.gov
Website: <https://www.nsf.gov/od/odi/>

UA's grievance procedures and grievance process under Title IX, including how to report or file a formal complaint of sex discrimination, how to report or file a formal complaint of sexual harassment, and how UA will respond are located in UA Board of Regents' Policy and Regulation Chapter 01.04. (<https://alaska.edu/bor/policy/01.04-Sex%20and%20Gender-Based%20Discrimination%20Under%20Title%20IX.pdf>) This chapter defines prohibited behavior and details the administrative grievance procedures and grievance process for inquiries, investigations, hearings, and appeals which apply when prohibited behavior is alleged to have occurred.

Caring Statement

At the University of Alaska Fairbanks, the safety, security and well-being of our students, faculty, staff and visitors are our foremost concern. To help you make an informed decision and comply with the Clery Act, we publish an annual Campus Security Report. This report contains information from the three previous calendar years concerning reported offenses, arrests, crimes and disciplinary referrals that occurred on campus; in certain off-campus buildings owned or controlled by the university; and on public property within or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, alcohol and other drug use, crime prevention strategies, and how to report crimes, sexual assault and other related matters.

Catalog Disclaimer

This catalog and its contents shall not be construed as a contract between the University of Alaska Fairbanks and prospective or enrolled students. The catalog is merely a vehicle of information, including university policies, regulations, rules and procedures. Although every effort is made to ensure its correctness, regulations of the university and its program requirements change from time to time during the period any student is attending the University of Alaska Fairbanks; to the extent there is a conflict between this catalog and university policies, regulations, rules or procedures, the university policies, regulations, rules or procedures will control.

Accordingly, if regulations or program requirements of the university in any way conflict with information contained in this catalog, the current regulations and program requirements govern. The university reserves the right to initiate changes in any of its regulations or program requirements affecting operation of the university and its program requirements; such changes shall become effective upon whatever time periods are required by applicable statutes, university regulations or program requirements.

UAF is accredited by the Northwest Commission on Colleges and Universities, 8060 165th Ave. NE, Suite 100, Redmond, WA 98052.

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Veterans Affairs Educational Benefits, Tuition and Fees

Title 38 United States Code Section 3679(e) School Compliance Policy

As part of the Veterans Benefits and Transition Act of 2018, section 3679 of title 38, the University of Alaska Fairbanks (UAF) complies with the requirements as outlined below:

Note: A Covered Individual is any individual who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill® benefits.

- UAF permits any covered individual to attend or participate in the course of education during the period beginning on the date on which the individual provides to UAF Department of Military and Veteran Services a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33, or a Statement of Benefits from the VA website e-benefits, or a VAF 28-1905 form for chapter 31 and ending on the earlier of the following dates:
- The date on which payment from VA is made to UAF.
- 90 days after the date UAF certified tuition and fees following receipt of the certificate of eligibility.
- UAF will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to UAF due to the delayed disbursement funding from VA under chapter 31 or 33.

In addition, the statute allows UAF to require chapter 31 and chapter 33 students to take the following additional actions:

1. Submit a certificate of eligibility for entitlement to educational assistance no later than the first day of a course of education.
2. Submit a written request (Certification Request Form) to use entitlement.
3. Provide additional information necessary to UAF for the proper certification of enrollment.
4. Make payment for a difference between the amount of the student's financial obligation and the amount of the VA education benefits disbursement.

UAF will hold a student responsible for any portion of tuition and other fees not covered by the VA by the published fee payment deadline. A late fee may be assessed for account balances not covered by the VA education benefit disbursement. UAF Housing and Dining fees are not included in the deferred payment for tuition and fees. Students may contact the UAF Office of the Bursar to discuss available payment options if needed.

If students do not turn in a COE, or Statement of Benefits, and/or CRF by the first day of class, a late fee may be assessed.

VA payment reversals are due within 5 business days. Balances over \$300 are subject to late fee assessment.

VA Chapter 30 and 35 students will follow standard student guidelines for payment or payment arrangements by the fee payment deadline.

UAF requires a Certificate of Eligibility (COE) from the VA in order to post an Expected (estimated) VA payment to your student account. In addition, UAF requires a Certification Request Form every semester you wish to use VA Education Benefits. Without the initial COE or a Certification Request Form each semester, you will need to make payment arrangements with the Office of the Bursar before the required fee payment deadlines.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website (<https://www.benefits.va.gov/gibill/>).

HOUSING AND DINING

Housing

Single-Student Housing

Your educational experience at UAF will be one of the great adventures of your life. The Department of Residence Life can be a vital part of that adventure through programs that give you a comfortable, energetic environment in which to live and learn. The community fosters close friendships and academic achievement, helps you develop individual leadership ability and provides opportunities for personal growth.

Some of UAF's residence halls have a wonderful view of the Alaska Range and Denali, the tallest peak in North America.

Residence Life offers living environments to meet every need. Options include coed buildings by floor or by room, small community atmospheres or larger halls, options for students to living in themed living-learning communities, apartment-style options, double, single and super-single rooms, gender-inclusive housing options, and first-year experience halls.

Residence hall students have the conveniences of home within walking distance to class. Benefits include:

- wireless and high-speed connections
- laundry facilities
- gender-inclusive housing
- living-learning communities
- trained staff on call 24 hours
- more than 1,000 programs each year
- the ability to participate in residence hall associations or community councils
- shared community kitchen and lounge spaces

ELIGIBILITY

All UA students enrolled in at least 6 credits (in-person, online or distance-education class) are eligible for campus housing, but students are not guaranteed housing until approved by the Department of Residence Life. Students must be current on required immunizations to live in campus housing.

APPLICATION PROCESS

You must have access to UAOnline to apply for campus housing. All housing applications and forms can be found in your MyHousing Portal. We have a two-part housing application process. Please complete the Housing Eligibility Form first, then you will be given access to the housing application(s) that fits your housing needs. More information can be found here (<https://uaf.edu/reslife/apply/>). Incoming non-first-year applicants must pay the \$40 nonrefundable application fee with the signed housing application. Application fees are waived for first-year applicants. Upon acceptance, Residence Life will send a written confirmation and receipt to the student.

COSTS

On-campus costs are comparable to off-campus living costs. When amenities such as in-room wifi connections, all utilities, transportation and laundry facilities are added in, the on-campus costs are even more favorable. Residential fees (room and board) are due in full at fee

payment along with all other fees. All students living in a residence hall are required to purchase a meal plan, with the exception of graduate students. Please see the Dining Services section (p. 90) for more information regarding meal plans.

Residence hall and board plan fees are listed below. All room and board costs are subject to change. Students whose housing applications have been accepted will be able to withdraw (minus the application fee) if rates increase after they apply. Contact Residence Life about residence hall fees. Questions about the meal plan should be directed to Dining Services at 907-474-6661 or uaf-dining@alaska.edu.

Fairbanks Campus Single-Student Housing

| | (per semester)* |
|---------------------------------|------------------------------|
| Double rooms | \$2,550-\$2,907 |
| Single rooms ¹ | \$3,060-\$3,417 |
| Super-single rooms ² | \$3,570-\$3,927 |
| Cutler Apartment Complex | \$3,060-\$3,723 ³ |

¹ Extremely limited availability

² Super-single = Double room occupied by one person. Super-singles are limited to specific facilities.

³ Includes winter break

* All students will be charged a per-semester nonrefundable \$25 programming fee. This fee supports the administration, events and activities scheduled in the campus communities throughout the program.

CONSEQUENCES OF CANCELING A HOUSING CONTRACT

After July 31, students who have submitted a housing application are expected to live on campus and pay appropriate housing fees for their reserved space. Students who do not occupy their reserved space by the first day of classes or who cancel their reserved space after July 31 will be charged a \$150 cancellation fee. Dining plans also carry cancellation consequences. Direct questions about meal plans to Dining Services at 907-474-6661 or uaf-dining@alaska.edu.

On-campus housing applications are for the academic year. Students living on campus for the fall semester but not living on campus the following spring semester should follow the spring schedule to avoid the cancellation fee.

Room charges and refunds are processed according to the following schedule:

Housing Refund Schedules FALL 2022

| Cancellation Date | Refund | Cancellation Fee? |
|-------------------|-------------|-------------------|
| Before Aug. 1 | 100% refund | \$0 |
| Aug. 1-24 | 100% refund | \$150 |
| Aug. 25-Sept. 9 | 90% refund | \$150 |
| Sept. 10-23 | 75% refund | \$150 |
| Sept. 24-Oct. 7 | 50% refund | \$150 |
| Oct. 8-21 | 25% refund | \$150 |
| After Oct. 21 | No refund | \$150 |

SPRING 2023

| Cancellation Date | Refund | Cancellation Fee? |
|-------------------|-------------|-------------------|
| Before Dec. 1 | 100% refund | No |
| Dec. 1-Jan. 12 | 100% refund | \$150 |
| Jan. 13-27 | 90% refund | \$150 |
| Jan. 28-Feb. 10 | 75% refund | \$150 |
| Feb. 11-24 | 50% refund | \$150 |
| Feb. 25-March 10 | 25% refund | \$150 |
| After March 10 | No refund | \$150 |

HALLS AND ROOMS

Every residence hall has common areas — including recreation lounges, study lounges, small kitchens and laundry facilities — to foster academic and personal growth. Recreational lounges typically have televisions, couches, tables, chairs, and pool tables or ping pong tables. Hall kitchens generally include a range/oven, refrigerator, microwave, sink, table and chairs. Kitchens are for preparing snacks and not designed to replace the university meal plan.

All student rooms have high-speed internet connections. Students must furnish their own twin-long linens, blankets, pillows and towels. Custodial service is provided for all common areas such as hallways, lounges and centrally located bathrooms.

FIRST-YEAR LIVE-ON REQUIREMENT

All incoming first-year undergraduate students are required to live on campus. The live-on requirement is a commitment between the undergraduate students and the University of Alaska Fairbanks to enhance students' experience and success. Living on campus for at least the first year is a significant advantage, as you will be part of a community and make connections to other students, faculty and staff. Living on campus also connects you to services that support you as you transition to college life at UAF. If you are a first-year undergraduate student enrolled in 9 credits or more, are under the age of 21 and are not planning to live locally with your parent(s)/legal guardian as specified below, you are required to live in a UAF residence hall for one academic year (fall/spring, excluding summer and winter breaks). If you are a UAF student receiving a scholarship specifically for room/board, you are required to live on campus as specified in the stipulations of the award or conditions of the program. Incoming spring transfer students who are still in their first matriculated year are required to live in a university residence hall and carry a traditional meal plan for the spring semester. All undergraduate international students in their first year of study in the United States are required to live on campus their first year. Requests for permission to reside off-campus for other reasons are considered on their own merit, taking into account individual circumstances.

The University of Alaska Fairbanks recognizes that exceptions to the live-on requirement may be appropriate in certain circumstances. Students can request an exception to the live-on requirement by completing an Exception to Housing Agreement Form via their MyHousing Portal (<https://beis.alaska.edu/ssomanager/c/SSB/?MAU=F>). Those seeking an exemption must meet one or more of the following criteria, subject to validation. Other exceptions not listed below will also be considered on a case-by-case basis:

1. Student is married, in a registered domestic partnership or civil union.
2. Student is a parent with custody of a child or children or caring for a dependent who is living with them.

3. Student is living with immediate family or legal guardian. Parent(s), sibling(s), or grandparent(s) are the only individuals that qualify as immediate family. Immediate family or legal guardian must also live within a 40-mile radius of campus.

4. Credits are 100% eCampus.

More information about the first-year live-on requirement, including frequently asked questions, can be found here (<https://uaf.edu/reslife/edge.php>).

EDGE PROGRAM

The Education, Development, Growth and Experience program provides support and resources to help traditional first-time students achieve academic success. The EDGE program is for all first-time students under 21 years of age who live on campus. Alcohol is prohibited in EDGE halls. Participants receive instruction in academic success skills, campus resources and other topics that foster success.

LIVING-LEARNING COMMUNITIES

We have multiple LLCs on campus:

Honors LLC (<https://uaf.edu/reslife/llc/community.php>) — UAF's Honors College (<https://uaf.edu/honors/>) and Residence Life collaborate to provide opportunities for students to pursue excellence in their academic and personal development. In addition, Residence Life supports the Honors College efforts to foster critical and independent thinking and help students become informed, responsible and active citizens. This LLC is located in Skarland Hall (<https://uaf.edu/reslife/hall/skarland.php>) and is available for first-year students. (<https://uaf.edu/reslife/edge.php>) Residents must be a part of the UAF Honors College to participate in the Honors LLC.

Engineering LLC (<https://uaf.edu/reslife/llc/community.php>) — The Engineering Living-Learning Community extends learning from the classroom into the residence hall, where students participate in structured programs built around academics, common interests and shared goals. Programming within the LLC is a partnership between the College of Engineering and Mines (<https://www.uaf.edu/cem/>) and Residence Life. The Engineering LLC is located in Skarland Hall (<https://uaf.edu/reslife/hall/skarland.php>) and is available for first-year students (<https://uaf.edu/reslife/edge.php>) who are enrolled in or interested in enrolling in an engineering-related field of study.

Outdoor Adventures LLC (<https://uaf.edu/reslife/llc/community.php>) — The Outdoor Adventures Living-Learning Community serves to provide students with an opportunity to explore the great outdoors that is Alaska! With support from Outdoor Adventures, students can expect to have exposure to programs ranging from hiking to ice climbing. Students will also have access to special pricing and trip opportunities. This LLC is located in Skarland Hall (<https://uaf.edu/reslife/hall/skarland.php>) and is available for first-year students (<https://uaf.edu/reslife/edge.php>). All interested in exploring personal growth and a personal spirit of adventure are encouraged to participate!

Stonewall LLC (<https://uaf.edu/reslife/llc/community.php>) — The Stonewall Living-Learning Community is a safe and inclusive community for students. Through collaboration with various UAF campus partners and the Fairbanks community, UAF's LGBTQ+ student population is supported through connection, education and

advocacy. The Stonewall LLC is located in Bartlett Hall (<https://uaf.edu/reslife/hall/bartlett.php>) (6th floor) for returning students and Moore Hall (<https://uaf.edu/reslife/hall/moore.php>) (6th floor) for first-year students. (<https://uaf.edu/reslife/edge.php>)

Impact LLC (<https://uaf.edu/reslife/llc/community.php>) — The Impact Living-Learning Community, a collaboration with Nanook Diversity and Action Center and Residence Life, provides students the opportunity to develop their civic engagement skills in order to achieve equity in their environment. Students in this community will attend programs and activities that are focused on advancing their knowledge in the area of social justice. Students will also gain access to campus engagement and leadership opportunities. The Impact LLC is located in Skarland Hall (<https://uaf.edu/reslife/hall/skarland.php>) and is available for first-year students (<https://uaf.edu/reslife/edge.php>).

UNDERGRADUATE STUDENT APARTMENTS

Currently, Cutler Apartments is the only apartment-style facility open to traditional undergraduate students. Each apartment has a kitchen, two bedrooms and one bathroom, and houses up to four students. Each apartment also has a small patio or deck, and most have shared storage space. There are two laundry facilities in the complex that are open 24 hours a day. Cutler Apartments are available to undergraduate and graduate students in single-student housing.

ROOM USE DURING VACATION PERIODS

All halls are open during Thanksgiving and spring break, but most are closed during the winter break, with the exception of Cutler Apartments. All students living on campus in the fall and spring are eligible to remain on campus over the winter break provided they apply to do so and pay the winter break fee. Space is limited and is available on a first-come, first-served basis. The winter break fee for Cutler Apartments is included in the fall semester rates. Food service may not be available during the winter and spring breaks. Summer housing is also available; assignments are made through Residence Life.

Employee, Family and Graduate Housing

UAF offers a variety of on-campus housing for student families. The university owns and maintains 180 furnished apartments on campus, ranging from one- to three-bedroom units. They are affordable, comfortable and conveniently located near the center of campus.

ELIGIBILITY

Employees, graduate students, and students with dependents or students who are over the age of 26 are eligible for employee, family and graduate housing options at UAF. The main agreement holder must be registered for a minimum of 6 credits (in-person, online or distance education class) or be a benefited employee to live in campus housing.

APPLICATION PROCESS

You must have access to UAOnline to apply for campus housing. All housing applications and forms can be found in your MyHousing Portal. We have a two-part housing application process. Please complete the Housing Eligibility Form first, then you will be given access to the housing application(s) that fits your housing needs. More information can be found here (<https://uaf.edu/reslife/home/>). You will receive further information within one week of submitting your housing application. For many of Residence Life's employee, family and graduate housing units, a waitlist is maintained according to the order the application was received. Submitting an application is not a guarantee of accommodations, but it

gives Residence Life the information it requires to meet the applicant's needs. All apartment preferences are honored on a first-come, first-served basis. Once a unit has been designated for you, a \$40 nonrefundable application fee will be requested.

PET POLICY

Specific employee, family and graduate housing units allow pets. Residents of employee, family and graduate housing may keep one pet in their unit. Certain types of pets are permitted, including fish, small caged animals, dogs and cats. Residents are limited to types of pets depending on the unit. Detailed information about pet policies can be found on the Residence Life website (https://uaf.edu/reslife/files/Animal_Policy.pdf). All pets must be registered with the Department of Residence Life. Applying to keep a pet does not guarantee approval.

COSTS

Costs for individuals living on campus are comparable to the costs of living off campus. On-campus apartment rental rates include all utilities.

Your occupancy agreement is for either six or 12 months, but you may terminate your agreement early for any reason as long as you provide a 60-day notice. Those who terminate their agreement early and fail to provide a 60-day notice will be charged a \$500 cancellation fee. All residents must provide a notice to vacate by submitting a Housing Cancellation Form via their MyHousing Portal. See the cancellation/termination section of your agreement for more detailed information.

Those with pets will be required to pay a pet deposit.

FAIRBANKS CAMPUS EFG HOUSING

(per month; 6-month or yearlong contract required)*

| | |
|---|-----------------|
| Efficiency, double-shared, one- to three-bedroom apartments | \$853-\$1,717 |
| One- to three-bedroom home with garage | \$1,377-\$1,821 |

* All EFG units will be charged a \$25 programming fee with their January and September rent.

EFG COMPLEXES

The Fairbanks campus maintains the following EFG complexes: Stuart Hall and Walsh Hall offer one-bedroom apartments (400 square feet); Hess Village offers one-bedroom (425 square feet), two-bedroom (720 square feet) and three-bedroom (900 square feet) apartments; Garden Apartments (695 square feet) is a six-plex offering shared two-bedroom apartments. Harwood Hall offers efficiencies (380 square feet) and one-bedroom apartments (470 square feet). Chandalar Drive holds one-bedroom (600 square feet), two-bedroom (1408 square feet) and three-bedroom (1450 square feet) homes with garages. Tanana Drive has one-bedroom (720 square feet) and two-bedroom (1400 square feet) homes with garages. Children are not allowed in Stuart, Walsh or Harwood Hall. All complexes are equipped with laundry facilities.

Campus apartments are fully furnished and include high-speed wi-fi internet connections and laundry facilities. Limited unfurnished units available.

Immunization Policy and Housing

The University of Alaska strictly enforces immunization and test requirements for students living in high-density housing. To live in Cutler,

Garden, Bartlett, Moore, Skarland, McIntosh, Wickersham, Nerland or Stevens Hall, you are required to submit records showing that you have had the following:

- Two measles, mumps and rubella (MMR) immunizations (or proof of immunity)
- Tetanus immunization within the last 10 years (this can be either tetanus/diphtheria [TD], or tetanus, diphtheria and pertussis [TDAP])
- Negative tuberculosis (TB) test (often called a PPD test) within the first year of living in housing. If your TB test was positive, negative confirmatory testing or negative chest x-ray report is required
- Meningococcal (MCV4) for residents under the age of 21, last administered after the age of 16.

If you do not have access to these records, you can obtain these immunizations and TB testing at the Student Center for Health and Counseling or at a clinic or pharmacy in the community (<https://uaf.edu/chc/resources/after-hours.php>). If you get them done in the community, please upload your immunization records to the Patient Portal (https://uafchc.uaf.edu/login_directory.aspx), bring the documents to the Student Health and Counseling Center, or send them to:

UAF Student Health and Counseling Center
P.O. Box 755580
Fairbanks, AK 99775

Although the university urges all students to be immunized against communicable diseases, these requirements are specifically intended to help ensure the health of all resident students.

MANDATORY IMMUNIZATIONS AND TESTS

You must submit proof of required immunizations by July 31 for fall and Nov. 30 for spring, or your assignment will be canceled or your application will be held. The university may require additional or expanded immunization and testing if the university community’s health and safety warrants it.

The university may grant exemptions from immunization requirements based on medical or religious reasons. The chancellor may also grant exemptions to people who will occupy student residence facilities for less than a semester. Those exempted from immunization or testing for a disease may be removed from student residence facilities should an outbreak of that disease occur or threaten to occur. Residence Life cannot authorize exceptions to this policy.

See Board of Regents’ Policy, Part IX–Student Affairs, Chapter XI–Student Health. For more information, contact the Student Health and Counseling Center (<https://www.uaf.edu/chc/>) at 907-474-7043 or uaf-sh-cc@alaska.edu.

Where To Get More Information

Department of Residence Life
University of Alaska Fairbanks
Main Floor, Moore-Bartlett-Skarland Complex
P.O. Box 756860
Fairbanks, AK 99775-6860
Email: uaf-housing@alaska.edu
Telephone: 907-474-7247
Fax: 907-474-6423

Dining Services
The UAF Dining Experience

UAF Dining offers a welcoming, affordable dining experience for Fairbanks residential and commuter students. With multiple locations on the Fairbanks campus, you will find something to satisfy all your dining needs. All of them accept cash, BearBucks, Munch Money and credit cards. Please visit the UAF Dining website (<https://www.uaf.edu/dining/>) for more information on each location.

MEAL PLAN OPTIONS

Meal plans are combinations of block meals and Munch Money. All-you-care-to-eat block meals can be used at Dine Forty-nine and as cash equivalency up to \$8 at Fairbanks campus dining locations. Munch Money is used like cash at all dining locations and most vending machines on campus.

MEAL PLANS

All first-year students living in campus housing may only select either the Ultimate Monthly Block, Weekly 7 Block, Weekly 5 Block, Denali plan or Aurora plan.

| Meal Plan | Block Dinners | Munch Money | Price per semester | Available to |
|------------------------|-----------------------------|-------------|--------------------|------------------|
| Ultimate Monthly Block | 1 for each day of the month | \$2,000 | \$3,050 | All |
| Weekly 7 Block | 7 | \$1,500 | \$2,750 | All |
| Weekly 5 Block | 5 | \$1,500 | \$2,550 | All |
| Weekly 3 Block | 3 | \$1,500 | \$2,150 | All |
| Denali plan | 0 | \$2,750 | \$2,750 | All |
| Aurora plan | 0 | \$2,550 | \$2,550 | All |
| Nanook plan | 0 | \$2,250 | \$2,250 | All |
| Blue plan | 0 | \$1,975 | \$1,975 | All |
| Gold plan | 0 | \$1,195 | \$1,195 | Cutler residents |
| Cub plan | 0 | \$850 | \$850 | Cutler residents |
| Weekly 1 Block | 1 | \$450 | \$650 | Cutler residents |

USING YOUR MEAL PLAN

Blocks and Munch Money are accessed using the PolarExpress student ID card. With all meal plans, you have the option to eat at any campus dining location or to make purchases at most campus vending machines.

All students living in a residence hall and Cutler Apartments are required to purchase a meal plan, with the exception of graduate students. UAF also offers meal plans to students not living on campus. Students wishing to share meals with others may do so as long as they are present. For more information on meal plan options and plan details, please review the Dining Services program terms and conditions (<https://uaf.edu/dining/forms-and-feedback.php>).

All pricing is per semester. Students will automatically be enrolled in the same meal plan in the spring semester unless Dining Services is notified

in writing of a different selection. These plans are nontransferable. Monthly block meals will reset on the first of each month, Weekly blocks will reset on Sundays. Up to \$250 in leftover Munch Money from the fall semester will be added to the spring meal plan. All remaining Munch Money expires at the end of the academic year in May if not used. Unused blocks and Munch Money are nonrefundable.

Dining services on campus are provided by UAF partner Chartwells Higher Education Dining Services, an international food and facilities management services company. Check Dining Services' website (<https://www.uaf.edu/dining/>) for additions or changes.

Where To Get More Information

Dining Services

University of Alaska Fairbanks
309 Eielson Building
P.O. Box 757815
Fairbanks, AK 99775-7815
Email: uaf-dining@alaska.edu
Telephone: 907-474-6661
Fax: 907-474-5707

SERVICES AND RESOURCES

Academic Advising and Learning Assistance

Academic advising is a vital part of a student's experience at UAF. In fact, academic advising is so important that UAF requires all degree students to meet with their academic advisor at least once a semester, including the summer semester, before students can register for classes. An academic advisor can assist students in developing an educational plan encompassing both academic and career goals, as well as major and/or minor requirements. Advisors are also able to help build a semester-by-semester study plan to ensure timely graduation. Students can access DegreeWorks through UAOnline (<https://uaonline.alaska.edu>) to view and track all major and degree requirements. Newly admitted degree students will be advised by either a faculty member from their major or a staff advisor within their school or college. Visit the newly admitted student page (<https://www.uaf.edu/admitted/advising.php>) for a list of academic advisors' contact information.

The Academic Advising Center on the Troth Yeddha' campus in Fairbanks helps undeclared and pre-major students, as well as students in majors who are exploring other bachelor degrees. Certificate, associate, vocational and technical program students are advised at the Community and Technical College's Student Advising and Registration Center, in downtown Fairbanks. Alaska Native students and students from rural Alaska are encouraged to seek an academic advisor from Rural Student Services, in the Brooks Building. Students attending community campuses outside Fairbanks should contact local student services staff for information on registration, deadlines and other policies unique to their campus or region.

Academic Advising Center

Academic Advising Center advisors offer comprehensive guidance for undeclared, exploratory and pre-major students, and students accepted into the UAF North Star Middle College. AAC advisors also serve student-athletes, nondegree students, academically disqualified students and students who are in transition from a declared major to another degree program. The center is also a clearinghouse for general university and degree information. Academic advisors at the AAC also help students with information about nontraditional credit options like credit for prior learning and meeting requirements for pre-professional academic programs like law, dentistry, architecture, pharmacy, physician assistant or other pre-professional programs outside of what is offered in Alaska.

The Academic Advising Center, in cooperation with other departments, provides academic support with reference materials, referrals and study assistance to build and refresh knowledge in writing, math, reading and science. Staff can also help students identify their interests, abilities and learning styles using assessments, inventories and other tools that provide guidance about careers and academic majors. These programs are free for UAF students.

Contact the Academic Advising Center by visiting 510 Gruening, calling 907-474-6396, or emailing uaf-advising@alaska.edu (uaf.advising@alaska.edu). Specific information for students can be found on the Academic Advising Center website (<https://www.uaf.edu/advising/>).

Community and Technical College Student Advising and Registration Center

The Community and Technical College Student Advising and Registration Center provides advising and support for students in A.A. and A.A.S. degree, certificate and specialized training programs to contribute to a successful learning experience and transition to a career. Staff recognize the unique concerns of adult and returning students as well as traditional students entering college. Academic advisors can help with pre-admission advising, academic assessment, placement, and financial aid information and applications, as well as with choosing a major.

The center offers academic support through developmental courses, workshops, classroom presentations and one-on-one assistance to help conquer academic hurdles. In addition, advising staff provide personalized career advice based on job market information and a student's personal goals. Staff ensure that students have a broad base of support as they plan the move from college to career.

For more information, contact the Student Advising and Registration Center by visiting the Community and Technical College located at 604 Barnette St., Fairbanks, AK 99701, calling 907-455-2800 or visiting the Student Advising and Registration Center website (<https://www.ctc.uaf.edu/student/>).

Rural Student Services

Rural Student Services is the vital link between the Fairbanks campus and rural Alaska communities. RSS provides comprehensive academic advising services, including assisting with admissions, registering classes, explaining academic requirements, exploring degree options, career advising, financial aid and scholarship resources, as well as student advocacy and cultural programming.

RSS functions as a student support center in the Brooks Building on the UAF Troth Yeddha' campus in Fairbanks. RSS advisors recognize the unique cultural components of Alaska Native and rural Alaska students at UAF.

RSS is committed to responding to student needs by providing quality services to Alaska Native and rural students who expend positive effort in the pursuit of higher education and its opportunities. Our comprehensive approach is unique in recognizing students' efforts to develop and maintain academic and personal balance as they contribute to the cultural richness of the University of Alaska Fairbanks and beyond.

Students who are enrolled at UAF and are Alaska Native or come from a rural area are encouraged to use RSS' resources and services.

For more information visit Rural Student Services in the Brooks Building, call 907-474-7871, email uaf-rss@alaska.edu or visit the Rural Student Services website (<https://www.uaf.edu/ruralss/>).

International Student Advising

Students from other countries face many situations that American students do not encounter. International students must comply with immigration regulations, adapt to a new and often strange culture, and adjust to the American system of higher education. International student advisors are a liaison between the student and various U.S. immigration agencies. Advisors issue documents so students can apply for visas, help students adjust to UAF, and provide immigration and personal assistance. For more information, contact International Student and Scholar Services

at 907-474-7677, uaf-iss@alaska.edu or at the International Student and Scholar Services website (<https://www.uaf.edu/iss/>).

Student Support Services

Student Support Services provides UAF bachelor's degree students opportunities for academic development, helps them meet college requirements and motivates them to complete their degree program. SSS addresses the unique challenges faced by students from non-college-going and limited-income backgrounds, and supports students experiencing a documented disability by helping them take advantage of academic support resources at UAF. The program is primarily funded by two TRiO grants from the U.S. Department of Education, as well as additional institutional support.

Services include comprehensive advising, tutoring and peer coaching, free printing, first-year learning communities for STEM and non-STEM majors, academic mentoring, cultural and social engagement, laptop and media loans, and a supportive environment where students are valued. Eligible first-year students attending UAF in person are encouraged to apply to the Emerging Scholars Academy or Emerging STEM Scholars Academy summer bridge program and cohort learning community.

All services are free to eligible students. The program is staffed with College Reading and Learning Association-certified student tutors as well as 24/7 online tutor access.

To receive SSS program services, a student must have an academic need and meet one or more of the following criteria:

- be financially limited according to federal criteria, or
- be a first-generation college student (meaning neither parent has earned a bachelor's degree from the U.S.), or
- have a documented physical or learning disability.

Participants must also be U.S. citizens or permanent residents, be enrolled in at least 9 credit hours and be admitted to and pursuing a bachelor's degree from UAF.

For information, visit Student Support Services in 514 Gruening, call 907-474-6844, email trio.sss@alaska.edu or visit the Student Support Services website (<https://www.uaf.edu/sss/>) for an application.

Tutoring Services

Information about lab hours for all Fairbanks campus academic support resources and tutoring options is on the Academic Advising Center website (<https://www.uaf.edu/advising/student-resources/>). Most of these resources are free.

• Accounting Lab

The Accounting Lab provides tutoring services to students enrolled in accounting courses. Located in 219 Bunnell Building, the lab is staffed by accounting graduate students and outstanding undergraduate students. Lab hours are assigned (but flexible) Monday through Saturday. For more information, contact the Department of Accounting and Information Systems at 907-474-7461.

• Chemistry Learning Center

For more information, contact the Department of Chemistry and Biochemistry at 907-474-6287 or visit the Chemistry Learning Center website (<https://www.uaf.edu/chem/clc/>).

• Developmental Education Math, English and Reading Labs

The Department of Developmental Education provides academic support labs in math, English and reading. These labs are at each

rural campus, at the Community and Technical College, and on the Fairbanks campus. Labs provide tutoring and small-group instruction for students taking developmental, academic or vocational math, and reading and writing courses. Academic support labs supplement and support student learning, as well as improve and expand student skills in these areas. For further information, contact your local campus or the Department of Developmental Education at 907-474-1112 or 1-877-747-1580.

• Engineering Tutoring

The College of Engineering and Mines offers tutoring for various engineering courses each year. Visit the CEM tutoring website (<https://www.uaf.edu/cem/resources/tutoring.php>) for more information.

• Foreign Language Laboratory

The language lab, in 609 Gruening, provides assistance in French, Spanish, Japanese, German and Russian. Computer programs, CDs, cassettes and spell-checkers are available. Call the Department of Foreign Languages and Literatures at 907-474-7396 for lab hours.

• Math and Statistics Laboratory

This lab provides flexible-hour assistance seven days a week to students enrolled in mathematics and statistics courses. The lab is coordinated by faculty, and services are provided by students. For more information, contact the Math Department at 907-474-5427.

• Speaking Center

The Speaking Center, in 507 Gruening, provides coaching on refining presentation topics and presentation organization. Students receive immediate, constructive suggestions from a Speaking Center coach. The center is usually open weekdays and some evenings. Visit the Speaking Center website (<https://www.uaf.edu/speak/>) for center hours. For more information, contact the Speaking Center at 907-474-5470 or uaf-speakingcenter@alaska.edu.

• Writing Center

The Writing Center, in 801 Gruening, is open Sunday through Friday for tutoring all enrolled students. The staff, composed of English graduate teaching assistants and outstanding undergraduate students, reviews student writing projects at any stage, whether planning, drafting or revising. Tutors are available to help students improve grammar and usage. For information, call the Writing Center at 907-474-5314.

Academic Records, Registration and Degree Services

The Office of the Registrar provides guidance for all students in registration, academic records, academic policy interpretation, classroom scheduling, degree audits, degree certification and transcript requests. The office offers training workshops for students and staff on a variety of topics, including DegreeWorks, UAOnline, faculty grading and registration. All services (e.g., registration, grades, degree audits, and official and unofficial transcripts) are available through UAOnline (<https://uaonline.alaska.edu>). Visit the Office of the Registrar (<https://uaf.edu/reg/>) for information about how to register.

For more information, contact the Office of the Registrar (<https://www.uaf.edu/reg/>) on the first floor of Signers' Hall, call 907-474-6300 or email uaf-registrar@alaska.edu.

Alumni Association

The UAF Alumni Association is an independent nonprofit that connects and supports UAF graduates and former students. The association works closely with the University Advancement team. UAFAA offers scholarships, sponsors networking events in Alaska and the Lower 48 including the Nanook Rendezvous reunion, and advocates on behalf of the university before the state Legislature. Through the association, alumni have the opportunity for lifelong involvement with UAF and their former classmates. For more information contact the alumni association at 907-474-7081, uaf-alumni@alaska.edu or the alumni association website (<https://www.uaf.edu/alumni/>).

Army ROTC

UAF is home to the only Army Reserve Officers Training Corps in Alaska. The military science program is staffed with regular Army and Alaska National Guard officers and noncommissioned officers. The curriculum challenges students to develop interpersonal, mental and physical skills, cultivating leaders of character capable of bearing the responsibilities of tomorrow's civil and military leadership positions.

The focus of ROTC is academic excellence and preparing leaders. All students enrolled in at least one course are assigned a faculty member to provide leadership and academic counseling.

ROTC offers a variety of resources, including scholarships, athletic teams and academic assistance. Neighboring Fort Wainwright offers students numerous opportunities to participate in military activities such as the Arctic biathlon competition, mentorships and recreational activities in an Arctic environment. For more information visit the UAF ROTC website (<https://www.uaf.edu/rotc/>) or call 907-474-7501.

Financial Assistance

Army ROTC provides financial assistance in the form of scholarships and stipends. The current stipend ranges between \$300-\$500 monthly depending on military science class level and is tax-free for all committed cadets. ROTC scholarships also pay 100 percent of tuition and mandatory fees and provide \$1,200 annually for books and supplies. Scholarships are available for two to four years and may be used for graduate studies.

Army ROTC also offers partnership, or simultaneous membership, programs with the Reserves and National Guard. These partnerships provide a suite of financial assistance programs for ROTC cadets, including tuition assistance, GI Bill® benefits, bonuses, stipends and pay. In addition, Army ROTC at UAF is granted a limited number of room waivers and chancellor's tuition waivers for qualified students. For more information call 907-474-7501 or visit the UAF ROTC website (<https://www.uaf.edu/rotc/>).

Curriculum

The military science curriculum is an approved minor which includes credit for one writing- and one oral-intensive course. Classes, including outdoor skills labs, are offered every semester. Labs give students hands-on instruction in areas such as rappelling, skiing, first aid, land navigation and survival.

Army ROTC comprises two levels: the basic course followed by the advanced course. Credit for the basic course can be earned in three ways: by completing freshman and sophomore military science classes, by completing a four-week summer camp or by having prior military basic training. Students incur no obligation to Army ROTC or the Armed Forces during the basic course.

Students who complete the basic course may enter the advanced course, which is normally reserved for juniors and seniors pursuing a commission in the regular Army, Army Reserves or Army National Guard. For more information contact the Department of Military Science at 907-474-6852, 907-474-7501, uaf-army-rotc-dept@alaska.edu (<https://mail.google.com/a/alaska.edu/mail/?view=cm&fs=1&tf=1&to=uaf-army-rotc-dept@alaska.edu>) or through the UAF ROTC website (<https://www.uaf.edu/rotc/>).

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website (<https://www.benefits.va.gov/gibill/>).

ASUAF

The Associated Students of the University of Alaska Fairbanks office is in Wood Center. All students paying the Fairbanks consolidated fee are ASUAF members. ASUAF runs service departments and programs dedicated to the interests and welfare of UAF students. ASUAF represents UAF students to the university administration, the University of Alaska Board of Regents and the Alaska Legislature. Officers are selected by the student body in elections held every fall and spring semester. For information, visit the ASUAF website (<https://www.uaf.edu/asuaf/>), email asuaf.office@alaska.edu or call 907-474-7355.

Athletics

The National Collegiate Athletic Association is the primary association that governs and controls intercollegiate athletics on the national level. The Alaska Nanooks athletic program is a multidivisional member of the NCAA, with 10 teams competing at the Division I and Division II levels, including men's and women's basketball, men's and women's cross country running, men's and women's Nordic skiing, coed rifle, women's volleyball, women's swimming, and men's ice hockey. For intercollegiate athletics information, call 907-474-6665 or visit the Alaska Nanooks website (<https://www.alaskananooks.com>).

The Alaska Nanooks have conference affiliations with the Great Northwest Athletic Conference, Rocky Mountain Intercollegiate Ski Association, and Pacific Collegiate Swim and Dive Conference. The men's ice hockey team competes independently. The 10-time NCAA champion Alaska Nanooks rifle team competes in the Patriot Rifle Conference.

The Ernest N. Patty Center, home of the Alaska Nanook teams, was completed in 1963 and houses a 1,650-seat gymnasium, a 25-yard swimming pool, athletic training room, ticketing box office, varsity weight room, rifle range, administrative offices and locker rooms with saunas. In 1979, the 1,300-seat Patty ice arena was built to the west of the Patty Center. The Alaska Nanooks men's hockey team practices at the Patty ice arena and competes off campus at the 4,595-seat Carlson Center.

Campus Mail Center

To receive mail on the Fairbanks campus, students who live on campus must rent a campus mailbox, located on the lower level of Constitution Hall. There is no alternative for mail delivery on campus. All mail for students living on campus comes to the Campus Mail Center and is not delivered anywhere else on campus. This includes U.S. Postal Service, FedEx and UPS mail.

The mailbox rental fee is \$75 per semester and is billed automatically to the student's account at the beginning of each semester (fall and spring). Billing will continue until the mailbox account is closed through SCLogic (<https://uaf.sclintracom/>). Students who do not live on campus may also rent mailboxes as long as enough are available. Limited numbers of larger boxes are available for additional cost. There is a \$25 charge for lost or unreturned keys.

Renting, updating address information and closing mailboxes are done through SCLogic (<https://uaf.sclintracom/>).

Mailboxes are for individual or family use. They are not to be shared with other students. Mail not addressed to the box holder will be returned to the sender. USPS mail is delivered to box holders only through their mailboxes; UPS and FedEx will deliver packages to the Campus Mail Center using the physical address: 1692 Tok Lane Room #107, Box 75xxxx (using the student's mailbox number), Fairbanks, AK 99775. A delivery notice will then be placed in the student's mailbox. Parcel lockers are available for most package pickups.

The Campus Mail Center also serves as a Passport Application Acceptance Office open to the public. The center's Passport Services webpage (<https://www.uaf.edu/fs/services/passport-services.php>) has forms and information about services, fees, appointment scheduling procedures and more.

For more information, visit the Campus Mail Center website (<https://www.uaf.edu/fs/services/campusmailcenter/>). Questions? Email us at uaf-campusmailcenter@alaska.edu, call 907-474-7215 or write UAF Campus Mail Center, P.O. Box 750100, Fairbanks, AK 99775-0100.

Campus Recreation

Recreational opportunities are organized by Nanook Recreation. Activities are housed primarily in the Student Recreation Center, the Patty ice arena and the Patty Center. For information on hours, recreational activities or intramurals, call 907-474-5886 or visit the Nanook Recreation website (<https://www.uaf.edu/recreation/>).

The SRC offers a wide variety of structured and unstructured recreational activities. The SRC provides a weight room and a large gym floor that can be divided into courts for volleyball, tennis, badminton, soccer and basketball. A two-story indoor climbing wall, an eight-lap-per-mile running track, aerobics/dance floor and cardiovascular machines provide many options for a well-rounded workout. Eligible students have access to SRC facilities when your fees are paid — just remember to bring your workout shoes as street shoes are not allowed on the courts or floors.

Intramural leagues and competitions and fitness and recreation instruction give students many opportunities to stay fit, learn lifetime skills and use the skills they already have. Nanook Recreation staff members develop and support sports clubs in response to student interests and available resources.

Outdoor fields for soccer and Ultimate Frisbee, an outdoor climbing wall — which in winter is converted to an ice climbing wall — and a disc golf course are next to the SRC, and the campus has many miles of cross-country trails for running, walking and skiing, including a lighted ski trail. In addition, recreational skating, recreational hockey, and intramural hockey take place at the Patty Ice Arena, also next to the SRC. Students taking 6 credits in a classroom and paying the Fairbanks consolidated fee also have the opportunity to receive a season pass to Ski Land at no additional charge. Ski Land has the farthest north chairlift in North America, ski and snowboard rentals, miles of trails, a terrain park and an aurora viewing lodge. Go to the Nanook Recreation website (<https://www.uaf.edu/recreation/>) for more details. This program may be renewed annually after this publication.

Explore Alaska's wild frontier by joining an Outdoor Adventures excursion. OA organizes a variety of outings, such as hikes, whitewater raft trips and rock climbing excursions. OA also offers courses such as ice climbing, winter camping and wilderness leadership. Equipment is available for rent, including backpacks, canoes, cross-country skis and much more. Visit the Outdoor Adventures office in the Student Recreation Center or at the Nanook Recreation website (<https://www.uaf.edu/recreation/>) for more information.

Students with disabilities are encouraged to participate in campus recreation programs. Anyone confronted with any barrier to participation is urged to contact the SRC office.

Career Services

Career Services is here to provide students and alumni with professional advice, guidance and networking opportunities. The office also provides career counseling, major exploration and job/internship search assistance. The Career Services advisors review resumes and cover letters, conduct practice interviews and provide online resources through the Career Services website. Information about employment, internships and on-campus jobs is available by appointment.

Students and alumni can network with employers and explore careers by participating in on-campus recruitment events and attending career fairs where students can apply for full-time employment and internships with local, statewide and national employers. Career Services also supports the use of Handshake, a career management platform for employers, students and alumni. All students and alumni have access to their personalized Handshake account. Career Services is available to help students use this platform.

Career Services is on the third floor of the Eielson Building in room 304. For more information, call 907-474-7596, email uaf-career@alaska.edu or visit Career Services online (<https://www.uaf.edu/career/>).

Continuing Education and Professional Development

The Community and Technical College offers training and continuing education programs to meet employment needs in the trades and professions. In response to individual and community demands, CTC provides short courses, noncredit workshops, supervisory and customer service skill seminars for local businesses and agencies, and general programs for cultural enrichment. Programs can be tailored to a specific group or need, and offer an economical way to improve workforce development skills. Call 907-455-2869 for more information about professional development.

Cooperative Extension Service

The Cooperative Extension Service is part of the largest informal education system in the world, connecting Extension programs and land-grant colleges and universities in every U.S. territory and state.

Whether teaching people how to can salmon, build a house or compost with worms, Extension Service staff have provided research-based, practical education to Alaskans since 1930. Extension now offers community outreach and engagement programs in all areas of the state.

UAF's outreach role is filled in part by Extension faculty and staff in Anchorage, Bethel, Delta Junction, Dillingham, Fairbanks, Juneau, Kodiak, Nome, Palmer, Sitka and Soldotna, and in affiliate offices with the Tanana Chiefs Conference and Eielson Air Force Base.

As the state's gateway to the university system, Extension serves some 50,000 Alaskans annually, providing a link between Alaska's diverse people and communities by interpreting relevant knowledge of interest to Alaska residents. Major issue areas include food safety and security; health; climate change; energy; youth, families and communities; and economic development.

Extension has produced hundreds of publications and videos on a variety of topics with practical information that Alaskans can use. These are available at district offices or online at the Extension website (<https://www.uaf.edu/ces/>).

For more information, call 907-474-5211 or 877-520-5211 toll free, or visit the Cooperative Extension Service website (<https://www.uaf.edu/ces/>).

Developmental Education

The mission of developmental education at UAF is to make educational opportunity and success possible for all students by developing the skills and attitudes necessary to achieve academic excellence and student success, and to develop lifelong learning skills.

Developmental education courses prepare students for university academic and vocational/technical programs by improving skills in math, writing and reading. Study skills classes prepare students to successfully negotiate the university experience. A student's need for developmental education courses is determined by high school transcripts, test scores, other achievement data and discussions with counselors, advisors and instructors. Students may also take developmental education courses when they want to improve their skills or proficiency.

There are three categories of developmental education courses:

- developmental math
- developmental English (writing skills)
- developmental studies (reading and study skills)

Descriptions of developmental education classes are listed in the courses section under math, writing and developmental studies.

For more information, contact the Department of Developmental Education offices at 907-455-2869 or visit the Developmental Education website (<https://www.uaf.edu/deved/>).

Disability Services

Disability Services strives to ensure universal access to classes, coursework, housing, programs and activities. UAF has designated Disability Services to determine reasonable accommodations for students with disabilities. Accommodations are free and available to any student who qualifies as an individual with a disability or chronic illness and is enrolled in at least 1 credit hour or is registered for a university-sponsored program.

UAF Disability Services serves students who are enrolled in classes at the Fairbanks campus, as well as the Bristol Bay, Chukchi, Interior Alaska, Kuskokwim, Northwest, and Community and Technical College campuses, eCampus, and the College of Rural and Community Development.

Disability Services uses an interactive process designed to be convenient for students. It starts with a simple conversation. Our first goal is to better understand your unique experience. We then partner with faculty and staff to provide academic, university housing and programmatic accommodations.

For more information contact Disability Services at 907-474-5655, email uaf-disability-services@alaska.edu or visit the Disability Services website (<https://www.uaf.edu/disabilityservices/>).

E-learning

UAF's eCampus offers an alternative for anyone preferring an online educational option. The advantage of e-learning, also known as online learning, is its flexibility. Students select their own hours of study and work in surroundings they choose. E-learning offers the freedom to structure a personal academic schedule and the flexibility to continue educational progress, even when it is impossible or challenging to attend scheduled, face-to-face classes.

UAF eCampus offers more than 350 asynchronous courses in 60 disciplines and offers full degrees and certificates completely online. eCampus courses follow all university calendars and deadlines and must be completed within the semester time frame. These courses use a learning management system (typically Canvas or Blackboard). Students are required to have reliable Internet access to complete eCampus courses and may be required to have quizzes or exams proctored.

For UAF students, eCampus courses count as residence credit. When a student enrolls in an eCampus course, the course may be used to determine full-time/part-time status and eligibility for financial aid and scholastic action. The grade will average in both semester and cumulative GPAs.

Information on course offerings, online certificates and degrees, enrollment information and course descriptions can be found at the eCampus website (<https://ecampus.uaf.edu>). For more information contact UAF eCampus in 131 Bunnell Building on the Fairbanks Campus, by phone at 800-277-8060 or 907-455-2060, via email at uaf-ecampus@alaska.edu or at the eCampus website (<https://ecampus.uaf.edu>).

The University of Alaska provides many possibilities for students to take distance-delivered courses. The campuses at Anchorage, Fairbanks and Juneau, along with their community college networks, offer hundreds of courses using a variety of delivery modes. Opportunities for students who prefer distance-delivered courses can be found at the University of Alaska distance learning website (<https://distance.alaska.edu>).

Equity and Compliance

Staff in the Department of Equity and Compliance (DE&C) lead UAF's diversity, equity, inclusion, and accessibility efforts lead a focused effort to build inclusive systems and a welcoming environment at UAF. This includes strategic planning, prevention programming, training, and addressing complaints of discrimination and sexual harassment. Staff ensure equality of employment and educational opportunities and work to eradicate discriminatory practices.

DE&C staff investigate complaints of discrimination and sexual harassment and work with parties to find a resolution. If students or employees believe they are being treated differently because of their race, religion, color, national origin, citizenship, age, sex, physical or mental disability, status as a protected veteran, marital status, changes in marital status, pregnancy, childbirth or related medical conditions, parenthood, sexual orientation, gender identity, political affiliation or belief, genetic information, or another legally protected status, they can lodge a complaint with DEC. Complaints can be filed online (<https://www.uaf.edu/oeo/>) or by visiting the office.

The Department of Equity and Compliance is on the third floor of Constitution Hall at 1692 Tok Lane. For more information call 907-474-7300 or visit the DE&C website (<https://www.uaf.edu/equity/>).

Exam Services

As a national testing center, eCampus Exam Services administers paper-and-pencil and computer-based exams. The office advises UAF students, prospective students and the community on national testing matters for college admissions and placement and for career and professional certification. eCampus Exam Services also coordinates credit by examination for local tests, for the College-Level Examination Program and can perform private proctoring. For more information and registration materials, visit eCampus Exam Services in 131 Bunnell Building, call 907-455-2060, email uaf-testing@alaska.edu or visit eCampus Exam Services online (<https://ecampus.uaf.edu/exam-services/>).

Honor Societies

For information or a current list of honor societies, contact the Honors College at 907-474-6612 or the Student Leadership and Involvement Office (<https://www.uaf.edu/sli/>) at 907-474-1170.

Honors College

The UAF Honors College provides opportunities for students to pursue excellence in academic and personal development. We foster critical and independent thinking and help students become informed, responsible and active citizens. Honors students have access to small classes, research opportunities, intensive advising and scholarships. Students are encouraged to participate in service, leadership, research, study abroad, internships and other opportunities that contribute to their personal growth.

Eligibility

To be eligible to join the Honors College, entering first-years must have a cumulative high school GPA of 3.6 or higher, a combined SAT score of 1280 or higher, or a composite ACT score of 27 or higher. Current UAF students and transfer students must have a combined cumulative GPA of 3.5 that includes at least 24 credits of college courses. The Honors College accepts applications all year. The application form is available on the Honors College website (<https://www.uaf.edu/honors/>).

Program Features

Honors students complete a flexible schedule of courses that includes honors sections of some general education courses and courses developed specifically for the Honors College. Other courses may be contracted for honors credit by students who work with individual professors. With approval by the director, students who study abroad may earn up to 12 honors credits for the academic courses they take at their host universities. Undergraduate students who complete graduate courses may count those courses toward their honors course requirement. In all cases, courses will only count toward the honors distinction if the student earns a grade of B (3.0) or higher. Honors students must be enrolled full-time in a baccalaureate degree program and are expected to complete a minimum of 6 honors credits each academic year.

The Honors College offers students intensive advising with an opportunity to develop a personal plan for their UAF years that builds in extracurricular opportunities, research, leadership, service and more to meet the goals of each student.

The Honors House, located in the heart of campus, provides honors students a casual and comfortable home away from home. The house includes computer labs, a smart classroom, quiet study areas, a kitchen, a laundry room and a place for social gatherings.

College Requirements

To graduate with a distinction from the Honors College, students must fulfill GPA, capstone project or thesis, and honors course and credit requirements.

Honors students must maintain a cumulative GPA of at least 3.25. Students whose cumulative GPA falls below 3.25 for two consecutive semesters will be removed from the college unless an appeal is approved by the honors director.

In addition to the other college requirements, students must work with a faculty mentor to complete a capstone thesis or project that includes a written component and an oral presentation.

University Honors Scholar distinction is awarded at commencement to students who complete 27 or more credits of honors courses including

specific honors courses, elective honors courses, and a capstone project or thesis, in addition to other program requirements. Students who join the program after they complete 60 or more credits, either from UAF or from a transfer institution, can graduate as an Honors Thesis Scholar by completing 12 credits of honors course work and a capstone project or thesis in addition to other program requirements.

Additional Information

For more information contact the Honors College at the Honors House, 520 Copper Lane, 907-474-6612, uaf.honors@alaska.edu or visit the Honors College website (<https://www.uaf.edu/honors/>).

Libraries

UAF has two libraries on the Fairbanks campus and libraries on three rural campuses. The Elmer E. Rasmuson Library, on the Fairbanks campus, is the leading research library in the state, with a comprehensive physical and online collection. The Keith B. Mather Library, also on the Fairbanks campus, holds collections in the geological and biological sciences and is Alaska's U.S. Patent and Trademark Office depository. Both libraries offer wireless networking, public computer terminals, and designated quiet study spaces with natural lighting. Rasmuson Library also has group study rooms and a secure 24-hour study space with computers.

The Rasmuson and Mather libraries provide extensive reference and instructional services for students. Library faculty and staff help students conduct library research using print materials and online databases and collections. The library information and research course, LS F101X, is a required course for bachelor's and associate degrees and gives students an introduction to effective methods of identifying, locating and evaluating information resources, as well as a thorough introduction to information literacy.

UAF libraries provide access to online catalogs and databases, as well as resources worldwide through interlibrary loan. The library website is a gateway to more than 300 subscribed online databases, with broad coverage in the sciences, humanities and social sciences, business management, and engineering. Web-based indexes and collections link to full-text articles from more than 60,000 periodical titles. Additional web-based resources include reference tools, electronic books, specialized sources for Arctic and polar information, and indexes to special formats such as government documents and dissertations. ScholarWorks@UA, the University of Alaska online institutional repository, makes theses, dissertations, articles and other scholarly works by UA students and faculty freely available to the public.

The Rasmuson Library is a federal depository library and houses titles from the Government Printing Office that are related to Alaska and some Pacific Northwest states. Special collections in the library include the internationally recognized Alaska and Polar Regions Collections and Archives, which houses historical books, periodicals, documents, manuscripts, photographs, film, audio recordings, oral history projects, and maps. APRCA digitizes selected archival materials to make unique collection materials available worldwide.

Get more Rasmuson Library information at 907-474-7481, AskRasmusonLibrary@uaf.libanswers.com or at the Rasmuson Library's website (<https://library.uaf.edu>).

Military and Veteran Services

The University of Alaska Fairbanks is home to a strong and growing community of military and veteran students. As a military-friendly school, we are dedicated to providing academic opportunities and a supportive learning environment that serves the unique needs of active service members, veterans and their families. UAF offers in-state/resident tuition, credits for military training, flexible online degree programs, VA and TA educational benefits advising and other resources for veteran and military students. We are also ranked as one of America's Best Military Friendly Online Colleges.

The UAF Department of Military and Veteran Services has locations on the Fairbanks, or Troth Yeddha', campus, Fort Wainwright, Eielson Air Force Base, Fort Greely/Delta Junction and Clear Air Station. UAF has been designated a Military Friendly Institution since 2008, and, in addition to providing student services, UAF offers university classes at Fort Wainwright and Eielson Air Force Base.

Offices at Fort Wainwright, Eielson Air Force Base and the Troth Yeddha' campus actively support the Wounded Warrior Transition Unit through services that include academic and financial aid advising, future career preparation and registering for classes. Testing services are also available for writing and math (Accuplacer and ALEKS), awarding college credit (CLEP and DANTES) and industry certification exams available through Pearson VUE.

The UAF Department of Military and Veteran Services is dedicated to providing comprehensive support to military, veterans and their dependents in an atmosphere of respect for their service to the nation. The DMVS endeavors to assist students utilizing VA educational benefits, Tuition Assistance, and MyCAA grants to meet their educational goals. The DMVS strives to build a community for past, present and future military-affiliated students.

The Post-9/11 GI Bill® pays tuition and fees up to 36 months. This benefit is available for individuals with at least 90 days of aggregate service on or after September 11, 2001, individuals discharged with a service-connected disability after 30 days, dependent children and spouses using benefits transferred by a qualifying veteran or servicemember and also Purple Heart recipients who were honorably discharged after September 11, 2001 with any amount of service.

The Montgomery GI Bill® (Chapter 30) is another veterans education benefit to help with tuition and training costs. There are three programs available: Active Duty, Selected Reserve and Reserve Educational Assistance Program (REAP).

This VA education benefit for military veterans helps with vocational rehabilitation services (Chapter 31) for veterans who have a service-connected disability of 10% and higher.

If you're the spouse or child of a veteran or active service member who has died, is captured or missing, or is permanently or totally disabled as the result of a service-connected disability, you may be able to get help paying for college or professional training through the DEA program (Chapter 35) or Fry Scholarship.

Tuition assistance is available to many active duty, Reserve and National Guard members. The DMVS helps service members utilize their tuition assistance benefits.

For more information, contact the Department of Military and Veteran Services offices at the Troth Yeddha' campus, 1820 Salcha St, Eielson

Building Room 104., 907-474-7400; Eielson Air Force Base, 2631 Wabash Ave., Room 205, 907-377-1396; Fort Wainwright, 4391 Neely Rd., Room 137, 907-356-3826; uaf-veterans@alaska.edu or visit the DMVS website (<https://www.uaf.edu/veterans/>).

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website (<https://www.benefits.va.gov/gibill/>).

New Student Orientation

New Student Orientation helps incoming students establish a foundation for success. All new students are strongly encouraged to participate in New Student Orientation on the Fairbanks campus. Orientation is required for all first-year bachelor's-degree students (regardless of the number of earned college credits) and international students (undergraduate F-1 and international exchange J-1 status). Domestic transfer students are also encouraged to attend.

New Student Orientation features a variety of workshops and activities to address the needs of incoming students, including campus tours, opportunities to meet faculty and staff, numerous campus resource presentations, and many fun social events. Fall semester includes the popular family orientation for parents and other family members of new students. Fees are \$150 per student for fall orientation, which covers all programs except special Outdoor Adventures activities; \$25 for one-day fall transfer student orientation; \$25 (plus \$10 each additional guest) for two-day fall family orientation; and \$35 for spring orientation. For more information, contact the New Student Orientation office at 907-474-6295 or visit the New Student Orientation website (<https://www.uaf.edu/admitted/orientation/>).

PolarExpress Identification Card

The PolarExpress card is the official UAF photo identification card used by students, staff and faculty to access UAF facilities and make purchases. The card includes your name, photograph and UA identification number. A central database holds information to identify the buildings and rooms you may access, meal plan type, some account balances, library checkouts, computer lab access and other activities. See the complete list on the Office of the Bursar's website (<https://www.uaf.edu/bursar/polarexpress/>).

Your PolarExpress card lets you check out library books and vote in student elections, and gives you access to the Student Health and Counseling Center and other student services. The card's magnetic stripe holds a unique key that provides secure access to residence halls, laboratories and the Student Recreation Center. You can deposit money into your Bear Bucks account, which can be used at all Dining Services locations, photocopiers and the UAF Bookstore. The PolarExpress card is a permanent card, valid for two years after the holder's last affiliation with the university. All privileges expire upon departure from the university, with the exception of Bear Bucks and Munch Money accounts. Bear Bucks expire two years after your last affiliation, and Munch Money accounts expire at the end of the academic year with the ability to roll over up to \$250 per semester. Holders who return to the university system within two years and no longer have their PolarExpress card must purchase a replacement card.

You can access your account balance and add money to your PolarExpress card through eAccounts (<https://eacct-ualaska-sp.transactcampus.com/eaccountsuaaf/AnonymousHome.aspx>), a secure way to check all your stored value accounts (Bear Bucks, Munch Money, copy card, etc.), add money to your card, view your transaction history, deactivate a lost or stolen card, and more.

Safety

Police and Fire Departments

The UAF Police Department was founded in 1991 to meet the increasing needs of the university community. UAFPD is a progressive, proactive department that strives towards active community engagement. The department is responsible for the protection of the students, staff, faculty and general public on the Fairbanks campus as well as for the protection of university and private property. Through its officers and community service officers, the department provides a variety of functions, some unique to university police departments. These include a firearm storage room for all affiliated personnel, a bike registration program, providing escorts, and conducting after hours vehicle jump starts and unlocks. Police personnel also provide presentations on various topics including violent intruders, personal safety and drug orientation training.

The university emergency communications center serves the Fairbanks campus 24 hours a day. In addition to handling campus law enforcement calls, the center also monitors alarm systems both on and off campus and handles after-hours Facility Services calls. The center employs full-time career dispatchers.

The University Fire Department provides fire, rescue, EMS response and public assistance to the Fairbanks campus as well as the University Fire Service Area and EMS district. The department provides protection for a 26-square-mile area and more than 22,000 people. The department is nationally recognized and staffed full time at two stations, one on campus and one in the fire service area. The department provides plan review and inspection services to the Fairbanks-area and rural campuses. The Fire Department provides exceptional employment and career opportunities for students interested in a career in emergency services. The hands-on, interactive program develops highly skilled individuals able to perform all the duties of professional career firefighters.

The emergency telephone for both police and fire is **911**. For more information, call 907-474-7721 for the Police Department, 907-474-5770 for the Fire Department, or visit the Police Department website (<https://www.uaf.edu/police/>) or Fire Department website (<https://www.uaf.edu/fire/>).

Annual Security and Fire Safety Report

The 2020 Annual Security and Fire Safety Report for the University of Alaska Fairbanks campuses is available in pdf form (<https://uaf.edu/csrr/safety-prevention/Annual%20Security%20and%20Fire%20Report%202020.pdf>).

The report contains information regarding campus safety and security including topics such as: campus law enforcement authority; crime reporting policies; campus alerts (timely warnings and emergency notifications); fire safety policies and procedures; programs to prevent dating violence, domestic violence, sexual assault and stalking; the procedures the university will follow when one of these crimes is reported; and other matters of importance related to security on campus. The report also contains information about crime statistics for the three most recent calendar years concerning reported crimes that occurred on campus; in on-campus student housing facilities; in off-campus buildings or property owned or controlled by the university or a recognized student organization; and on public property within, or immediately adjacent to and accessible from, the campus. The report also contains fire statistics

for any fires occurring in an on-campus student housing facility during the three most recent calendar years.

If you would like to receive a paper copy of the Annual Security and Fire Safety Report for University of Alaska Fairbanks campuses, you can stop by the UAF Center for Student Rights and Responsibilities in Room 110 of the Eielson Building or request a copy be mailed to you by calling 907-474-7317 or emailing uaf-studentrights@alaska.edu.

Student Affairs and Enrollment Management

Student Affairs and Enrollment Management facilitates students' learning and development outside of the classroom utilizing various student development, learning, socio-cultural, and retention theories and nationally recognized high impact practices. Student Affairs and Enrollment Management provides student-centered programs and services to help students achieve their personal, academic and career goals. In collaboration with the academic deans, Student Affairs and Enrollment Management leads the university in recruiting a diverse student body. With the creative use of ongoing assessment, Student Affairs and Enrollment Management supports and develops programs and communities that contribute to the retention, success and leadership development of students.

Student Affairs and Enrollment Management departments include the Office of Admissions; Associated Students of UAF (ASUAF); Bookstore; Center for Student Rights and Responsibilities; Department of Military and Veteran Services; Dining Services; Disability Services; Financial Aid; Nanook Recreation; New Student Orientation; Office of the Registrar; Residence Life; Student Health and Counseling Center; Center for Student Engagement; Sustainability; and Wood Center.

The Office of the Vice Chancellor for Student Affairs and Enrollment Management is a resource and referral center where students who don't know where to look for a solution to a problem at UAF will find help. Each department and office has its own web page detailing its student services, or students can visit the Student Affairs and Enrollment Management website (<https://www.uaf.edu/student-affairs/>) for a complete list of all departments. For more information contact Student Affairs at uaf-student-affairs@alaska.edu or 907-474-2600.

The Center for Student Rights and Responsibilities is also a resource and referral center where students can get help with concerns, issues or needs. You can get more information at the Center for Student Rights and Responsibilities website (<https://www.uaf.edu/csrr/>), uaf-studentrights@alaska.edu or 907-474-7317.

Student Health and Counseling Center

At the Student Health and Counseling Center, students may receive health care, counseling, substance abuse referrals, health education and assistance with student health insurance. Students must pay the Fairbanks consolidated fee to be eligible for these services.

The medical staff provides primary health care and referrals for specialty medical services when appropriate. General office visits for preventive care, illness and injury are provided at no charge. Medications, laboratory services, medical supplies and some physical examinations are provided at reduced cost. Students should call for appointments. Urgent care appointments are available when necessary.

The counseling staff offers individual, group and crisis intervention counseling. Counselors, all with graduate-level training, assist with a variety of personal and interpersonal issues. Students should call to schedule appointments. Students in emergency situations are usually seen the same day.

The student health insurance program for international and graduate students on a stipend is administered through the Student Health and Counseling Center. Staff are available to answer questions about policy coverage and to help with information about how to file claims.

The Student Health and Counseling Center is located on the second floor of the Whitaker Building. For more information and current hours, call 907-474-7043, fax 907-474-5777, email uaf-sh-cc@alaska.edu or visit the Student Health and Counseling Center website (<https://www.uaf.edu/chc/>).

Study Away Programs

National Student Exchange

UAF is a member of the National Student Exchange. Through this program, qualified students may apply for exchange enrollment at any one of almost 200 colleges and universities throughout the United States, its territories and Canada. NSE enables students to study at member institutions and to take advantage of specialized courses or unique programs.

Applicants must have completed a minimum of two full-time semesters at UAF as a degree student and have a minimum 2.5 cumulative GPA in order to participate in NSE. The Alaska Performance Scholarship, UA Scholars and most other forms of financial aid may be used to cover costs. The priority application deadline for the upcoming academic year is March 1.

Students approved to participate in NSE pay a \$500 study away fee to UAF each semester they are away. Tuition is either assessed by the host institution at the in-state rate, or the student may pay tuition at UAF, depending on availability.

For more information, visit the National Student Exchange website (<https://www.nse.org>) and contact UAF's NSE coordinator at 907-474-6516 or uaf-studyaway@alaska.edu, or visit the UAF study abroad programs website (<https://www.uaf.edu/academics/study-abroad.php>).

Note: Students attending any campus of the University of Alaska system under the National Student Exchange program are assumed to be receiving the benefit of reduced tuition because of their enrollment at an NSE partner university in another state. Therefore, time spent in NSE does not count toward the time required to establish residency in Alaska for tuition purposes. If students end their participation in NSE, they could begin establishing residency for tuition purposes as set forth in the UA Resident and Nonresident Tuition policy (p. 64) on the Tuition and Fees page.

Study Abroad And International Exchange Programs

Studying abroad or participating in an international exchange or internship is an excellent opportunity for every UAF student to learn about other cultures and gain international experience while earning academic credit. Students participating in approved international exchange, study abroad or internship programs enroll at UAF and receive UAF credit. The Alaska Performance Scholarship, UA Scholars and most other forms of financial aid may be used to cover costs of international academic programs; scholarships are also available for many programs. Students interested in gaining international experience should begin planning early in their UAF careers, particularly because prior study of a foreign language may be required for some programs and is highly recommended for others. Applicants must have completed a minimum of two full-time semesters at UAF as a degree student and have a minimum 2.5 cumulative GPA. Other requirements may also apply, and all applications are subject to approval by the Study Away Programs office. Application deadlines are Oct. 1 for spring semester programs and March 1 for summer, fall semester or academic-year programs.

Students approved to participate in study abroad or exchange programs pay a \$500 study abroad fee to UAF each semester they are abroad. For study abroad programs, all tuition, housing and student fees are paid directly to the program provider or host institution. Students participating

in exchange programs pay for 15 credits of undergraduate or 9 credits of graduate UAF tuition and a 4 percent of tuition network fee in addition to the \$500 study abroad fee. Tuition and fees are assessed on a semester basis.

UArctic organizes north2north, one of UAF's student exchange programs. Programs are focused on studies in and of the North and are designed to enhance the Arctic perspective of UAF academic programs.

Programs are available in more than 70 countries worldwide.

Contact Study Away Programs for more information at 907-474-6516 or uaf-studyaway@alaska.edu, or visit the Study Away Programs website (<https://www.uaf.edu/academics/study-abroad.php>).

Summer Sessions and Lifelong Learning

Summer Sessions and Lifelong Learning provides a wide variety of outreach and learning opportunities year-round. Our 365 SMART Academy offers a diverse selection of virtual homeschool enrichment programs during the fall and spring semesters, as well as dozens of in-person day camps during the summer months.

Summer Sessions also offers weekend workshops and special interest non-credit courses to community members year-round. The Osher Lifelong Learning Institute (OLLI), also housed by Summer Sessions, provides ongoing learning opportunities for adults 50 and older.

Each summer SSLL hosts a minimum of 40 free lectures, concerts and recreational activities for students and community members. In January, a Here Comes the Sun community concert brings the community together with great music until we can meet again in the Georgeson Botanical Garden for the summer concert series.

SSLL educational travel programs take groups overseas several times each year to study the cultural, political and natural history of destination countries. We also run several travel programs in Alaska, such as migratory birding tours, Alaska tours for OLLI groups from the Lower 48, and an ESL/cultural institute for foreign university students.

For more information, contact Summer Sessions and Lifelong Learning, 216 Eielson Building, phone 907-474-7021, toll free at 866-404-7021, email summer@alaska.edu, or visit the Summer Sessions website (<https://www.uaf.edu/summer/>).

Technology on Campus

The Office of Information Technology is located in the Bunnell Building on the Troth Yeddha' campus. The walkup service desk in Bunnell 231 is where students can get free help with their laptops and other technology devices. In addition to walkups, the OIT Service Desk can be contacted by calling 907-450-8300 or 800-478-8226, emailing helpdesk@alaska.edu or visiting OIT online (<https://www.alaska.edu/oit/get-help/>).

Internet Access, Computing Labs and Smart Classrooms

Wireless internet is available throughout the Troth Yeddha' campus buildings, including residence halls.

There are walkup computers available in the Rasmuson Library and the Moore-Bartlett-Skarland residence complex. The Nook, in 319 Bunnell Building, offers virtual computer stations and plenty of collaborative seating while using personal devices. The Nook includes easy access to power outlets, wired and wireless network access, mobile printing, and conference tables where students can share content on their devices with others on a large screen.

On the Troth Yeddha' campus, there are over 160 smart-learning spaces outfitted with instructional technology such as web videoconferencing, computers, digital projectors, document cameras, digital monitors and lecture capture. These classrooms enable a flexible, modern learning experience spanning multiple teaching modalities from face-to-face to online and hybrid situations.

Video Conferencing

OIT's Video Conferencing Services provides consultation, planning, installation, training and scheduling for videoconferencing classrooms and other video-enabled rooms on the Fairbanks campus and across the University of Alaska system. VCS can schedule and support job interviews for students, faculty and staff. For more information, visit the OIT Video Conferencing Services website (<https://www.alaska.edu/oit/services/video-conferencing/>).

Undeclared

Students pursuing a bachelor's degree who haven't declared a major or haven't decided which major to pursue are admitted as undeclared students. Undeclared students usually take courses required for the university general education requirements. Many of these courses are the same for all majors and allow you to make progress toward completing degree requirements while at the same time investigating subject areas that may help you choose a major or career. Undeclared students work with academic advisors in the Academic Advising Center who encourage exploring, selecting and committing to an appropriate major. All undeclared students must declare a major before they have earned 75 credits. To declare a major, simply complete a change of major form available from the Office of the Registrar or at the Registrar's website (<https://www.uaf.edu/reg/forms/>). Students receiving GI assistance or veteran's benefits may be required to change to a declared major to keep their benefits award. Students must have declared a major in order to participate in the Western Undergraduate Exchange program.

The director of the Academic Advising Center functions as the department chair, and the vice provost functions as the dean for general studies and undeclared students, and oversees academic assistance and actions concerning general studies and undeclared students. For more information, contact the Academic Advising Center, 907-474-6396, or contact the vice provost's office at 907-474-2764.

Pre-Major

Students admitted in pre-major standing have not met the admission requirements for bachelor's degrees but are intending to major in a bachelor's degree. As a bachelor's-intended student, you will work with advisors in the Academic Advising Center, but it is helpful to also contact the department of your intended major. Pre-major students will work with an academic advisor from the Academic Advising Center to determine the best selection of courses to pursue their desired major, as well as complete any additional admittance requirements into their desired program. Students who are in good standing and have completed 14 credits at the 100 level or above with a C grade average (2.0) or better, of which 9 credits must satisfy baccalaureate general education requirements, will be changed to undeclared major status. The vice provost will notify students of their change of status and inform the registrar. Undeclared students can then use the change of major form to move from undeclared to their desired major. Admittance into a desired major is determined by the completion of individual program requirements and approval of the department chair.

Undergraduate Research and Scholarly Activity

As a research university, UAF offers students opportunities to participate in experimental and observational research and creative activities. The Office of Undergraduate Research and Scholarly Activity supports, develops, documents and institutionalizes UAF's diverse and robust programs of undergraduate research and scholarly activity. Building on existing efforts and capacities, URSA enables UAF students to pursue varying levels of research engagement, including independent scholarly investigations, a B.F.A. exhibit or performance, and/or a senior thesis.

Eligibility

Undergraduate students from all disciplines are eligible to engage in research or creative activity for academic credit or for pay. All UAF students are eligible to enroll in URSA courses and apply for URSA awards that support their research or creative projects with funding for travel, supplies, and stipends. First-year students and new transfer students are encouraged to attend the UAF Research and Creative Activity Day or contact the URSA office to learn about research and creative opportunities across all disciplines at UAF. Students can use URSA as a resource to help find a faculty mentor with whom they might work on a research or creative project. The project may be designed by the student or the faculty mentor and will lead to creation of new information.

For more information contact the URSA office at 301 Bunnell Building, 907-450-8772 or ursa.uaf@alaska.edu, or visit the URSA website (<https://www.uaf.edu/ursa/>).

Upward Bound

The goal of the Upward Bound College Bound program is improving the graduation rates of high school students and increasing the number of UB College Bound graduates who enter colleges and universities. UB College Bound offers two strands: a school year program that works with 10 high schools in Alaska, called “target schools,” along with three distinct six-week summer residential programs held on the UAF campus: UB College Bound (freshman/sophomore), Pre-College Academy (juniors), and the Pathways-2-College bridging program (graduating seniors).

Upward Bound College Bound serves 160 low-income, first-generation college students who demonstrate potential for academic success and whose parents have not earned college degrees. Services offered in target schools include tutorial sessions; educational, recreational or cultural events; group activities; exploration of postsecondary education opportunities and visits to campuses; financial aid application assistance; and participation in the six-week summer program on the Fairbanks campus.

The residential summer program emphasizes academic development for 50 students selected for participation from the target schools. The summer experience helps UB students become familiar with the Fairbanks campus, residence life, services provided and, most importantly, places an emphasis on academic development and growth.

Participation in this program is only available to active UB College Bound target school participants. Upward Bound College Bound is a federally funded program.

For more information, call 907-474-5685 or email uafupwardbound@gmail.com.

Wood Center

The William Ransom Wood Center, under the Division of Student Affairs, is the student union building. It is the focal point of campus activities and services for the university and Fairbanks communities.

Services at Wood Center include event scheduling, campus information, dining facilities, meeting rooms, laundry and shower facilities, and a recreation area with pool tables and video games. Wood Center also has the campus lost-and-found center, an ATM, and tickets to cultural and sporting events.

Wood Center is home to the Student Activities Office, which oversees Nanook Traditions. Student Activities organizes events designed to entertain, educate and inspire the UAF community. Nanook Traditions are among UAF's most highly anticipated annual events. These include the Starvation Gulch bonfires in September, Winter Carnival in February, Festival of Native Arts in March and SpringFest in late April. For more information visit the Student Activities Office website (<https://www.uaf.edu/activities/>).

The Student Leadership and Involvement program provides opportunities for students to learn about and practice leadership skills and become involved on campus and in the community. Through the SLI program students can complete and earn Co-Curricular Opportunities for Leadership Development certificates. The COLD certificates provide tangible ways for students to be recognized for leadership development within the UAF community and beyond. Students who complete the COLD certificate are eligible for graduation with leadership honors and/or distinction. To find out more about SLI, visit the Wood Center or SLI online (<https://www.uaf.edu/sli/>).

The Nanook Diversity and Action Center (<https://www.uaf.edu/ndac/>) promotes a community of inclusion, social justice and cultural pluralism by providing educational activities in collaboration with student organizations that honor and support areas of age, gender, religion, ability, socioeconomic status, race, ethnicity, culture, sexual orientation and gender expression. Additionally, NDAC focuses on prevention and awareness efforts, including Take Back the Night, bystander intervention, and Sexual Assault Awareness Month.

More than 100 student organizations (<https://www.uaf.edu/sli/clubs/list.php>) are active on campus. Membership in a student organization can help you make social connections. It can also help in career and leadership development and enhance your resume. Each semester a student organizations fair provides an opportunity to learn more about these diverse groups. Contact the Student Leadership and Involvement office (<https://uaf.edu/sli/>) to learn more about UAF student organizations.

Alaska Esports at UAF brings together the competitive and casual gamers from across the diverse community of UAF. All are welcome in the esports arena, from the over-the-shoulder spectator, to the occasional dabbler, to the die-hard competitor looking to raise game-play to the next level. In addition to playing a wide variety of old and new titles, our community participates in speedrunning events, pro-matches watch parties, “book club” style play-throughs of amazing narrative video games, and questing in MMOs amongst many other activities. Whether you have thousands of hours in your favorite game, or you are just wanting to find out what all the fuss is about, we have something to offer you.

The Wood Center Pub offers evening entertainment for those 21 and older with live music, an open mic night, movies, trivia games and karaoke. Special events include theme nights, beer and wine tastings, comedy performances, casino night and more.

The Associated Students of the University of Alaska Fairbanks (ASUAF) is also located in the Wood Center. All students enrolled in 3 or more credits are ASUAF members. ASUAF runs service departments and programs dedicated to the interests and welfare of UAF students. ASUAF represents UAF students to the university administration, the University of Alaska Board of Regents and the Alaska Legislature. Officers are selected by the student body in elections held every fall and spring semester. For information, visit ASUAF online (<https://www.uaf.edu/asuaf/>) or call 907-474-7355.

ASUAF Student Media is also located in the Wood Center. The online news site Polaris News (<https://www.polarisnews.org/>) and the campus radio station KSUA (<https://www.ksuaradio.com/>) give students the opportunity to gain experience in news writing and broadcasting.

For more information call 907-474-7034 or visit Wood Center online (<https://www.uaf.edu/woodcenter/>).

HOW TO EARN AN OCCUPATIONAL ENDORSEMENT

How to Earn an Occupational Endorsement

To earn a UAF occupational endorsement you will need to apply for admission to the program. There is no cost. There are three sets of requirements to complete the endorsement: general university requirements; occupational endorsement and program (major) requirements. These requirements are all described in this section of the catalog. To apply for admission (Admission to OEC) Requirements for your major are found in the Occupational Endorsement Programs section.

If your endorsement program is delivered collaboratively within the UA system (e.g., information technology specialist, early childhood education, human services and rural human services), then the credits you earn from each UA institution will be counted toward the fulfillment of the program requirements and fulfillment of the minimum institutional residency requirements. Institutional residency requirements are the minimum number of credits you must earn from the campus where you earn a degree.

Occupational Endorsements Overview

Occupational endorsement programs are designed to give students occupational training in a specific field. These programs are 9-29 credit hours and will be posted to the student's transcript upon completion and after approval by the academic department. The credit hours may be applied to other undergraduate degree programs where applicable.

General University Requirements

You must earn at least 9 semester credits at the 100 level or above for an occupational endorsement. At least 30 percent of the program must be earned at UAF. A minimum of a 2.0 cumulative GPA is required in all work as well as in your major field. In addition, you must earn a minimum C- grade in courses required for your occupational endorsement. Some programs may require higher GPAs for major coursework.

Unless otherwise specified by the appropriate academic unit, a course may be taken more than once toward fulfilling endorsement requirements. However, credit hours for such courses count only once toward the total credits required for the endorsement.

Students seeking an occupational endorsement do not apply for graduation. Certifying that you have met all major requirements is the responsibility of your department faculty, who will notify the Office of the Registrar.

If you want to use correspondence study credits from a school other than UAF to satisfy degree requirements, you must have the approval of those courses by the dean of the school or college from which you will graduate; otherwise, you take the risk the courses will not be accepted.

RESIDENCE CREDIT

Residence credit is course credit earned through any unit of UAF. Formal classroom instruction, correspondence study, distance-delivered courses, individual study or research at UAF are all considered residence credit. On the other hand, transfer credit, advanced placement credit, credit for

prior learning, military service credit and credit granted through nationally prepared examinations are not considered residence credit, nor are credit-by-examination credits earned through locally prepared tests. None of these types of credit can be applied to UAF residency requirements.

RESIDENCY REQUIREMENT

Most universities have residency requirements that call for a certain number of credits toward a degree to be earned at the degree-granting school. At UAF, the residency requirement for occupational endorsements is 30 percent of the program.

Occupational Endorsement Requirements

In order to earn an occupational endorsement, students must be admitted to the program and complete the requirements listed in the program section (Admission to OEC (p. 29)) of this chapter. A minimum of 9 credits is required to earn an occupational endorsement. At least 30 percent of the program must be completed in residence at UAF. Additional residency credit requirements may be established to meet discipline or accreditation standards.

You must have a cumulative GPA of at least 2.0 in all coursework. Some occupational endorsement programs require higher GPAs.

Students may elect to complete their program under the requirements of the catalog in effect at the time of formal acceptance to an occupational endorsement program or the catalog in effect at the time of completion. Courses for occupational endorsement must be completed within five years of formal acceptance into the program. Admission will expire if requirements are not completed in five years. The student must reapply for admission and meet the admission and program requirements in effect at the time of formal acceptance. Program requirements may require completion in less than five years.

Students may earn more than one occupational endorsement by completing all requirements for each additional program. Additional occupational endorsements must differ by 3 or more credits.

Occupational Endorsement Programs

- Business, Applied and Accounting, Applied (p. 115)
- Health, Allied - Occupational Endorsements (p. 116)
- Paramedic Academy (p. 117)
- O.E.C., Administrative Assistant (p. 118)
- O.E.C., Advanced Emergency Medical Technician (p. 118)
- O.E.C., Bookkeeping Technician (p. 119)
- O.E.C., Carpentry, Basic (p. 120)
- O.E.C., Content Creation (p. 120)
- O.E.C., Drafting Technology (p. 121)
- O.E.C., Ethnobotany (p. 121)
- O.E.C., Facility Maintenance (p. 122)
- O.E.C., Financial Services Representative (p. 122)
- O.E.C., High Latitude Range Management (p. 123)
- O.E.C., Homeland Security (p. 123)
- O.E.C., Law Enforcement Academy (p. 124)
- O.E.C., Medical Billing (p. 125)
- O.E.C., Medical Coding (p. 125)
- O.E.C., Medical Office Reception (p. 126)
- O.E.C., Medical Scribe (p. 126)
- O.E.C., Mining Mill Operations (p. 127)
- O.E.C., Nanny Caregiving (p. 128)
- O.E.C., Nurse Aide (p. 129)
- O.E.C., Rural Surface Water Quality Testing (p. 129)
- O.E.C., Rural Waste Management and Spill Response (p. 130)
- O.E.C., Supervision and Personnel Management (p. 131)
- O.E.C., Sustainable Energy (p. 131)
- O.E.C., Tribal Justice (p. 133)
- O.E.C., Welding, Entry-level (p. 133)
- O.E.C., Wildland Fire Science (p. 134)
- O.E.C., Yup'ik Language Competency (p. 134)

Occupational Endorsement Programs

Business, Applied and Accounting, Applied

Occupational Endorsement

The applied business and applied accounting (ABUS) program offers four occupational endorsements. The administrative assistant, financial services representative and the bookkeeping technician occupational endorsements are designed to give students the necessary skills to enter into the job market. The occupational endorsement in supervision and personnel management has been designed for employees who have assumed greater roles in their organizations or are looking to advance their careers. All occupational endorsements are steppingstones to the ABUS certificate and Associate of Applied Science degrees.

Community and Technical College

Applied Business and Accounting (<https://www.ctc.uaf.edu/academics/applied-business-accounting/>)

907-455-2800

ADMINISTRATIVE ASSISTANT (P. 118)

The administrative assistant occupational endorsement may be earned in one semester and represents a large portion of the coursework required for the applied business management certificate. Students must complete all courses with a grade of C- or better to earn the endorsement. Applicants must be 16 years old to be admitted.

BOOKKEEPING TECHNICIAN (P. 119)

The bookkeeping technician occupational endorsement provides students with education and training to qualify for bookkeeper positions in both small and large businesses. The occupational endorsement represents one-half of the credits required for the accounting technician certificate. This program is open to students with a high school diploma or GED. Applicants must be 16 years old to be admitted.

FINANCIAL SERVICES REPRESENTATIVE (P. 122)

The financial services representative program provides education and training to qualify students for customer service and teller positions in banks, credit unions and other financial institutions. This 15-credit occupational endorsement may be earned in one semester and represents half the credits required for the applied business management certificate in finance. Upon completion of the coursework, students may enroll in BA F253 for an optional additional 1-3 credits and get practical work experience in a financial institution.

This program is open to students who can document a high school diploma or GED. To be hired in any financial institution, graduates must be able to pass credit and criminal background checks. Applicants must be 16 years old to be admitted.

SUPERVISION AND PERSONNEL MANAGEMENT (P. 131)

The occupational endorsement for supervision and personnel management provides education and training to students to qualify for managerial and supervisory leadership positions in both small and large businesses, government, nonprofit and education settings. This 15-credit occupational endorsement may be earned in one or two semesters

and represents a large portion of the education required for the applied business management certificate. Students must complete all courses with a grade of C or better in order to earn the endorsement.

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Programs

Occupational Endorsement Programs

- Administrative Assistant (p. 118)
- Bookkeeping Technician (p. 119)
- Financial Services Representative (p. 122)
- Supervision and Personnel Management (p. 131)

Health, Allied - Occupational Endorsements

Occupational Endorsements

The occupational endorsements in allied health give students the knowledge and technical skills for employment in health care. Occupational endorsements are available in medical billing (p. 125), medical coding (p. 125), medical office reception (p. 126), medical scribe (p. 126) and nurse aide (p. 129).

Special admission, licensing or certification requirements may apply to students in this program. Applicants should familiarize themselves with these and speak with a faculty advisor if they have any questions or concerns.

Information on any of the allied health programs is available from the Allied Health Department (<https://www.ctc.uaf.edu/academics/allied-health/>) at the Community and Technical College, PO Box 758040, Fairbanks, AK 99775; by calling 907-455-2800; or by email at uaf-ctc@alaska.edu.

Community and Technical College
Allied Health (<https://www.ctc.uaf.edu/academics/allied-health/>)
907-455-2800

MEDICAL BILLING (P. 125) AND MEDICAL CODING (P. 125)

The occupational endorsements in medical billing (p. 125) and medical coding (p. 125) prepare students for employment in medical offices, clinics, hospitals and other medical facilities. Students in the program learn analysis of medical records and the assigning of codes for indexing diagnoses and procedures to provide information for reimbursement purposes.

MEDICAL OFFICE RECEPTION (P. 126)

Students receive education in the theory and skills for both office work and clinical care. Prerequisites for the program include a high school diploma or GED.

MEDICAL SCRIBE (P. 126)

The medical scribe occupational endorsement will prepare students to perform data input related to patient health care records for licensed healthcare providers in a wide variety of medical settings (e.g., hospitals, emergency medicine, primary care, urgent care, among many others). Students will be equipped with skills that maximize the efficiency and productivity of clinical care, enabling real-time clinical documentation and workflow efficiencies for their employers. Students will learn skills to maintain comprehensive and accurate electronic health records. They will be prepared to take the necessary certification exam for the Medical Scribe Certification and Aptitude Test (MSCAT) to acquire the Certified Medical Scribe Specialist (CMSS), a certification recognized by the American College of Medical Scribe Specialists.

NURSE AIDE (P. 129)

The nurse aide occupational endorsement provides education and training to students in theory and basic nursing skills necessary to become efficient and productive health care team members. Students who successfully complete the program will be prepared to sit for the national nurse aide examination for certification. This program is open to those who can document a high school diploma or GED and 10th-grade

reading level by exam, or who have the instructor's permission. Students must also be in good physical condition (capable of repeatedly lifting 50 pounds) and have the following immunizations: hepatitis B full series, two MMRs, chickenpox vaccine (or titer to prove immunity to MMR/chickenpox) and have a negative PPD for tuberculosis within the past year.

PHLEBOTOMY

Training is also available in phlebotomy. UAF does not award degree certificates or endorsements in phlebotomy, but a student who completes the phlebotomy course may sit for national certification through the American Society for Clinical Pathology to become a certified phlebotomy technician.

Students wishing to enroll in phlebotomy must have documentation of antibody titer for hepatitis B; current immunizations or titers to measles, mumps, rubella and varicella; flu shot if required by site; and a completed two-step PPD (Purified Protein Derivative) for tuberculosis within the past year, prior to registering for the class. Additional immunizations may be necessary as required by the externship site. Students must submit documentation of a background check administered through the Alaska State troopers with the completed application.

Programs Occupational Endorsement Programs

- Medical Billing (p. 125)
- Medical Coding (p. 125)
- Medical Office Reception (p. 126)
- Medical Scribe (p. 126)
- Nurse Aide (p. 129)

Paramedic Academy

The paramedic academy prepares students to take the national paramedic exam. A passing score qualifies students to apply for a paramedic license through the State of Alaska.

The paramedic academy offers the highest level of education available to prepare for work in the pre-hospital environment. The most common entry-level positions for paramedics are in an ambulance within an emergency response system or in a nonemergency transport service. Paramedics also work in doctors' offices, urgent care clinics, hospital emergency rooms, intensive care units, laboratories, aeromedical transport services and safety departments in corporate and industrial settings.

UAF's paramedic academy offers an intensive three-semester course of full-time study. Students may apply their paramedic course credits to more advanced degrees, including the A.A.S. in emergency services.

The paramedic academy meets or exceeds the national standards curriculum for the EMT-paramedic. During the first two semesters, the student will complete 500 hours of classroom education and 232 hours of clinical experience. The clinical component includes rotations in a hospital setting, including placements in respiratory therapy and in the emergency room and intensive care unit. In the third semester, the student will complete a field internship outside Alaska with an ambulance company supervised by paramedic field preceptors. During the internship, the student is responsible for all costs of housing, travel and living expenses in addition to tuition and fees.

The paramedic student should be emotionally stable and have good dexterity, agility and physical coordination. Paramedics must also have the strength to lift and carry heavy loads.

Special admission, licensing or certification requirements may apply to students in this program. Applicants should familiarize themselves with these and speak to a faculty advisor if they have questions or concerns.

Community and Technical College

Paramedic Academy (<https://www.ctc.uaf.edu/programs/paramedic/>)
907-455-2800

Admission Requirements

Complete the following admission requirements:

- Be at least 18 years old by the first day of the semester in which you are admitted;
- Complete BIOL classes to match paramedic A.A.S.

Application packets for the paramedic academy may be obtained from the Community and Technical College at 907-455-2853 or jmpepperling@alaska.edu. Applications will be reviewed by the program director and medical director. In keeping with certification requirements, class size is limited to 20 students. Applicants must have a current EMT basic certification (or have completed EMS F170), and have completed HLTH F114.

Program Requirements

| Code | Title | Credits |
|-------------------------|----------------------|---------|
| Complete the following: | | |
| EMS F181 | Clinical Rotation I | 4 |
| EMS F183 | Clinical Rotation II | 4 |

| | | |
|----------|----------------------|----|
| EMS F280 | Paramedicine I | 12 |
| EMS F282 | Paramedicine II | 12 |
| EMS F283 | Paramedic Internship | 12 |

O.E.C., Administrative Assistant Occupational Endorsement

The administrative assistant occupational endorsement may be earned in one semester and represents a large portion of the coursework required for the applied business management certificate. Students must complete all courses with a grade of C- or better to earn the endorsement. Applicants must be 16 years old to be admitted.

Minimum Requirements for Administrative Assistant Occupational Endorsement: 16 credits

Community and Technical College
Applied Business (<https://www.ctc.uaf.edu/programs/business-applied/>)
907-455-2800

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Administrative Assistant Occupational Endorsement: 16 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Administrative Assistant Program Requirements | | |
| Complete the following: | | |
| ABUS F102A or ABUS F102C | Keyboarding: Touch Typing Keyboarding: Document Formatting | 1 |
| ABUS F154 | Human Relations | 3 |
| ABUS F170 or ABUS F271 | Business English Business Communications | 3 |
| ABUS F182 | Office Procedures | 3 |
| Complete 6 credits from the following: | | 6 |
| ABUS F183 | Professional Skills for Job Hunt | |
| ABUS F199 | Practicum in Applied Business | |
| CIOF F130 | Word Processing | |
| CIOF F135 | Microcomputer Spreadsheets | |
| CIOF F150 | Computer Business Applications | |

O.E.C., Advanced Emergency Medical Technician

Occupational Endorsement

The primary focus of the Advanced Emergency Medical Technician (AEMT) is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance.

AEMTs are most usually employed in ambulance services, working in conjunction with EMTs and paramedics; however they are also commonly found in fire departments and law enforcement agencies as non-transporting first responders. Ambulances operating at the AEMT level of care are commonplace in rural areas and occasionally found in larger cities as part of a tiered-response system.

Minimum Requirements for Advanced Emergency Medical Technician Occupational Endorsement: 16 credits

Community and Technical College
EMS/Paramedicine (<https://www.ctc.uaf.edu/programs/ems-paramedicine/>)
907-455-2800

Admission Requirements

Complete the following admission requirements:

- 18 years of age or older
- State- or federal-issued ID
- Documentation of health insurance
- Documentation of the following immunizations:
 - Hepatitis B
 - Measles - must have two doses of vaccine or a positive titer
 - Mumps – must have two doses of vaccine or a positive titer
 - Rubella – must have one dose of vaccine or a positive titer
 - Two-step - Tuberculosis skin test (current within one year of AEMT clinical)
 - Varicella – must have two doses of vaccine or a positive titer
 - Influenza – Must show proof of vaccine to perform clinicals during the flu season

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Advanced Emergency Medical Technician Occupational Endorsement: 16 credits

| Code | Title | Credits |
|---|---------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Advanced Emergency Medical Technician Program Requirements | | |
| Complete the following: | | |
| EMS F170 | EMT: Emergency Medical Technician I | 6 |
| EMS F270 | Advanced Emergency Medical Technician | 10 |

O.E.C., Bookkeeping Technician Occupational Endorsement

The bookkeeping technician occupational endorsement provides students with education and training to qualify for bookkeeper positions in both small and large businesses. The occupational endorsement represents one-half of the credits required for the accounting technician certificate. This program is open to students with a high school diploma or GED. Applicants must be 16 years old to be admitted.

Minimum Requirements for Bookkeeping Technician Occupational Endorsement: 15 credits

Community and Technical College
Applied Accounting (<https://www.ctc.uaf.edu/programs/accounting-applied/>)
907-455-2800

Admission Requirements

Complete the following admissions requirement:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Bookkeeping Technician Occupational Endorsement: 15 credits

| Code | Title | Credits |
|--|--------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Bookkeeping Technician Program Requirements | | |
| Complete the following: | | |
| ABUS F101 | Principles of Accounting I | 3 |
| ABUS F141 | Payroll Accounting | 3 |
| ABUS F201 | Principles of Accounting II | 3 |
| ABUS F203 | Accounting Capstone | 3 |
| ABUS F220 | Microcomputer Accounting: QuickBooks | 3 |

O.E.C., Carpentry, Basic Occupational Endorsement

The occupational endorsement in basic carpentry is the beginning for both a career in the construction industry and pursuing a certificate and degree in construction trades technology. Training consists of basic construction safety, introduction to hand and power tools, construction mathematics, floor systems, roof framing, and window and exterior door installation. Students develop a basic understanding of how to communicate, understand, anticipate and complete the work on a construction job site. Applicants must be 16 years old to be admitted.

Minimum Requirements for Basic Carpentry Occupational Endorsement: 14.5 credits

College of Rural Community Development (<https://www.uaf.edu/rural/>)
907-474-7143

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Basic Carpentry Occupational Endorsement: 14.5 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Basic Carpentry Program Requirements | | |
| Complete the following: | | |
| CTT F100 | Construction Technology Core | 3 |
| or CTT F101 and CTT F102 and CTT F103 | Basic Construction Safety and Introduction to Hand and Power Tools and Introduction to Blueprint Reading | |
| CTT F106 | Construction Measuring | 3 |
| CTT F110 | Residential Carpentry I | 8.5 |
| or CTT F111 and CTT F112 and CTT F113 and CTT F114 | Materials and Tools Used in the Trade and Floor Systems, Wall and Ceiling Framing and Roof Framing, Windows and Exterior Doors and Introduction to Concrete Materials and Forms | |

O.E.C., Content Creation Occupational Endorsement

The occupational endorsement in content creation provides education and training to prepare students to enter the online content creation space. Training will emphasize skills needed to develop an online presence, business and self-employment, personal finance, basic computer and peripheral support, troubleshooting, and managing groups of people. Students will be equipped with skill sets enabling them to enter into various digital content creation platforms such as streaming, vlogging and other social media sites with the preparation and principles to run their accounts as an effective business.

Minimum Requirements for Content Creation Occupational Endorsement: 16 credits

College of Rural Community Development (<https://www.uaf.edu/rural/>)
907-474-7143

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Content Creation Occupational Endorsement: 16 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Content Creation Program Requirements | | |
| Complete the following: | | |
| ABUS F189 | The Business of Gaming and Content Creation | 3 |
| BA F151X | Introduction to Business | 3 |
| CITS F203 | Information Technology Support Fundamentals | 4 |
| COJO F121X | Introduction to Interpersonal Communication | 3 |
| COJO F280 | Video Storytelling: Content Creation | 3 |

O.E.C., Drafting Technology Occupational Endorsement

The occupational endorsement for drafting technician provides education and training to students to qualify for entry-level drafting and construction documentation preparation. This 18-credit occupational endorsement may be earned in two semesters and represents a significant portion of the education required for the drafting technology certificate. Students must complete all courses with a grade of C or better in order to earn the endorsement.

This program is open to those who have completed the university application process.

An occupational endorsement, utilizing existing drafting technology (DRT) and construction management (CM) courses to credential individuals with entry-level training that will get their foot in the door with prospective employers.

Minimum Requirements for Drafting Technology Occupational Endorsement: 18 credits

Community and Technical College
Drafting/Design Technology (<https://www.ctc.uaf.edu/programs/drafting/>)
907-455-2800

Admission Requirements

Students must have completed the university application process.

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Drafting Technology Occupational Endorsement: 18 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Drafting Technology Program Requirements | | |
| CM F102 | Methods of Building Construction | 3 |
| DRT F140 | Architectural Drafting | 3 |
| DRT F170 | Beginning CAD | 3 |
| DRT F210 | Intermediate CAD | 3 |
| Complete two of the following: | | 6 |
| CM F123 | Codes and Standards | |
| DRT F145 | Structural Drafting | |
| DRT F150 | Civil Drafting | |
| DRT F155 | Mechanical and Electrical Drafting | |
| DSGN F130 | Modeling, Assembly & 3D Animation: Autodesk Inventor | |

O.E.C., Ethnobotany Occupational Endorsement

The coursework for this new ethnobotany occupational endorsement program was developed with input from the students, Elders and stakeholders who participated in the ethnobotany certificate program and now provides a strong interdisciplinary foundation for understanding what students are seeking from ethnobotany coursework that will enhance their opportunities both in the workplace and for professional development. Currently, no other program exists in Alaska that prepares students with basic understanding of botany and cultural uses of plants, including the skills required to collect plants in the field, conduct interviews using culturally and scientifically appropriate methods, and provide hands-on opportunities to research, implement, and report (online, orally, and in writing) on student-designed projects.

Minimum Requirements for Ethnobotany Occupational Endorsement: 16 credits

College of Rural and Community Development
Kuskokwim Campus (<https://www.bethel.uaf.edu>)
907-474-7143

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Ethnobotany Occupational Endorsement: 16 credits

| Code | Title | Credits |
|--|------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Ethnobotany Program Requirements | | |
| Complete the following: | | |
| BIOL F190 | Introduction to Alaska Flora | 2 |
| EBOT F100 | Introduction to Ethnobotany | 3 |
| EBOT F200 | Seminar in Ethnobotany | 2 |
| EBOT F210 | Ethical Wildcrafting | 1 |
| EBOT F220 | Ethnobotanical Techniques | 2 |
| EBOT F250 | Applied Ethnobotany Fall | 2 |
| EBOT F251 | Applied Ethnobotany Spring | 2 |
| EBOT/ANTH F336 | Ethnomycology ¹ | 3 |

¹ Or advisor-approved elective(s)

O.E.C., Facility Maintenance Occupational Endorsement

The facility maintenance program trains participants in dealing with challenges unique to rural Alaska structures. Training consists of identifying, troubleshooting and customizing solutions to a building or home, learning the importance of working with community advocates, tracking and analyzing past maintenance trends, and developing strategies for future maintenance needs.

Minimum Requirements for Facility Maintenance Occupational Endorsement: 18 credits

College of Rural and Community Development (<https://www.uaf.edu/rural/>)
907-474-7143

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Facility Maintenance Occupational Endorsement: 18 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Facility Maintenance Program Requirements | | |
| Complete the following: | | |
| CTT F100 | Construction Technology Core | 3 |
| or CTT F101 and CTT F102 and CTT F103 | Basic Construction Safety and Introduction to Hand and Power Tools and Introduction to Blueprint Reading | |
| CTT F106 | Construction Measuring ¹ | 3 |
| CTT F131 | Interior Repairs | 1 |
| CTT F132 | Flooring Installation | 1 |
| CTT F133 | Cabinet Installation with Countertops | 1 |
| CTT F135 | Boiler Troubleshooting and Burner Repair | 2 |
| CTT F137 | Appliance Troubleshooting and Repair | 2 |
| CTT F138 | Residential Heating Controls | 2 |
| CTT F141 | Door and Window Installation | 1 |
| CTT F153 | Plumbing Piping and Tools | 2 |

¹ Or other advisor approved 100 level mathematics course.

O.E.C., Financial Services Representative

Occupational Endorsement

The financial services representative program provides education and training to qualify students for customer service and teller positions in banks, credit unions and other financial institutions. This 15-credit occupational endorsement may be earned in one semester and represents half the credits required for the applied business management certificate in finance. Upon completion of the coursework, students may enroll in BA F253 for an optional additional 1-3 credits and get practical work experience in a financial institution.

This program is open to students who can document a high school diploma or GED. To be hired in any financial institution, graduates must be able to pass credit and criminal background checks. Applicants must be 16 years old to be admitted.

Minimum Requirements for Financial Services Representative Occupational Endorsement: 15 credits

Community and Technical College
Applied Business (<https://www.ctc.uaf.edu/programs/business-applied/>)
907-455-2800

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Financial Services Representative Occupational Endorsement: 15 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Financial Services Representative Program Requirements | | |
| Complete the following: | | |
| ABUS F154 | Human Relations | 3 |
| or ABUS F175 | Customer Service | |
| ABUS F155 | Business Math (or MATH F100-level or above) | 3 |
| ABUS F233 | Financial Management | 3 |
| Complete 6 credits from the following: | | 6 |
| ABUS F160 | Principles of Banking | |
| ABUS F161 | Personal and Business Finance | |
| ABUS F234 | Introduction to Investing | |

O.E.C., High Latitude Range Management

Occupational Endorsement

The high latitude range management occupational endorsement program combines academic and Indigenous knowledge at the local, national and international levels to offer courses that help prepare students for entry-level jobs in the field of natural resources and livestock production, including reindeer husbandry. The program operates in cooperation with regional communities and organizations with involvement from statewide industry representatives and educators as part of the program's commitment to responding to the unique needs of rural Alaska communities, particularly with respect to local resources. The Sámi Education Institute of Finland manages the international BEBO organization, which promotes the languages and cultures of reindeer herding peoples in the Arctic and extends cooperation specifically to the HLRM program.

Minimum Requirements for High Latitude Range Management Occupational Endorsement: 13 credits

College of Rural Community Development (<https://www.uaf.edu/rural/>)
907-474-7143

Admission Requirements

Complete the following admission requirements:

- Admission is open to students with a high school diploma or GED.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for High Latitude Range Management Occupational Endorsement: 13 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| High Latitude Range Management Program Requirements | | |
| Complete the following: | | |
| HLRM F120 | History of Domesticated Alaskan Ungulates | 1 |
| HLRM F130 | Research Field Logistics | 2 |
| HLRM F140 | High Latitude Range Management | 2 |
| HLRM F150 | Alaskan Ungulate Husbandry | 2 |
| HLRM F160 | Meat Production | 2 |
| HLRM F170 | Health Issues in Domesticated Ungulates | 2 |
| HLRM F201 | Field Techniques for Range Management | 2 |

O.E.C., Homeland Security Occupational Endorsement

The occupational endorsement in homeland security provides the essential academic preparation and sought-after critical thinking skills necessary for mid-level careers in the homeland security field. At the same time, this certificate serves as a stepping stone into homeland security and emergency management-related degree programs such as the HSEM bachelor's degree at the College of Business and Security Management.

Minimum Requirements for Homeland Security Occupational Endorsement: 12 credits

College of Business and Security Management (<https://www.uaf.edu/cbsm/>)
907-474-7461

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Homeland Security Occupational Endorsement: 12 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Homeland Security Program Requirements | | |
| Complete the following: | | |
| HSEM F120 | Introduction to Emergency Management | 3 |
| or HSEM F121 | Introduction to Homeland Security | |
| Complete at least 9 credits from the following: | | 9 |
| HSEM F223 | Terrorism: A Global Threat | |
| HSEM F225 | Intelligence Analysis and Security Management | |
| HSEM F227 | Transportation and Border Security | |
| HSEM F231 | The Threat of Weapons of Mass Destruction | |
| HSEM F233 | Critical Infrastructure Protection | |

O.E.C., Law Enforcement Academy Occupational Endorsement; Alaska Police Standards Council Certification

The law enforcement academy prepares students for a career in law enforcement in the state of Alaska. APSC certification will allow a qualified candidate to work as a commissioned officer in any of approximately 65 state and municipal law enforcement organizations.

The law enforcement academy is an intense semester of full-time study. Students attend class 40 hours per week for one semester. The certification is approved by the Alaska Police Standards Council in compliance with Title 13.85.050 of the Alaska Administrative Code. Courses are not offered separately but must be taken as part of the entire law enforcement academy package.

Special admission, licensing or certification requirements may apply to students in this program. Applicants should familiarize themselves with these and speak with a faculty advisor if they have any questions or concerns. Applicants must be 21 years old to be admitted.

Minimum Requirements for Law Enforcement Occupational
Endorsement: 17 credits

Community and Technical College
Law Enforcement (<https://www.ctc.uaf.edu/programs/lawacad/>)
907-455-2800

Admission Requirements

Complete the following admission requirements:

- Be at least 21 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Law Enforcement Occupational Endorsement: 17 credits

LAW ENFORCEMENT CERTIFICATION BY THE ALASKA POLICE STANDARDS COUNCIL

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Law Enforcement Program Requirements | | |
| Complete the following: | | |
| LE F110 | Cultural and Behavioral Strategies for Law Enforcement Officers | 1 |
| LE F115 | Enforcement Skills for Law Enforcement Officers | 4 |
| LE F120 | Law Enforcement Operations | 4 |

| | | |
|---------|-------------------------|---|
| LE F125 | Basic Police Procedures | 4 |
| LE F205 | Criminal Law for Police | 4 |

O.E.C., Medical Billing Occupational Endorsement

The occupational endorsements in medical billing and medical coding prepare students for employment in medical offices, clinics, hospitals and other medical facilities. Students in the program learn analysis of medical records and the assigning of codes for indexing diagnoses and procedures to provide information for reimbursement purposes.

Information on any of the allied health programs is available from the Allied Health department (<https://www.ctc.uaf.edu/academics/allied-health/>) at the Community and Technical College, P.O. Box 758040, Fairbanks, AK 99775; by calling 907-455-2800; or by email at uaf-ctc@alaska.edu.

Minimum Requirements for Medical Billing Occupational Endorsement: 12 credits

Community and Technical College
Allied Health (<https://www.ctc.uaf.edu/academics/allied-health/>)
907-455-2800

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Medical Billing Occupational Endorsement: 12 credits

| Code | Title | Credits |
|--|--------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Medical Billing Program Requirements | | |
| Complete the following: | | |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F130 | Medical Office Technology | 3 |
| HLTH F236 | Outpatient Health Care Reimbursement | 3 |
| HLTH F237 | Inpatient Health Care Reimbursement | 3 |

O.E.C., Medical Coding Occupational Endorsement

The occupational endorsements in medical billing and medical coding prepare students for employment in medical offices, clinics, hospitals and other medical facilities. Students in the program learn analysis of medical records and the assigning of codes for indexing diagnoses and procedures to provide information for reimbursement purposes.

Information on any of the allied health programs is available from the Allied Health department (<https://www.ctc.uaf.edu/academics/allied-health/>) at the Community and Technical College, P.O. Box 758040, Fairbanks, AK 99775; by calling 907-455-2800; or by email at uaf-ctc@alaska.edu.

Minimum Requirements for Medical Coding Occupational Endorsement: 15 credits

Community and Technical College
Allied Health (<https://www.ctc.uaf.edu/academics/allied-health/>)
907-455-2800

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Medical Coding Occupational Endorsement: 15 credits

| Code | Title | Credits |
|--|--------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Medical Coding Program Requirements | | |
| Complete the following: | | |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F130 | Medical Office Technology | 3 |
| HLTH F208 | Human Diseases | 3 |
| HLTH F238 | Medical Coding I ¹ | 3 |
| HLTH F239 | Medical Coding II ¹ | 3 |

¹ Must complete HLTH F238 and HLTH F239 with a B grade or better.

O.E.C., Medical Office Reception Occupational Endorsement

Students in the medical office reception program receive education in the theory and skills for both office work and clinical care. Prerequisites for the program include a high school diploma or GED.

Information on any of the allied health programs is available from the Allied Health Department (<https://www.ctc.uaf.edu/academics/allied-health/>) at the Community and Technical College, PO Box 758040, Fairbanks, AK 99775; by calling 907-455-2800; or by email at uaf-ctc@alaska.edu.

Minimum Requirements for Medical Office
Reception Occupational Endorsement: 13 credits

Community and Technical College
Allied Health (<https://www.ctc.uaf.edu/academics/allied-health/>)
907-455-2800

Admission Requirements

Prerequisites for the program include a high school diploma or GED.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Medical Office Reception Occupational Endorsement: 13 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Medical Office Reception Program Requirements | | |
| Complete the following: | | |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F118 | Medical Law and Ethics | 2 |
| HLTH F126 | Administrative Procedures for the Healthcare Worker | 3 |
| HLTH F130 | Medical Office Technology | 3 |

O.E.C., Medical Scribe Occupational Endorsement

The medical scribe occupational endorsement will prepare students to perform data input related to patient health care records for licensed healthcare providers in a wide variety of medical settings (e.g., hospitals, emergency medicine, primary care, urgent care, among many others). Students will be equipped with skills that maximize the efficiency and productivity of clinical care, enabling real-time clinical documentation and workflow efficiencies for their employers. Students will learn skills to maintain comprehensive and accurate electronic health records. They will be prepared to take the necessary certification exam for the Medical Scribe Certification and Aptitude Test (MSCAT) to acquire the Certified Medical Scribe Specialist (CMSS), a certification recognized by the American College of Medical Scribe Specialists.

Information on any of the allied health programs is available from the Allied Health Department (<https://www.ctc.uaf.edu/academics/allied-health/>) at the Community and Technical College, PO Box 758040, Fairbanks, AK 99775; by calling 907-455-2800; or by email at uaf-ctc@alaska.edu.

Minimum Requirements for Medical Scribe Occupational Endorsement:
17 credits

Community and Technical College
Allied Health (<https://www.ctc.uaf.edu/academics/allied-health/>)
907-455-2800

Admission Requirements

Prerequisites:

- High school graduation or GED; ALEKS placement into HLTH F116; Accuplacer placement into or completion of WRTG F110; or permission of instructor.
- Student must be in good physical condition and have documentation of the following immunizations: two varicella, two MMR, three Hepatitis B vaccines and a two-step PPD within previous 12 months or titers to prove immunity to above diseases.

Complete the following admission requirements:

- Be at least 18 years old by the first day of the semester in which you are admitted.
- Students should complete the UAF application process.
- Complete FAFSA for financial aid, if needed.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Medical Scribe Occupational Endorsement: 17 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |

Medical Scribe Program Requirements

Complete the following:

| | | |
|------------|--|---|
| ABUS F102A | Keyboarding: Touch Typing | 1 |
| ABUS F102B | Keyboarding: Skill Building | 1 |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F114 | Fundamentals of Anatomy and Physiology | 4 |
| HLTH F118 | Medical Law and Ethics | 2 |
| HLTH F122 | First Aid and CPR for the Health Care Provider | 0 |
| HLTH F124 | Introduction to Medical Scribe Specialist | 2 |
| HLTH F260 | Medical Scribe Specialist Practicum | 2 |

Note: See your advisor if you are not sure which catalog year to use.

O.E.C., Mining Mill Operations

Overview

Occupational Endorsement

The occupational endorsement in mining mill operations provides education and training in the skills and knowledge required of a mining mill operator.

Minimum Requirements for Mining Mill Operations
Occupational Endorsement: 17 credits

Community and Technical College
Process Technology (<https://www.ctc.uaf.edu/programs/process-technology/>)
907-455-2800

Admission Requirements

This program is open to those who have a high school diploma or GED.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Mining Mill Operations Occupational Endorsement: 17 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Mining Mill Operations Program Requirements | | |
| Complete the following: | | |
| AMIT F129 | Surface Mine Safety | 1 |
| AMIT F130 | Surface Mining Operations | 3 |
| AMIT F135 | Introduction to Mining Systems and Equipment | 4 |
| AMIT F145 | Introduction to Mineral Beneficiation | 3 |
| PRT F110 | Introduction to Occupational Safety, Health and Environmental Awareness | 3 |
| PRT F140 | Industrial Process Instrumentation I | 3 |

O.E.C., Nanny Caregiving Occupational Endorsement

ECE F140

Positive Social and Emotional
Development

3

The nanny caregiving occupational endorsement prepares the student for work as a knowledgeable in-home childcare provider. Students who successfully complete the program will acquire the skills to support the development of infants and young children under their care to grow and thrive in a nurturing environment. The program includes a foundation in child development from prenatal through the elementary school years as well as coursework in curriculum development for various ages, safe healthy learning environments, culture and the young child, and positive social and emotional development.

The occupational endorsement was designed to enable students to complete their coursework in just two terms with careful advising. The program uses performance-based assessment rather than testing. The courses are available 100% online allowing students to work at their own convenience during the designated timeline of the course or with synchronous options. The nanny caregiving occupational endorsement serves as a stepping stone in the early childhood education profession. Students who want to learn more can continue on to the certificate and further degree and career opportunities.

Minimum Requirements for Nanny Caregiving Occupational
Endorsement: 20 credits

Community and Technical College
Early Childhood Education (<https://www.ctc.uaf.edu/programs/early-childhood-education/>)
907-455-2800

Admission Requirements

Open enrollment

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Nanny Caregiving Occupational Endorsement: 20 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Nanny Caregiving Program Requirements | | |
| Complete the following: | | |
| ECE F101 | Introduction to Early Childhood Profession | 3 |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers | 3 |
| ECE F107X | Child Development II: The Preschool and Primary Years | 3 |
| ECE F110 | Safe, Healthy Learning Environments | 3 |
| ECE F119 | Curriculum I: Principles and Practices | 3 |
| ECE F130 | Culture, Learning and the Young Child | 2 |

O.E.C., Nurse Aide Occupational Endorsement

The nurse aide occupational endorsement provides education and training to students in theory and basic nursing skills necessary to become efficient and productive health care team members. Students who successfully complete the program will be prepared to sit for the national nurse aide examination for certification. This program is open to those who can document a high school diploma or GED and 10th-grade reading level by exam, or who have the instructor's permission. Students must also be in good physical condition (capable of repeatedly lifting 50 pounds) and have the following immunizations: hepatitis B full series, two MMRs, chickenpox vaccine (or titer to prove immunity to MMR/chickenpox) and have a negative PPD for tuberculosis within the past year.

Information on any of the allied health programs is available from the Allied Health department (<https://www.ctc.uaf.edu/academics/allied-health/>) at the Community and Technical College, PO Box 758040, Fairbanks, AK 99775; by calling 907-455-2800; or by email at ctc@alaska.edu.

Minimum Requirements for Nurse Aide Occupational Endorsement: 9 credits

Community and Technical College
Allied Health (<https://www.ctc.uaf.edu/academics/allied-health/>)
907-455-2800

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Nurse Aide Occupational Endorsement: 9 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Nurse Aide Program Requirements | | |
| HLTH F107 or HLTH F111 and HLTH F113 | Nurse Aide Training Personal Care Attendant Training and Personal Care Attendant to Nursing Assistant Bridge | 9 |

O.E.C., Rural Surface Water Quality Testing

Occupational Endorsement

This program provides education and training to conduct water quality monitoring and assessment by developing and following a Quality Assurance Project Plan. Coursework focuses on issues related to rural Alaska communities and provides basic academic preparation for entry-level water quality technician careers. Students gain a foundation of knowledge that prepares them to continue into science and engineering-related certificate, associate or baccalaureate programs.

Minimum Requirements for Rural Surface Water Quality Testing Occupational Endorsement: 9 credits

College of Rural and Community Development
907-474-7143

Admission Requirements

Admission is open to students with a high school diploma or GED.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Rural Surface Water Quality Testing Occupational Endorsement: 9 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Rural Surface Water Quality Testing Program Requirements | | |
| Complete the following: | | |
| ABUS F183 | Professional Skills for Job Hunt | 1-3 |
| CIOS F150 | Computer Business Applications | 1-3 |
| ENVI F101 | Introduction to Environmental Science | 3 |
| ENVI F110 | Introduction to Water Quality I: Measurement | 1 |
| ENVI F111 | Introduction to Water Quality II: Monitoring and Assessment | 1 |
| ENVI F112 | Introduction to Water Quality III: Data Quality Assurance | 1 |
| ENVI F160 | Internship in Environmental Studies | 1-2 |

O.E.C., Rural Waste Management and Spill Response

Occupational Endorsement

The occupational endorsement in rural waste management and spill response provides education and training in how to handle management municipal waste. Emphasis is placed upon providing students with the skills and experience necessary to implement solutions to challenging solid waste stream issues facing rural waste managers. The program introduces students to best practices in waste management that are in compliance with state and federal governmental regulations. Exceptional focus is placed on workplace safety and students are assessed on proficiency in operational safety and safety planning. Upon completion of the occupational endorsement, students will be prepared to help protect rural communities from many of the environmental risks associated with waste disposal by safely managing municipal solid and hazardous waste streams.

Minimum Requirements for Rural Waste Management Spill Response Occupational Endorsement: 10 credits

College of Rural and Community Development
Bristol Bay Campus (<https://www.uaf.edu/bbc/>)
907-842-5109

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Rural Waste Management Spill Response Occupational Endorsement: 10 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Rural Waste Management Spill Response Program Requirements | | |
| Complete the following: | | |
| ABUS F183 | Professional Skills for Job Hunt | 1 |
| ENVI F110 | Introduction to Water Quality I: Measurement | 1 |
| ENVI F115 | Rural Solid and Hazardous Waste Management | 1 |
| ENVI F116 | Rural Alaska Landfill Operator | 1 |
| ENVI F117 | Community Spill Response | 1 |
| FIRE F110 | Introduction to Hazardous Waste Operations and Emergency Response | 3 |
| Complete 2 credits from the following: | | 2 |

| | |
|---------------------------|---|
| CiOS F135 | Microcomputer Spreadsheets |
| CTT F130 | Introduction to Facility Maintenance |
| ENVI F130 | Introduction to the National Environmental Policy Act |
| ENVI F160 | Internship in Environmental Studies |
| ENVI F260 | Field Techniques for Environmental Technicians |
| HLTH F122 | First Aid and CPR for the Health Care Provider |
| RD F250 | Grant Writing for Community Development |
| TG F130 | Introduction to Utility Management |
| Advisor-approved elective | |

O.E.C., Supervision and Personnel Management

Occupational Endorsement

The occupational endorsement for supervision and personnel management provides education and training to students to qualify for managerial and supervisory leadership positions in both small and large businesses, government, nonprofit and education settings. This 15-credit occupational endorsement may be earned in one or two semesters and represents a large portion of the education required for the applied business management certificate. Students must complete all courses with a grade of C or better in order to earn the endorsement.

Minimum Requirements for Supervision and Personnel Management Occupational Endorsement: 15 credits

Community and Technical College

Applied Business (<https://www.ctc.uaf.edu/programs/business-applied/>)
907-455-2800

Admission Requirements

This program is open to those who have completed the university application process.

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Supervision and Personnel Management Occupational Endorsement: 15 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Supervision and Personnel Management Program Requirements | | |
| Complete the following: | | |
| ABUS F154 | Human Relations | 3 |
| ABUS F179 | Fundamentals of Supervision | 3 |
| ABUS F231 | Introduction to Personnel ¹ | 3 |
| ABUS F232 or ABUS F277 | Contemporary Management Issues Dynamics of Leadership | 3 |
| ABUS F242 | Employment Law | 3 |

¹ ABUS F231 is a variable credit course. Students must take a total of 3 credits.

O.E.C., Sustainable Energy Occupational Endorsement

Providing education and training in energy efficiency and renewable energy, the sustainable energy occupational endorsement addresses many of the energy issues that influence Alaska communities and provides the basic academic preparation for entry-level sustainable energy careers. It also serves as a steppingstone into science- and engineering-related certificate, associate or bachelor's programs.

The program is structured as 6 credits of foundation knowledge and a minimum of 6 credit electives that allow students (in consultation with their advisor) to specialize in specific areas of sustainable energy. Some examples of how the electives can be formed into specific areas of study follow. Applicants must be 16 years old to be admitted.

EXAMPLES OF HOW THE ELECTIVES CAN BE FORMED INTO SPECIFIC AREAS OF STUDY

| Code | Title | Credits |
|---|--|---------|
| Energy Science | | |
| ENVI F101 | Introduction to Environmental Science | 3 |
| PHYS F102X | Energy and Society | 4 |
| Photovoltaic | | |
| CTT F100 | Construction Technology Core | 3 |
| CTT F160 | Photovoltaic Systems I | 5 |
| CTT F161 | Photovoltaic Systems II | 5 |
| Biomass | | |
| CTT F100 | Construction Technology Core | 3 |
| CTT F250 | Current Topics in Construction Trades | 2 |
| ENVI F120 | Home Energy Basics | 1 |
| Wind | | |
| CTT F100 | Construction Technology Core | 3 |
| CTT F250 | Current Topics in Construction Trades | 1-3 |
| ENVI F120 | Home Energy Basics | 1 |
| Energy-Efficient Construction | | |
| CTT F100 | Construction Technology Core | 3 |
| CT S201 (https://catalog.uas.alaska.edu/search/?search=CT+S201) | Cold Climate Construction ¹ | 3 |
| Other | | |
| Other areas of study related to sustainable energy | | |

¹ CT S201 is offered by the University of Alaska Southeast.

Minimum Requirements for Sustainable Energy Occupational Endorsement: 12 credits

College of Rural and Community Development (<https://www.uaf.edu/rural/>)
907-474-7143

Admission Requirements

Complete the following admission requirements:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Sustainable Energy Occupational Endorsement: 12 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Sustainable Energy Program Requirements | | |
| ENVI F220 | Introduction to Sustainable Energy | 3 |
| Complete one of the following: | | 3 |
| CTT F106 | Construction Measuring | |
| MATH F105 | Intermediate Algebra | |
| TTCH F131 | Mathematics for the Trades | |
| <i>Electives</i> | | |
| Complete 6 credits from the following: | | 6 |
| CT S201 (https:// catalog.uas.alaska.edu/ search/? search=CT+S201) ¹ Cold Climate Construction | | |
| CTT F100 | Construction Technology Core | |
| ENVI F120 | Home Energy Basics | |
| ENVI F121 | Building Ventilation and Energy | |
| ENVI F122 | Energy Efficient Building Design and Simulation | |
| ENVI F170 | Solar Energy Basics | |
| ENVI F173 | Basics of Small Wind Systems | |
| ENVI F174 | Basics of Heat Pump Systems | |
| ENVI F175 | Introduction to Biomass Energy Systems | |
| ENVI F180 | Alaska Utility Lecture Series | |
| PHYS F102X | Energy and Society | |
| ENVI F101 | Introduction to Environmental Science | |
| RE A110 (https:// catalog.uaa.alaska.edu/ search/? search=RE+A110) ² Introduction to Solar Photovoltaic Systems | | |
| RE A130 (https:// catalog.uaa.alaska.edu/ search/? search=RE+A130) ² Introduction to Small Wind Systems | | |
| RE A150 (https:// catalog.uaa.alaska.edu/ search/? search=RE+A150) ² Basics of Ground-Source Heat Pump Systems | | |
| or other, advisor-approved electives | | |
| CTT F160 | Photovoltaic Systems I | |

| | |
|----------|---------------------------------------|
| CTT F161 | Photovoltaic Systems II |
| CTT F250 | Current Topics in Construction Trades |

¹ CT S201 is offered by the University of Alaska Southeast.

² RE A110, RE A130 and RE A150 are offered by the University of Alaska Anchorage.

O.E.C., Tribal Justice Occupational Endorsement

The occupational endorsement in tribal justice provides education specific to tribal courts and tribal justice in Alaska, preparing tribal court judges, clerks and administrators for employment in the tribal justice field. The endorsement also provides a pathway for continuing education for tribal justice professionals in Alaska. Applicants must be 16 years old to be admitted.

Minimum Requirements for Tribal Justice Occupational Endorsement: 9 credits

College of Rural and Community Development
Tribal Governance Program (<https://tribal.uaf.edu/>)
907-474-7143

Admission Requirements

Complete the following admission requirement:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Tribal Justice Occupational Endorsement: 9 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Tribal Justice Program Requirements | | |
| Complete the following: | | |
| TG F110 | Tribal Court Development for Alaska Tribes | 1 |
| TG F111 | Children's Topics in Tribal Justice | 1 |
| TG F112 | Federal Indian Law for Alaska Tribes | 1 |
| TG F113 | Tribal Code Development | 1 |
| TG F114 | Tribal Justice Responses to Community and Domestic Violence | 1 |
| TG F115 | Tribal Court Administration | 1 |
| TG F116 | Juvenile Justice in Tribal Court | 1 |
| TG F117 | Tribal Court Enforcement of Decisions | 1 |
| TG F118 | Tribal Community and Restorative Justice | 1 |

O.E.C., Welding, Entry-level Occupational Endorsement

Advances in welding technology, along with the advent of new materials and manufacturing processes, require that welders have a better knowledge of the science associated with welding in addition to manipulative skills. The entry-level welding occupational endorsement provides a cornerstone for skills and knowledge essential to being successful in the welding industry. As an American Welding Society School Excelling through National Skill Standards Education (AWS SENSE) training organization, our program offers students the opportunity to earn four separate welding process certificates as well as an AWS SENSE Entry-Level I certificate. Applicants must be 16 years old to be admitted.

Minimum Requirements for Entry-level Welding Occupational Endorsement: 24 credits

Community and Technical College
Welding and Materials Technology (<https://www.ctc.uaf.edu/programs/weld/>)
907-455-2800

Admission Requirements

Complete the following admissions requirement:

- Be at least 16 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C or better in each course.

Minimum Requirements for Entry-level Welding Occupational Endorsement: 24 credits

| Code | Title | Credits |
|--|---------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Entry-level Welding Program Requirements | | |
| Complete the following: | | |
| TTCH F131 | Mathematics for the Trades | 3 |
| WMT F103 | Welding I | 3 |
| WMT F105 | Welding II | 3 |
| WMT F130 | Shielded Metal Arc Welding | 3 |
| WMT F140 | Metal Fabrication | 3 |
| WMT F150 | Gas Tungsten Arc Welding | 3 |
| WMT F160 | Gas Metal Arc Welding | 3 |
| WMT F290 | Welding Proficiency Maintenance | 3 |

O.E.C., Wildland Fire Science Occupational Endorsement

The wildland fire science occupational endorsement provides students with the knowledge and skills to perform at the first level of wildland fire management. This includes managing a squad on a wildland fire crew, correct methods of operation for wildland fire chainsaws and pumps, and working around fire helicopters and aircraft. Completion of this program can lead to employment in the field, provide a foundation for wildland fire management, including in- and out-of-state wildland fire assignments, and act as a steppingstone to the Associate of Applied Science degree in wildland fire control. Completion of the wildland fire science occupational endorsement will create a well-rounded entry-level firefighter capable of filling positions on wildland fires. Applicants must be at least 18 years old to be admitted.

Minimum Requirements for Wildland Fire Science Occupational Endorsement: 11 credits

College of Rural and Community Development
Wildland Fire Science (<https://www.uaf.edu/iac/programs/fire-science/>)
907-474-7143

Admission Requirements

Complete the following admission requirement:

- Be at least 18 years old by the first day of the semester in which you are admitted.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Wildland Fire Science Occupational Endorsement: 11 credits

| Code | Title | Credits |
|--|--------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Wildland Fire Science Program Requirements | | |
| WFS F151 | Wildland Firefighter I | 3 |
| WFS F152 | Wildland Firefighter II | 3 |
| WFS F153 | Wildland Firefighter III | 2 |
| WFS F157 | Wildland Air Operations | 3 |

O.E.C., Yup'ik Language Competency Occupational Endorsement

The Yup'ik language competency occupational endorsement recognizes that acquisition of Yup'ik language competency in listening, speaking, reading, writing, grammar, composition, translating and transcribing are workforce skills needed by organizations throughout the Yukon-Kuskokwim region.

The courses chosen and testing criteria for the proposed Yup'ik language competency occupational endorsement were discussed with input from Walkie Charles, UAF associate professor of Alaska Native languages; Patrick Marlow, UAF linguistics program chair; Sally Samson, assistant professor of Yup'ik language and culture, UAF Kuskokwim Campus; Catherine Moses and Rosalie Lincoln, UAF Kuskokwim Campus Yup'ik adjunct instructors in Toksook Bay, Alaska; and Sheila Wallace, Lower Kuskokwim School District Yup'ik distance delivery instructor and Kuskokwim Campus adjunct instructor. Adjunct instructor Wallace approached Kuskokwim Campus to offer Yup'ik courses as high school dual-language credit and requested the University of Alaska to establish an occupational endorsement certificate in Yup'ik language competency to create a career pathway for fluent high school Yugtun speakers. These courses will provide students with a pathway for a Yup'ik language proficiency certificate, an A.A.S. degree in Yup'ik language proficiency, and/or a B.A. in Yup'ik language and culture. The rigor in the courses helps prepare students to meet the requirements for the State of Alaska's Seal of Biliiteracy, as well as the Alaska Performance Scholarship.

College of Rural and Community Development
Department of Alaska Native Languages (<https://www.uaf.edu/anlc/>)
907-474-7874

Admission Requirements

Complete the following admission requirements:

- Have at least basic conversational Yup'ik skills based on the UAF Yup'ik proficiency test or Yup'ik WorldSpeak assessment.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Yup'ik Language Competency Occupational Endorsement: 9 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 113) | | |
| Occupational Endorsement Requirements | | |
| Complete the occupational endorsement requirements. (p. 113) | | |
| Yup'ik Language Competency Program Requirements | | |
| Complete the following: | | |
| YUP F130 | Beginning Yup'ik Grammar | 3 |
| YUP F208 | Yup'ik Composition | 3 |
| YUP F240 | Introduction to Reading and Writing Yup'ik | 3 |

HOW TO EARN A CERTIFICATE OR ASSOCIATE DEGREE

How To Earn a Certificate or Associates Degree

To earn a UAF degree, three sets of requirements must be satisfied: general university requirements; certificate or degree requirements; and program (major) requirements. These requirements are all described in this section of the catalog. Requirements for each program major are found in the Certificate and Associate Degree Programs (p. 147) section.

If a degree program is delivered collaboratively within the UA system (e.g., information technology specialist, early childhood education, human services, rural human services), then the credits earned from each UA institution will be counted toward fulfillment of the degree requirements and fulfillment of the minimum institutional residency requirements. Institutional residency requirements are the minimum number of credits that must be earned from the campus where the degree is earned.

General University Requirements

At least 30 semester credits for a certificate and 60 semester credits for an associate degree, including transfer credits, must be earned at the 100-level or above. At least 15 semester credits applicable to any certificate or associate degree must be earned at UAF. A minimum cumulative GPA of 2.0 is required in all work as well as in the major field. A C- grade or higher must be earned in all courses required for a degree unless otherwise specified by the program major (major, minor, general education requirements and degree requirements). Some majors require higher GPAs for major coursework.

Unless otherwise specified by the appropriate academic unit, a course may be taken more than once toward fulfilling degree, certificate or major requirements. However, credit hours for such courses count only once toward total credits required for the degree or certificate.

| | Certificate | Associate Degree |
|---|---|---|
| Minimum number of credits required | 30 credits | 60 credits |
| Credits that must be earned at UAF (residence credit) | 15 credits | 15 credits |
| Grade point average required | 2.0 cumulative and in major | 2.0 cumulative and in major |
| Minimum grades required for major | No grade lower than C- in courses required for major. Some departments have higher requirements | No grade lower than C- in courses required for major. Some departments have higher requirements |
| Catalog year that can be used to meet requirements | May use any catalog in effect when enrolled as a degree-seeking student, regardless of major; five-year limit on catalog year | May use any catalog in effect when enrolled as a degree-seeking student, regardless of major; five-year limit on catalog year |

Second degree requirements

Only one A.A. degree may be earned; 12 credits beyond first A.A.S. degree and all requirements for the second degree must be met

CATALOG YEAR

For information on catalog year, please visit the Catalog Year section on the Academic Standards page. (p. 79)

MAJORS

A major may be declared when upon admittance to UAF as a degree undergraduate student. If a major hasn't been chosen, the major of general studies will be applied. Nondegree students are not eligible to declare a major, be assigned class standing or receive financial aid.

Students enrolled in associate degree or certificate programs who want to declare a bachelor's degree major must apply for admission to a degree program following the standard admission process for bachelor's degree programs. (See admission requirements in How to Earn a Bachelor's Degree (p. 198).)

• Changing a Major

Undergraduate students may change majors by completing a change of major form available from the Office of the Registrar forms page (<https://www.uaf.edu/reg/forms/>). A change of major becomes effective the semester it is submitted. Students who wish to change majors from one level to another level (e.g., from an associate degree to a bachelor's degree) must apply for admission to the degree program following the standard admission process.

CONCENTRATIONS

An area of emphasis, including the major core courses within a student's degree program, is termed a concentration. Some programs at UAF require a concentration, others do not. A student may only earn one degree in a specific discipline once. Using different concentrations within a degree program to count as different degrees is not allowed.

SECOND CERTIFICATE

To receive an additional certificate, the requirements for each certificate must be completed. It is not required to complete any additional credits beyond the requirements for each certificate.

SECOND ASSOCIATE DEGREE

To receive a second Associate of Applied Science degree, at least 12 credit hours beyond the first associate degree must be earned, as well as completion of all requirements for the major. As long the additional 12-hour requirement has been completed, a student may be awarded two degrees in one semester.

DEGREE REQUIREMENTS AND TIME LIMITS

Students may complete degree requirements in effect and published in the UAF catalog in any one of the previous five academic years in which enrolled as a degree student for a certificate or associate degree. A student is considered enrolled in a degree program when the appropriate degree student registration procedure has been completed. If a student is not enrolled for a semester or more, or if enrolled through the non-degree student registration process, a student isn't considered enrolled as a degree student during that time.

EXCEPTIONS TO DEGREE REQUIREMENTS

Occasionally an undergraduate student may request an exception to an academic requirement or regulation. Requests for an academic dispensation must be approved by petition. If a student submits a petition on the basis of a disability, the coordinator of Disability Services will be consulted. Undergraduate Petition forms are available at the Office of the Registrar or on the Office of the Registrar's forms page (<https://www.uaf.edu/reg/forms/>). Forms must be returned to the Office of the Registrar with the required approval signatures. The Office of the Registrar will note the completed petition in DegreeWorks once the appropriate person or committee has made a decision. Academic petitions fall into three categories, and each involves different processes:

- **General Education Requirement Petitions**

If a petition deals with baccalaureate general education requirements or the Associate of Arts or Science library science requirement, the advisor and the head of the department of the academic area involved must grant approval. Submit the signed petition to the Office of the Registrar. It will then be forwarded to the chair of the Faculty Senate Core/General Education Requirement Curriculum Review Committee for consideration.

- **Major or Minor Degree Requirement Petitions**

If the goal is to waive or substitute courses within a major or a minor's requirements, approval signatures from the advisor and the department or program head of the major or minor area. Submit the signed petition to the Office of the Registrar.

- **Petitions for Other Requirements**

If the petition deals with general university and/or specific requirements for the degree or other academic policies, approval is needed from the advisor and the dean or director of the college or school in which the major is located. Submit the signed petition to the Office of the Registrar. It will then be forwarded to the provost for consideration.

RESIDENCE CREDIT

Residence credit is course credit earned through any unit of UAF. Formal classroom instruction, correspondence study, distance-delivered courses, individual study or research at UAF are all considered residence credit. On the other hand, transfer credit, advanced placement credit, credit for prior learning, military service credit and credit granted through nationally prepared examinations are not considered residence credit, nor are credit-by-examination credits earned through locally prepared tests. None of these types of credit can be applied to UAF residency requirements.

RESIDENCY REQUIREMENT

Most universities have residency requirements that call for a certain number of credits toward a degree to be earned at the degree-granting school. At UAF, the residency requirement for both certificates and associate degrees is 15 resident credits.

ALASKA NATIVE-THEMED REQUIREMENTS

The Alaska Native-themed requirement is a degree requirement for all baccalaureate, associate of arts and associate of science degrees. The requirement may be met by taking a designated Alaska Native-themed course anywhere in the student's course of study, including general education requirements, major requirements, minor requirements and electives.

GRADUATION

- **Responsibility**

It is the student's responsibility to meet all requirements for graduation. Students are encouraged to work with their advisor and use DegreeWorks throughout their college career to ensure they are on track to graduate.

- **Application for Graduation**

A formal application and non-refundable fee for graduation are required to be filed with the Office of the Registrar. Application prior to the semester planned for graduation is encouraged. If the application is filed by the published deadline the graduation application fee is \$50. Late application for graduation is available by the published late graduation deadline for the semester. The fee for a late application is \$80. Applications for graduation filed after the late deadline are processed for graduation the following semester. Students who apply for graduation and who do not complete degree requirements by the end of the semester must reapply for graduation and repay the fee.

- **Diplomas and Commencement**

UAF issues diplomas to graduates three times a year: in September following summer sessions, in February at the end of the fall semester and in June at the end of the spring semester. Students who complete degree requirements for UA Board of Regents approved academic programs during the academic year are invited to participate in the annual commencement ceremony at the end of the spring semester.

Names of students receiving degrees/certificates appear in the commencement program and are released to the media unless a written request to withhold is submitted to the Office of the Registrar. Graduates are responsible for ordering caps and gowns through the UAF bookstore in early spring.

- **Graduation with Honors**

Graduation with honors is a tribute that recognizes academic achievement. Honors graduates have earned a cumulative GPA of 3.5 or higher in all college work. If a student's overall cumulative GPA is 3.5 or higher, a student graduates with the distinction of cum laude; 3.75 or higher, magna cum laude; 3.9 or higher and no grade lower than A-, summa cum laude. The student's cumulative GPA for graduation with honors is based on all college work attempted at UAF, including any repeated or omitted credits due to Fresh Start/academic bankruptcy.

For transfer students to be considered for graduation with honors, they must have:

- 3.5 cumulative GPA in all attempted UAF credits, and
- UAF residence credit of 24 semester hours for an associate degree.

Once those requirements are met, a cumulative GPA is calculated by combining all college work attempted at UAF, as well as all college work attempted at any other institutions the student attended, including repeated credits and any credits that may not have been accepted for transfer to UAF. The combined cumulative GPA must also be 3.5 or higher for a transfer student to graduate with honors.

Certificate and Associate Degree Requirements

Complete Summary of Certificate and Associate Degree Requirements (p. 139)

Types of Certificates and Associate Degrees

- **Certificate Programs**

Certificate programs are for students preparing for entry-level employment or upgrading in a specific occupation.

- **Associate of Science**

The A.S. degree represents the completion of a broad-based course of study with an emphasis on the sciences. This degree may serve as a stepping-stone to a science-related baccalaureate program. Only one A.S. degree may be earned.

- **Associate of Arts**

The A.A. is a program of study with an interdisciplinary approach useful for transferring to future degree programs or as a starting point for a career. An emphasis created in an A.A. program can fulfill general education requirements or become the basis for a minor in many bachelor's programs. The A.A. degree is offered at all UAF campuses as well as online. Students may earn only one A.A.

- **Associate of Applied Science**

The A.A.S. is for students preparing for entry-level employment or upgrading in a specific occupation. This degree is not intended for transfer into a four-year degree program. However, some courses within the A.A.S. degree may be accepted in a four-year bachelor's program. (Each course is considered on an individual basis.)

General Associate Degree Requirements

At least 60 semester hours, including transfer credits, must be completed to earn a UAF associate degree.

At least 15 credits applicable to any associate degree must be UAF resident credits.

See a list of all Certificate and Associate Degree programs here.
(p. 147)

Certificate and Associate Degree Programs

CERTIFICATE AND ASSOCIATE DEGREE PROGRAMS

- Accounting Technician (p. 147)
- Accounting, Applied (p. 148)
- Apprenticeship Technologies (p. 149)
- Associate of Arts (p. 150)
- Associate of Science (p. 150)
- Automotive Technology (p. 150)
- Aviation Maintenance (p. 151)
- Business Management, Applied (p. 155)
- Business, Applied (p. 157)
- Community Health (p. 160)
- Construction Management (p. 162)
- Culinary Arts and Hospitality (p. 163)
- Diesel/Heavy Equipment (p. 165)
- Drafting Technology (p. 166)
- Early Childhood Education (p. 167)
- Fire Science (p. 168)
- Health, Allied (p. 169)
- High Latitude Range Management (p. 175)
- Human Services (p. 176)
- Information Technology Specialist (p. 179)
- Instrumentation Technology (p. 182)
- Interdisciplinary Studies (p. 183)
- Local Knowledge Educator (p. 184)
- Native Language Education (p. 186)
- Paralegal Studies (p. 188)
- Paramedicine (p. 189)
- Piloting, Professional (p. 190)
- Process Technology (p. 191)
- Rural Human Services (p. 193)
- Tribal Governance (p. 194)
- Yup'ik Language Proficiency (p. 196)

Summary of Certificate and Associate Degree Requirements

Types of Certificates and Associate Degrees

- **Certificate Programs**

Certificate programs are for students preparing for entry-level employment or upgrading in a specific occupation.

- **Associate of Science**

The A.S. degree represents the completion of a broad-based course of study with an emphasis in the sciences. This degree may serve as a steppingstone to a science-related baccalaureate program. You may earn only one A.S. degree.

- **Associate of Arts**

The A.A. is a program of study with an interdisciplinary approach useful for transferring to future degree programs or as a starting point for a career. An emphasis created in an A.A. program can fulfill general education requirements or become the basis for a minor in many bachelor's programs. The A.A. degree is offered at all UAF campuses as well as online. Students may earn only one A.A.

- **Associate of Applied Science**

The A.A.S. is for students preparing for entry-level employment or upgrading in a specific occupation. This degree is not intended for transfer into a four-year degree program. However, some courses within the A.A.S. degree may be accepted in a four-year bachelor's program. (Each course is considered on an individual basis.)

General Associate Degree Requirements

You must have completed at least 60 semester hours, including transfer credits, to earn a UAF associate degree.

At least 15 credits applicable to any associate degree must be UAF resident credits.

See a list of all Certificate and Associate Degree programs here. (p. 147)

Certificates

Certificate Requirements

Certificate programs vary in length; however, you can usually complete them in one year. Certificates are awarded in specific occupational fields with emphasis on entering the job market. These certificates can serve as the basis for additional education and are the first step toward an Associate of Applied Science degree. For specific major requirements, refer to the degrees and programs section (p. 147).

If your degree program is delivered collaboratively within the UA system, credits you earn from each UA institution will be counted toward fulfillment of the degree requirements and fulfillment of the minimum institutional residency requirements.

You may enroll in any course for which you are eligible. To earn a certificate, you must formally be admitted to a certificate program and you must earn at least 30 credits, including transfer credit. Fifteen semester hours must be residence credits.

You must have a cumulative GPA of at least 2.0 in your major and overall. You must earn a C- grade or higher in all courses required for your degree, unless otherwise specified by your major (major, minor, general education requirements and degree requirements). Some majors require higher GPAs for major coursework. Programs of study for which certificates are granted must contain a recognizable body of instruction in the program-related areas of communication, computation and human relations.

Additional appropriate topics may include safety, industrial safety and environmental awareness. Instruction in the related instructional areas may be embedded within the program curriculum or taught in blocks of specialized instruction. Each approach, however, will have clearly identified content that is pertinent to the general program of study.

Note: Students planning to go on to a bachelor's degree need to work closely with their advisors and are encouraged to select courses meeting general education requirements and courses designated within majors and minors. Only those courses with an X designator count toward the baccalaureate general education requirements.

CERTIFICATE REQUIREMENTS

| Code | Title | Credits |
|---|--|----------------|
| Communication | | 2-3 |
| Complete one of the following: | | |
| ABUS F170 | Business English | |
| ABUS F271 | Business Communications | |
| COJO F121X | Introduction to Interpersonal Communication | |
| COJO F131X | Fundamentals of Oral Communication: Group Context | |
| COJO F141X | Fundamentals of Oral Communication: Public Context | |
| DEVS F104 | University Communications | |
| DEVS F105 | Academic Reading for College | |
| WRTG F111X | Writing Across Contexts | |
| WRTG F211X | Writing and the Humanities | |
| WRTG F212X | Writing and the Professions | |
| WRTG F213X | Writing and the Sciences | |
| WRTG F214X | Arguing Across Contexts | |
| Other program-approved discipline-based communication course or discipline-based courses with embedded communication content. | | |
| Computation | | 2-3 |
| Complete one of the following: | | |
| Any course at the F100-level or above in mathematical sciences (computer science, math or statistics). | | |
| ABUS F155 | Business Math | |
| ECE F117 | Practical Math Skills | |
| HLTH F116 | Mathematics in Health Care | |
| HUMS F117 | Practical Math Skills | |
| MATH F105 | Intermediate Algebra | |
| TTCH F131 | Mathematics for the Trades | |
| Other program-approved discipline-based computation course or discipline-based courses with embedded computation content. | | |
| Human Relations | | 2-3 |
| Complete one of the following: | | |
| ABUS F154 | Human Relations | |
| ANL F287 | Teaching Methods for Alaska Native Languages | |
| ANTH F100X | Individual, Society and Culture | |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers | |
| ECE F107X | Child Development II: The Preschool and Primary Years | |
| ED/PSY F245 | Child Development | |
| HLTH F106 | Human Behavior in Health Care | |
| HUMS F120 | Cultural Diversity in Human Services | |
| RHS F110 and RHS F115 | Cross-cultural Bridging Skills and Issues of Personal Development | |
| SOC F101X | Introduction to Sociology | |
| Other program-approved discipline-based human relations or discipline-based courses with embedded human relations content. | | |
| Major Specialty | | |
| At least 21 hours of major specialty courses | | 21 |
| Electives to Total | | 30 |

Associate of Arts

Associate of Arts Requirements

The Associate of Arts degree represents the completion of broad-based college study. This degree may serve as a starting point for your career or as a steppingstone to a bachelor's program. You may earn only one A.A. degree.

Students planning to go on to a bachelor's degree are advised to select courses meeting remaining general education requirements and courses designated within bachelor's degree majors and minors.

You must have a cumulative GPA of at least 2.0 in your major and overall. You must earn a C- grade or higher in all courses required for your degree, unless otherwise specified by your major (major, minor, general education requirements and degree requirements). Some majors require higher GPAs for major coursework.

The curriculum of the Associate of Arts degree consists of all courses required to meet the UAF baccalaureate general education requirements, with the following exception:

All credits for the A.A. degree must be at the F100 level or above, with 20 credits at the F200 level or above, and be distributed as follows:

| Code | Title | Credits |
|---------------------------------------|-------|-----------|
| General education requirement credits | | 35-40 |
| A.A. degree requirements | | 3-4 |
| General electives | | 19-24 |
| Total Credits | | 60 |

ASSOCIATE OF ARTS REQUIREMENTS

Minimum Requirements for Degree: 60 credits

General Education Requirements

| Code | Title | Credits |
|----------------------|-------|----------|
| Communication | | 9 |

Complete the following:

| | |
|---------------|--|
| COJO F121X | Introduction to Interpersonal Communication |
| or COJO F131X | Fundamentals of Oral Communication: Group Context |
| or COJO F141X | Fundamentals of Oral Communication: Public Context |
| WRTG F111X | Writing Across Contexts |
| WRTG F211X | Writing and the Humanities |
| or WRTG F212X | Writing and the Professions |
| or WRTG F213X | Writing and the Sciences |
| or WRTG F214X | Arguing Across Contexts |

| | |
|-------------|----------|
| Arts | 3 |
|-------------|----------|

Complete one of the following:

| | |
|--------------------|---|
| ART F105X | Beginning Drawing |
| ANS/FLPA F161X | Introduction to Alaska Native Performance |
| ANS F202X | Aesthetic Appreciation of Alaska Native Performance |
| ANS/MUS/ACNS F223X | Alaska Native Music |
| ART F200X | Explorations in Art |

| | |
|----------------------|-----------------------------------|
| ART F261X | History of World Art I |
| ART F262X | History of World Art II |
| ENGL/FLPA/COJO F217X | Introduction to the Study of Film |
| FLPA/COJO F105X | History of the Cinema |
| FLPA F121X | Fundamentals of Acting |
| FLPA F200X | Discovering Stage & Screen |
| FLPA F215X | Dramatic Literature and History |
| HUM F201X | Unity in the Arts |
| MUS F103X | Music Fundamentals |
| MUS F125X | Enjoying Jazz |
| MUS F200X | Explorations in Music |

| | |
|-------------------|------------|
| Humanities | 3-5 |
|-------------------|------------|

Complete one of the following:

| | |
|---------------|---|
| ANL F251X | Introduction to Athabascan Linguistics |
| ANL F255X | Introduction to Alaska Native Languages |
| COJO F101X | Media and Culture |
| COJO F102X | Introduction to Broadcasting |
| ENGL/FL F200X | World Literature |
| ENGL F201X | Texts and Contexts |
| ENGL F270X | Introduction to Creative Writing |
| LING F101X | Nature of Language |
| LING F216X | Languages of the World |
| PHIL F102X | Introduction to Philosophy |
| PHIL F104X | Logic and Reasoning |
| RELG F221X | Religions of the World |

OR take one of the following languages:

| | |
|------------|--------------------------------|
| ANL F141X | Beginning Dene / Athabascan I |
| ANL F142X | Beginning Dene / Athabascan II |
| ASLG F101X | American Sign Language I |
| ASLG F202X | American Sign Language II |
| CHNS F101X | Elementary Chinese I |
| CHNS F102X | Elementary Chinese II |
| FREN F101X | Elementary French I |
| FREN F102X | Elementary French II |
| GER F101X | Elementary German I |
| GER F102X | Elementary German II |
| INU F111X | Elementary Inupiaq I |
| INU F112X | Elementary Inupiaq II |
| JPN F101X | Elementary Japanese I |
| JPN F102X | Elementary Japanese II |
| LAT F101X | Beginning Latin I |
| LAT F102X | Beginning Latin II |
| RUSS F101X | Elementary Russian I |
| RUSS F102X | Elementary Russian II |
| SPAN F101X | Elementary Spanish I |
| SPAN F102X | Elementary Spanish II |
| YUP F101X | Elementary Central Yup'ik I |
| YUP F102X | Elementary Central Yup'ik II |

Social Sciences

6

Complete two courses from the following in two different disciplines:

| | |
|-----------------|--|
| ACCT F261X | Principles of Financial Accounting |
| ANS F111X | History of Colonization in Alaska: The Indigenous Response |
| ANS F242X | Indigenous Cultures of Alaska |
| ANTH F100X | Individual, Society and Culture |
| ANTH F101X | Introduction to Anthropology |
| ANTH F111X | Ancient Civilizations |
| ANTH F211X | Fundamentals of Archaeology |
| BA F151X | Introduction to Business |
| BA F254X | Personal Finance (s) |
| BA/SPRT F281X | Introduction to Sport Management |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers |
| ECE F107X | Child Development II: The Preschool and Primary Years |
| ECE F210X | Child Guidance |
| ECON F101X | Principles of Microeconomics |
| ECON F102X | Principles of Macroeconomics |
| ECON F111X | The Economy of Rural Alaska |
| ECON F120X | Introduction to Economic Analysis |
| ECON F235X | Introduction to Natural Resource Economics |
| HIST F100X | Modern World History |
| HIST F102X | Western Civilization Since 1500 |
| HIST F110X | History of Alaska Natives from Contact to the Present |
| HIST F122X | East Asian Civilization |
| HIST F132X | History of the U.S. |
| HUMS/JUST F125X | Introduction to Addictive Processes |
| JUST F110X | Introduction to Justice |
| JUST F251X | Criminology |
| PS F100X | Political Economy |
| PS F101X | Introduction to American Government and Politics |
| PS F201X | Comparative Politics |
| PS F221X | International Politics |
| PSY F101X | Introduction to Psychology |
| RD F200X | Rural Development in the North |
| SOC F101X | Introduction to Sociology |
| SOC F201X | Social Problems and Solutions |
| SWK F103X | Introduction to Social Work |
| WGS F201X | Introduction to Women, Gender and Sexuality Studies |

Additional Arts/Humanities/Social Science 3-5

Complete one additional course from the arts, humanities or social science courses listed above.

Mathematics 3-4

Complete one of the following:

| | |
|------------|--|
| MATH F113X | Numbers and Society |
| MATH F122X | Essential Precalculus with Applications ¹ |

| | |
|------------|---|
| MATH F151X | College Algebra for Calculus ¹ |
| MATH F152X | Trigonometry |
| MATH F156X | Precalculus |
| MATH F230X | Essential Calculus with Applications ^{2,3} |
| MATH F251X | Calculus I ^{2,3} |
| MATH F252X | Calculus II ³ |
| MATH F253X | Calculus III ³ |
| STAT F200X | Elementary Statistics |

Natural Sciences 8

Complete two of the following:

| | |
|------------|---|
| ATM F101X | Weather and Climate of Alaska |
| BIOL F100X | Human Biology |
| BIOL F103X | Biology and Society |
| BIOL F104X | Natural History of Alaska |
| BIOL F111X | Human Anatomy and Physiology I |
| BIOL F112X | Human Anatomy and Physiology II |
| BIOL F115X | Fundamentals of Biology I |
| BIOL F116X | Fundamentals of Biology II |
| BIOL F120X | Introduction to Human Nutrition |
| CHEM F100X | Chemistry in Complex Systems |
| CHEM F103X | Introduction to General Chemistry |
| CHEM F104X | Introduction to Organic Chemistry and Biochemistry |
| CHEM F105X | General Chemistry I |
| CHEM F106X | General Chemistry II |
| CHEM F111X | Introduction to Environmental Chemistry of the Arctic |
| GEOS F101X | The Dynamic Earth |
| GEOS F106X | Life in the Age of Dinosaurs |
| GEOS F111X | Earth and Environment: Elements of Physical Geography |
| GEOS F112X | The History of Earth and Life |
| GEOS F120X | Glaciers, Earthquakes and Volcanoes: Past, Present and Future |
| MSL F111X | The Oceans |
| PHYS F102X | Energy and Society |
| PHYS F115X | Physical Sciences |
| PHYS F123X | College Physics I |
| PHYS F124X | College Physics II |
| PHYS F165X | Introduction to Astronomy |
| PHYS F211X | General Physics I |
| PHYS F212X | General Physics II |
| PHYS F213X | Elementary Modern Physics |

¹ You may earn credit for MATH F122X or MATH F151X, but not both.

² You may earn credit for MATH F230X or MATH F251X, but not both.

³ Or any math course having one of these as a prerequisite.

A.A. Degree Requirements

| Code | Title | Credits |
|---|----------------------------------|---------|
| Library and Information Research | | |
| Complete one of the following prior to junior standing: | | 0-1 |
| LS F101X | Library Information and Research | |

Successful completion of library skills competency test

Alaska Native-themed Requirement

During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses.

3

Complete the Alaska Native-themed requirements.
(p. 225)

Associate of Applied Science

Associate of Applied Science Requirements

Associate of applied science degrees are awarded in specific occupational fields with emphasis on entering the job market. This degree, usually seen as a terminal degree, can serve as the basis for additional education. For specific major requirements, see the Certificate and Associate Degree Programs (p. 147) section.

Students planning to go on to a bachelor's degree need to work closely with their advisors and are encouraged to select courses meeting general education requirements and courses designated within majors and minors. Only courses with an X designator count towards the baccalaureate general education requirements (GER).

You must have a cumulative GPA of at least 2.0 in your major and overall. You must earn a C- grade or higher in all courses required for your degree, unless otherwise specified by your major (major, minor, general education requirements and degree requirements). Some majors require higher GPAs for major coursework.

All credits for the A.A.S. degree must be at the F100 level or above and be distributed as follows:

ASSOCIATE OF APPLIED SCIENCE REQUIREMENTS

Minimum Requirements for Degree: 60 credits

| Code | Title | Credits |
|---|--|----------|
| Communication | | 9 |
| Complete the following: | | |
| ABUS F271 | Business Communications | |
| | or WRTG F211X Writing and the Humanities | |
| | or WRTG F212X Writing and the Professions | |
| | or WRTG F213X Writing and the Sciences | |
| | or WRTG F214X Arguing Across Contexts | |
| COJO F121X | Introduction to Interpersonal Communication | |
| | or COJO F131X Fundamentals of Oral Communication: Group Context | |
| | or COJO F141X Fundamentals of Oral Communication: Public Context | |
| WRTG F111X | Writing Across Contexts | |
| Computation | | 3 |
| Complete one of the following: | | |
| Any course at the F100 level or above in mathematical sciences (computer science, math or statistics) | | |
| ABUS F155 | Business Math | |
| ECE F117 | Practical Math Skills | |
| HLTH F116 | Mathematics in Health Care | |
| HUMS F117 | Practical Math Skills | |
| MATH F105 | Intermediate Algebra | |
| TTCH F131 | Mathematics for the Trades | |
| Other program-approved discipline-based computation course or discipline-based course with embedded computation content | | |
| Human Relations | | 3 |
| Complete one of the following: | | |

| | |
|---|---|
| ABUS F154 | Human Relations |
| ANL F287 | Teaching Methods for Alaska Native Languages |
| ANTH F100X/ SOC F101X | Individual, Society and Culture |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers |
| ECE F107X | Child Development II: The Preschool and Primary Years |
| ED/PSY F245 | Child Development |
| HLTH F106 | Human Behavior in Health Care |
| HUMS F120 | Cultural Diversity in Human Services |
| RHS F110 and RHS F115 | Cross-cultural Bridging Skills and Issues of Personal Development |
| Other program-approved discipline-based human relations course or discipline-based course with embedded human relations content | |
| Major Specialty | |
| At least 30 hours of major specialty courses | 30 |
| Electives to total | 60 |

Associate of Science

Associate of Science Requirements

The Associate of Science degree represents the completion of a broad-based course of study with an emphasis in the sciences. This degree may serve as a steppingstone to a science-related baccalaureate program.

You may earn only one A.S. degree.

You must have a cumulative GPA of at least 2.0 in your major and overall. You must earn a C- grade or higher in all courses required for your degree, unless otherwise specified by your major (major, minor, general education requirements and degree requirements). Some majors require higher GPAs for major course work.

ASSOCIATE OF SCIENCE REQUIREMENTS

Minimum Requirements for Degree: 60 credits

General Education Requirements

| Code | Title | Credits |
|--------------------------------|---|------------|
| Communication | | 9 |
| Complete the following: | | |
| COJO F121X | Introduction to Interpersonal Communication | |
| or COJO F131X | Fundamentals of Oral Communication: Group Context | |
| or COJO F141X | Fundamentals of Oral Communication: Public Context | |
| WRTG F111X | Writing Across Contexts | |
| WRTG F211X | Writing and the Humanities | |
| or WRTG F212X | Writing and the Professions | |
| or WRTG F213X | Writing and the Sciences | |
| or WRTG F214X | Arguing Across Contexts | |
| Arts | | 3 |
| Complete one of the following: | | |
| ART F105X | Beginning Drawing | |
| ANS/FLPA F161X | Introduction to Alaska Native Performance | |
| ANS F202X | Aesthetic Appreciation of Alaska Native Performance | |
| ANS/MUS/ACNS F223X | Alaska Native Music | |
| ART F200X | Explorations in Art | |
| ART F261X | History of World Art I | |
| ART F262X | History of World Art II | |
| ENGL/FLPA/COJO F217X | Introduction to the Study of Film | |
| FLPA/COJO F105X | History of the Cinema | |
| FLPA F121X | Fundamentals of Acting | |
| FLPA F200X | Discovering Stage & Screen | |
| FLPA F215X | Dramatic Literature and History | |
| HUM F201X | Unity in the Arts | |
| MUS F103X | Music Fundamentals | |
| MUS F125X | Enjoying Jazz | |
| MUS F200X | Explorations in Music | |
| Humanities | | 3-5 |

Complete one of the following:

| | |
|---|---|
| ANL F251X | Introduction to Athabascan Linguistics |
| ANL F255X | Introduction to Alaska Native Languages |
| COJO F101X | Media and Culture |
| COJO F102X | Introduction to Broadcasting |
| ENGL/FL F200X | World Literature |
| ENGL F201X | Texts and Contexts |
| ENGL F270X | Introduction to Creative Writing |
| LING F101X | Nature of Language |
| LING F216X | Languages of the World |
| PHIL F102X | Introduction to Philosophy |
| PHIL F104X | Logic and Reasoning |
| RELG F221X | Religions of the World |
| OR complete one of the following languages: | |
| ANL F141X | Beginning Dene / Athabascan I |
| ANL F142X | Beginning Dene / Athabascan II |
| ASLG F101X | American Sign Language I |
| ASLG F202X | American Sign Language II |
| CHNS F101X | Elementary Chinese I |
| CHNS F102X | Elementary Chinese II |
| FREN F101X | Elementary French I |
| FREN F102X | Elementary French II |
| GER F101X | Elementary German I |
| GER F102X | Elementary German II |
| INU F111X | Elementary Inupiaq I |
| INU F112X | Elementary Inupiaq II |
| JPN F101X | Elementary Japanese I |
| JPN F102X | Elementary Japanese II |
| LAT F101X | Beginning Latin I |
| LAT F102X | Beginning Latin II |
| RUSS F101X | Elementary Russian I |
| RUSS F102X | Elementary Russian II |
| SPAN F101X | Elementary Spanish I |
| SPAN F102X | Elementary Spanish II |
| YUP F101X | Elementary Central Yup'ik I |
| YUP F102X | Elementary Central Yup'ik II |

Social Sciences **6**

Complete two courses from the following in two different disciplines:

| | |
|---------------|--|
| ACCT F261X | Principles of Financial Accounting |
| ANS F111X | History of Colonization in Alaska: The Indigenous Response |
| ANS F242X | Indigenous Cultures of Alaska |
| ANTH F100X | Individual, Society and Culture |
| ANTH F101X | Introduction to Anthropology |
| ANTH F111X | Ancient Civilizations |
| ANTH F211X | Fundamentals of Archaeology |
| BA F151X | Introduction to Business |
| BA F254X | Personal Finance (s) |
| BA/SPRT F281X | Introduction to Sport Management |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers |

| | |
|-----------------|---|
| ECE F107X | Child Development II: The Preschool and Primary Years |
| ECE F210X | Child Guidance |
| ECON F101X | Principles of Microeconomics |
| ECON F102X | Principles of Macroeconomics |
| ECON F111X | The Economy of Rural Alaska |
| ECON F120X | Introduction to Economic Analysis |
| ECON F235X | Introduction to Natural Resource Economics |
| HIST F100X | Modern World History |
| HIST F102X | Western Civilization Since 1500 |
| HIST F110X | History of Alaska Natives from Contact to the Present |
| HIST F122X | East Asian Civilization |
| HIST F132X | History of the U.S. |
| HUMS/JUST F125X | Introduction to Addictive Processes |
| JUST F110X | Introduction to Justice |
| JUST F251X | Criminology |
| PS F100X | Political Economy |
| PS F101X | Introduction to American Government and Politics |
| PS F201X | Comparative Politics |
| PS F221X | International Politics |
| PSY F101X | Introduction to Psychology |
| RD F200X | Rural Development in the North |
| SOC F101X | Introduction to Sociology |
| SOC F201X | Social Problems and Solutions |
| SWK F103X | Introduction to Social Work |
| WGS F201X | Introduction to Women, Gender and Sexuality Studies |

Additional Arts/Humanities/Social Science 3-5

Complete one additional course from the arts, humanities or social science courses listed above.

Mathematics 3-4

Complete one of the following:

| | |
|------------|--|
| MATH F113X | Numbers and Society |
| MATH F122X | Essential Precalculus with Applications ¹ |
| MATH F151X | College Algebra for Calculus ¹ |
| MATH F152X | Trigonometry |
| MATH F156X | Precalculus |
| MATH F230X | Essential Calculus with Applications ^{2,3} |
| MATH F251X | Calculus I ^{2,3} |
| MATH F252X | Calculus II ³ |
| MATH F253X | Calculus III ³ |
| STAT F200X | Elementary Statistics |

Natural Sciences 16

Complete four from the following:⁴

| | |
|------------|-------------------------------|
| ATM F101X | Weather and Climate of Alaska |
| BIOL F100X | Human Biology |
| BIOL F103X | Biology and Society |
| BIOL F104X | Natural History of Alaska |

| | |
|------------|---|
| BIOL F111X | Human Anatomy and Physiology I |
| BIOL F112X | Human Anatomy and Physiology II |
| BIOL F115X | Fundamentals of Biology I |
| BIOL F116X | Fundamentals of Biology II |
| BIOL F120X | Introduction to Human Nutrition |
| CHEM F100X | Chemistry in Complex Systems |
| CHEM F103X | Introduction to General Chemistry |
| CHEM F104X | Introduction to Organic Chemistry and Biochemistry |
| CHEM F105X | General Chemistry I |
| CHEM F106X | General Chemistry II |
| CHEM F111X | Introduction to Environmental Chemistry of the Arctic |
| GEOS F101X | The Dynamic Earth |
| GEOS F106X | Life in the Age of Dinosaurs |
| GEOS F111X | Earth and Environment: Elements of Physical Geography |
| GEOS F112X | The History of Earth and Life |
| GEOS F120X | Glaciers, Earthquakes and Volcanoes: Past, Present and Future |
| MSL F111X | The Oceans |
| PHYS F102X | Energy and Society |
| PHYS F115X | Physical Sciences |
| PHYS F123X | College Physics I |
| PHYS F124X | College Physics II |
| PHYS F165X | Introduction to Astronomy |
| PHYS F211X | General Physics I |
| PHYS F212X | General Physics II |
| PHYS F213X | Elementary Modern Physics |

Concentration Specialty 15

Complete 15 credits of concentration specialty courses as approved by the department

¹ You may earn credit for MATH F122X or MATH F151X, but not both.

² You may earn credit for MATH F230X or MATH F251X, but not both.

³ Or any math course having one of these as a prerequisite.

⁴ Complete a one-year sequence in one natural science beyond the baccalaureate general education requirements. The total courses used to satisfy this requirement shall represent at least two different natural sciences.

A.S. Degree Requirements

| Code | Title | Credits |
|---|----------------------------------|---------|
| Library and Information Research | | |
| Complete one of the following prior to junior standing: | | 0-1 |
| LS F101X | Library Information and Research | |
| Successful completion of library skills competency test | | |

Alaska Native-themed Requirement

| | |
|---|---|
| During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. | 3 |
|---|---|

Complete the Alaska Native-themed requirements.
(p. 225)

Certificate and Associate Degree Programs

Accounting Technician Certificate

The accounting technician program prepares students for entry-level accounting positions in payables and/or receivables, bookkeeping and payroll accounting. This program covers financial decision-making tools for the small-business operator as well.

Courses in this program address the concerns of modern businesspeople and provide training to enhance business success. The accounting technician certificate represents the first year of training toward the applied accounting A.A.S. degree.

Students entering the certificate program are expected to have basic computer skills equivalent to CIOS F150. Classes are offered online and during times that accommodate working students.

Community and Technical College
Applied Accounting (<https://www.ctc.uaf.edu/programs/accounting-applied/>)
907-455-2800

Programs Certificate

- Accounting Technician (p. 147)

Certificate, Accounting Technician

Students must earn a C- grade or better in each course.

Minimum Requirements for Accounting Technician Certificate: 30 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements, complete: | | |
| <i>Communication</i> | | |
| ABUS F170 | Business English | |
| or ABUS F271 | Business Communications | |
| or WRTG F111X | Writing Across Contexts | |
| <i>Computation</i> | | |
| ABUS F155 | Business Math (or MATH at the 100 level or above) | |
| <i>Human Relations</i> | | |
| ABUS F154 | Human Relations (or other UAF certificate-approved human relations course) | |
| Accounting Technician Program Requirements | | |
| Complete the following: | | |
| ABUS F101 | Principles of Accounting I | 3 |
| ABUS F141 | Payroll Accounting | 3 |
| ABUS F201 | Principles of Accounting II | 3 |
| or ABUS F235 | Fund Accounting for Nonprofits | |
| ABUS F203 | Accounting Capstone | 3 |
| ABUS F210 | Income Tax | 3 |
| ABUS F220 | Microcomputer Accounting: QuickBooks | 3 |
| BA F151X | Introduction to Business | 3 |

Accounting, Applied

A.A.S. Degree

The applied accounting program prepares students for entry- and midlevel accounting positions in payables and/or receivables, bookkeeping and payroll accounting. This program covers financial decision-making tools for the small-business operator as well.

Courses in the applied accounting program address the concerns of modern businesspeople and provide training to enhance business success.

Students entering the A.A.S. program are expected to have basic computer skills equivalent to CIOS F150. Classes are offered online and during times that accommodate working students.

Minimum Requirements for Applied Accounting A.A.S. Degree: 60 credits

Community and Technical College
Applied Accounting (<https://www.ctc.uaf.edu/programs/accounting-applied/>)
907-455-2800

Programs

Degree

- A.A.S., Accounting, Applied (p. 148)

A.A.S, Accounting, Applied

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Applied Accounting A.A.S.: 60 credits

| Code | Title | Credits |
|--|--------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) ¹ | | |
| Applied Accounting Program Requirements | | |
| Complete the following: | | |
| ABUS F101 | Principles of Accounting I | 3 |
| ABUS F141 | Payroll Accounting | 3 |
| ABUS F175 | Customer Service | 3 |
| or ABUS F179 | Fundamentals of Supervision | |
| ABUS F201 | Principles of Accounting II | 3 |
| ABUS F202 | Principles of Accounting III | 3 |
| ABUS F203 | Accounting Capstone | 3 |
| ABUS F210 | Income Tax | 3 |
| ABUS F220 | Microcomputer Accounting: QuickBooks | 3 |
| ABUS F233 | Financial Management | 3 |
| ABUS F235 | Fund Accounting for Nonprofits | 3 |
| or ABUS F160 | Principles of Banking | |
| BA F151X | Introduction to Business | 3 |
| CIOS F135 | Microcomputer Spreadsheets | 3 |
| or CIOS F240 | Microcomputer Databases | |
| Department-recommended electives | | 9 |

¹ As part of the A.A.S. degree requirements, it is recommended, though not required, that students complete ABUS F154 for the human relations requirement and ABUS F155 for the computation requirement.

Apprenticeship Technologies

A.A.S. Degree

The A.A.S. degree in apprenticeship technologies provides career and technical training and supporting course work to prepare students for the rapidly changing global workplace. The program also helps Alaska industries by training workers who can meet increasing certification requirements which reflect complex business and industrial standards.

The apprenticeship technologies program is a 60-credit A.A.S. degree delivered collaboratively through UAA, UAF and UAS. The practical integration of general course work and training for vocational-technical trades specifically reflects the commitment of the university to high-quality instruction and public service. Individuals earning this degree must complete a formal apprenticeship program and hold journey-level status in trades or occupations (including occupational license or occupational certificate) recognized by the U.S. Department of Labor's Training and Employment Administration.

Students declaring a major in apprenticeship technologies must present documentation of acceptance into an apprenticeship program meeting the requirements of the U.S. Department of Labor, Training and Employment Administration. The appropriate College of Rural and Community Development campus will review the documentation and may recommend up to 38 credits of course work following completion of all courses listed below. Students are encouraged to begin the required courses while completing the apprenticeship program to expand the quality and breadth of the program. Students who complete this program may be eligible to enroll in the B.S. technology degree program at UAA or the B.A.A.S. degree program at UAF.

Minimum Requirements for Apprenticeship Technologies A.A.S. Degree: 60 credits

Community and Technical College
Apprenticeship Technologies (<https://www.ctc.uaf.edu/programs/apprenticeship-technology/>)
907-455-2800

Programs Degrees

- A.A.S., Apprenticeship Technologies (p. 149)

A.A.S., Apprenticeship Technologies

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Apprenticeship Technologies A.A.S.: 60 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| As part of the A.A.S. requirements complete the following: | | |
| <i>Communication</i> | | |
| COJO F131X | Fundamentals of Oral Communication: Group Context | |
| or COJO F141X | Fundamentals of Oral Communication: Public Context | |
| WRTG F111X | Writing Across Contexts | |
| WRTG F212X | Writing and the Professions | |
| Apprenticeship Technologies Program Requirements | | |
| Complete one of the following: | | |
| MATH F105 | Intermediate Algebra | |
| STAT F200X | Elementary Statistics | |
| Any MATH course at the 100 level or higher | | |
| Complete one of the following: | | |
| ABUS F154 | Human Relations | |
| ANTH F100X | Individual, Society and Culture | |
| SOC F101X | Introduction to Sociology | |
| Safety, computer, business, technical or other advisor-approved courses linked to an identified education or career pathway | | 6 |
| Approved apprenticeship program transfer of credit maximum | | 38 |
| Electives to complete 60 credits as needed | | |

Associate of Arts

A.A. Degree

The Associate of Arts degree is offered at all UAF campuses. The degree offers a rigorous program of study for the serious student who eventually intends to transfer to a bachelor's degree program. The degree may serve as a starting point for a career or as a steppingstone to a bachelor's program. You may earn only one A.A. degree.

Minimum Requirements for Associate of Arts Degree: 60 credits

Community and Technical College
Associate of Arts (<https://www.ctc.uaf.edu/programs/aa/>)
907-455-2800

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Associate of Arts Degree: 60 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A. Degree Requirements | | |
| Complete the A.A. degree requirements. (p. 141) | | |

Associate of Science

A.S. Degree

The Associate of Science (A.S.) degree represents the completion of a broad-based course of study with an emphasis in the sciences. This degree may serve as a stepping-stone to a science-related baccalaureate program. You may earn only one A.S. degree.

Minimum Requirements for Associate of Science Degree: 60 credits

College of Rural and Community Development
Associate of Science Degree (<https://www.uaf.edu/iac/associateofsciencedegree/>)
907-474-7143

Admissions Requirements

Complete the following admission requirements:

- cumulative GPA of at least 2.0 in major and overall GPA.
- a C- grade or higher in all courses required for student's degree, unless otherwise specified by the specific major.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Degree: 60 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.S. Degree Requirements | | |

| | | |
|---|--|-------|
| Complete the A.S. degree requirements. (p. 145) | | |
| Concentration | | |
| Complete one of the following concentrations: | | 15-17 |
| General Science | | |
| Ethnobotany | | |

¹ All credits for the A.S. degree must be at the 100 level or above with 20 credits at the 200 level or above. Variation in credits depends on the concentration area.

Concentrations

GENERAL SCIENCE

| Code | Title | Credits |
|------|--|---------|
| | Science-focused area of study in natural science, mathematics, statistics, engineering, computer science or from a Bachelor of Science degree area as determined in coordination with your advisor | 15 |

ETHNOBOTANY

| Code | Title | Credits |
|------|--|---------|
| | Complete 17 credits of Ethnobotany courses | 17 |

Automotive Technology Certificate

The automotive technology program gives students the education and training to become an entry-level automotive technician. The automotive service industry is constantly changing as cars become more complicated. Highly trained technicians are needed to understand, diagnose and repair modern automobiles.

The program emphasizes hands-on training and in-class experience as students perform preventive maintenance inspections, determine causes of equipment problems and make necessary repairs and adjustments to the complex systems that make up today's cars. The certificate training qualifies students for entry-level positions within the automotive service and repair industry in the areas of electricity/electronics, brakes, suspension and alignment, and engine performance.

Successful graduates from the automotive technology program go on to careers in dealerships, independent shops, service/IM stations, fleet repair facilities and aviation ground support. Salaries vary depending on job placement and the student's skill level.

Minimum Requirements for Automotive Technology Certificate: 34 credits

Community and Technical College
Automotive Technology (<https://www.ctc.uaf.edu/programs/Automotive/>)
907-455-2800

Programs Certificate

- Automotive Technology (p. 151)

Certificate, Automotive Technology

Students must earn a C grade or better in each course.

Minimum Requirements for Automotive Technology Certificate: 34 credits

| Code | Title | Credits |
|--|---------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Automotive Technology Program Requirements | | |
| Complete the following: | | |
| AUTO F102 | Introduction to Automotive Technology | 3 |
| AUTO F110 | Basic Electrical Systems | 3 |
| AUTO F122 | Engine Theory and Diagnosis | 3 |
| AUTO F131 | Automotive Electrical II | 3 |
| AUTO F150 | Brake Systems | 4 |
| AUTO F162 | Suspension Alignment | 4 |
| AUTO F190 | Automotive Practicum I | 4 |
| AUTO F202 | Auto Fuel and Emissions Systems | 4 |
| AUTO F222 | Automotive Engine Performance | 3 |
| AUTO F227 | Automotive Electrical III | 3 |

¹ As part of the certificate requirements, the communication, computation and human relations content are embedded in the major required courses for this program.

Aviation Maintenance

Certificate; A.A.S. Degree

Aviation maintenance offers an A.A.S. degree and certificates in three areas: airframe, powerplant, or airframe and powerplant.

Students who receive a certificate in airframe and powerplant may elect to complete the A.A.S. degree in aviation maintenance to enhance their employability.

Students in the airframe and powerplant certificate program may complete requirements for the Federal Aviation Administration mechanic's certificate with both airframe and powerplant ratings in as little as one year. The aviation maintenance program covers many subject areas, but it places special emphasis on those skills most sought after in the Alaska job market. Through classroom and hands-on laboratory instruction, this intensive curriculum prepares students for entry into the aviation field. Graduates who pass the FAA examinations for the airframe and powerplant ratings usually qualify for entry-level positions in the maintenance, repair, overhaul and modification of aircraft.

Students interested in qualifying for an FAA airframe mechanic's certificate may choose to earn only the airframe certificate. Those who wish to qualify for an FAA powerplant mechanic's certificate may choose to earn only the powerplant certificate.

Admission to the airframe and powerplant programs is at the discretion of the program faculty and requires an interview with the faculty advisor. The program normally starts around the end of August of each year.

Minimum Requirements for Airframe and Powerplant Certificates: 31-49 credits; for Aviation Maintenance Degree: 64 credits

Community and Technical College

Aviation Maintenance (<https://www.ctc.uaf.edu/programs/amt/>)
907-455-2800

Programs Degree

- A.A.S., Aviation Maintenance (p. 152)

Certificates

- Airframe and Powerplant (p. 153)
- Airframe (p. 152)
- Powerplant (p. 154)

A.A.S., Aviation Maintenance

Students must earn a C- grade or better in each course.

Minimum Requirements for Aviation Maintenance A.A.S.: 64 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| | Complete the general university requirements. (p. 135) | |
| A.A.S. Degree Requirements | | |
| | Complete the A.A.S. degree requirements. (p. 144) | |
| Aviation Maintenance Program Requirements | | |
| | Complete the Airframe and Powerplant certificate requirements. (p. 153) | 49 |

Certificate, Airframe

Minimum Requirements for Airframe Certificate: 31 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| | Complete the general university requirements. (p. 135) | |
| Certificate Requirements | | |
| | Complete the certificate requirements. (p. 139) ¹ | |
| Airframe Program Requirements | | |
| | Complete the following: | |
| AFPM F145 | Basic Mathematics | 1 |
| AFPM F146 | Basic Electricity | 2 |
| AFPM F147 | Physics for Mechanics | 0.5 |
| AFPM F148 | Aircraft Drawing | 1 |
| AFPM F149 | Fluid Lines and Fittings | 0.5 |
| AFPM F150 | Materials and Processes | 2 |
| AFPM F151 | Cleaning and Corrosion Control | 1 |
| AFPM F152 | Federal Aviation Regulations | 1 |
| AFPM F153 | Weight and Balance | 1 |
| AFPM F154 | Ground Operations and Servicing | 0.5 |
| Airframe Structures Requirements | | |
| | Complete the following: | |
| AFPM F261 | Nonmetallic Structures | 1 |
| AFPM F262 | Aircraft Coverings | 1 |
| AFPM F263 | Aircraft Finishes | 0.5 |
| AFPM F264 | Sheet Metal Structures | 3 |
| AFPM F265 | Aircraft Welding | 1.5 |
| AFPM F266 | Assembly and Rigging | 1.5 |
| AFPM F267 | Airframe Inspections | 0.5 |
| AFPM F270 | Airframe Testing | 0.5 |
| Airframe Systems and Components Requirements | | |
| | Complete the following: | |
| AFPM F230 | Aircraft Electrical Systems | 2.5 |
| AFPM F253 | Transport Category Aircraft | 1 |
| AFPM F254 | Ice and Rain Control Systems | 0.5 |
| AFPM F256 | Communications and Navigation Systems | 0.5 |
| AFPM F258 | Cabin Atmosphere Control Systems | 1 |
| AFPM F259 | Hydraulic and Pneumatic Systems | 1.5 |
| AFPM F260 | Aircraft Landing Gear Systems | 1.5 |
| Combined Systems and Components Requirements | | |
| | Complete the following: | |
| AFPM F251 | Fuel Systems | 1.5 |
| AFPM F255 | Fire Protection Systems | 0.5 |
| AFPM F257 | Instrument Systems | 0.5 |

¹ As part of the certificate requirements, the communication, computation and human relations content is embedded in the major required courses for this program.

Certificate, Airframe and Powerplant

Minimum Requirements for Airframe and Powerplant Certificate: 49 credits

| Code | Title | Credits |
|--|---------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Airframe and Powerplant Program Requirements | | |
| Complete the following: | | |
| AFPM F145 | Basic Mathematics | 1 |
| AFPM F146 | Basic Electricity | 2 |
| AFPM F147 | Physics for Mechanics | 0.5 |
| AFPM F148 | Aircraft Drawing | 1 |
| AFPM F149 | Fluid Lines and Fittings | 0.5 |
| AFPM F150 | Materials and Processes | 2 |
| AFPM F151 | Cleaning and Corrosion Control | 1 |
| AFPM F152 | Federal Aviation Regulations | 1 |
| AFPM F153 | Weight and Balance | 1 |
| AFPM F154 | Ground Operations and Servicing | 0.5 |
| Airframe Structures Requirements | | |
| Complete the following: | | |
| AFPM F261 | Nonmetallic Structures | 1 |
| AFPM F262 | Aircraft Coverings | 1 |
| AFPM F263 | Aircraft Finishes | 0.5 |
| AFPM F264 | Sheet Metal Structures | 3 |
| AFPM F265 | Aircraft Welding | 1.5 |
| AFPM F266 | Assembly and Rigging | 1.5 |
| AFPM F267 | Airframe Inspections | 0.5 |
| AFPM F270 | Airframe Testing | 0.5 |
| Airframe Systems and Components Requirements | | |
| Complete the following: | | |
| AFPM F230 | Aircraft Electrical Systems | 2.5 |
| AFPM F253 | Transport Category Aircraft | 1 |
| AFPM F254 | Ice and Rain Control Systems | 0.5 |
| AFPM F256 | Communications and Navigation Systems | 0.5 |
| AFPM F258 | Cabin Atmosphere Control Systems | 1 |
| AFPM F259 | Hydraulic and Pneumatic Systems | 1.5 |
| AFPM F260 | Aircraft Landing Gear Systems | 1.5 |
| Powerplant Theory and Maintenance Requirements | | |
| Complete the following: | | |
| AFPM F235 | Aircraft Reciprocating Engines | 4.5 |
| AFPM F240 | Turbine Engines | 2 |
| AFPM F271 | Powerplant Inspections | 0.5 |
| AFPM F272 | Powerplant Testing | 0.5 |
| Powerplant Systems and Components Requirements | | |
| Complete the following: | | |
| AFPM F231 | Powerplant Electrical Systems | 1.5 |
| AFPM F244 | Lubricating Systems | 1.5 |
| AFPM F245 | Ignition Systems | 2 |

| | | |
|-----------|----------------------------|-----|
| AFPM F246 | Fuel Metering Systems | 2 |
| AFPM F248 | Induction Systems | 0.5 |
| AFPM F249 | Powerplant Cooling Systems | 0.5 |
| AFPM F250 | Powerplant Exhaust Systems | 0.5 |
| AFPM F252 | Propellers | 2 |

Combined Systems and Components Requirements

Complete the following:

| | | |
|-----------|-------------------------|-----|
| AFPM F251 | Fuel Systems | 1.5 |
| AFPM F255 | Fire Protection Systems | 0.5 |
| AFPM F257 | Instrument Systems | 0.5 |

¹ As part of the certificate requirements, the communication, computation and human relations content is embedded in the major required courses for this program.

Certificate, Powerplant

Students must earn a C- or better in each course.

prior to acceptance into the airframe and powerplant, airframe or powerplant certificate programs.

Minimum Requirements for Powerplant Certificate: 31 credits

| Code | Title | Credits |
|--|---------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Powerplant Program Requirements | | |
| Complete the following: | | |
| AFPM F145 | Basic Mathematics | 1 |
| AFPM F146 | Basic Electricity | 2 |
| AFPM F147 | Physics for Mechanics | 0.5 |
| AFPM F148 | Aircraft Drawing | 1 |
| AFPM F149 | Fluid Lines and Fittings | 0.5 |
| AFPM F150 | Materials and Processes | 2 |
| AFPM F151 | Cleaning and Corrosion Control | 1 |
| AFPM F152 | Federal Aviation Regulations | 1 |
| AFPM F153 | Weight and Balance | 1 |
| AFPM F154 | Ground Operations and Servicing | 0.5 |
| Powerplant Theory and Maintenance Requirements | | |
| Complete the following: | | |
| AFPM F235 | Aircraft Reciprocating Engines | 4.5 |
| AFPM F240 | Turbine Engines | 2 |
| AFPM F271 | Powerplant Inspections | 0.5 |
| AFPM F272 | Powerplant Testing | 0.5 |
| Powerplant and Systems Components Requirements | | |
| Complete the following: | | |
| AFPM F231 | Powerplant Electrical Systems | 1.5 |
| AFPM F244 | Lubricating Systems | 1.5 |
| AFPM F245 | Ignition Systems | 2 |
| AFPM F246 | Fuel Metering Systems | 2 |
| AFPM F248 | Induction Systems | 0.5 |
| AFPM F249 | Powerplant Cooling Systems | 0.5 |
| AFPM F250 | Powerplant Exhaust Systems | 0.5 |
| AFPM F252 | Propellers | 2 |
| Combined Systems and Components Requirements | | |
| Complete the following: | | |
| AFPM F251 | Fuel Systems | 1.5 |
| AFPM F255 | Fire Protection Systems | 0.5 |
| AFPM F257 | Instrument Systems | 0.5 |

¹ As part of the certificate requirements, the communication, computation and human relations content is embedded in the major required courses for this program.

Note: This is a one-year program, usually starting at the beginning of September. Entry at other times is allowed only with departmental approval. A personal background check and drug test will be required

Business Management, Applied Certificate

Planning and preparation are keys to success in business. The applied business management certificate provides students with the basic principles to run a business effectively. Graduates of the program will have the foundation of contemporary management skills to successfully lead private, public and nonprofit organizations through ever-changing social and economic conditions.

The program covers basic knowledge and skills, emerging technologies, advanced procedures and interpersonal skills. Coursework includes accounting, management, human relations, math, communications, customer service, computers, law, finance and logic. The curriculum also serves as the first year of training toward the A.A.S. degree in applied business.

Potential careers for graduates include entrepreneurship and entry-level positions in business management, tourism, human resources, public administration and office administration.

Minimum Requirements for Applied Business Management Certificate: 30-36 credits

Community and Technical College

Applied Business (<https://www.ctc.uaf.edu/programs/business-applied/>)
907-455-2800

Programs Certificate

- Business Management, Applied (p. 155)

With concentrations in:

- Computer Applications (p. 156)
- Finance (p. 156)
- General Business (p. 156)
- Human Resources (p. 156)
- Marketing (p. 156)
- Office Administration (p. 156)
- Public Management (p. 156)
- Recreational Guiding (p. 156)
- Retail Management (p. 156)
- Tourism (p. 157)

Certificate, Business Management, Applied

Students must earn a C- grade or better in each course.

Minimum Requirements for Applied Business Management Certificate: 30-36 credits

CONCENTRATIONS: COMPUTER APPLICATIONS (P. 156), FINANCE (P. 156), GENERAL BUSINESS (P. 156), HUMAN RESOURCES (P. 156), MARKETING (P. 156), OFFICE ADMINISTRATION (P. 156), PUBLIC MANAGEMENT (P. 156), RECREATIONAL GUIDING (P. 156), RETAIL MANAGEMENT (P. 156) AND TOURISM (P. 157)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements, complete: | | |
| <i>Communication</i> | | |
| Complete one of the following: | | |
| ABUS F170 | Business English | |
| ABUS F271 | Business Communications | |
| WRTG F111X | Writing Across Contexts | |
| <i>Computation</i> | | |
| ABUS F155 | Business Math (or any MATH course at the F100 level or above) | |
| | or MATH F105 Intermediate Algebra | |
| <i>Human Relations</i> ¹ | | |
| ABUS F154 | Human Relations (recommended) | |
| Applied Business Management Program Requirements | | |
| Complete the following: | | |
| ABUS F101 | Principles of Accounting I | 3 |
| ABUS F161 | Personal and Business Finance | 3 |
| BA F151X | Introduction to Business | 3 |
| Concentrations | | |
| Complete one of the following concentrations: | | 12-18 |
| Computer Applications | | |
| Finance | | |
| General Business | | |
| Human Resources | | |
| Marketing | | |
| Office Administration | | |
| Public Management | | |
| Recreational Guiding | | |
| Retail Management | | |
| Tourism | | |

¹ A.A.S. Approved Course

Concentrations

COMPUTER APPLICATIONS

| Code | Title | Credits |
|---------------------------|---|---------|
| Complete the following: | | |
| CIOS F130 | Word Processing | 3 |
| CIOS F135 | Microcomputer Spreadsheets | 3 |
| CIOS F146 or CITS F220 | Using Internet Tools and Technologies Implementing Internet Tools and Technologies | 3 |
| CIOS F240 | Microcomputer Databases | 3 |

FINANCE

| Code | Title | Credits |
|-------------------------|---------------------------|---------|
| Complete the following: | | |
| ABUS F160 | Principles of Banking | 3 |
| ABUS F210 | Income Tax | 3 |
| ABUS F233 | Financial Management | 3 |
| ABUS F234 | Introduction to Investing | 3 |

GENERAL BUSINESS

| Code | Title | Credits |
|---|---|---------|
| Complete the following: | | |
| ABUS F179 or BA F307 | Fundamentals of Supervision Introductory Human Resources Management | 3 |
| ABUS F201 or ABUS F210 or ABUS F220 or ABUS F235 | Principles of Accounting II Income Tax Microcomputer Accounting: QuickBooks Fund Accounting for Nonprofits | 3 |
| ABUS F232 or ECON F101X or ECON F102X | Contemporary Management Issues Principles of Microeconomics Principles of Macroeconomics | 3 |
| ABUS F260 or ABUS F263 or BA F343 | Marketing Practices Public Relations Principles of Marketing | 3 |

HUMAN RESOURCES

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| ABUS F141 | Payroll Accounting | 3 |
| ABUS F179 | Fundamentals of Supervision | 3 |
| ABUS F231 or BA F307 | Introduction to Personnel Introductory Human Resources Management | 3 |
| ABUS F242 or BA F317 | Employment Law Employment Law | 3 |

MARKETING

| Code | Title | Credits |
|--------------------------------|------------------|---------|
| Complete the following: | | |
| ABUS F175 | Customer Service | 3 |
| ABUS F178 | Professionalism | 3 |
| Complete one of the following: | | |
| | | |

| | | |
|---|-------------------------|---|
| ABUS F260 | Marketing Practices | |
| ABUS F263 | Public Relations | |
| BA F343 | Principles of Marketing | |
| CIOS F2xx-level graphics or web design elective | | 3 |

OFFICE ADMINISTRATION

| Code | Title | Credits |
|--|----------------------------------|---------|
| Complete the following: | | |
| ABUS F170 | Business English | 3 |
| ABUS F182 | Office Procedures | 3 |
| Complete six credits from the following: | | |
| ABUS F183 | Professional Skills for Job Hunt | |
| ABUS F199 | Practicum in Applied Business | |
| CIOS F130 | Word Processing | |
| CIOS F135 | Microcomputer Spreadsheets | |
| CIOS F150 | Computer Business Applications | |

PUBLIC MANAGEMENT

| Code | Title | Credits |
|--------------------------|---|---------|
| Complete the following: | | |
| ABUS F235 | Fund Accounting for Nonprofits | 3 |
| PS F100X | Political Economy | 3 |
| PS F101X or ABUS F232 | Introduction to American Government and Politics Contemporary Management Issues | 3 |
| PS F212 | Introduction to Public Administration | 3 |

RECREATIONAL GUIDING

| Code | Title | Credits |
|--|---|---------|
| Complete the following: | | |
| ABUS F175 | Customer Service | 3 |
| NRM F161 | Wilderness Leadership Education | 3 |
| Complete one of the following: | | |
| EMS F152 | Emergency Trauma Training First Responder | |
| More advanced Emergency First Responder Training | | |
| RECR electives | | 3 |

RETAIL MANAGEMENT

| Code | Title | Credits |
|--------------------------------|---|---------|
| Complete the following: | | |
| ABUS F179 or BA A231 | Fundamentals of Supervision ¹ Fundamentals of Supervision | 3 |
| ABUS F231 | Introduction to Personnel | 3 |
| ABUS F260 or BA A260 | Marketing Practices ¹ Marketing Practices | 3 |
| BA A266 | Retailing Management | 3 |
| CIOS F150 or CIOS A103 | Computer Business Applications ¹ Introduction to Personal Computers | 3 |
| Complete one of the following: | | |
| COJO F101X | Media and Culture | |
| COJO F121X | Introduction to Interpersonal Communication | |

| | |
|------------|---|
| COJO F131X | Fundamentals of Oral Communication: Group Context |
| COJO F141X | Fundamentals of Oral Communication: Public Context |
| CLOS A261A | Interpersonal Skills in Organization ¹ |
| COMM A111 | Fundamentals of Oral Communication ¹ |
| COMM A237 | Interpersonal Communication ¹ |

¹ Courses offered via distance delivery from University of Alaska Anchorage

TOURISM

| Code | Title | Credits |
|--------------------------------|---|---------|
| Complete the following: | | |
| ABUS F158 | Introduction to Tourism | 3 |
| ABUS F175 | Customer Service | 3 |
| ABUS F199 | Practicum in Applied Business | 3 |
| Complete one of the following: | | 3 |
| ABUS F256 | Small Hotel, Bed and Breakfast, and Lodge Operations | |
| ABUS F267 | Transportation and Logistics Management | |
| ABUS F269 | Food and Beverage Management | |

Note: Other courses specific to individual education and career goals may be substituted with program approval.

Business, Applied

A.A.S. Degree

The Associate of Applied Science (A.A.S.) degree in applied business is a two-year program designed to provide students with a well-rounded business education covering a wide range of related subjects. Students who have completed the business management certificate will be able to apply their credits towards the A.A.S. degree in applied business.

Students will complete courses that will advance their business knowledge of supervision, human resources, management issues, business law, and marketing and public relations. Additionally, the program provides the opportunity for students to focus their studies in any one of the following 12 concentration areas: Administrative Management, Applied Management, Computer Applications, Entrepreneurship, Finance, Health Care Management, Human Resources, Management, Marketing, Public Management, Recreation and Guiding Management, and Tourism.

Minimum Requirements for Applied Business A.A.S. Degree: 60 credits

Community and Technical College

Applied Business (<https://www.ctc.uaf.edu/programs/business-applied/>)
907-455-2800

Programs Degree

- A.A.S., Business, Applied (p. 158)

With concentrations in:

- Administrative Management (p. 158)
- Applied Management (p. 158)
- Computer Applications (p. 158)
- Entrepreneurship (p. 158)
- Finance (p. 159)
- Health Care Management (p. 159)
- Human Resources (p. 159)
- Management (p. 159)
- Marketing (p. 159)
- Public Management (p. 159)
- Recreation and Guiding Management (p. 159)
- Tourism (p. 160)

A.A.S., Business, Applied

Students must earn a C- grade or better in each course.

Minimum Requirements for Applied Business A.A.S. Degree: 60 credits

CONCENTRATIONS: ADMINISTRATIVE MANAGEMENT (P. 158), APPLIED MANAGEMENT (P. 158), COMPUTER APPLICATIONS (P. 158), ENTREPRENEURSHIP (P. 158), FINANCE (P. 159), HEALTH CARE MANAGEMENT (P. 159), HUMAN RESOURCES (P. 159), MANAGEMENT (P. 159), MARKETING (P. 159), PUBLIC MANAGEMENT (P. 159), RECREATION AND GUIDING MANAGEMENT (P. 159), **AND** TOURISM (P. 160)

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) ¹ | | |
| Applied Business Program Requirements | | |
| Complete the following: | | |
| ABUS F101 | Principles of Accounting I | 3 |
| ABUS F161 | Personal and Business Finance | 3 |
| ABUS F175 | Customer Service | 3 |
| or ABUS F183 | Professional Skills for Job Hunt | |
| ABUS F179 | Fundamentals of Supervision | 3 |
| or BA F307 | Introductory Human Resources Management | |
| BA F151X | Introduction to Business | 3 |
| Complete one of the following: | | 3 |
| ABUS F232 | Contemporary Management Issues | |
| or ABUS F277 | Dynamics of Leadership | |
| ECON F101X | Principles of Microeconomics | |
| ECON F102X | Principles of Macroeconomics | |
| Complete one of the following: | | 3 |
| ABUS F241 | Applied Business Law I | |
| ABUS F242 | Employment Law | |
| BA F317 | Employment Law | |
| Complete one of the following: | | 3 |
| ABUS F260 | Marketing Practices | |
| ABUS F263 | Public Relations | |
| BA F343 | Principles of Marketing | |
| Concentrations | | |
| Complete one of the following concentrations: | | 21 |
| Administrative Management | | |
| Applied Management | | |
| Computer Applications | | |
| Entrepreneurship | | |
| Finance | | |
| Health Care Management | | |
| Human Resources Management | | |

| |
|-----------------------------------|
| Marketing |
| Public Management |
| Recreation and Guiding Management |
| Tourism |

¹ As part of the A.A.S. degree requirements, it is recommended that students complete ABUS F154 for the human relations requirement.

Concentrations

ADMINISTRATIVE MANAGEMENT

| Code | Title | Credits |
|---|----------------------------------|---------|
| Complete the following: | | |
| ABUS F102C | Keyboarding: Document Formatting | 1 |
| ABUS F116 | Using 10-Key Calculators | 1 |
| ABUS F134 | Alphabetic Filing | 1 |
| ABUS F170 | Business English | 3 |
| ABUS F182 | Office Procedures | 3 |
| ABUS F264 | Filing/Records Management | 3 |
| ABUS, CIOS or CITS electives appropriate to skill level | | 3 |
| Complete 6 credits from the following: | | 6 |
| ABUS F183 | Professional Skills for Job Hunt | |
| ABUS F199 | Practicum in Applied Business | |
| CIOS F130 | Word Processing | |
| CIOS F135 | Microcomputer Spreadsheets | |
| CIOS F150 | Computer Business Applications | |

APPLIED MANAGEMENT

| Code | Title | Credits |
|--|-------|---------|
| Complete one of the following: | | 21 |
| A university-approved certificate | | |
| A professional, technical or vocational license or certification issued by government or industry and 21 department-approved electives | | |

COMPUTER APPLICATIONS

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| CIOS F130 | Word Processing | 3 |
| CIOS F135 | Microcomputer Spreadsheets | 3 |
| CIOS F146 | Using Internet Tools and Technologies | 3 |
| or CITS F220 | Implementing Internet Tools and Technologies | |
| CIOS F233 | Desktop Publishing | 3 |
| or CIOS F255 | Digital Graphics | |
| CIOS F240 | Microcomputer Databases | 3 |
| ABUS, ACCT, BA, CITS or CIOS electives | | 6 |

ENTREPRENEURSHIP

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| ABUS F233 | Financial Management | 3 |
| or ABUS F234 | Introduction to Investing | |
| ABUS F265 | Current and Emerging Trends in Applied Marketing | 3 |

| | | |
|--|--------------------------------------|---|
| ABUS F272 | Small-Business Planning | 3 |
| ABUS F273 | Entrepreneurship and Small Business | 3 |
| ABUS F274 | Business in the Digital World | 3 |
| ABUS, ACCT, BA, CITS or CIOS electives | | 3 |
| Complete one of the following: | | 3 |
| ABUS F201 | Principles of Accounting II | |
| ABUS F210 | Income Tax | |
| ABUS F220 | Microcomputer Accounting: QuickBooks | |
| ABUS F235 | Fund Accounting for Nonprofits | |

FINANCE

| Code | Title | Credits |
|-------------------------|--------------------------------------|---------|
| Complete the following: | | |
| ABUS F160 | Principles of Banking | 3 |
| ABUS F201 | Principles of Accounting II | 3 |
| ABUS F210 | Income Tax | 3 |
| ABUS F220 | Microcomputer Accounting: QuickBooks | 3 |
| ABUS F233 | Financial Management | 3 |
| ABUS F234 | Introduction to Investing | 3 |
| ABUS F272 | Small-Business Planning | 3 |

HEALTH CARE MANAGEMENT

| Code | Title | Credits |
|-------------------------|---------------------------------------|---------|
| Complete the following: | | |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F132 | Administrative Procedures I | 2 |
| HLTH F208 | Human Diseases | 3 |
| HLTH F234 | Administrative Procedures II | 4 |
| HLTH F235 | Medical Coding | 4 |
| HLTH F236 | Outpatient Health Care Reimbursement | 3 |

HUMAN RESOURCES

| Code | Title | Credits |
|----------------------------------|---|---------|
| Complete the following: | | |
| ABUS F141 | Payroll Accounting | 3 |
| ABUS F178 | Professionalism | 3 |
| ABUS F231 | Introduction to Personnel | 3 |
| or BA F307 | Introductory Human Resources Management | |
| ABUS F242 | Employment Law | 3 |
| or BA F317 | Employment Law | |
| CIOS F135 | Microcomputer Spreadsheets | 3 |
| CIOS F240 | Microcomputer Databases | 3 |
| ABUS, ACCT, BA or CIOS electives | | 3 |

MANAGEMENT

| Code | Title | Credits |
|---|-----------------------------|---------|
| Complete the following: | | |
| ABUS, ACCT, BA, ECON, MATH or STAT or other department-approved electives | | 21 |
| Recommended courses include: | | |
| ABUS F201 | Principles of Accounting II | |

| | | |
|------------|--|--|
| ABUS F202 | Principles of Accounting III | |
| BA F254X | Personal Finance (s) | |
| ECON F101X | Principles of Microeconomics | |
| ECON F102X | Principles of Macroeconomics | |
| ECON F120X | Introduction to Economic Analysis | |
| ECON F227 | Introductory Statistics for Economics and Business | |
| MATH F122X | Essential Precalculus with Applications | |
| MATH F230X | Essential Calculus with Applications | |
| STAT F200X | Elementary Statistics | |

MARKETING

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| ABUS F178 | Professionalism | 3 |
| ABUS F265 | Current and Emerging Trends in Applied Marketing | 3 |
| ABUS F274 | Business in the Digital World | 3 |
| CIOS F233 | Desktop Publishing | 3 |
| or CIOS F255 | Digital Graphics | |
| CIOS or CITS F200 level or above Internet or web design elective | | 3 |
| ABUS, BA or CIOS electives | | 6 |

PUBLIC MANAGEMENT

| Code | Title | Credits |
|----------------------------------|--|---------|
| Complete the following: | | |
| ABUS F235 | Fund Accounting for Nonprofits | 3 |
| PS F100X | Political Economy | 3 |
| PS F101X | Introduction to American Government and Politics | 3 |
| PS F212 | Introduction to Public Administration | 3 |
| ABUS, ACCT, CIOS or PS electives | | 6 |
| Complete one of the following: | | 3 |
| ABUS F242 | Employment Law | |
| BA F317 | Employment Law | |
| PS F403 | Public Policy | |

RECREATION AND GUIDING MANAGEMENT

| Code | Title | Credits |
|--|---|---------|
| Complete the following: | | |
| ABUS F158 | Introduction to Tourism | 3 |
| EMS F257 | Arctic Survival | 3 |
| or NRM F361 | Advanced Wilderness Leadership Education | |
| NRM F101 | Natural Resources Conservation and Policy | 3 |
| NRM F161 | Wilderness Leadership Education | 3 |
| RECR electives | | 6 |
| Complete one of the following: | | 3 |
| EMS F152 | Emergency Trauma Training First Responder | |
| EMS F195 | Special Topics | |
| More advanced Emergency First Responder Training | | |

TOURISM

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| ABUS F158 | Introduction to Tourism | 3 |
| ABUS F199 | Practicum in Applied Business | 3 |
| ABUS F265 | Current and Emerging Trends in Applied Marketing | 3 |
| ABUS F273 | Entrepreneurship and Small Business | 3 |
| Complete 3 credits from the following electives: | | 3 |
| ABUS F256 | Small Hotel, Bed and Breakfast, and Lodge Operations | |
| ABUS F267 | Transportation and Logistics Management | |
| ABUS F269 | Food and Beverage Management | |
| Complete one of the following elective options: | | 6 |
| <i>Option 1</i> | | |
| ABUS, ACCT, BA, CAH or CIOs electives | | |
| <i>Option 2</i> | | |
| ABUS F299 | Practicum in Applied Business (Study Abroad) | |
| Foreign Language | | |

Community Health Certificate; A.A.S. Degree

The community health aide/practitioner (CHA/P) training program prepares students to provide primary health care services in villages, under the supervision of a referral physician. As a prerequisite, students entering the program must be employed by a regional health corporation.

The educational program consists of four basic training sessions, each four weeks long and followed by a field component in the community health aide's village clinic. The curriculum includes the knowledge and skills necessary to provide acute care for common medical problems, emergency care, follow-up care for patients with chronic illnesses, and preventive services including prenatal and well-child care. The training also includes state-approved emergency care courses, completion of a skills checklist, a supervised clinical preceptorship, and passing the community health practitioner (CHP) statewide examination.

Upon successful completion of all certification requirements, students are awarded a CHP certificate by the training center. Students completing the training program also meet the requirements for a university certificate recognizing the credits earned. These credits may be used to satisfy requirements for the A.A.S. degree.

The CHA/P academic review committee (ARC), composed of representatives from the regional health corporations, training centers and university, ensures that the curriculum and certification process is kept uniform throughout the state. The ARC reports to the Association of CHA/P program directors and serves in an advisory role to the executive dean for rural, community and Native education.

For more information about the CHA/P basic training program, contact one of the CHA/P training centers. For more information about the A.A.S. degree, contact the College of Rural and Community Development health programs office at 907-786-1630.

Minimum Requirements for Community Health Certificate: 34 credits; for Community Health A.A.S. Degree: 60 credits

College of Rural and Community Development
907-474-7143

Programs Degree

- A.A.S., Community Health (p. 161)

Certificate

- Community Health (p. 161)

A.A.S., Community Health

Students must earn a C- grade or better in each course.

Minimum Requirements for Community Health A.A.S.: 60 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Community Health Program Requirements | | |
| Complete the following: | | |
| CHP F131 | Community Health Aide I | 8 |
| CHP F132 | Community Health Aide II | 8 |
| CHP F133 | Community Health Aide III | 8 |
| CHP F134 | Community Health Aide IV | 8 |
| CHP F135 | Community Health Aide Preceptorship | 2 |
| Complete 5 or more credits from the following: | | 5 |
| CHP F203 | Clinical Update for Community Health Practitioners | |
| CHP F207 | Maternal and Infant Health | |
| CHP F208 | Communicable Diseases | |
| CHP F211 | Health Education | |
| CHP F212 | Diabetes: Primary Prevention and Village Medical Care | |
| CHP F214 | Cancer: Risks, Diagnosis and Treatment | |
| CHP F215 | Death and Dying | |
| CHP F220 | Women's Health: Breast and Cervical Cancer Screening | |
| CHP F250 | Current Issues in Rural Health Care ¹ | |
| CHP F293 | Special Topics | |
| EMS — any F200-level courses | | |
| HLTH — any F200-level courses | | |
| Electives | | 6 |

¹ May repeat up to 3 credits toward A.A.S. degree.

Certificate, Community Health

Minimum Requirements for Community Health Certificate: 34 credits

| Code | Title | Credits |
|--|-------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Community Health Program Requirements | | |
| Complete the following: | | |
| CHP F131 | Community Health Aide I | 8 |
| CHP F132 | Community Health Aide II | 8 |
| CHP F133 | Community Health Aide III | 8 |
| CHP F134 | Community Health Aide IV | 8 |
| CHP F135 | Community Health Aide Preceptorship | 2 |

¹ As part of the certificate requirements, the communication, computation and human relations content is embedded in some of the major required courses for this program.

Construction Management

A.A.S. Degree

The construction management program meets growing needs in the construction industry by training entry-level construction managers and by providing continuing education for construction employees.

Construction managers plan, direct and are responsible for oversight of construction projects. They are responsible for coordinating and managing people, materials and equipment; budgets, schedules and contracts; and the safety of employees and the general public. Construction managers determine construction means and methods and the most cost-effective plans and schedules. They track construction costs and administer contract changes to the project budget to maximize profitability. Construction managers monitor work progress to ensure compliance with architectural and engineering drawings and specifications.

Construction managers work in all phases of the construction business — for public and private owners; from small, multifamily projects to large skyscrapers and industrial projects; and from rural roads to major highways. Construction managers work closely with architects, engineers, owners and the various contractors on a construction job. The construction manager's duties are varied, challenging and rewarding.

UAF's construction management program was developed with input from local contractors and professional industry organizations. It gives students broad knowledge of building systems and construction techniques. Construction management graduates understand basic principles of business and know about the technical aspects of the construction industry. Graduates are able to function both in the construction office and on the job site.

The construction management A.A.S. degree requires four to five semesters to complete. While not a prerequisite, it is recommended that students applying for admission have experience in the construction industry.

Minimum Requirements for Construction Management Associate Degree: 62 credits

Community and Technical College
Construction Management (<https://www.ctc.uaf.edu/programs/construction-management/>)
907-455-2846

Programs Degree

- A.A.S., Construction Management (p. 162)

A.A.S., Construction Management

Students must earn a C- grade or better in each course.

Minimum Requirements for Construction Management A.A.S.: 62 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| As part of the A.A.S. requirements complete the following: | | |
| <i>Communication</i> | | |
| WRTG F111X | Writing Across Contexts | |
| | or WRTG F212X Writing and the Professions | |
| | or WRTG F213X Writing and the Sciences | |
| COJO F131X | Fundamentals of Oral Communication: Group Context | |
| | or COJO F141X Fundamentals of Oral Communication: Public Context | |
| <i>Computation</i> | | |
| MATH F151X | College Algebra for Calculus | |
| <i>Human Relations</i> | | |
| The human relations content is embedded in some of the major required courses for this program. | | |
| Construction Management Program Requirements | | |
| ABUS F101 | Principles of Accounting I | 3 |
| ABUS F201 | Principles of Accounting II | 3 |
| CM F102 | Methods of Building Construction | 3 |
| CM F123 | Codes and Standards | 3 |
| CM F142 | Mechanical and Electrical Technology | 3 |
| CM F163 | Building Construction Cost Estimating | 3 |
| CM F201 | Construction Project Management | 3 |
| CM F202 | Project Planning and Scheduling | 3 |
| CM F205 | Construction Safety | 3 |
| CM F213 | Civil Technology | 3 |
| CM F231 | Structural Technology | 3 |
| CM F263 | Civil Construction Cost Estimating | 3 |
| CM F299 | Construction Management Internship | 3 |
| DRT F170 | Beginning CAD | 3 |
| MATH F152X | Trigonometry | 3 |
| PHYS F123X | College Physics I | 4 |

Culinary Arts and Hospitality

Certificate; A.A.S. Degree

The culinary arts and hospitality program prepares students for careers in this ever-expanding field. Graduates can seek employment in various food service operations or in the management of restaurants, bakeries, hotels, hospitals, camps or any other facility that requires food service as part of its operation. Certificates in culinary arts or baking and pastry arts, as well as an associate degree in culinary arts, are offered.

Minimum Requirements for Culinary Arts or Baking and Pastry Arts
Certificates: 30 credits; for Culinary Arts and Hospitality A.A.S. Degree: 60 credits

Community and Technical College

Culinary Arts and Hospitality (<https://www.ctc.uaf.edu/programs/culinary-hospitality/>)
907-455-2800

Programs Degree

- A.A.S., Culinary Arts and Hospitality (p. 163)

Certificates

- Culinary Arts (p. 164)
- Baking and Pastry Arts (p. 164)

A.A.S., Culinary Arts and Hospitality

Students must earn a C- grade or better in each course.

Minimum Requirements for Culinary Arts and Hospitality A.A.S.: 60 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) ¹ | | |
| Culinary Arts and Hospitality Program Requirements | | |
| Complete the following: | | |
| CAH F101 | Introduction to the Culinary Field | 1 |
| CAH F140 | Culinary I: Principles and Techniques | 4 |
| CAH F141 | Culinary II: Stocks, Soups and Sauces | 4 |
| CAH F146 | Introduction to Baking and Pastry | 4 |
| CAH F150 | Food Service Sanitation | 2 |
| CAH F154 | Food and Beverage Service | 2 |
| CAH F160 | Principles of Nutrition | 2 |
| CAH F175 | Protein Fabrication | 3 |
| CAH F199 | Culinary Arts Externship | 2 |
| CAH F230 | Menu Planning | 1 |
| CAH F242 | Culinary III: Vegetables and Starch | 4 |
| CAH F243 | Culinary IV: A la Carte Cookery | 4 |
| CAH F248 | Intermediate Baking and Pastry | 4 |
| CAH F250 | Garde Manger | 4 |
| CAH F253 | Storeroom Purchasing and Receiving | 2 |
| CAH F256 | Restaurant and Hospitality Cost Management | 2 |

¹ As part of the degree requirement, CAH F255 is recommended to complete the human relations requirement.

Certificate, Baking and Pastry Arts

Minimum Requirements for Baking and Pastry Arts Certificate: 30 credits

| Code | Title | Credits |
|--|---------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Baking and Pastry Arts Program Requirements | | |
| Complete the following: | | |
| CAH F101 | Introduction to the Culinary Field | 1 |
| CAH F140 | Culinary I: Principles and Techniques | 4 |
| CAH F146 | Introduction to Baking and Pastry | 4 |
| CAH F150 | Food Service Sanitation | 2 |
| CAH F248 | Intermediate Baking and Pastry | 4 |
| Complete 6-9 credits from the following: | | 6-9 |
| CAH F117 | Art in Cake Icing | |
| CAH F154 | Food and Beverage Service | |
| CAH F160 | Principles of Nutrition | |
| CAH F161 | Pastry Tube Art | |
| CAH F171 | Gourmet Baking | |
| CAH F176 | Techniques of Healthy Cooking | |
| CAH F180 | Artisan Breads | |
| CAH F181 | International Breads | |
| CAH F230 | Menu Planning | |

¹ As part of the certificate requirements, CAH F256 is recommended to complete the computation requirement and CAH F255 is recommended to complete the human relations requirement.

Certificate, Culinary Arts

Students must earn a C- or better in each course.

Minimum Requirements for Culinary Arts Certificate: 30 credits

| Code | Title | Credits |
|--|---------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Culinary Arts Program Requirements | | |
| Complete the following: | | |
| CAH F101 | Introduction to the Culinary Field | 1 |
| CAH F140 | Culinary I: Principles and Techniques | 4 |
| CAH F146 | Introduction to Baking and Pastry | 4 |
| CAH F150 | Food Service Sanitation | 2 |
| Complete 10-13 credits from the following: | | 10-13 |
| CAH F141 | Culinary II: Stocks, Soups and Sauces | |
| CAH F154 | Food and Beverage Service | |
| CAH F160 | Principles of Nutrition | |
| CAH F170 | Gourmet Cooking | |
| CAH F172 | Gourmet Asian Cooking | |
| CAH F174 | Vegetarian Cooking | |
| CAH F175 | Protein Fabrication | |
| CAH F176 | Techniques of Healthy Cooking | |
| CAH F230 | Menu Planning | |
| CAH F242 | Culinary III: Vegetables and Starch | |
| CAH F243 | Culinary IV: A la Carte Cookery | |
| CAH F250 | Garde Manger | |

¹ As part of the certificate requirements, CAH F256 is recommended to complete the computation requirement and CAH F255 is recommended to complete the human relations requirement.

Diesel/Heavy Equipment Certificate

The diesel and heavy equipment mechanics program offers training in the maintenance and repair of trucks, buses and heavy equipment. This one-year certificate program emphasizes hands-on training and in-class experience as students perform preventive maintenance inspections, determine causes of equipment problems and make necessary repairs and adjustments from tune-ups to complete engine and equipment overhauls. Students work on large truck fuel, electrical and air systems, diesel engines, transmissions, differentials, crawler tractor undercarriages, steering and final drives. A student may request credit by examination for any DSLT or MECN class. See the department coordinator for details.

Minimum Requirements for Diesel/Heavy Equipment Certificate: 34 credits

Community and Technical College
Diesel/Heavy Equipment (<https://www.ctc.uaf.edu/programs/diesel/>)
907-455-2800

Programs Certificate

- Diesel/Heavy Equipment (p. 165)

Certificate, Diesel/Heavy Equipment Program Requirements

Students must earn a C or better in each course.

Minimum Requirements for Diesel/Heavy Equipment Certificate: 34 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Diesel/Heavy Equipment Program Requirements | | |
| Complete the following: | | |
| DSLTF101 | Safety Including Rigging and Lifting | 1 |
| DSLTF103 | Basic Equipment and Truck Operation | 1 |
| DSLTF105 | Preventive Maintenance | 3 |
| DSLTF107 | Basic Electrical Systems | 3 |
| DSLTF110 | Basic Industrial Fabrication | 2 |
| DSLTF111 | Diesel Emissions | 2 |
| DSLTF123 | Heavy Duty Braking Systems | 3 |
| DSLTF201 | Manual Transmissions and Differentials | 3 |
| DSLTF202 | Heavy Duty Automatic Transmissions | 2 |
| DSLTF210 | Heavy Equipment Fabrication | 2 |
| DSLTF254 | Engine | 6 |
| MECNF103 | Advanced Electrical Systems | 3 |
| MECNF210 | Hydraulics | 3 |

¹ As part of the certificate requirements, the communication, human relations and computation content is embedded in the major required courses for this program.

Drafting Technology

Certificate

The drafting technology programs combine focused training in computer-aided drafting with a well-rounded exposure to the professions, trades and materials common to construction in Alaska. Courses combine technical CAD training with the vocabulary and knowledge needed to communicate with future employers in the architectural, engineering and construction fields. Students develop skills in mathematics, drawing and multifunctional CAD techniques. Students are instructed in traditional drawing techniques, CAD, and building information modeling technologies, giving them the knowledge and flexibility to work traditionally and with the most recent drafting technologies. Required courses cover many aspects of design and construction, including building materials, codes, and civil, mechanical, electrical and structural technologies. Qualified students have the opportunity to work side-by-side with professionals from the architectural and engineering community in internships, gaining valuable on-the-job experience.

Students entering the certificate program are expected to have computer skills equivalent to CIOS F150.

Minimum Requirements for Drafting Technology Certificate: 30 credits

Community and Technical College
Drafting/Design Technology
907-455-2800

Programs

Certificate

- Drafting Technology (p. 166)

Certificate, Drafting Technology

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Drafting Technology Certificate: 30 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| Drafting Technology Program Requirements | | |
| Complete the following: | | |
| CM F102 | Methods of Building Construction | 3 |
| DRT F140 | Architectural Drafting | 3 |
| DRT F170 | Beginning CAD | 3 |
| DRT F210 | Intermediate CAD | 3 |
| Complete 6 credits from the following or program coordinator-approved courses: | | 6 |
| DRT F145 | Structural Drafting | |
| DRT F150 | Civil Drafting | |
| DRT F155 | Mechanical and Electrical Drafting | |
| DRT F260 | Drafting Internship | |
| DRT F270 | Advanced CAD | |
| DSGN F130 | Modeling, Assembly & 3D Animation: Autodesk Inventor | |
| Complete 3 credits from the following or program coordinator-approved courses: | | 3 |
| CM F123 | Codes and Standards | |
| CM F213 | Civil Technology | |
| CM F142 | Mechanical and Electrical Technology | |
| CM F231 | Structural Technology | |

Early Childhood Education

Certificate, A.A.S. Degree

All courses are offered through distance delivery, both asynchronous and with audio or video support for the convenience of students. Face-to-face classes are scheduled in Fairbanks and around the state as needed. These Early Childhood Education (ECE) programs improve the skills of those already in the field and prepare those seeking employment as early care and education teachers, K-3 teachers aides, and child care providers.

Graduates are in high demand and have a wide range of employment opportunities. They can choose to travel the world as civilian support for the military Child and Youth Services or stay in Alaska working for Head Start programs, child welfare agencies, recreation services, schools, or child care programs. Diverse opportunities for employment include staff training, program licensing, and entrepreneurial initiatives serving children and families. Contrary to times in the past, graduates are now able to receive fair compensation including good salaries and benefits. The A.A.S. program at UAF was accredited by the Commission on the Accreditation of Early Childhood Higher Education Programs of the National Association for the Education of Young Children in July 2019.

The ECE programs are for students enrolling in college for the first time as well as for those who are educated in other subject areas but desire to retrain for employment in this profession. Through course work, including fieldwork directly with children, students gain the knowledge and skills they need to meet State of Alaska requirements for employment as administrators or teachers in licensed centers and as aides in elementary schools. Course work also fulfills minor or concentration requirements for degrees in other disciplines. Students entering any ECE program should meet with an early childhood advisor to discuss a specific course of study. The courses for the A.A.S. degree can be combined with other disciplines to make a specific focus on young children in areas such as science, movement, leadership, business, or creative arts.

Minimum Requirements for Early Childhood Education degrees:
Certificate: 34 credits; A.A.S. Degree: 60 credits

Community and Technical College
Early Childhood Education (<https://www.ctc.uaf.edu/programs/early-childhood-education/>)
907-455-2800

Programs

Degrees

- A.A.S., Early Childhood Education (p. 167)

Certificate

- Certificate, Early Childhood Education (p. 168)

A.A.S., Early Childhood Education

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Early Childhood Education A.A.S. Degree: 60 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| As part of the A.A.S. requirements complete the following: | | |
| <i>Human Relations</i> | | |
| ECE F107X | Child Development II: The Preschool and Primary Years | |
| Early Childhood Education Program Requirements | | |
| Complete the following: | | |
| ECE F101 | Introduction to Early Childhood Profession | 3 |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers | 3 |
| ECE F110 | Safe, Healthy Learning Environments | 3 |
| ECE F119 | Curriculum I: Principles and Practices | 3 |
| ECE F130 | Culture, Learning and the Young Child | 2 |
| ECE F132 | Young Child and the Family | 1 |
| or LS F101X | Library Information and Research | |
| or ECE F249 | Current Issues in Early Childhood Education | |
| ECE F140 | Positive Social and Emotional Development | 3 |
| ECE F210X | Child Guidance | 3 |
| ECE F213 | Curriculum: Thinking, Reasoning and Discovery | 3 |
| ECE F214 | Infants and Toddlers | 3 |
| ECE F229X | Foundations in Nutrition and Physical Wellness | 3 |
| ECE F235 | Screening, Assessment and Recording | 3 |
| ECE F240 | Inclusion of Children with Special Needs | 3 |
| ECE F242 | Child and Family Ecology | 3 |
| ECE F170 | Practicum I | 3 |
| or ECE F299 | Practicum for CDAs | |
| ECE F270 | Practicum II | 3 |

Certificate, Early Childhood Education

Students must earn a C- grade or better in each course.

Minimum Requirements for Early Childhood Education Certificate: 34 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements, complete: | | |
| <i>Communication</i> | | |
| WRTG F111X | Writing Across Contexts | |
| <i>Computation</i> | | |
| ECE F117 | Practical Math Skills | |
| or any other math course at the 100 level or above. | | |
| <i>Human Relations</i> | | |
| ECE F107X | Child Development II: The Preschool and Primary Years | |
| Early Childhood Education Program Requirements | | |
| Complete the following major requirements: | | |
| ECE F101 | Introduction to Early Childhood Profession | 3 |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers | 3 |
| ECE F110 | Safe, Healthy Learning Environments | 3 |
| ECE F119 | Curriculum I: Principles and Practices | 3 |
| ECE F132 | Young Child and the Family | 1 |
| or LS F101X | Library Information and Research | |
| or ECE F249 | Current Issues in Early Childhood Education | |
| ECE F140 | Positive Social and Emotional Development | 3 |
| ECE F170 | Practicum I | 3 |
| or ECE F115 | Responsive and Reflective Teaching | |
| or ECE F299 | Practicum for CDAs | |
| ECE F213 | Curriculum: Thinking, Reasoning and Discovery | 3 |
| or ECE F214 | Infants and Toddlers | |
| ECE F229X | Foundations in Nutrition and Physical Wellness | 3 |

Fire Science

A.A.S. Degree

The fire science program emphasizes municipal fire control, provides classroom education, hands-on training and practical vocational experience through local fire and rescue organizations.

Instructors provide a high level of technical expertise on a variety of emergency and fire science services. The primary goal of this program is to make our students the most attractive candidates for job openings and promotions within fire and other emergency services fields.

Minimum Requirements for Fire Science A.A.S. Degree: 60 credits

Community and Technical College

Fire Science (<https://www.ctc.uaf.edu/programs/fire-science/>)
907-455-2800

Programs Degree

- A.A.S., Fire Science (p. 169)

A.A.S., Fire Science

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Fire Science A.A.S.: 60 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Fire Science Program Requirements¹ | | |
| FIRE F101 | Principles of Emergency Services | 3 |
| FIRE F105 | Fire Prevention | 3 |
| FIRE F121 | Fire Behavior and Combustion | 3 |
| FIRE F131 | Firefighter I, Series I | 3 |
| FIRE F133 | Firefighter I, Series II | 3 |
| FIRE F135 | Firefighter I, Series III | 3 |
| FIRE F137 | Firefighter I, Series IV | 3 |
| FIRE F206 | Building Construction for Fire Protection | 3 |
| FIRE F214 | Fire Protection Systems | 3 |
| FIRE F220 | Emergency Services Safety, Health and Survival | 3 |
| Program Electives | | |
| Complete 15 credits from the following: | | 15 |
| EMS F170 | EMT: Emergency Medical Technician I | |
| FIRE F107 | Strategy and Tactics | |
| FIRE F117 | Rescue Practices | |
| FIRE F143 | Firefighter Internship, Series 1 | |
| FIRE F145 | Firefighter Internship, Series 2 | |
| FIRE F147 | Firefighter Internship, Series 3 | |
| FIRE F151 | Wildland Firefighter I | |
| FIRE F202 | Fire Protection Hydraulics and Water Supply | |
| FIRE F210 | Fire Administration I | |
| FIRE F232 | Firefighter II | |
| FIRE F244 | Firefighter Internship, Series 4 | |
| FIRE F246 | Firefighter Internship, Series 5 | |
| FIRE F248 | Firefighter Internship, Series 6 | |

¹ Students completing the A.A.S. in fire science will automatically complete a concentration in municipal fire control.

Note: Program electives must be approved by the student's advisor.

Health, Allied

Certificate; A.A.S. Degree

The occupational endorsement, certificates, degrees and occupational training programs in allied health provide students with the knowledge and technical skills for employment in health care. Coursework in phlebotomy is available, as are occupational endorsements in medical billing, medical coding and medical office reception. Certificates include medical assistant, dental assistant, health care reimbursement and medical/dental reception. A.A.S. degrees include dental assistant and medical assistant. A.A.S. degrees in nursing and radiologic technology are offered in Fairbanks at the Community and Technical College through the University of Alaska Anchorage.

Special admission, licensing or certification requirements may apply to students in this program. Applicants should familiarize themselves with these and speak with a faculty advisor if they have any questions or concerns.

DENTAL ASSISTANT

The dental assistant certificate and A.A.S. degree programs prepare students to become skilled members of the dental health care team. The duties of the dental assistant are among the most comprehensive and varied in the dental office. Upon completion of the course work, students graduate with either an A.A.S. or certificate in dental assisting and are eligible to take the National Entry Level Dental Assistant (NELDA) Dental Assisting National Board (DANB) examination. Prerequisites are graduation from high school or equivalent (GED) and completion of a dental assisting application form.

HEALTH CARE REIMBURSEMENT

The health care reimbursement certificate program prepares students for employment as medical billers and coders in medical offices, clinics, hospitals and other medical facilities. Students in the program learn analysis of medical records and the assigning of codes for indexing diagnoses and procedures to provide information for reimbursement purposes. The successful completion of this certificate prepares the student for the national certification exam through the American Academy of Professional Coders. The occupational endorsements in medical billing and medical coding are part of the health care reimbursement certificate.

MEDICAL ASSISTANT, MEDICAL/DENTAL RECEPTION

The medical assistant certificate and A.A.S. degree programs prepare students for employment in ambulatory care settings. Students receive education in the theory and skills for office work and clinical care. Prerequisites for the program include a high school diploma or GED and completion of the medical assistant application. The UAF Community and Technical College medical assistant certificate is accredited by the Commission on Accreditation of Allied Health Education Programs upon recommendation of the Medical Assisting Education Review Board (MAERB), CAAHEP, 9355 113th N., #7709, Seminole, FL. 33775. The medical assistant certificate incorporates both the medical office reception occupational endorsement and the medical/dental reception certificate.

MEDICAL SCRIBE SPECIALIST

The certificate in medical scribe specialist prepares students for employment as members of the health care team to provide data collection and input to maintain comprehensive and accurate electronic health records. Medical scribe specialists work in a variety of health care

settings such as hospitals, ambulatory settings and specialties (e.g., primary care, urgent care, internal medicine, ophthalmology). Students will be equipped with skills that maximize the efficiency and productivity of clinical care, enabling real-time clinical documentation and workflow efficiencies for their employers. They will be prepared to take the Medical Scribe Certification and Aptitude Test to acquire the certified medical scribe specialist, a certification recognized by the American College of Medical Scribe Specialists.

NURSING QUALIFICATIONS, PRE-

The allied health certificate in pre-nursing qualifications is designed to guide students preparing to apply to the University of Alaska Anchorage Bachelory of Science in nursing. The certificate includes a clinical course in addition to a number of the prerequisite and corequisite courses for the B.S. in nursing. Admission to this certificate program requires a high school diploma or GED and test scores sufficient for placement into WRTG F111X and MATH F105.

Admission to the UAA School of Nursing (SON) program is competitive. While this certificate prepares the student to be highly qualified, it does not guarantee admission to the UAA SON. Before applying to UAA and the UAA SON, students must complete a pre-admission nursing exam and are strongly encouraged to work in a clinical practice. Students should work closely with an advisor while completing this certificate to help prepare for admission to the UAA SON.

Students who have not completed high school chemistry will need to complete either CHEM F103X or CHEM F105X or have instructor permission to register for BIOL F111X or BIOL F112X.

REGISTERED NURSE

The B.S. degree in nursing is offered by the University of Alaska Anchorage at the Community and Technical College in cooperation with the allied health department. Graduates of the nursing program are prepared to provide effective nursing services to individuals receiving care in inpatient settings and in structured outpatient settings. The academic program provides a closely related mix of theory and clinical practice; students gain experience in hospitals, nursing homes, clinics and community agencies. Graduates of this B.S. degree are eligible to take the NCLEX examination that grants professional licensure to practice nursing as a registered nurse. Additional information is available at University of Alaska Anchorage Department of Nursing (<https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-nursing/>).

RADIOLOGIC TECHNOLOGY

The A.A.S. degree in radiologic technology is offered by the University of Alaska Anchorage in cooperation with the Community and Technical College and Fairbanks Memorial Hospital. Coursework for the degree is delivered through a combination of the traditional classroom setting, distance delivery and clinical experience. Upon completion of the program, students may apply to the American Registry of Radiologic Technologists for national certification. Additional information is available at University of Alaska Anchorage Radiologic Technology (<http://www.uaa.alaska.edu/college-of-health/departments/school-of-allied-health/radiologic-technology/>).

MORE INFORMATION

Information on any of the allied health programs is available from the Allied Health department (<https://www.ctc.uaf.edu/academics/allied-health/>) at Community and Technical College, P.O. Box 758040, Fairbanks,

AK 99775; by calling 907-455-2800; or by email at uaf-ctc@alaska.edu (p. 14).

Minimum Requirements for Certificate: 30-42 credits; for Degree: 60-61 credits

Community and Technical College
Allied Health (<https://www.ctc.uaf.edu/academics/allied-health/>)
907-455-2800

Programs Degrees

- A.A.S., Dental Assistant (p. 171)
- A.A.S., Medical Assistant (p. 171)

Certificates

- Dental Assistant (p. 172)
- Health Care Reimbursement (p. 172)
- Medical Assistant (p. 173)
- Medical/Dental Reception (p. 174)
- Medical Scribe Specialist (p. 173)
- Pre- (p. 174) Nursing Qualifications (p. 174)

A.A.S., Dental Assistant

Students must earn a C- grade or better in each course.

Minimum Requirements for Dental Assistant A.A.S.: 60 credits

| Code | Title | Credits |
|--|---|-----------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| As part of the A.A.S. requirements complete the following: | | |
| <i>Communication</i> | | |
| COJO F121X | Introduction to Interpersonal Communication | |
| or COJO F131X | Fundamentals of Oral Communication: Group Context | |
| or COJO F141X | Fundamentals of Oral Communication: Public Context | |
| WRTG F111X | Writing Across Contexts | |
| WRTG F213X | Writing and the Sciences | |
| <i>Human Relations</i> | | |
| HLTH F106 | Human Behavior in Health Care | |
| <i>Computation</i> | | |
| HLTH F116 | Mathematics in Health Care | |
| Dental Assistant Program Requirements | | |
| DA F100 | Introduction to Dental Assisting | 3 |
| DA F150 | Dental Radiography | 4 |
| DA F152 | Dental Materials and Applications | 4 |
| DA F153 | Anatomy for Dental Assistants | 3 |
| DA F251 | Beginning Chairside for Dental Assistants | 4 |
| DA F252 | Advanced Chairside for Dental Assistants | 4 |
| DA F254 | Dental Assistant Practicum | 4 |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F114 | Fundamentals of Anatomy and Physiology | 4 |
| HLTH F118 | Medical Law and Ethics | 2 |
| HLTH F122 | First Aid and CPR for the Health Care Provider ¹ | 0 |
| HLTH F203 | Science of Nutrition | 3 |
| HLTH F208 | Human Diseases | 3 |
| MA F247 | Introduction to Pharmacology | 2 |
| Total Credits | | 45 |

¹ or First Aid/CPR card.

A.A.S., Medical Assistant

Students must earn a C- grade or better in each course.

Minimum Requirements for Medical Assistant A.A.S. Degree: 60 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Medical Assistant Program Requirements | | |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F118 | Medical Law and Ethics | 2 |
| HLTH F122 | First Aid and CPR for the Health Care Provider ¹ | 0 |
| HLTH F130 | Medical Office Technology | 3 |
| HLTH F203 | Science of Nutrition | 3 |
| HLTH F208 | Human Diseases | 3 |
| HLTH F236 | Outpatient Health Care Reimbursement | 3 |
| MA F100 | Medical Terminology | 3 |
| MA F114 | Fundamentals of Anatomy and Physiology (preferred) | 4 |
| or BIOL F100X | Human Biology | |
| MA F142 | Clinical Procedures I | 4 |
| MA F144 | Administrative Procedures for the Medical Assistant | 6 |
| MA F244 | Clinical Procedures II | 4 |
| MA F247 | Introduction to Pharmacology | 2 |
| MA F268 | Medical Assisting Practicum | 4 |
| or MA F261 and MA F267 | Medical/Dental Office Reception Practicum and Medical Assisting Practicum Completion | |
| Approved HLTH, CIOS, ABUS, HUMS electives | | 3 |

¹ Complete course or submit current first aid and CPR for the healthcare provider card.

Certificate, Dental Assistant

Students must earn a C- or better in each course.

Minimum Requirements for Certificate: 37 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements complete: | | |
| <i>Communication</i> | | |
| WRTG F111X | Writing Across Contexts | |
| <i>Computation</i> | | |
| HLTH F116 | Mathematics in Health Care | |
| <i>Human Relations</i> | | |
| HLTH F106 | Human Behavior in Health Care | |
| Dental Assistant Program Requirements | | |
| Complete the following: | | |
| DA F100 | Introduction to Dental Assisting | 3 |
| DA F150 | Dental Radiography | 4 |
| DA F152 | Dental Materials and Applications | 4 |
| DA F153 | Anatomy for Dental Assistants | 3 |
| DA F251 | Beginning Chairside for Dental Assistants | 4 |
| DA F252 | Advanced Chairside for Dental Assistants | 4 |
| DA F254 | Dental Assistant Practicum | 4 |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F122 | First Aid and CPR for the Health Care Provider | 0 |

Certificate, Health Care Reimbursement

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Health Care Reimbursement Certificate: 33 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements ¹ | | |
| Complete the certificate requirements. (p. 139) | | |
| Health Care Reimbursement Program Requirements | | |
| Complete the following: | | |
| WRTG F111X | Writing Across Contexts | 3 |
| or ABUS F271 | Business Communications | |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F114 | Fundamentals of Anatomy and Physiology | 4 |
| HLTH F116 | Mathematics in Health Care | 3 |
| HLTH F126 | Administrative Procedures for the Healthcare Worker | 3 |
| HLTH F130 | Medical Office Technology | 3 |
| HLTH F208 | Human Diseases | 3 |
| HLTH F236 | Outpatient Health Care Reimbursement | 3 |
| HLTH F238 | Medical Coding I | 3 |
| HLTH F239 | Medical Coding II | 3 |

¹ As part of the certificate requirements, the communication, computation and human relations content are embedded in the major required courses for this program.

Certificate, Medical Assistant

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Medical Assistant Certificate: 36 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| <i>Communications</i> | | |
| WRTG F111X | Writing Across Contexts ¹ | 3 |
| <i>Computation</i> | | |
| Complete 3 credits from the following: | | 3 |
| HLTH F116 | Mathematics in Health Care (preferred) | |
| MATH F105 | Intermediate Algebra | |
| MATH at the 100 level or higher | | |
| <i>Human Relations</i> | | |
| Complete 3 credits from the following: | | 3 |
| ABUS F154 | Human Relations | |
| HLTH F106 | Human Behavior in Health Care | |
| Medical Assistant Program Requirements | | |
| HLTH F122 | First Aid and CPR for the Health Care Provider ² | 0 |
| MA F100 | Medical Terminology | 3 |
| MA F114 | Fundamentals of Anatomy and Physiology (preferred) | 4 |
| or BIOL F100X | Human Biology | |
| MA F142 | Clinical Procedures I | 4 |
| MA F144 | Administrative Procedures for the Medical Assistant | 6 |
| MA F244 | Clinical Procedures II | 4 |
| MA F247 | Introduction to Pharmacology | 2 |
| MA F268 | Medical Assisting Practicum | 4 |
| or MA F261 and MA F267 | Medical/Dental Office Reception Practicum and Medical Assisting Practicum Completion | |

¹ Fulfills the written communications requirement.

² Complete course or submit current First Aid and CPR for the healthcare provider card.

Certificate, Medical Scribe Specialist

Admission Requirements

- High school graduation or GED; ALEKS Placement: HLTH F116; Accuplacer Placement: WRTG F110; or permission of instructor.
- Documentation of the following immunizations: two varicella, two MMR, three Hep B, and two-step PPD within previous 12 months or titers to prove immunity to above diseases.
- Be at least 18 years old by the first day of the semester in which you are admitted.
- Complete the UAF application process.
- Complete FAFSA for financial aid, if needed.
- These will be verified by the director of allied health programs.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Medical Scribe Specialist Certificate: 32 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements, complete: | | |
| <i>Communication</i> | | |
| WRTG F111X | Writing Across Contexts | |
| or ABUS F271 | Business Communications | |
| <i>Computation</i> | | |
| HLTH F116 | Mathematics in Health Care | |
| <i>Human Relations</i> | | |
| HLTH F106 | Human Behavior in Health Care ¹ | |
| Medical Scribe Specialist Program Requirements | | |
| Complete the following: | | |
| ABUS F102A | Keyboarding: Touch Typing | 1 |
| ABUS F102B | Keyboarding: Skill Building | 1 |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F114 | Fundamentals of Anatomy and Physiology | 4 |
| HLTH F118 | Medical Law and Ethics | 2 |
| HLTH F122 | First Aid and CPR for the Health Care Provider | 0 |
| HLTH F124 | Introduction to Medical Scribe Specialist | 2 |
| HLTH F236 | Outpatient Health Care Reimbursement | 3 |
| HLTH F260 | Medical Scribe Specialist Practicum | 2 |
| MA F247 | Introduction to Pharmacology | 3 |

¹ Or other approved human relations courses.

Certificate, Medical/Dental Reception

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Medical/Dental Reception Certificate: 30 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements, complete: | | |
| <i>Communications</i> | | |
| ABUS F271 | Business Communications | |
| | or WRTG F111X Writing Across Contexts | |
| <i>Computation</i> | | |
| HLTH F116 | Mathematics in Health Care (or MATH at the F100 level or above) | |
| <i>Human Relations</i> | | |
| HLTH F106 | Human Behavior in Health Care | |
| Medical/Dental Reception Program Requirements | | |
| Complete the following: | | |
| HLTH F100 | Medical Terminology | 3 |
| HLTH F110 | Professional Skills for the Workplace | 2 |
| HLTH F118 | Medical Law and Ethics | 2 |
| HLTH F122 | First Aid and CPR for the Health Care Provider ¹ | 0 |
| HLTH F126 | Administrative Procedures for the Healthcare Worker | 3 |
| HLTH F130 | Medical Office Technology | 3 |
| HLTH F208 | Human Diseases | 3 |
| HLTH F236 | Outpatient Health Care Reimbursement | 3 |
| HLTH F261 | Medical/Dental Office Reception Practicum | 2 |

¹ Complete course or submit First Aid and CPR for the healthcare providers cards.

Certificate, Pre-Nursing Qualifications

Admission Requirements

Note: CHEM F103X is required only if CHEM is not taken and passed in high school.

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Pre-Nursing Qualifications Certificate: 37-42 credits

OPTIONAL CONCENTRATIONS: BSN PREPARED CONCENTRATION (P. 175)

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| <i>Communications</i> | | |
| COJO F121X | Introduction to Interpersonal Communication | 3 |
| or COJO F131X | Fundamentals of Oral Communication: Group Context | |
| or COJO F141X | Fundamentals of Oral Communication: Public Context | |
| WRTG F111X | Writing Across Contexts | 3 |
| <i>Computation</i> | | |
| Select from of the following: | | 3 |
| MATH F105 | Intermediate Algebra | |
| MATH at the 100 level or higher | | |
| <i>Human Relations</i> | | |
| PSY F101X | Introduction to Psychology | 3 |
| Pre-Nursing Qualifications Program Requirements | | |
| BIOL F111X | Human Anatomy and Physiology I | 4 |
| BIOL F112X | Human Anatomy and Physiology II | 4 |
| BIOL F240 | | 4 |
| HLTH F203 | Science of Nutrition | 3 |
| PSY F240 | Psychology of Development | 3 |
| WRTG F213X | Writing and the Sciences | 3 |
| Clinical Courses | | |
| Complete one of the following: | | 4-9 |
| EMS F170 | EMT: Emergency Medical Technician I | |
| HLTH F107 | Nurse Aide Training | |
| HLTH F111 | Personal Care Attendant Training | |
| HLTH F113 | Personal Care Attendant to Nursing Assistant Bridge | |

Other approved clinical course

OPTIONAL CONCENTRATION**BSN Prepared Concentration**

| Code | Title | Credits |
|-------------------------|--------------------------------|---------|
| Complete the following: | | |
| PHIL F102X | Introduction to Philosophy | 3 |
| or PHIL F104X | Logic and Reasoning | |
| PHIL F402 | Biomedical and Research Ethics | 3 |
| STAT F200X | Elementary Statistics | 3 |
| NS A216 | Pathophysiology | 4 |
| NS A309 | Pharmacology in Nursing | 3 |

High Latitude Range Management Certificate

An HLRM program certificate represents the completion of 31 credits delivered via hands-on applied field, laboratory and classroom sessions, with supplementary virtual instruction. The curriculum consists of the inventory and monitoring of Northern animal and plant populations, domesticated ungulate husbandry and health, research and report writing, and the opportunity to formulate a reindeer business plan specific for community development needs. Indigenous knowledge and the application of the scientific method will be used to stimulate learning and to better prepare students for entry-level natural resource jobs or to become a reindeer entrepreneur.

Admission is open to all, especially those employed by or interested in employment with tribal, state or federal agencies or other local entities in rural Alaska that provide natural resource management services.

Students should have a high school diploma or GED and an interest in science-related fields. It is strongly recommended that students seeking admission to this program have completed two high school lab-based science courses, preferably in biology, chemistry or physics.

The HLRM certificate may serve as a bridge to a variety of natural science associate and baccalaureate programs.

Minimum Requirements for High Latitude Range Management Certificate: 31 credits

College of Rural and Community Development
Northwest Campus (<https://www.uaf.edu/nwc/>)
907-474-7143

Programs Certificate

- High Latitude Range Management (p. 176)

Certificate, High Latitude Range Management

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for High Latitude Range Management Certificate: 31 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements, complete: | | |
| <i>Communication</i> | | |
| WRTG F111X | Writing Across Contexts | |
| <i>Computation</i> | | |
| MATH F113X | Numbers and Society | |
| or ABUS F155 | Business Math | |
| <i>Human Relations</i> | | |
| ANTH F100X/ SOC F101X | Individual, Society and Culture | |
| or ABUS F154 | Human Relations | |
| High Latitude Range Management Program Requirements | | |
| Complete the following: | | |
| BIOL F104X | Natural History of Alaska | 4 |
| HLRM F120 | History of Domesticated Alaskan Ungulates | 1 |
| HLRM F130 | Research Field Logistics | 2 |
| HLRM F140 | High Latitude Range Management | 2 |
| HLRM F150 | Alaskan Ungulate Husbandry | 2 |
| HLRM F160 | Meat Production | 2 |
| HLRM F170 | Health Issues in Domesticated Ungulates | 2 |
| HLRM F201 | Field Techniques for Range Management | 2 |
| HLRM F205 | Report Writing in Range Management | 2 |
| NRM F101 | Natural Resources Conservation and Policy | 3 |

Human Services

A.A.S. Degree

Students in the human services program receive skills-based training within a foundation of theory. After completing foundation courses, students select an area of concentration from the following: addictions counseling, behavioral health, or interdisciplinary concentration. Students learn interviewing and assessment, case management, crisis intervention, group counseling techniques and other specific skills needed within their concentration area.

The program prepares students for entry-level positions in human services agencies. Persons with a strong desire to help others, a sincere respect for humankind and a commitment to their own personal growth may find this field rewarding. They must be emotionally stable, flexible and interested in working with people of diverse social, cultural and economic backgrounds from themselves. Recovery from life traumas and addictions can be a positive attribute if the student has successfully worked through specific issues and is willing to continue personal growth.

Students who complete an addictions concentration are eligible for certification as chemical dependency counselor technicians through the Alaska Commission for Behavioral Health Certification.

Each concentration is available to B.A. degree students as a minor. Option 1: The B.A. degree student must complete the concentration and three HUMS elective credits. Concentrations provide students with the skills needed for employment. See minor requirements. Option 2: Complete HUMS-approved elective credits (18 credits of electives must be approved by the human services program head).

The degree program is delivered through the College of Rural and Community Development.

Minimum Requirements for Human Services A.A.S. Degree: 63 credits

College of Rural and Community Development
Human Services Program (<https://www.uaf.edu/iac/academic-programs/rural-human-services/>)
907-474-5439

Programs

Degree

- A.A.S., Human Services (p. 177)

Certification

- Alaska Chemical Dependency Counselor (p. 178)

A.A.S., Human Services

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Human Services A.A.S.: 63 credits

CONCENTRATIONS: ADDICTIONS COUNSELING (P. 177), BEHAVIORAL HEALTH (P. 177) AND INTERDISCIPLINARY CONCENTRATION (P. 177)

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Human Services Program Requirements | | |
| Complete the following: | | |
| HUMS F101 | Introduction to Human Services | 3 |
| or SWK F103X | Introduction to Social Work | |
| HUMS F102 | Standards of Practice | 2 |
| HUMS F120 | Cultural Diversity in Human Services | 3 |
| HUMS F125X | Introduction to Addictive Processes | 3 |
| HUMS F202 | Standards of Practice II | 1 |
| HUMS F215 | Individual Interviewing | 3 |
| HUMS F232 | Human Service Practicum I | 3 |
| HUMS F233 | Human Service Practicum II | 3 |
| HUMS F301 | Ethics in Human Service | 3 |
| or SWK F220 | Ethics, Values and Social Work Practice | |
| PSY F101X | Introduction to Psychology | 3 |
| Concentrations | | |
| Complete one of the following concentrations: | | 12-21 |
| Addictions Counseling | | |
| Behavioral Health | | |
| Interdisciplinary Concentration | | |

Concentrations

ADDICTIONS COUNSELING

| Code | Title | Credits |
|---|--|---------|
| Complete the following: | | |
| HUMS F105 | Personal Awareness and Growth | 3 |
| HUMS F205 | Basic Principles of Group Counseling | 3 |
| or HUMS F210 | Crisis and Grief Counseling | |
| HUMS F250 | Current Issues in Human Services (or any 1-credit course approved by the human services program) | 1 |
| HUMS F260 | History of Alcohol in Alaska | 1 |
| HUMS F261 | Substance Abuse Assessment: ASAM PPC II | 1 |
| HUMS F263 | Fetal Alcohol Spectrum Disorder | 1 |
| HUMS F266 | Co-occurring Disorders | 2 |
| HUMS F305 | Substance Abuse Counseling | 3 |
| Complete one of the following family courses: | | 2-3 |

| | |
|-----------|---------------------------|
| ECE F342 | Family Relationships |
| HUMS F140 | Family Dynamics |
| PSY F240 | Psychology of Development |
| RHS F120 | Family Systems I |

BEHAVIORAL HEALTH

| Code | Title | Credits |
|---|--------------------------------------|---------|
| Complete the following: | | |
| HUMS F205 | Basic Principles of Group Counseling | 3 |
| HUMS F210 | Crisis and Grief Counseling | 3 |
| HUMS F280 | Prevention and Community Development | 3 |
| HUMS F290 | Case Management | 3 |
| HUMS F305 | Substance Abuse Counseling | 3 |
| PSY F240 | Psychology of Development | 3 |
| or PSY F245 | Child Development | |
| Elective credits (approved by human services program coordinator) | | 3 |

If the student is a social work or justice major, then select one of the following in place of an elective:

Social Work Majors:

SWK F103X Introduction to Social Work

Justice Majors:

JUST F110X Introduction to Justice

INTERDISCIPLINARY CONCENTRATION

- The interdisciplinary concentration option is made available to students based on their individual needs and goals for specific vocational preparation. The interdisciplinary concentration will include 12 credits at the F200 level or above from the disciplines of social work, psychology, sociology, justice or human services. Three credits from these disciplines can be at the F100 level.
- The interdisciplinary concentration will be reviewed and approved by the human services program coordinator, another human services faculty member and a faculty member representing at least one other discipline. Criteria for the approval of the interdisciplinary concentration is based on the candidate's identified vocational and curricular needs.

Examples:

- HUMS or other acceptable courses that meet a student's specific need: Workforce Specialty, Family Specialty, Restorative Justice, etc.
- Courses or a certificate from within the UA system (UAA, RHS, PWSCC, etc.) that are aligned with the human services degree program.

Below is a sample of courses that could be used to fulfill an interdisciplinary concentration in restorative justice for the human services degree.

| Code | Title | Credits |
|------------|-------------------------------|---------|
| HUMS F210 | Crisis and Grief Counseling | 3 |
| HUMS F290 | Case Management | 3 |
| JUST F110X | Introduction to Justice | 3 |
| JUST F251X | Criminology | 3 |
| SOC F201X | Social Problems and Solutions | 3 |

For Students with the Rural Human Services Certificate

Up to 27 credits accepted as a block of courses

MINIMUM REQUIREMENTS FOR HUMAN SERVICES A.A.S. DEGREE: 63 CREDITS

Students must earn a C grade or better in each course.

| Code | Title | Credits |
|--|--------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Human Services Program Requirements | | |
| Complete the following: | | |
| HUMS F101 | Introduction to Human Services | 3 |
| HUMS F301 | Ethics in Human Service | 3 |
| PSY F101X | Introduction to Psychology | 3 |
| PSY F240 | Psychology of Development | 3 |
| Complete three from the following: | | 9 |
| HUMS F205 | Basic Principles of Group Counseling | |
| HUMS F250 | Current Issues in Human Services | |
| HUMS F280 | Prevention and Community Development | |
| HUMS F290 | Case Management | |
| HUMS F305 | Substance Abuse Counseling | |

Certification, Alaska Chemical Dependency Counselor

ALASKA CHEMICAL DEPENDENCY COUNSELOR CERTIFICATION

The Alaska Commission for Behavioral Health Certification has approved the following courses for up to 45 training hours each toward certification or recertification of chemical dependency counselors in the state of Alaska.

| Code | Title | Credits |
|------------|--------------------------------------|---------|
| HUMS F125X | Introduction to Addictive Processes | 3 |
| HUMS F205 | Basic Principles of Group Counseling | 3 |
| HUMS F210 | Crisis and Grief Counseling | 3 |
| HUMS F215 | Individual Interviewing | 3 |
| HUMS F260 | History of Alcohol in Alaska | 1 |
| HUMS F301 | Ethics in Human Service | 3 |
| HUMS F305 | Substance Abuse Counseling | 3 |

Note: Chemical dependency counselors currently certified by the Alaska Commission for Behavioral Health Certification are eligible for transfer credit toward the human services degree. Contact the human services program advisor at 907-474-5439 for more information.

Information Technology Specialist Certificate; A.A.S. Degree

The information technology specialist certificate and associate programs teach students how to use, support, implement and troubleshoot the computer and information technology systems found in educational, governmental and corporate settings.

The certificate program focuses on foundation-level support skills required to effectively use and troubleshoot computer and information technology systems. Students completing the certificate program will be prepared for entry-level IT positions and to continue their education in the information technology specialist A.A.S. degree program.

The A.A.S. degree program prepares individuals to implement, support, and troubleshoot computer and information technology systems and obtain employment as an IT professional. Associate degrees in computing technology, network and cybersecurity, and network and system administration are offered.

Students entering either the certificate or A.A.S. degree program should meet with a faculty advisor to discuss program requirements and develop an education plan that matches the current skills and goals of the student.

This degree program is delivered collaboratively within the UA system.

Minimum Requirements for Information Technology Specialist Certificate: 30 credits; for Associate Degree: 60 credits

Community and Technical College
Information Technology (<https://www.ctc.uaf.edu/its/>)
907-455-2800

Programs Degree

- A.A.S., Information Technology Specialist (p. 179)

Certificate

- Information Technology Specialist (p. 181)

A.A.S., Information Technology Specialist

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Information Technology Specialist A.A.S.: 60 credits

CONCENTRATIONS: COMPUTING TECHNOLOGY (P. 180), NETWORK AND CYBERSECURITY (P. 180), AND NETWORK AND SYSTEM ADMINISTRATION (P. 180)

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| As part of the A.A.S. requirements complete the following: | | |
| <i>Computation</i> | | |
| MATH F105 | Intermediate Algebra | |
| or any course at the F100 level or above in mathematical sciences (computer science, math or statistics) | | |
| <i>Human Relations</i> | | |
| ABUS F154 | Human Relations | |
| or ANTH F100X | Individual, Society and Culture | |
| or SOC F101X | Introduction to Sociology | |
| Information Technology Specialist Program Requirements | | |
| Complete the following: | | |
| CITS F204 | Introduction to Computer Networks | 3 |
| CITS F205 | Introduction to Coding and Programming | 3 |
| or CS F103 | Introduction to Computer Programming | |
| or CS F201 | Computer Science I | |
| CITS F212 | Server Operating Systems | 3 |
| CITS F261 | Computer and Network Security | 3 |
| CITS F281 | Professional Practices in IT | 3 |
| CITS F284 | Independent Project | 3 |
| or CITS F285 | Cooperative Work Experience | |
| Additional 6 credits from CIOS, CITS or CS electives | | 6 |
| Concentrations | | |
| Complete one of the following concentrations: | | 21-22 |
| <i>Computing Technology</i> | | |
| Network and Cybersecurity | | |
| Network and System Administration | | |

Pass a certification review requiring students to demonstrate proficiency in the following skill areas: network support and troubleshooting; system administration; cybersecurity; independent thinking; human relations and support; and professional practices. ¹

¹ Prior to graduation, all students are required to pass a certification review that includes a hands-on scenario task and the development and presentation of a portfolio of work.

Concentrations

COMPUTING TECHNOLOGY

| Code | Title | Credits |
|---|--|---------|
| Complete 21-22 credits from the following or from program coordinator-approved courses: | | 21-22 |
| CITS F201 | Operating Systems Support | |
| CITS F203 | Information Technology Support Fundamentals | |
| CITS F219 | Operating Systems: Topics | |
| CITS F220 | Implementing Internet Tools and Technologies | |
| CITS F221 | Graphics and Multimedia for the Web | |
| CITS F222 | Website Design | |
| CITS F240 | System and Network Services Administration | |
| CITS F241 | Networking and LAN Infrastructure Basics | |
| CITS F242 | Routing and Switching Essentials | |
| CITS F243 | Intermediate Networking and LAN Infrastructure | |
| CITS F245 | Cloud Computing Foundations | |
| CITS F262 | Cybersecurity Defense and Countermeasures | |
| CITS F263 | Network Security Penetration Testing | |
| CITS F265 | Directory Services Administration | |
| CITS F282 | IT Troubleshooting Skills | |
| CITS F289 | Information Technology: Topics | |

NETWORK AND CYBERSECURITY

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| CITS F241 | Networking and LAN Infrastructure Basics | 4 |
| CITS F242 | Routing and Switching Essentials | 4 |
| CITS F243 | Intermediate Networking and LAN Infrastructure | 4 |
| CITS F245 | Cloud Computing Foundations | 3 |
| CITS F262 | Cybersecurity Defense and Countermeasures | 3 |
| CITS F263 | Network Security Penetration Testing | 3 |

NETWORK AND SYSTEM ADMINISTRATION

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| CITS F240 | System and Network Services Administration | 3 |
| CITS F241 | Networking and LAN Infrastructure Basics | 4 |
| CITS F242 | Routing and Switching Essentials | 4 |

| | | |
|-----------|--|---|
| CITS F243 | Intermediate Networking and LAN Infrastructure | 4 |
| CITS F245 | Cloud Computing Foundations | 3 |
| CITS F265 | Directory Services Administration | 3 |

Note: Upon admission to the certificate or degree program, each student will be assigned a mentor/committee chair who will be responsible for determining the student's current level of competency in the various skill areas; assisting the student in determining the courses/experiences necessary for gaining competency in the deficient skill areas; setting up the student's committee to consist of the mentor and at least one other individual who may be a UA faculty member, an adjunct faculty member, or an expert in the student's community; arranging for practical experiences in the student's community; and organizing the committee's final assessment of the student's work and recommending award of the certificate or degree.

Certificate, Information Technology Specialist

Students must earn a C- grade or better in each course.

Minimum Requirements for Information Technology Specialist Certificate: 30 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements complete the following: | | |
| <i>Human Relations</i> | | |
| ANTH F100X and SOC F101X or ABUS F154 | Individual, Society and Culture and Introduction to Sociology Human Relations | |
| Information Technology Specialist Program Requirements | | |
| Complete the following: | | |
| CITS F203 | Information Technology Support Fundamentals | 4 |
| CITS F204 | Introduction to Computer Networks | 3 |
| CITS F212 | Server Operating Systems | 3 |
| CITS F261 | Computer and Network Security | 3 |
| Complete 8-9 credits from the following or program coordinator-approved courses: | | 8-9 |
| CLOS F128 | Microcomputer Operating Systems | |
| CLOS F130 | Word Processing | |
| CLOS F135 | Microcomputer Spreadsheets | |
| CLOS F150 | Computer Business Applications | |
| CLOS F189 | Microcomputer Applications: Topics ² | |
| CLOS F233 | Desktop Publishing | |
| CLOS F240 | Microcomputer Databases | |
| CLOS F255 | Digital Graphics | |
| CLOS F258 | Digital Photography | |
| CITS F201 | Operating Systems Support | |
| CITS F219 | Operating Systems: Topics ¹ | |
| CITS F220 | Implementing Internet Tools and Technologies | |
| CITS F221 | Graphics and Multimedia for the Web | |
| CITS F222 | Website Design | |
| CITS F240 | System and Network Services Administration | |
| CITS F241 | Networking and LAN Infrastructure Basics | |
| CITS F242 | Routing and Switching Essentials | |
| CITS F262 | Cybersecurity Defense and Countermeasures | |
| CITS F263 | Network Security Penetration Testing | |
| CITS F265 | Directory Services Administration | |
| CITS F282 | IT Troubleshooting Skills | |

CITS F289 Information Technology: Topics

Pass a certification review requiring students to demonstrate proficiency in the following skill areas: operating systems, hardware, and network support and troubleshooting. ²

¹ May be repeated for different topics.

² Prior to graduation, all students are required to pass a certification review that includes a hands-on scenario task and the development and presentation of a portfolio of work.

Instrumentation Technology Certificate

The instrumentation technology program will develop entry-level skills in industrial instrumentation. Courses combine the technical know-how, the use of state-of-the-art equipment and hands-on experience necessary for work in a variety of industrial instrumentation fields.

Students are taught the necessary objectives and skill sets required to take the entry-level Instrumentation, Systems and Automation Society certificate examination. This is a nationally recognized certification by industry partners; individuals holding this certification are sought after by industry partners to fill instrumentation technician positions worldwide.

As the process industries expand and automate, the need for qualified technicians increases. This need is currently being addressed by the Industrial Instrumentation & Controls Technology Alliance. CTC and the process technology program are active members of this national alliance.

Minimum Requirements for Instrumentation Technology Certificate: 32 credits

Community and Technical College
Process Technology (<https://www.ctc.uaf.edu/programs/process-technology/>)
907-455-2800

Programs Certificate

- Instrumentation Technology (p. 182)

Certificate, Instrumentation Technology

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Instrumentation Technology Certificate: 32 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| Instrumentation Technology Program Requirements | | |
| ELT F101 | Basic Electronics: DC Physics | 4 |
| ELT F102 | Basic Electronics: AC Physics | 4 |
| ELT F246 | Electronic Industrial Instrumentation | 3 |
| PRT F140 | Industrial Process Instrumentation I | 3 |
| PRT F144 | Industrial Process Instrumentation II | 3 |
| PRT F240 | Industrial Process Instrumentation III | 3 |
| PRT F248 | Valve Maintenance and Instrumentation | 3 |

Interdisciplinary Studies

A.A.S. Degree

The interdisciplinary program provides flexibility to students who have educational goals that do not fit into one of the established Associate of Applied Sciences degrees offered by UAF. This A.A.S. interdisciplinary studies program is offered through a shared partnership with the Community and Technical College and the office of Undergraduate Interdisciplinary Studies. Students who are interested in an interdisciplinary studies program should meet with an advisor in the office of Undergraduate Interdisciplinary Studies or the CTC Advising Center to discuss their educational plan. Appointments can be scheduled by clicking the "schedule an appointment" link on the undergraduate interdisciplinary studies website or by calling the CTC Advising Center at 907-455-2800.

Minimum Requirements for Degree: 60 credits

Community and Technical College
CTC Advising Center
907-455-2800

Interdisciplinary Studies
Division of General Studies
907-479-2436

Programs Degree

- A.A.S., Interdisciplinary Studies (p. 183)

A.A.S., Interdisciplinary Studies

Admission Requirements

Admission process for an Interdisciplinary Studies A.A.S.

1. Students who are interested in an interdisciplinary studies program should meet with an advisor in the office of Undergraduate Interdisciplinary Studies or the CTC Advising Center to develop their educational plan. Appointments can be scheduled by clicking the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<https://www.uaf.edu/inds/>) or by calling the CTC Advising Center at 907-455-2800.
2. If you are not currently an active UAF student, are attending as a nondegree student, or are admitted to different degree level, you need to apply for admission with the UAF Office of Admissions (<https://www.uaf.edu/admissions/apply/>). If you are currently active in an associate degree program at UAF, you do not need to reapply for admission and can skip this step.
3. Create a draft of your interdisciplinary studies major plan, including its title, courses to be included, a written description and a capstone. You can work on a draft directly on the Interdisciplinary Studies Associate of Applied Science - Goals Option Approval Form. Students are also encouraged to use a plan ahead worksheet or spreadsheet to lay out a path to graduation.
4. Contact faculty (three minimum) to serve as your interdisciplinary committee. One faculty member will serve as the chair/advisor. The faculty chair should be affiliated with an academic unit that provides the degree level you are seeking. You should arrange a committee meeting for all members to meet and discuss your proposal. At this meeting, the committee will review your interdisciplinary proposal and provide feedback to help you choose your title and proposed courses.
5. After receiving feedback and advice from your faculty committee, you will fill out or edit your drafted Interdisciplinary Studies Associate Degree - Goals Option Approval Form. The form must be submitted electronically to the office of Undergraduate Interdisciplinary Studies, and will then be routed for electronic signatures by you, each of your committee members and the dean of the Community and Technical College as well as the director of undergraduate interdisciplinary studies and vice provost for final approval.
6. Once your interdisciplinary studies packet is approved, you will be notified by email and your DegreeWorks will be updated to show your new major's courses. You will work with your committee chair as your primary academic advisor going forward.
7. Any changes to the approved curriculum are made only with the approval of your faculty committee chair and submitted on a UAF Undergraduate Petition form and signed by all necessary parties. Petitions should be submitted to the undergraduate interdisciplinary studies office for the director to consider for final approval.
8. The approved title of your major will appear on the transcript and diploma when you graduate as "Your Title: Interdisciplinary Studies."

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Program Requirements

Minimum Requirements for Interdisciplinary Studies A.A.S.: 60 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Interdisciplinary Studies Program Requirements: | | |
| | Select course work from more than one discipline to create a cohesive body of knowledge for a minimum of 30 credits. Courses must be approved by three faculty, the dean of UAF Community and Technical College, the director of undergraduate interdisciplinary studies and the UAF vice provost. | 30 |

See the Admission Requirements tab for more information on the approval process for the program requirements for the interdisciplinary studies major.

Note: Any changes to an approved interdisciplinary proposal need to be approved by the chair of your committee by petition and by the vice provost.

Local Knowledge Educator Certificate

The local knowledge educator certificate is a 30-credit undergraduate certificate program intended to provide individuals interested in the teaching profession with a benchmark credential that will set them on a path to a bachelor's degree in elementary or secondary education. 27-30 of the credits in the certificate program will apply to the elementary B.A. degree, or 18 of the credits will apply to a secondary B.A. degree.

The coursework in the local knowledge educator certificate program represents a collection of courses that have low barriers to entry (no prerequisites), fulfill the general university requirements for a certificate program, and provide an individual interested in working in a non-certificated K-12-based position (e.g., as a substitute teacher or a paraprofessional) with a strong introduction to the teaching profession and content knowledge relevant to work in a school context. The collection of classes can both enhance individual knowledge of Alaska and Alaska's Indigenous cultures, as well as equip future educators with tools that will help them incorporate their own local knowledge into K-12 classrooms now and in the future.

Minimum Requirements for Local Knowledge Educator Certificate: 30 credits

School of Education (<https://www.uaf.edu/soe/>)
907-474-7341

Programs

Certificate

- Local Knowledge Educator (p. 185)

Certificate, Local Knowledge Educator

Admission Requirements

For admission to certificate programs, official documentation must be provided showing that the applicant:

1. is at least 18 years old, or
2. has a high school diploma, or
3. has a General Educational Development (GED) diploma.

Applicants under the age of 18 who will not have a high school diploma or GED before the start of their first semester are not admissible but may take courses as a nondegree student. Please note that in order to qualify for federal financial aid, students must have either a high school diploma or a GED.

TRANSFER STUDENTS

Transfer students are eligible for admission if they left their previous accredited institution(s) in good standing. Admission status will be determined on an individual basis if a student attended an unaccredited/non-regionally accredited post-secondary institution.

HIGH SCHOOL STUDENTS

High school students may take classes at UAF. There are two enrollment options for students interested in certificate or associate degree programs: Secondary Student Enrollment and TECH PREP. Both have specific registration requirements but do not require admission to UAF.

HOME-SCHOOLED STUDENTS

Home-schooled students may be admitted to an associate or certificate program if the student is at least 18 years old, holds a GED, graduated from a state-sponsored correspondence program with a high school diploma, or with the approval of the director of admissions.

Program Requirements

Students must earn a C or better in each course.

Minimum Requirements for Local Knowledge Educator Certificate: 30 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements, complete: | | |
| <i>Communication</i> | | |
| WRTG F111X | Writing Across Contexts | |
| or COJO F121X | Introduction to Interpersonal Communication | |
| or COJO F131X | Fundamentals of Oral Communication: Group Context | |
| or COJO F141X | Fundamentals of Oral Communication: Public Context | |
| <i>Computation</i> | | |
| MATH F151X | College Algebra for Calculus | |

or ECE F117 Practical Math Skills
 or MATH F105 Intermediate Algebra
 or MATH F122X Essential Precalculus with Applications

Human Relations

ED F245 Child Development

Local Knowledge Educator Program Requirements

Complete the following:

| | | |
|--------------|---|-----|
| ANL F141X | Beginning Dene / Athabascan I ¹ | 3-5 |
| ANL F287 | Teaching Methods for Alaska Native Languages ^{2,3} | 3 |
| or ED F486 | Media Literacy | |
| ANS F161X | Introduction to Alaska Native Performance | 3 |
| or ANS F223X | Alaska Native Music | |
| or ANS F202X | Aesthetic Appreciation of Alaska Native Performance | |
| ANS F242X | Indigenous Cultures of Alaska | 3 |
| or HIST F115 | Alaska, Land and Its People | |
| ED F100 | Language, Education, Linguistics | 3 |
| ED F111 | Teaching for Alaska's Future | 3 |
| ED F206 | Core Practices in Place and Arts-Based Teaching | 3 |
| or ED F204 | Literature for Children | |

¹ or another 3-5 credit Alaska Native Language course ending in X

² or RAHI Local Languages Preservation Class

³ can substitute for ED F486 Media Literacy

Native Language Education

Certificate; A.A.S. Degree

The Native language education program trains teachers of Native language and culture, providing coursework in Athabascan, Inupiaq Eskimo or Central Yup'ik Eskimo. The certificate and degree are recognized by some Alaska school districts and serve as steps toward a four-year degree. Candidates for the Central Yup'ik option must score advanced oral proficiency on an oral proficiency exam before being admitted into the program.

Minimum Requirements for Native Language Education Certificate: 30 credits; for A.A.S. Degree: 60 credits

College of Rural and Community Development
Alaska Native Languages Program (<https://www.uaf.edu/anlc/classes/>)
907-474-7874

Programs

Degree

- A.A.S., Native Language Education (p. 186)

Certificate

- Native Language Education (p. 187)

A.A.S., Native Language Education

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Native Language Education A.A.S.: 60 credits

CONCENTRATIONS: ATHABASCAN (P. 186), INUPIAQ ESKIMO (P. 186), CENTRAL YUP'IK ESKIMO (P. 187)

| Code | Title | Credits |
|--|----------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Native Language Education Program Requirements | | |
| Complete one of the following concentrations: | | 27-30 |
| | Athabascan | |
| | Inupiaq | |
| | Central Yup'ik | |

Concentrations

ATHABASCAN

Candidates must demonstrate proficiency or complete a two-semester sequence in the language of the degree.

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| ANL F108 | Beginning Athabascan Literacy | 3 |
| ANL F208 | Advanced Athabascan Literacy | 3 |
| ANL F251X | Introduction to Athabascan Linguistics | 3 |
| ANL F256 | Introduction to Alaska Native Languages: History, Status and Maintenance | 3 |
| ANL F287 | Teaching Methods for Alaska Native Languages | 3 |
| ANL F288 | Curriculum and Materials Development for Alaska Native Languages | 3 |
| ED F299 | Practicum in Education | 1-3 |
| Complete 6 credits from the following: | | 6 |
| ANL F199 | Practicum in Native Language Education | |

INUPIAQ ESKIMO

Candidates must demonstrate proficiency or complete a two-semester sequence in the language of the degree.

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| ANL F256 | Introduction to Alaska Native Languages: History, Status and Maintenance | 3 |
| ANL F287 | Teaching Methods for Alaska Native Languages | 3 |

| | | |
|--|--|---|
| ANL F288 | Curriculum and Materials Development for Alaska Native Languages | 3 |
| ED F299 | Practicum in Education | 6 |
| INU F118 | Inupiaq Orthography | 3 |
| INU F218 | Inupiaq Composition | 3 |
| Eskimo linguistics elective | | 3 |
| Complete 6 credits from the following: | | 6 |
| ANL F199 | Practicum in Native Language Education | |

CENTRAL YUP'IK ESKIMO

Demonstrate advanced oral/aural proficiency in Yup'ik.

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| ANL F199 | Practicum in Native Language Education | 3 |
| ANL F256 | Introduction to Alaska Native Languages: History, Status and Maintenance | 3 |
| ANL F287 | Teaching Methods for Alaska Native Languages | 3 |
| ANL F288 | Curriculum and Materials Development for Alaska Native Languages | 3 |
| ED F299 | Practicum in Education | 3 |
| YUP F109 | Central Yup'ik Orthography | 3 |
| YUP F208 | Yup'ik Composition | 3 |
| YUP F250 | Yup'ik Literature for Children | 3 |
| YUP F251 | Teaching Beginning Yup'ik Reading and Writing | 3 |

See Alaska Native Languages (p. 233).

Certificate, Native Language Education

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Native Language Education Certificate: 30 credits

CONCENTRATIONS: ATHABASCAN (P. 187), INUPIAQ ESKIMO (P. 188), CENTRAL YUP'IK ESKIMO (P. 188)

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Native Language Education Program Requirements | | |
| Complete one of the following concentrations: | | 30 |
| Concentrations | | |
| Athabascan | | |
| Inupiaq Eskimo | | |
| Central Yup'ik Eskimo | | |

¹ As part of the certificate requirements, the communication, computation and human relations content is embedded in some of the major required courses for this program.

Concentrations

ATHABASCAN

Candidates must demonstrate proficiency or complete a two-semester sequence in the language of the degree.

| Code | Title | Credits |
|---|--|---------|
| Athabascan Concentration Requirements | | |
| Complete the following: | | |
| ANL F108 | Beginning Athabascan Literacy | 3 |
| ANL F208 | Advanced Athabascan Literacy | 3 |
| ANL F251X | Introduction to Athabascan Linguistics | 3 |
| ANL F256 | Introduction to Alaska Native Languages: History, Status and Maintenance | 3 |
| ANL F287 | Teaching Methods for Alaska Native Languages | 3 |
| ANL F288 | Curriculum and Materials Development for Alaska Native Languages | 3 |
| Complete 6 credits from each of the following practicums: | | 12 |
| ANL F199 | Practicum in Native Language Education | |
| ED F299 | Practicum in Education | |

INUPIAQ ESKIMO

Candidates must demonstrate proficiency or complete a two-semester sequence in the language of the degree.

| Code | Title | Credits |
|---|--|---------|
| Inupiaq Eskimo Concentration Requirements | | |
| Complete the following: | | |
| ANL F256 | Introduction to Alaska Native Languages: History, Status and Maintenance | 3 |
| ANL F287 | Teaching Methods for Alaska Native Languages | 3 |
| ANL F288 | Curriculum and Materials Development for Alaska Native Languages | 3 |
| INU F118 | Inupiaq Orthography | 3 |
| INU F218 | Inupiaq Composition | 3 |
| Eskimo linguistics elective | | 3 |
| Complete 6 credits from each of the following practicums: | | 12 |
| ANL F199 | Practicum in Native Language Education | |
| ED F299 | Practicum in Education | |

CENTRAL YUP'IK ESKIMO

Demonstrate advanced oral and aural proficiency in Yup'ik.

| Code | Title | Credits |
|---|--|---------|
| Central Yup'ik Eskimo Concentration Requirements | | |
| Complete the following: | | |
| ANL F199 | Practicum in Native Language Education | 3 |
| ANL F256 | Introduction to Alaska Native Languages: History, Status and Maintenance | 3 |
| ANL F287 | Teaching Methods for Alaska Native Languages | 3 |
| ANL F288 | Curriculum and Materials Development for Alaska Native Languages | 3 |
| ED F299 | Practicum in Education | 3 |
| YUP F109 | Central Yup'ik Orthography | 3 |
| YUP F130 | Beginning Yup'ik Grammar | 3 |
| YUP F208 | Yup'ik Composition | 3 |
| YUP F250 | Yup'ik Literature for Children | 3 |
| YUP F251 | Teaching Beginning Yup'ik Reading and Writing | 3 |

Paralegal Studies

A.A.S. Degree

Paralegals assist in the delivery of legal services under the supervision of a practicing lawyer. Paralegals conduct client and witness interviews; engage in basic fact-finding and investigation; draft correspondence, reports, pleadings, motions and other legal documents; conduct legal research; and assist in discovery and trial preparation. Paralegals are in high demand in private law offices, local, state and federal agencies, and legal departments of large corporations. Employment opportunities exist both in Alaska and nationwide in private law offices large and small; in myriad local, state and federal government offices and agencies; and in corporations that retain in-house legal departments.

Note: Program curriculum is approved by the American Bar Association. Graduates are not authorized to provide direct legal services to the public. The paralegal studies program provides training for paralegals who are authorized to perform substantive legal work under the supervision of a lawyer. The program does not train lawyers or legal administrators.

Minimum Requirements for Paralegal Studies A.A.S. Degree: 60 credits

Community and Technical College

Paralegal Studies (<https://www.ctc.uaf.edu/programs/paralegal-studies/>)
907-455-2800

Programs Degree

- A.A.S., Paralegal Studies (p. 189)

A.A.S., Paralegal Studies

Admission Requirements

Complete the following admission requirements:

- Complete WRTG F111X with a grade of C or better prior to admission to the program.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Paralegal A.A.S.: 60 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Paralegal Program Requirements | | |
| Complete the following: | | |
| JUST F110X | Introduction to Justice | 3 |
| or PS F101X | Introduction to American Government and Politics | |
| PLS F102 | Introduction to Paralegal Studies | 3 |
| PLS F105 | Ethics for Paralegals | 3 |
| PLS F201 | Practical Paralegal Skills | 3 |
| PLS F210 | Civil Procedure | 3 |
| PLS F240 | Family Law | 3 |
| PLS F260 | Legal Technology | 3 |
| PLS F270 | Constitutional Law for Paralegals | 3 |
| PLS F280 | Legal Research and Writing for Paralegals | 3 |
| PLS F285 | Advanced Legal Writing | 3 |
| PLS F299 | Paralegal Studies Internship | 3 |
| Complete four of the following: | | 12 |
| PLS F203 | Torts | |
| PLS F213 | Criminal Law for Paralegals | |
| PLS F215 | Contracts/Real Property | |
| PLS F242 | Employment and Administrative Law | |
| PLS F250 | Probate Law | |

Note: Students interested in the paralegal studies degree should consult the program coordinator before enrolling in paralegal courses. Transfer credits for paralegal courses completed at other institutions are subject to approval by the program coordinator. No more than 15 credit hours of paralegal courses completed at other institutions will be applied toward completion of the A.A.S. degree in paralegal studies at UAF.

Paramedicine

A.A.S. Degree

The Community and Technical College paramedicine program is accredited by the Commission on Accreditation of Allied Health Education Programs (<http://www.caahep.org/>) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs
(<http://www.caahep.org/>)
25400 US Highway 19 N., Suite 158
Clearwater, FL 33763
727-210-2350

To contact CoAEMSP (<https://coaemsp.org/>):
8301 Lakeview Parkway
Suite 111-312
Rowlett, TX 75088
214-703-8445
FAX 214-703-8992

The paramedicine program offers excellent instruction, clinical experience, state-of-the-art simulation labs and practical vocational experience for the student seeking to become a paramedic. Upon completion of the paramedicine program, students will be able to take the national paramedic exam. After receiving national certification, students can apply for a paramedic license through the Alaska State Medical Board.

An application must be completed for admission into the paramedicine program. Applications are reviewed by the program's medical director and advisory board.

Applicants must have a current EMT basic certification (or have completed EMS F170), and have completed HLTH F114 (or BIOL F111X and BIOL F112X) .

Minimum Requirements for Paramedicine A.A.S. Degree: 69-73 credits

Community and Technical College
EMS/Paramedicine Department (<https://www.ctc.uaf.edu/programs/paramedicine/>)
907-455-2800

Programs Degree

- A.A.S., Paramedicine (p. 190)

A.A.S., Paramedicine

Admission Requirements

- Applicants must have a current EMT basic certification (or have completed EMS F170) and have completed HLTH F114 (or BIOL F111X and BIOL F112X) .

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Paramedicine A.A.S.: 69-73 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Paramedicine Program Requirements | | |
| EMS F170 | EMT: Emergency Medical Technician I | 6 |
| EMS F181 | Clinical Rotation I | 4 |
| EMS F183 | Clinical Rotation II | 4 |
| EMS F280 | Paramedicine I | 12 |
| EMS F282 | Paramedicine II | 12 |
| EMS F283 | Paramedic Internship | 12 |
| HLTH F114 | Fundamentals of Anatomy and Physiology | 4-8 |
| or BIOL F111X and BIOL F112X | Human Anatomy and Physiology I and Human Anatomy and Physiology II | |

Piloting, Professional

A.A.S. Degree

The professional piloting program offers a series of aviation piloting courses ranging from ground school classes for private through commercial flying, Arctic survival, weather and aircraft maintenance. Rated pilots or military aviators may be eligible for credit based upon experience and FAA certificates, which may be applied towards an Associate of Applied Science degree in professional piloting or a minor in aviation technology. See department personnel for details. UAF does not offer flight instruction.

Minimum Requirements for Professional Piloting A.A.S. Degree: 60 credits

Community and Technical College
Professional Piloting (<https://www.ctc.uaf.edu/programs/piloting-professional/>)
907-455-2800

Programs Degree

- A.A.S., Piloting, Professional (p. 191)

A.A.S., Piloting, Professional

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Professional Piloting A.A.S.: 60 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Professional Piloting Program Requirements | | |
| AVTY F100 | Private Pilot Ground School | 4 |
| AVTY F102 | Commercial Ground Instruction | 3 |
| AVTY F155 | Preventive Maintenance (or AFPM advisor-approved course(s)) | 3 |
| AVTY F200 | Instrument Ground School | 4 |
| AVTY F231 | Arctic Survival | 3 |
| AVTY F235 | Elements of Weather | 3 |
| Program-approved major specialty electives ¹ | | 15 |
| General electives | | 10 |

¹ See webpage or contact department for suggested list of courses, many of which the applicant may obtain credit for based upon experience or ratings.

Process Technology

A.A.S. Degree

The process technology program prepares students for employment as operations technicians in the process industry, which includes oil and gas production, mining and milling, transportation and refining, chemical manufacturing, power generation, utilities, wastewater treatment facilities maintenance and food processing.

This A.A.S. degree program incorporates technical and academic courses covering topics such as pumps and turbines, instrumentation, safety and quality control. Summer internships give students valuable practical experience and exposure to the true nature of process technology careers.

Minimum Requirements for Process Technology A.A.S. Degree: 60 credits

Community and Technical College
Process Technology
907-455-2800

Programs Degree

- A.A.S., Process Technology (p. 192)

A.A.S., Process Technology

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Process Technology A.A.S.: 60 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Process Technology Program Requirements ¹ | | |
| <i>Physical Science</i> | | |
| Complete one from the following: | | 4 |
| PHYS F102X | Energy and Society | |
| PHYS F115X | Physical Sciences | |
| PHYS F123X | College Physics I | |
| PHYS F124X | College Physics II | |
| or 4 credits of program coordinator – approved natural science courses | | |
| <i>Chemistry</i> | | |
| Complete one of the following: | | 4 |
| CHEM F100X | Chemistry in Complex Systems | |
| CHEM F103X | Introduction to General Chemistry | |
| CHEM F104X | Introduction to Organic Chemistry and Biochemistry | |
| CHEM F105X | General Chemistry I | |
| CHEM F106X | General Chemistry II | |
| CHEM F111X | Introduction to Environmental Chemistry of the Arctic | |
| or 4 credits of program coordinator-approved natural science courses | | |
| Complete the following: | | |
| PRT F101 | Introduction to Process Technology | 3 |
| PRT F110 | Introduction to Occupational Safety, Health and Environmental Awareness | 3 |
| PRT F130 | Process Technology I: Equipment | 4 |
| PRT F140 | Industrial Process Instrumentation I | 3 |
| PRT F144 | Industrial Process Instrumentation II | 3 |
| PRT F230 | Process Technology II: Systems | 4 |
| PRT F231 | Process Technology III: Operations | 4 |
| PRT F250 | Process Troubleshooting | 3 |
| PRT F255 | Quality Concepts for the Process Industry | 1 |
| Complete 9 credits from the following or program coordinator-approved courses: | | 9 |
| AMIT F129 | Surface Mine Safety | |
| AMIT F130 | Surface Mining Operations | |
| AMIT F135 | Introduction to Mining Systems and Equipment | |
| AMIT F145 | Introduction to Mineral Beneficiation | |
| CIOS F150 | Computer Business Applications | |

| | |
|----------|---|
| ELT F101 | Basic Electronics: DC Physics |
| ELT F102 | Basic Electronics: AC Physics |
| ELT F246 | Electronic Industrial Instrumentation |
| PRT F120 | Water Quality Management for Process Industries |
| PRT F160 | Oil and Gas Exploration and Production I |
| PRT F240 | Industrial Process Instrumentation III |
| PRT F248 | Valve Maintenance and Instrumentation |
| PRT F275 | Process Technology Internship |

¹ Students must earn a C grade or better in each course.

Rural Human Services Certificate

The rural human services program is designed to develop strong and healthy rural Alaska Native individuals, families and communities. The RHS program provides entry-level training for students preparing for careers as natural helpers/healers in village-based public, private and volunteer human service organizations. The curriculum draws extensively from Indigenous knowledge and wisdom about health and well-being and reflects a strong multicultural orientation that validates, incorporates and builds on Indigenous values and principles.

The certificate program is a concentrated course of study focused on rural behavioral health services. Both the Alaska Division of Behavioral Health and the Alaska Native Tribal Health Consortium have designated many of the credits earned through the RHS program as satisfying credentialing training requirements.

The certificate program provides additional credentials for service providers who work in related fields and would like additional training in rural behavioral health services. Providers who may want such training could include health aides, family service workers, correctional workers and teachers. The RHS program is offered as a closed cohort with monthly, week-long intensives for two academic years.

Admission is open to anyone employed by a regional Native health corporation or local entity providing village-based human services, or to individuals recognized by their communities as natural helpers/healers. A high school diploma or GED and/or previous training or work experience in the delivery of village-based human services are recommended but not required.

This degree program is delivered collaboratively within the UA system.

Minimum Requirements for Rural Human Services Certificate: 32 credits

College of Rural and Community Development
Rural Human Services (<https://www.uaf.edu/rhs/>)
907-474-7143

Programs Certificate

- Rural Human Services (p. 193)

Certificate, Rural Human Services Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Rural Human Services Certificate: 32 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| As part of the certificate requirements, complete: | | |
| <i>Human Relations</i> | | |
| RHS F110 and RHS F115 | Cross-cultural Bridging Skills and Issues of Personal Development | |
| Rural Human Services Program Requirements | | |
| Complete the following: | | |
| RHS F120 | Family Systems I ¹ | 2 |
| RHS F130 | Processes of Community Change | 2 |
| RHS F140 | Alaska Native Values and Principles | 1 |
| RHS F150 | Introduction to Rural Counseling ¹ | 2 |
| RHS F220 | Family Systems II ¹ | 2 |
| RHS F250 | Rural Counseling II ¹ | 2 |
| RHS F260 | Addictions: Intervention and Treatment ¹ | 2 |
| RHS F265 | Interpersonal Violence ¹ | 2 |
| RHS F275 | Introduction to Recovery and Mental Illness | 2 |
| RHS F285 | Case Management ¹ | 2 |
| RHS F287 | Rural Human Services Practicum | 4 |
| RHS F290 | Grief and Healing ¹ | 2 |

¹ The Alcohol and Drug Abuse Certification review board has approved these courses toward certification or recertification of substance abuse counselors in the State of Alaska.

Note: Students spend time in intensive study at selected delivery sites.

Tribal Governance

Certificate; A.A.S. Degree

The tribal governance program provides skills and knowledge needed for positions within tribal, local and community governments and organizations across Alaska. In response to the broad variety of job-related skills needed by tribal leaders, councils, administrators and staff, the tribal governance certificate and A.A.S. degree programs are designed to allow students to tailor their education for specific employment-related skills. The tribal governance program provides students with fundamental knowledge of tribal governance, law, policy and management through academic and hands-on education and training in subject areas important to tribal governments. Students work closely with their academic advisor to choose courses in one or more areas of study that target their employment needs.

Students entering either the certificate or A.A.S. degree program will meet with a faculty advisor to discuss program content, requirements and planning.

Minimum Requirements for Tribal Governance Certificate: 30 credits; for A.A.S. Degree: 60 credits

College of Rural and Community Development
Tribal Governance (<https://uaf.edu/tribal/>)
907-474-7143

Programs Degree

- A.A.S., Tribal Governance (p. 194)

Certificate

- Tribal Governance (p. 195)

A.A.S., Tribal Governance

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Tribal Governance A.A.S.: 60 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Tribal Governance Program Requirements | | |
| Complete the following: | | |
| TG F101 | Introduction to Tribal Government in Alaska | 3 |
| TG F105 | Introduction to Managing Tribal Governments | 3 |
| TG F199 | Tribal Management Practicum I | 3 |
| TG F201 | Tribal Government in Alaska II | 3 |
| TG F205 | Managing Tribal Governments II | 3 |
| TG F299 | Tribal Management Practicum II | 3 |
| Complete 27 credits in the following: | | 27 |
| TG F102 | Essentials of Tribal Government | |
| TG F103 | Introduction to Tribal Administration | |
| TG F110 | Tribal Court Development for Alaska Tribes | |
| TG F111 | Children's Topics in Tribal Justice | |
| TG F112 | Federal Indian Law for Alaska Tribes | |
| TG F114 | Tribal Justice Responses to Community and Domestic Violence | |
| TG F115 | Tribal Court Administration | |
| TG F116 | Juvenile Justice in Tribal Court | |
| TG F117 | Tribal Court Enforcement of Decisions | |
| TG F118 | Tribal Community and Restorative Justice | |
| TG F120 | Introduction to Tribal Natural Resources Stewardship | |
| TG F140 | Introduction to Geospatial Data | |
| TG F141 | Practical GIS for Rural Alaska | |
| TG F142 | Practical GIS Project Design | |
| TG F221 | Tribal Participation in Federal Fish and Wildlife Management Systems | |
| TG F222 | Tribal Participation in State Fish and Game Management Systems | |
| TG F225 | Cross Connections: Adapting and Integrating Principles of Management and Conservation | |
| TG F250 | Current Topics in Tribal Government | |
| or up to 18 credits from the optional course list | | |

OPTIONAL COURSE LIST

| Code | Title | Credits |
|---|---|---------|
| Any course in: Alaska Native Languages (ANL, INU, YUP), Alaska Native Studies, Applied Arts, Applied Business, Environmental Studies, High Latitude Range Management, Human Services, Rural Development, Rural Human Services, and/or. ¹ | | |
| ACNS F125 | Our Changing Climate: Past, Present, Future | |
| ACNS F205 | Leadership, Citizenship and Choice | |
| BA F151X | Introduction to Business | |
| BIOL F104L | BIOL F104X Laboratory | |
| ECON F111X | The Economy of Rural Alaska | |
| FISH F110 | Fish and Fisheries in a Changing World | |
| NRM F101 | Natural Resources Conservation and Policy | |
| NRM F204 | Public Lands Law and Policy | |
| PS F100X | Political Economy | |
| PS F263 | Alaska Native Politics | |
| SWK F103X | Introduction to Social Work | |

¹ Course substitutions relevant to Tribal Governance may be made with the approval of the Tribal Governance faculty advisor.

Certificate, Tribal Governance

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Tribal Governance Certificate: 30 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) | | |
| Tribal Governance Program Requirements | | |
| Complete the following: | | |
| TG F101 | Introduction to Tribal Government in Alaska | 3 |
| TG F105 | Introduction to Managing Tribal Governments | 3 |
| TG F199 | Tribal Management Practicum I | 3 |
| Complete 12 credits of the following: | | 12 |
| TG F102 | Essentials of Tribal Government | |
| TG F103 | Introduction to Tribal Administration | |
| TG F110 | Tribal Court Development for Alaska Tribes | |
| TG F111 | Children's Topics in Tribal Justice | |
| TG F112 | Federal Indian Law for Alaska Tribes | |
| TG F114 | Tribal Justice Responses to Community and Domestic Violence | |
| TG F115 | Tribal Court Administration | |
| TG F116 | Juvenile Justice in Tribal Court | |
| TG F117 | Tribal Court Enforcement of Decisions | |
| TG F118 | Tribal Community and Restorative Justice | |
| TG F120 | Introduction to Tribal Natural Resources Stewardship | |
| TG F140 | Introduction to Geospatial Data | |
| TG F141 | Practical GIS for Rural Alaska | |
| TG F142 | Practical GIS Project Design | |
| TG F221 | Tribal Participation in Federal Fish and Wildlife Management Systems | |
| TG F222 | Tribal Participation in State Fish and Game Management Systems | |
| TG F225 | Cross Connections: Adapting and Integrating Principles of Management and Conservation | |
| TG F250 | Current Topics in Tribal Government | |
| or up to 9 credits from the optional course list | | |

OPTIONAL COURSE LIST

| Code | Title | Credits |
|---|---|---------|
| Any course in: Alaska Native Languages (ANL, INU, YUP), Alaska Native Studies, Applied Arts, Applied Business, Environmental Studies, High Latitude Range Management, Human Services, Rural Development, Rural Human Services, and/or. ¹ | | |
| ACNS F125 | Our Changing Climate: Past, Present, Future | |
| ACNS F205 | Leadership, Citizenship and Choice | |
| BA F151X | Introduction to Business | |
| BIOL F104X | Natural History of Alaska | |
| ECON F111X | The Economy of Rural Alaska | |
| FISH F110 | Fish and Fisheries in a Changing World | |
| NRM F101 | Natural Resources Conservation and Policy | |
| NRM F204 | Public Lands Law and Policy | |
| PS F100X | Political Economy | |
| PS F263 | Alaska Native Politics | |
| PSY F101X | Introduction to Psychology | |
| SWK F103X | Introduction to Social Work | |

¹ Course substitutions relevant to Tribal Governance may be made with the approval of the Tribal Governance faculty advisor.

Yup'ik Language Proficiency Certificate; A.A.S. Degree

The Yup'ik language proficiency program is designed to provide students with the opportunity to pursue structured study of Yup'ik in order to develop intermediate-level speaking and listening skills, as well as basic reading and writing abilities in the language. The certificate may serve as a step on the way to a two-year or four-year degree.

Minimum Requirements for Yup'ik Language Proficiency Certificate: 30 credits; for Yup'ik Language Proficiency A.A.S. Degree: 60 credits

College of Community and Rural Development
907-474-7143

Alaska Native Languages Program
Alaska Native Language Center (<https://www.uaf.edu/anlc/>)
907-474-7874

Programs Degree

- A.A.S., Yup'ik Language Proficiency (p. 197)

Certificate

- Yup'ik Language Proficiency (p. 197)

A.A.S., Yup'ik Language Proficiency Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Yup'ik Language Proficiency A.A.S.: 60 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| A.A.S. Degree Requirements | | |
| Complete the A.A.S. degree requirements. (p. 144) | | |
| Yup'ik Language Proficiency Program Requirements | | |
| YUP F130 | Beginning Yup'ik Grammar | 3 |
| YUP F208 | Yup'ik Composition | 3 |
| YUP F240 | Introduction to Reading and Writing Yup'ik | 3 |
| Complete one of the following sequences: | | 12 |
| YUP F103 and YUP F104 and YUP F203 and YUP F204 | Conversational Central Yup'ik I and Conversational Central Yup'ik II and Conversational Central Yup'ik III and Conversational Central Yup'ik IV | |
| YUP F121 and YUP F122 and YUP F123 | Elementary Central Yup'ik Apprenticeship I and Elementary Central Yup'ik Apprenticeship II and Elementary Central Yup'ik Apprenticeship III | |
| Complete one of the following sequences: | | 9 |
| YUP F205 and YUP F206 and YUP F223 | Regaining Fluency in Yup'ik and Regaining Fluency in Yup'ik II and Intermediate Central Yup'ik Apprenticeship III | |
| YUP F221 and YUP F222 and YUP F223 | Intermediate Central Yup'ik Apprenticeship I and Intermediate Central Yup'ik Apprenticeship II and Intermediate Central Yup'ik Apprenticeship III | |

Certificate, Yup'ik Language Proficiency

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Yup'ik Language Proficiency Certificate: 30 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 135) | | |
| Certificate Requirements | | |
| Complete the certificate requirements. (p. 139) ¹ | | |
| Yup'ik Language Proficiency Program Requirements | | |
| Complete the following: | | |
| YUP F130 | Beginning Yup'ik Grammar | 3 |
| YUP F208 | Yup'ik Composition | 3 |
| YUP F240 | Introduction to Reading and Writing Yup'ik | 3 |
| Complete one from the following sequences: | | 12 |
| YUP F103 and YUP F104 and YUP F203 and YUP F204 | Conversational Central Yup'ik I and Conversational Central Yup'ik II and Conversational Central Yup'ik III and Conversational Central Yup'ik IV | |
| YUP F121 and YUP F122 and YUP F123 | Elementary Central Yup'ik Apprenticeship I and Elementary Central Yup'ik Apprenticeship II and Elementary Central Yup'ik Apprenticeship III | |
| Complete one from the following sequences: | | 9 |
| YUP F205 and YUP F206 and YUP F223 | Regaining Fluency in Yup'ik and Regaining Fluency in Yup'ik II and Intermediate Central Yup'ik Apprenticeship III | |
| YUP F221 and YUP F222 and YUP F223 | Intermediate Central Yup'ik Apprenticeship I and Intermediate Central Yup'ik Apprenticeship II and Intermediate Central Yup'ik Apprenticeship III | |

¹ As part of the certificate requirements, the communication, computation and human relations content is embedded in some of the major required courses for this program.

HOW TO EARN A BACHELOR'S DEGREE OR POSTBACCALAUREATE CERTIFICATE

How to Earn a Bachelor's Degree

To earn a UAF degree, you must satisfy the following sets of requirements: general university requirements, degree requirements and program (major) requirements. General university requirements and degree requirements are described in this section of the catalog; major requirements are found in the Bachelor's Degree Programs section; for bachelor's degree requirements in brief, see Summary of Bachelor's Degree Requirements (p. 207) chart.

If your degree program is delivered collaboratively within the UA system, credits you earn from each UA institution will be counted toward fulfillment of degree requirements and the minimum institutional residency requirements. You must contact Admissions to bring any credit from another UA system in. Credits will not transfer automatically. Institutional residency requirements are the minimum number of credits you must earn from the campus where you earn a degree.

General University Requirements

For a UAF bachelor's degree, you must earn at least 120 semester credits, including transfer credits, at the 100 level or above. Of these, 39 credits must be upper-division (300 level or above), of which 24 must be UA residence credits and 15 must be UAF credits.

At least 30 semester credits applicable to any bachelor's degree must be earned at UAF. Transfer students need to earn at least 24 upper-division semester credits at UA, of which 15 must be UAF credits. Transfer students must earn at least 12 semester credits in the major and at least 3 semester credits in the minor. You must earn a C- grade or higher in all courses required for your degree, unless otherwise specified by your major (major, minor, general education requirements and degree requirements).

Unless otherwise specified, a course may be used more than once toward fulfilling degree, certificate, major and minor requirements. Credit hours for these courses count only once toward total credits required for the degree or certificate.

Since WRTG F211X, WRTG F212X, WRTG F213X and WRTG F214X are writing courses, any will satisfy the second half of the requirement in written communication for the bachelor's degree. But you can't enroll in WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X without first fulfilling the WRTG F111X requirement. (See Local Advanced Placement Credit — English (p. 38).)

General University Requirements for Baccalaureate Degrees

| | |
|--|--|
| Minimum number of credits | 120 credits |
| Credits earned at UAF (residence credit) | 30 credits |
| Upper-division credit (courses with numbers between F300 and F499) | 39 credits total (some degrees require more); 24 of the 39 must be earned at UA and 15 at UAF |
| Additional UAF credit that must be earned by transfer students | 12 credits in the major; 3 credits in the minor |
| Grade point average | 2.0 cumulative and 2.0 in both the major and minor |
| Minimum grades for major | No grade lower than C- in courses required for major. Some majors require higher GPA's for major course work. |
| Catalog year that can be used to determine requirements | May use any catalog in effect when enrolled as a degree-seeking student, regardless of major; seven-year limit on catalog year |
| Second degree | 24 credits beyond the first bachelor's degree and all requirements for the second degree must be met |

MAJORS

You may declare a major when you are admitted to UAF as a degree-seeking undergraduate student. If you haven't chosen a major you'll be enrolled as a general studies student. Nondegree students are not eligible to declare a major, be assigned class standing or receive financial aid.

A major from UAF consists of a minimum of 30 credits, at least 12 of which have to be earned at UAF. No grade lower than C- in courses required for major. Some majors require higher GPAs for major coursework.

Students enrolled in associate degree or certificate programs who want to declare a bachelor's degree major must apply for admission to a degree program following the standard admission process for bachelor's degree programs. The same is true for students enrolled in a bachelor's degree program who want to declare an associate degree or certificate program major. (See admission requirements (p. 31).)

• Changing Your Major

Undergraduate students may change majors by completing a Change of Major form available from the Office of the Registrar or online at the registrar's website. A change of major becomes effective after it is processed by the Office of the Registrar. Graduating seniors must have a change of major submitted with their graduation application to be considered in that program.

CONCENTRATIONS

A concentration is an area of emphasis including the program's required courses within a student's degree program. Some programs at UAF require a concentration, others do not. A student may only earn one degree in a specific discipline once. Using different concentrations within a degree program to count as different degrees is not allowed. Double concentrations are permitted with departmental approval.

MINORS

A minor is a component of a bachelor's degree. The Bachelor of Arts degrees requires a minor. You must satisfactorily complete the requirements for a minor before a B.A. degree can be awarded. A minor is optional for Bachelor of Applied Arts and Sciences, Bachelor of Applied Management, Bachelor of Business Administration, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science, Bachelor of Security and Emergency Management and Bachelor of Sport and Recreational Business degrees.

A minor from UAF consists of a minimum of 15 credits, at least 3 of which have to be earned at UAF. Students must earn a cumulative GPA of at least 2.0 (C) in the minor and follow minor requirements from the same academic catalog used for their bachelor's program. An Associate of Applied Science degree or certificate of at least 30 credits earned at any regionally accredited college or university may be used to meet requirements for a minor in B.A. degree programs.

Some minors require more than 15 credits and approval from the department. Refer to specific requirements listed in the Bachelor's Degree Program section. Students seeking minors can use DegreeWorks to review their options. Results in DegreeWorks will be more accurate after submitting a declaration of minor form to the Office of the Registrar by the beginning of the senior year.

SECOND BACHELOR'S DEGREE

UAF graduates who want to earn a second bachelor's degree must complete at least 24 hours of credit beyond the first bachelor's degree. Students must meet all general university requirements, degree requirements and major requirements for both degrees.

Students who earned a bachelor's degree from another college or university must be accepted for admission as a transfer student. All general university requirements (including residency requirement), degree and major requirements must be met. Students who graduated from a regionally accredited college or university, however, will be considered to have completed the equivalent of the UAF baccalaureate general education requirements.

DOUBLE DEGREES

Students who want to earn more than one UAF bachelor's degree must complete all general requirements as well as all major and minor requirements (if any) for all degrees. At least 24 semester credit hours beyond the total required for the first degree need to be earned before any additional degrees can be awarded. For two degrees completed at the same time, students may follow requirements from two different catalogs.

Differences Between Double Majors and Double Degrees

| | Double Majors | Double Degrees |
|--|---|---|
| Degree(s) earned | One bachelor's degree is earned. The Bachelor of Arts degree requires the completion of two majors rather than a major and a minor. Majors are selected from those approved for the B.A. degree. The Bachelor of Science degree requires the completion of a double major instead of a single major. Majors are selected from those approved for the B.S. degree. | More than one bachelor's degree is earned. Can be the same degree (e.g., two BAs) or different degrees, (e.g., B.A. and B.S., B.B.A. and B.S., B.F.A. and B.A., etc.). Each degree is independent of the other. If requirements for one degree are not completed as scheduled, the other degree may be awarded if all requirements are met. |
| Graduation application | A single graduation application and fee is required. | A separate graduation application and fee is required for each degree. |
| Catalog year | A single catalog is followed for both majors to meet requirements. | Different catalogs may be followed to meet requirements for each degree. |
| General university requirements and major requirements | All general university requirements and all major requirements for both majors must be met. | All general university requirements as well as all major and minor requirements (if any) must be met for each degree. |
| Credit hours required | If one major is from a program that requires 120 total credits and the other major is from a program that requires 130 total credits, the 130 total credits must be completed. | At least 24 semester credit hours beyond the total required for the first degree must be completed before an additional degree can be awarded. |

Degree Policies

RESIDENCE CREDIT

Residence credit is course credit earned through any unit of UAF. Formal classroom instruction, correspondence study, distance-delivered courses, individual study or research at UAF are all considered residence credit. On the other hand, transfer credit, advanced placement credit, credit for prior learning, military service credit and credit granted through nationally prepared examinations are not considered resident credit, nor are credit-by-examination credits earned through locally prepared tests. None of these types of credit can be applied to UAF residency requirements. UAF residence credit takes precedence over any nonresident credits.

For example, if a student has AP credit for a course, but takes the same courses at UAF, the AP credit will be excluded and the UAF course will be applied to the degree requirements.

RESIDENCY REQUIREMENT

Most universities have residency requirements that call for a certain number of credits toward a degree to be earned at the degree-granting school. At UAF, the residency requirement for bachelor's degrees is 30 resident credits.

DEGREE REQUIREMENTS AND TIME LIMITS

You may complete degree requirements in effect and published in the UAF catalog in any one of the previous seven academic years in which you are enrolled as a degree student for a bachelor's degree. You're considered enrolled in your degree program when you complete the appropriate degree student registration procedure. If you do not enroll for a semester or more, or if you enroll through the nondegree student registration process, you aren't considered enrolled as a degree student during that time.

EXCEPTIONS TO DEGREE REQUIREMENTS

Occasionally an undergraduate student may request an exception to an academic requirement or regulation. Requests for an academic dispensation must be approved by petition. If you submit a petition on the basis of a disability, the coordinator of Disability Services will be consulted. Petition forms are available at the Office of the Registrar or online at the registrar website. Forms need to be returned to the Office of the Registrar with required signatures of approval. The Office of the Registrar will notify note your petition in DegreeWorks once the appropriate person or committee has made a decision. Academic petitions fall into three categories and each involves different processes:

- **General Education Requirements Petitions**

If your petition deals with baccalaureate general education requirements or baccalaureate degree ethics or library science requirements, your advisor and the head of the department of the academic area involved must grant approval. Submit your signed petition to the Office of the Registrar. It will then be forwarded to the chair of the Faculty Senate CORE/General Education Requirements Curriculum Review Committee for consideration.

- **Major or Minor Degree Requirement Petitions**

If you want to waive or substitute courses within your major or minor requirements, you need approval signatures from your advisor and the department or program head of your major or minor area. Submit your signed petition to the Office of the Registrar.

- **Petitions for Other Requirements**

If your petition deals with general university and/or specific requirements for your degree or other academic policies, you need approval from your advisor and the dean or director of the college or school in which your major is located. Submit your signed petition to the Office of the Registrar. It will then be forwarded to the Provost for consideration.

RESERVING COURSES FOR GRADUATE PROGRAMS

Seniors who have only a few remaining requirements for a bachelor's degree may take courses at the 400 or 600 graduate course level and have them reserved for an advanced degree. Courses reserved for use toward a graduate program cannot also be counted toward requirements for your bachelor's degree. Unless otherwise notified in writing that the courses are to be used toward the undergraduate program, 600-level graduate courses will automatically be reserved for the advanced degree. To reserve one or more courses, you must be in your final year of an undergraduate program. Submit a written request to the Office of the Registrar during the first four weeks of the semester. The request should identify which semester courses you want reserved for graduate study and not counted toward your bachelor's degree. (Reserving courses does not, however, assure that a graduate advisory committee will accept them as part of your eventual graduate program.)

Graduation

- **Responsibility**

You are responsible for meeting all requirements for graduation. You are encouraged to communicate regularly with your academic advisor and to use DegreeWorks throughout your college career to ensure you are on track to graduate.

- **Application for Graduation**

You need to formally apply for graduation. An application for graduation and nonrefundable fee must be filed with the Office of the Registrar. We encourage students to apply the semester prior to the semester you plan to graduate. If you file your application by the published deadline, the graduation application fee is \$50. If you miss that deadline, you can submit a late application for graduation by the published late graduation deadline for that semester. The fee for a late application is \$80. Applications for graduation filed after the late deadline are processed for graduation the following semester. Students who apply for graduation and who do not complete degree requirements by the end of the semester must reapply for graduation and repay the fee.

- **Diplomas and Commencement**

UAF issues diplomas to graduates three times a year: in September, January and June. Students who complete degree requirements for UA Board of Regents-approved academic programs during the academic year are invited to participate in the annual commencement ceremony at the end of spring semester.

Names of students receiving degrees/certificates appear in the commencement program and are released to the media unless you submit a written request to the graduation department not to do so. (See Information Release and FERPA (p. 83).)

Graduates are responsible for ordering caps and gowns through the UAF bookstore in early spring.

- **Graduation with Honors**

Graduation with honors is a tribute that recognizes academic achievement. Candidates who have earned a minimum of 30 credits in residence at UAF and a minimum institutional grade point average of 3.50 at the bachelor's level will graduate with honors.

GPA calculations for graduation with honors do not include:

- Credits that were excluded due to retaking a course or through the Fresh Start Program
- Noncredit courses, transfer credits, and credit by examination

Please see Grading System and Grade Point Average Computation (p. 76) for more information on how the UAF Institutional GPA is calculated. Students who meet these academic criteria will graduate according to one of the following honor levels:

| Honor | UAF Grade Point Average (GPA) |
|-----------------|-------------------------------|
| Summa Cum Laude | 3.90 or higher |
| Magna Cum Laude | 3.75-3.89 |
| Cum Laude | 3.50-3.74 |

These designations are effective for all who graduate fall 2021 going forward and will not be retroactively applied to anyone who graduated prior to the fall 2021 semester.

Types of Bachelor's Degrees

• Bachelor of Applied Arts and Sciences

The B.A.A.S. interdisciplinary degree is designed for students with technical or vocational backgrounds who want to enhance their experiences with more advanced academic pursuits.

• Bachelor of Applied Management

The B.A.M. online degree is designed for individuals who have completed 21-30 credit hours in an area of specialization or trade and aspire to assume middle-management-level positions in their chosen field.

• Bachelor of Arts

The B.A. degree emphasizes written and oral communication skills, creative thinking, critical analyses of texts, understanding cultures, and a working knowledge of social, political and historical contexts. The degree is typically pursued by students whose major areas of study are directed toward humanities, arts and social science disciplines.

• Bachelor of Business Administration

The B.B.A. degree is the undergraduate equivalent of an MBA. Students explore a wide spectrum of business-related issues to develop advanced business, management and administration skills required in organizational settings at senior levels, and to accelerate high-level career development in the workplace.

• Bachelor of Fine Arts

The B.F.A. degree has a rigorous curriculum designed to prepare talented students for professional careers in the arts.

• Bachelor of Music

The B.M. degree encourages acquisition of skills and display of talent in music, with special emphasis on aesthetic performance and understanding.

• Bachelor of Security and Emergency Management

The B.S.E.M. degree prepares students for professional careers responding to natural and man-made disasters, forming crisis management plans and ensuring public safety. Students with backgrounds ranging from first responders and military to applied vocational skills will graduate ready to start or advance in careers in emergency management, homeland security, public safety and emergency services.

• Bachelor of Science

The B.S. degree emphasizes oral and written communication skills and analytical skills for examining and solving problems. The degree is typically pursued by students whose major areas of study are directed toward natural sciences, mathematics, statistics, engineering, computer science and some social science fields.

• Bachelor of Sport and Recreation Business

The B.S.R.B. will provide academic preparation and sought-after, critical education necessary for entry-level careers in the sport and recreation industries.

1. Build knowledge of human institutions, sociocultural processes, and the physical and natural world through the study of the natural and social sciences, technologies, mathematics, humanities, histories, languages and the arts.
2. Develop intellectual and practical skills across the curriculum, including inquiry and analysis, critical and creative thinking, problem-solving, written and oral communication, information literacy, technological competence, and collaborative learning.
3. Acquire tools for effective civic engagement in local through global contexts, including ethical reasoning, intercultural competence, and knowledge of Alaska and Alaska issues.
4. Integrate and apply learning, including synthesis and advanced accomplishment across general and specialized studies, adapting them to new settings, questions and responsibilities, and forming a foundation for lifelong learning.

If you completed your bachelor's degree, Associate of Arts degree or Associate of Science degree from a regionally accredited institution, you will be considered to have completed the equivalent of the general education requirements when you have been officially accepted to an undergraduate degree program at UAF.

ALASKA NATIVE-THEMED REQUIREMENTS

The Alaska Native-themed requirement is a degree requirement for all baccalaureate, associate of arts and associate of science degrees. The requirement may be met by taking a designated Alaska Native-themed course anywhere in the student's course of study, including general education requirements, major requirements, minor requirements and electives. For a summary of the Alaska Native-themed courses see the Alaska Native-themed Requirements (p. 225) chart.

Postbaccalaureate Certificate Requirements

For information regarding Postbaccalaureate Certificate Requirements visit the Postbaccalaureate Certificate page (p. 392).

Bachelor's Degree Requirements

THE GENERAL EDUCATION REQUIREMENTS

For a summary of the general education requirements see the general education requirements (p. 203) chart. Undergraduate bachelor's study at UAF is characterized by a common set of learning experiences known as the General Education Requirements. General education objective and learning outcomes for undergraduate students seeking baccalaureate degrees at the University of Alaska Fairbanks:

Bachelor's Degree Programs

- Accounting (p. 228)
- Accounting, Applied (p. 230)
- Aerospace Engineering (p. 231)
- Agrometeorology (p. 232)
- Alaska Native Languages (p. 233)
- Alaska Native Studies (p. 234)
- Anthropology (p. 236)
- Applied Management (p. 238)
- Arctic and Northern Studies (p. 239)
- Arctic Skills (p. 242)
- Art (p. 243)
- Asian Studies (p. 247)
- Aviation Technology (p. 248)
- Biological Sciences (p. 249)
- Business Administration (p. 257)
- Business, Applied (p. 262)
- Chemistry (p. 263)
- Child Development and Family Studies (p. 267)
- Civil Engineering (p. 270)
- Communication (p. 272)
- Computer Engineering (p. 274)
- Computer Information Technology Specialist (p. 276)
- Computer Science (p. 277)
- Digital Journalism (p. 279)
- Early Childhood Education (p. 281)
- Education (p. 282)
- Electrical Engineering (p. 293)
- English (p. 295)
- Environmental Politics (p. 298)
- Eskimo (p. 299)
- Ethnobotany (p. 301)
- Film and Performing Arts (p. 302)
- Fire Science (p. 305)
- Fisheries and Marine Sciences (p. 306)
- Foreign Languages (p. 311)
- Geography (p. 313)
- Geological Engineering (p. 314)
- Geoscience (p. 315)
- Global Studies (p. 320)
- History (p. 321)
- Homeland Security and Emergency Management (p. 323)
- Human Services (p. 326)
- Interdisciplinary Studies (p. 327)
- Japanese Studies (p. 336)
- Justice (p. 338)
- Law and Society (p. 340)
- Leadership (p. 341)
- Linguistics (p. 342)
- Marine Science (p. 344)
- Mathematics (p. 345)
- Mechanical Engineering (p. 349)
- Military Science and Leadership (p. 351)
- Mining Engineering (p. 353)
- Music (p. 355)
- Natural Resources and Environment (p. 361)
- Paralegal Studies (p. 363)
- Petroleum Engineering (p. 364)
- Philosophy (p. 366)
- Physics (p. 367)
- Political Science (p. 371)
- Psychology (p. 373)
- Rural Development (p. 376)
- Social Work (p. 379)
- Sport and Recreation Business (p. 381)
- Statistics (p. 383)
- Teaching English to Speakers of Other Languages (p. 384)
- Tribal Governance (p. 385)
- Wildlife Biology and Conservation (p. 386)
- Women, Gender and Sexuality Studies (p. 388)
- Yup'ik Language and Culture (p. 389)

General Education Requirements

General education objective and learning outcomes for undergraduate students seeking baccalaureate degrees at the University of Alaska Fairbanks:

1. Build knowledge of human institutions, sociocultural processes, and the physical and natural world through the study of the natural and social sciences, technologies, mathematics, humanities, histories, languages and the arts.
 - Competence will be demonstrated for the foundational information in each subject area, its context and significance, and the methods used in advancing each.
2. Develop intellectual and practical skills across the curriculum, including inquiry and analysis, critical and creative thinking, problem solving, written and oral communication, information literacy, technological competence, and collaborative learning.
 - Proficiency will be demonstrated across the curriculum through critical analysis of proffered information, well-reasoned solutions to problems or inferences drawn from evidence, effective written and oral communication, and satisfactory outcomes of group projects.
3. Acquire tools for effective civic engagement in local through global contexts, including ethical reasoning, intercultural competence, and knowledge of Alaska and Alaska issues.
 - Facility will be demonstrated through analyses of issues including dimensions of ethics, human and cultural diversity, conflicts and interdependencies, globalization and sustainability.
4. Integrate and apply learning, including synthesis and advanced accomplishment across general and specialized studies, adapting them to new settings, questions and responsibilities, and forming a foundation for lifelong learning.
 - Preparation will be demonstrated through the production of a creative or scholarly product that requires broad knowledge, appropriate technical proficiency, information collection, synthesis, interpretation, presentation and reflection.

If you completed your bachelor's degree, an associate of arts degree or associate of science degree from a regionally accredited institution, you will be considered to have completed the equivalent of the general education requirements when you have been officially accepted to an undergraduate degree program at UAF.

Courses that satisfy the GER have course numbers ending with X. For example, WRTG F111X and COJO F141X meet specific GER communication requirements. Courses used to satisfy general education requirements can also be used to satisfy minor requirements. Natural science and mathematics credits used to satisfy general education requirements can also be used to satisfy major requirements. If additional courses are added to GER in later catalog years, students may use them to fulfill a specific GER in this catalog year. Students must earn a C- grade or higher in each course used to meet a baccalaureate GER.

| Code | Title | Credits |
|------|---|---------|
| | Communication (p. 204) | 9 |
| | Arts (p. 204) | 3 |
| | Humanities (p. 204) | 3-5 |
| | Social Sciences (p. 204) | 6 |
| | Additional Arts/Humanities/Social Sciences (p. 204) | 3-5 |
| | Mathematics (p. 204) | 3-4 |
| | Natural Sciences (p. 204) | 8 |

General Education Requirements at a Glance

Minimum Requirements for General Education Requirements: 35-40 credits

Refer to tables below for specific courses.

Course Requirements by Category

MINIMUM REQUIREMENTS FOR GENERAL EDUCATION REQUIREMENTS: 35-40 CREDITS

Refer to tables below for specific courses.

COMMUNICATION - 9 CREDITS

| Code | Title | Credits |
|---------------------------------|--|---------|
| Complete the following courses: | | |
| COJO F121X | Introduction to Interpersonal Communication | 3 |
| or COJO F131X | Fundamentals of Oral Communication: Group Context | |
| or COJO F141X | Fundamentals of Oral Communication: Public Context | |
| WRTG F111X | Writing Across Contexts | 3 |
| WRTG F211X | Writing and the Humanities | |
| or WRTG F212X | Writing and the Professions | |
| or WRTG F213X | Writing and the Sciences | |
| or WRTG F214X | Arguing Across Contexts | |

ARTS - 3 CREDITS

| Code | Title | Credits |
|---|---|---------|
| Complete one course from the following: | | |
| ANS/FLPA F161X | Introduction to Alaska Native Performance | 3 |
| ANS F202X | Aesthetic Appreciation of Alaska Native Performance | |
| ANS/MUS/ACNS F223X | Alaska Native Music | 3 |
| ART F105X | Beginning Drawing | |
| ART F200X | Explorations in Art | |
| ART F261X | History of World Art I | |
| ART F262X | History of World Art II | |
| ENGL/FLPA/COJO F217X | Introduction to the Study of Film | |
| FLPA/COJO F105X | History of the Cinema | |
| FLPA F121X | Fundamentals of Acting | |
| FLPA F200X | Discovering Stage & Screen | |
| FLPA F215X | Dramatic Literature and History | |
| HUM F201X | Unity in the Arts | |
| MUS F103X | Music Fundamentals | |
| MUS F125X | Enjoying Jazz | |
| MUS F200X | Explorations in Music | |

HUMANITIES - 3-5 CREDITS

| Code | Title | Credits |
|---|---|-------------|
| Complete one from the following: | | 3-5 Credits |
| ANL F251X | Introduction to Athabascan Linguistics | |
| ANL F255X | Introduction to Alaska Native Languages | |
| COJO F101X | Media and Culture | |
| COJO F102X | Introduction to Broadcasting | |
| ENGL/FL F200X | World Literature | |
| ENGL F201X | Texts and Contexts | |
| ENGL F270X | Introduction to Creative Writing | |
| LING F101X | Nature of Language | |
| LING F216X | Languages of the World | |
| PHIL F102X | Introduction to Philosophy | |
| PHIL F104X | Logic and Reasoning | |
| RELG F221X | Religions of the World | |
| OR take one of the following languages: | | |
| ANL F141X | Beginning Dene / Athabascan I | |
| ANL F142X | Beginning Dene / Athabascan II | |
| ASLG F101X | American Sign Language I | |
| ASLG F202X | American Sign Language II | |
| CHNS F101X | Elementary Chinese I | |
| CHNS F102X | Elementary Chinese II | |
| FREN F101X | Elementary French I | |
| FREN F102X | Elementary French II | |
| GER F101X | Elementary German I | |
| GER F102X | Elementary German II | |
| INU F111X | Elementary Inupiaq I | |
| INU F112X | Elementary Inupiaq II | |
| JPN F101X | Elementary Japanese I | |
| JPN F102X | Elementary Japanese II | |
| LAT F101X | Beginning Latin I | |
| LAT F102X | Beginning Latin II | |
| RUSS F101X | Elementary Russian I | |
| RUSS F102X | Elementary Russian II | |
| SPAN F101X | Elementary Spanish I | |
| SPAN F102X | Elementary Spanish II | |
| YUP F101X | Elementary Central Yup'ik I | |
| YUP F102X | Elementary Central Yup'ik II | |

SOCIAL SCIENCES - 6 CREDITS

| Code | Title | Credits |
|---|--|---------|
| Complete two from the following in two different disciplines: | | 6 |
| ACCT F261X | Principles of Financial Accounting | |
| ANS F111X | History of Colonization in Alaska: The Indigenous Response | |
| ANS F242X | Indigenous Cultures of Alaska | |
| ANTH F100X | Individual, Society and Culture | |
| ANTH F101X | Introduction to Anthropology | |
| ANTH F111X | Ancient Civilizations | |
| ANTH F211X | Fundamentals of Archaeology | |
| BA F151X | Introduction to Business | |
| BA F254X | Personal Finance (s) | |
| BA/SPRT F281X | Introduction to Sport Management | |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers | |
| ECE F107X | Child Development II: The Preschool and Primary Years | |
| ECE F210X | Child Guidance | |
| ECON F101X | Principles of Microeconomics | |
| ECON F102X | Principles of Macroeconomics | |
| ECON F111X | The Economy of Rural Alaska | |
| ECON F120X | Introduction to Economic Analysis | |
| ECON F235X | Introduction to Natural Resource Economics | |
| HIST F100X | Modern World History | |
| HIST F102X | Western Civilization Since 1500 | |
| HIST F110X | History of Alaska Natives from Contact to the Present | |
| HIST F122X | East Asian Civilization | |
| HIST F132X | History of the U.S. | |
| HUMS/JUST F125X | Introduction to Addictive Processes | |
| JUST F110X | Introduction to Justice | |
| JUST F251X | Criminology | |
| PS F100X | Political Economy | |
| PS F101X | Introduction to American Government and Politics | |
| PS F201X | Comparative Politics | |
| PS F221X | International Politics | |
| PSY F101X | Introduction to Psychology | |
| RD F200X | Rural Development in the North | |
| SOC F101X | Introduction to Sociology | |
| SOC F201X | Social Problems and Solutions | |
| SWK F103X | Introduction to Social Work | |
| WGS F201X | Introduction to Women, Gender and Sexuality Studies | |

MATHEMATICS - 3-4 CREDITS

| Code | Title | Credits |
|----------------------------------|--|-------------|
| Complete one from the following: | | 3-4 Credits |
| MATH F113X | Numbers and Society | |
| MATH F122X | Essential Precalculus with Applications ¹ | |
| MATH F151X | College Algebra for Calculus ¹ | |
| MATH F152X | Trigonometry | |
| MATH F156X | Precalculus | |
| MATH F230X | Essential Calculus with Applications ^{2,3} | |
| MATH F251X | Calculus I ^{2,3} | |
| MATH F252X | Calculus II ³ | |
| MATH F253X | Calculus III ³ | |
| STAT F200X | Elementary Statistics | |

¹ You may earn credit for MATH F151X or MATH F122X but not both.

² You may earn credit for MATH F251X or MATH F230X but not both.

³ Or any math course having one of these as a prerequisite.

ADDITIONAL ARTS / HUMANITIES / SOCIAL SCIENCES - 3-5 CREDITS

| Code | Title | Credits |
|---|-------|-------------|
| Complete one additional course from the arts, humanities or social sciences courses listed. | | 3-5 Credits |

NATURAL SCIENCES - 8 CREDITS

| Code | Title | Credits |
|---|--|---------|
| Complete two from the following: ¹ | | 8 |
| ATM F101X | Weather and Climate of Alaska | |
| BIOL F100X | Human Biology | |
| BIOL F103X | Biology and Society | |
| BIOL F104X | Natural History of Alaska | |
| BIOL F111X | Human Anatomy and Physiology I | |
| BIOL F112X | Human Anatomy and Physiology II | |
| BIOL F115X | Fundamentals of Biology I | |
| BIOL F116X | Fundamentals of Biology II | |
| BIOL F120X | Introduction to Human Nutrition | |
| CHEM F100X | Chemistry in Complex Systems | |
| CHEM F103X | Introduction to General Chemistry | |
| CHEM F104X | Introduction to Organic Chemistry and Biochemistry | |
| CHEM F105X | General Chemistry I | |
| CHEM F106X | General Chemistry II | |
| CHEM F111X | Introduction to Environmental Chemistry of the Arctic | |
| ES F100X and ES F100L | Engineering Alaska - An Introduction to Engineering and Makerspace Alaska - A Laboratory Introduction to Engineering | |
| GEOS F101X | The Dynamic Earth | |
| GEOS F106X | Life in the Age of Dinosaurs | |
| GEOS F111X | Earth and Environment: Elements of Physical Geography | |
| GEOS F112X | The History of Earth and Life | |
| GEOS F120X | Glaciers, Earthquakes and Volcanoes: Past, Present and Future | |
| MSL F111X | The Oceans | |
| PHYS F102X | Energy and Society | |
| PHYS F115X | Physical Sciences | |
| PHYS F123X | College Physics I | |
| PHYS F124X | College Physics II | |
| PHYS F165X | Introduction to Astronomy | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| PHYS F213X | Elementary Modern Physics | |

¹ Some degrees (Associate of Science (p. 145)) might require more. Please be sure to verify with your academic advisor.

Summary of Bachelor's Degree Requirements

General education requirements must be completed by all students. In addition to the general education requirements each degree program (e.g., B.A., B.B.A.) may have specific required courses.

Bachelor of Applied Arts and Sciences

The B.A.A.S. degree program offers qualified applicants the opportunity to expand upon their vocational or technical education. An A.A.S. degree from an accredited institution of higher education, or equivalent, is one of the degree program requirements. See the Applied Arts and Sciences in the bachelor's degree program section.

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|--|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/ FLPA F161X, ANS F202X, ANS F223X/ MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | No additional humanities unless required by major or minor |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | No additional social sciences unless required by major or minor |
| Other | One additional Arts, Humanities or Social Sciences from the lists above. | ENGL F314 |
| Ethics | | Complete one from the following: BA F323X, COJO F300X, JUST F300X, NRM F303X, PHIL F322X, PS F300X |

| | | |
|-----------------------------|---|--|
| Mathematics | Complete one from the following: MATH F113X, MATH F122X, MATH F151X, MATH F152X, MATH F156X, MATH F230X, MATH F251X, MATH F252X, MATH F253X, or STAT F200X or any math course having one of these as a prerequisite | One course at the F100 level or above from math, computer sciences, statistics or an approved discipline-based course that was used to meet an A.A.S. computation requirement. Approved courses include ABUS F155, MATH F105, ECE F117, HLTH F116, HUMS F117, TTCH F131 or any course with embedded computation content approved by the interdisciplinary program. |
| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | No additional natural science unless required by the major |
| Alaska Native-themed | | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ |
| Major Complex | | Minimum of 30 credits of interdisciplinary studies and an Associate of Applied Science degree |
| Minor Complex | | |
| Total Required | 35-40 cr | 120 cr |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

Note: You must earn a C- grade or higher in all courses required for your degree unless otherwise specified by your major (major, minor, general education requirements and degree requirements).

Bachelor of Applied Management

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|---|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/ FLPA F161X, ANS F202X, ANS F223X/ MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, GEOG F101X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | |
| Other | One additional Arts, Humanities or Social Sciences from the lists above. | |
| Ethics | | BA F323X |
| Mathematics | MATH F122X | |
| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | |

| | | |
|-----------------------------|----------|--|
| Alaska Native-themed | | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ |
| Major Complex | | At least 33 |
| Minor Complex | | Optional: at least 15 cr |
| Total Required | 35-40 cr | 120 cr |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

Notes:

- You must earn a C- grade or higher in all courses required for your degree unless otherwise specified by your major (major, minor, general education requirements and degree requirements).
- Courses beyond 30 credits in a major complex may be used to fulfill the B.A.M. degree requirements in ethics.

Bachelor of Arts

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|---|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/FLPA F161X, ANS F202X, ANS F223X/MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | Humanities and social sciences (18 credits): Any combination of courses at the F100 level or above with a minimum of 6 credits in humanities and 6 credits in social sciences or up to 12 credits of a non-English language taken at the university level and at least 6 credits of social sciences |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | See above |
| Ethics | | Complete one from the following: BA F323X, COJO F300X, JUST F300X, NRM F303X, PHIL F322X, PS F300X |
| Mathematics | Complete one from the following: MATH F113X, MATH F122X, MATH F151X, MATH F152X, MATH F156X, MATH F230X, MATH F251X, MATH F252X, MATH F253X or STAT F200X or any math course having one of these as a prerequisite | |

| | | |
|-----------------------------|---|--|
| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | No additional natural science unless required by the major or minor |
| Other | One additional Arts, Humanities or Social Sciences from the lists above. | |
| Alaska Native-themed | | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ |
| Major Complex | | At least 30 cr |
| Minor Complex | | Required: at least 15 cr |
| Total Required | 35-40 cr | 120 cr |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

Notes:

You must earn a C- grade or higher in all courses required for your degree unless otherwise specified by your major (major, minor, general education requirements and degree requirements).

Department requirements for majors and minors may exceed the minimums indicated.

Of the above, at least 39 credits must be taken in upper-division (300-level or higher) courses. Courses beyond 30 credits in a major complex and 15 credits in a minor complex may be used to fulfill the B.A. degree requirements in ethics, humanities, mathematics or social sciences. Courses used to fulfill requirements for a minor may be used at the same time to fill major or general distribution requirements if so designated.

Students who hold a bachelors degree from a regionally accredited institution are not required to complete the minor complex.

• Minors

Minors are offered in many subject areas. Requirements for minors are listed in the degree program sections. See a list of all bachelor's degree programs, including minors, here (<http://catalog.uaf.edu/programs/>).

An Associate of Applied Science (A.A.S.) degree or certificate of at least 30 credits earned at any regionally accredited college or university may be used to meet requirements for a minor for the Bachelor of Arts (B.A.) degree. Students who hold a bachelor's degree from a regionally accredited institution are not required to complete the minor complex.

• Double majors

If you're a Bachelor of Arts degree candidate, you may complete two majors rather than a major and a minor. Your majors must be selected from those approved for the Bachelor of Arts degree. You'll need to complete all general requirements plus all requirements for both majors. If you're completing a double major, you need to officially declare both majors either when you're admitted or through the change of major procedure. You'll need to follow the degree requirements in a single catalog for both majors.

Bachelor of Business Administration

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|--|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/ FLPA F161X, ANS F202X, ANS F223X/ MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, GEOG F101X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | |
| Other | Complete one additional Arts, Humanities or Social Sciences from the lists above. | Complete the following: ACCT F261X; ACCT F262; AIS F101; ECON F101X; ECON F102X; ECON F227; and choose an additional ECON course at any level. |
| Ethics | | BA F323X |
| Mathematics | MATH F122X | |
| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | No additional natural science required |

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| Alaska Native-themed | | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ |
| Major Complex | | At least 24-33 cr |
| Minor Complex | | Optional: at least 15 cr |
| Total Required | 35-40 cr | 120 cr |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

Notes:

All majors must earn a C- grade or higher in the general education, degree, department and major-specific, minor and specific math and statistics requirements.

Department requirements for majors and minors may exceed the minimums indicated.

Of the above, at least 39 credits must be taken in upper-division (300-level or higher) courses.

Courses beyond 30 credits in a major complex may be used to fulfill the B.B.A. degree requirements in ethics.

Bachelor of Fine Arts

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|--|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/ FLPA F161X, ANS F202X, ANS F223X/ MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | Humanities (12 cr): Any combination of courses at the F100 level or above. |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, GEOG F101X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | |
| Ethics | | Complete one from the following: BA F323X, COJO F300X, JUST F300X, NRM F303X, PHIL F322X, PS F300X |
| Mathematics | Complete one from the following: MATH F113X, MATH F122X, MATH F151X, MATH F152X, MATH F156X, MATH F230X, MATH F251X, MATH F252X, MATH F253X, or STAT F200X or any math course having one of these as a prerequisite | |

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| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | |
| Other | One additional Arts, Humanities or Social Sciences from the lists above. | |
| Alaska Native-themed | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ | |
| Major Complex | At least 30 cr | |
| Minor Complex | Optional: at least 15 cr | |
| Total Required | 35-40 cr | 120 cr |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

Notes:

You must earn a C- grade or higher in all courses required for your degree unless otherwise specified by your major (major, minor, general education requirements and degree requirements).

Department requirements for majors and minors may exceed the minimums indicated.

Of the above, at least 39 credits must be taken in upper-division (300-level or higher) courses. Courses beyond 30 credits in a major complex and 15 credits in a minor complex may be used to fulfill the B.A. degree requirements in ethics, humanities, mathematics or social sciences. Courses used to fulfill requirements for a minor may be used at the same time to fill major or general distribution requirements if so designated.

Students who hold a bachelor's degree from a regionally accredited institution are not required to complete the minor complex.

• Minors

Minors are offered in many subject areas. Requirements for minors are listed in the degree program sections. See a list of all bachelor's degree programs, including minors, here (<http://catalog.uaf.edu/programs/>).

An Associate of Applied Science (A.A.S.) degree or certificate of at least 30 credits earned at any regionally accredited college or university may be used to meet requirements for a minor for the Bachelor of Arts (B.A.) degree. Students who hold a bachelor's degree from a regionally accredited institution are not required to complete the minor complex.

• Double majors

If you're a Bachelor of Arts degree candidate, you may complete two majors rather than a major and a minor. Your majors must be selected from those approved for the Bachelor of Arts degree. You'll need to complete all general requirements plus all requirements for both majors. If you're completing a double major, you need to officially declare both majors either when you're admitted or through the change of major procedure. You'll need to follow the degree requirements in a single catalog for both majors.

Bachelor of Music

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|--|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/ FLPA F161X, ANS F202X, ANS F223X/ MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | No additional humanities unless required by the major |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, GEOG F101X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | No additional social sciences unless required by the major |
| Other | One additional Arts, Humanities or Social Sciences from the lists above. | |
| Ethics | | Complete one from the following: BA F323X, COJO F300X, JUST F300X, NRM F303X, PHIL F322X, PS F300X |
| Mathematics | Complete one from the following: MATH F113X, MATH F122X, MATH F151X, MATH F152X, MATH F156X, MATH F230X, MATH F251X, MATH F252X, MATH F253X, or STAT F200X or any math course having one of these as a prerequisite | |

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|-------------------------|---|--|
| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | No additional natural science required |
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| Alaska Native-themed | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ | |
| Major Complex | 85 or more cr | |
| Minor Complex | Optional: at least 15 cr | |
| Total Required | 35-40 cr | 120 cr |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

Notes:

You must earn a C- grade or higher in all courses required for your degree unless otherwise specified by your major (major, minor, general education requirements and degree requirements).

Department requirements for majors and minors may exceed the minimums indicated.

Bachelor of Science

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|--|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/ FLPA F161X, ANS F202X, ANS F223X/ MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | No additional humanities unless required by major or minor |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | No additional social sciences unless required by major or minor |
| Other | One additional Arts, Humanities or Social Sciences from the lists above. | |
| Ethics | | Complete one from the following: BA F323X, COJO F300X, JUST F300X, NRM F303X, PHIL F322X, PS F300X |
| Mathematics | Complete one from the following: MATH F113X, MATH F122X, MATH F151X, MATH F152X, MATH F156X, MATH F230X, MATH F251X, MATH F252X, MATH F253X, or STAT F200X or any math course having one of these as a prerequisite | One 3-credit course at the F100 level or above from computer sciences or statistics, or math course from MATH F113X or above. A 3-credit calculus course must be included in general education requirements or B.S. requirements |

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| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | One-year sequence in one natural science beyond the general education requirements—8 cr (Total natural science courses used to meet general education requirements and B.S. requirements must represent at least two different natural sciences.) |
| Alaska Native-themed | | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ |
| Major Complex | | At least 30 cr |
| Minor Complex | | Optional: at least 15 cr |
| Total Required | 35-40 cr | 120 cr* |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

Notes:

You must earn a C- grade or higher in all courses required for your degree unless otherwise specified by your major (major, minor, general education requirements and degree requirements).

* Department requirements for majors and minors may exceed the minimums indicated, and most B.S. degree programs require 130 credits.

Of the above, at least 39 credits must be taken in upper-division (300-level or higher) courses. Courses beyond 30 credits in a major complex and 15 credits in a minor complex may be used to fulfill the B.S. degree requirements in ethics, mathematics or natural science. Courses used to fulfill requirements for a minor may be used at the same time to fill major or general distribution requirements if so designated.

• Double Majors

As a Bachelor of Science degree candidate, you may complete a double major instead of a single major. Your majors must be selected from those approved for the Bachelor of Science degree. You'll need to complete all general requirements plus all requirements for both majors. If you're completing a double major, you need to officially declare both majors either when you're admitted or through the change of major procedure. You'll need to follow the degree requirements in a single catalog for both majors.

• Optional Minor

You may elect to complete a minor with the B.S. degree under the following circumstances:

- You must declare your minor before the beginning of your final semester in the B.S. degree program. You need to complete a declaration of minor form and file it with the Office of the Registrar by the end of registration.
- Any minor approved for the B.A. degree may serve as a minor for the B.S. degree. All general and specific requirements for minors are the same as those listed for B.A. degree minors, including that courses used to meet minor requirements may not be used to meet major or general distribution requirements unless so designated. The catalog used for the minor must be the same as the catalog used for the major and general degree requirements.
- You must satisfactorily complete the requirements for the minor before your B.S. degree will be awarded. The minor will be listed on your transcript along with the B.S. degree.

Bachelor of Security and Emergency Management

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|---|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/FLPA F161X, ANS F202X, ANS F223X/MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | No additional humanities unless required by major or minor |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, GEOG F101X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | No additional social science unless required by major or minor |
| Other | One additional Arts, Humanities or Social Sciences from the lists above. | |
| Ethics | | BA F323X |
| Mathematics | Complete one from the following: MATH F113X, MATH F122X, MATH F151X, MATH F152X, MATH F156X, MATH F230X, MATH F251X, MATH F252X, MATH F253X, or STAT F200X or any math course having one of these as a prerequisite | |

| | | |
|-------------------------|---|--|
| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | No additional natural science required |
|-------------------------|---|--|

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|-----------------------------|--|--------|
| Alaska Native-themed | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ | |
| Major Complex | At least 78 cr | |
| Minor Complex | Optional: at least 15 cr | |
| Total Required | 35-40 cr | 120 cr |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

The B.S.E.M. degree prepares students for professional careers responding to natural and manmade disasters, forming crisis management plans and ensuring public safety. Students with backgrounds ranging from first responders and military to applied vocational skills graduate ready to start or advance in careers in emergency management, homeland security, public safety and emergency services. See Homeland Security and Emergency Management (p. 323) in Bachelor's Degree Programs.

Notes:

You must earn a C- grade or higher in all courses required for your degree unless otherwise specified by your major (major, minor, general education requirements and degree requirements).

Courses beyond 30 credits in a major complex may be used to fulfill the B.S.E.M. degree requirements in ethics.

Bachelor of Sport and Recreation Business

| Requirement Type | General Education Requirements | Degree Specific Requirements |
|---|--|---|
| Communication | Complete the following: COJO F121X, COJO F131X or COJO F141X; WRTG F111X; and WRTG F211X, WRTG F212X, WRTG F213X or WRTG F214X. | |
| Library and Information Research | | LS F101X or successful completion of library skills competency test |
| Arts | Complete one from the following: ANS F161X/ FLPA F161X, ANS F202X, ANS F223X/ MUS F223X/ACNS F223X, ART F105X, ART F200X, ART F261X, ART F262X, ENGL F217X/FLPA F217X/COJO F217X, FLPA F105X/COJO F105X, FLPA F121X, FLPA F200X, FLPA F215X, HUM F201X, MUS F103X, MUS F125X, MUS F200X | |
| Humanities | Complete one from the following: ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X/FL F200X, ENGL F201X, ENGL F270X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X | |
| Social Sciences | Complete two courses from the following in two different disciplines: ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA F281X/SPRT F281X, ECE F104X, ECE F107X, ECE F210X, ECON F101X, ECON F102X, ECON F111X, ECON F120X, ECON F235X, GEOG F101X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X/JUST F125X, JUST F110X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SWK F103X, SOC F101X, SOC F201X, WGS F201X | |
| Other | One additional Arts, Humanities or Social Sciences from the lists above. | |
| Ethics | | BA F323X |
| Mathematics | MATH F122X | |
| Natural Sciences | Complete two from the following: ATM F101X, BIOL F100X, BIOL F103X, BIOL F104X, BIOL F111X, BIOL F112X, BIOL F115X, BIOL F116X, BIOL F120X, CHEM F100X, CHEM F103X, CHEM F104X, CHEM F105X, CHEM F106X, CHEM F111X, GEOS F101X, GEOS F106X, GEOS F111X, GEOS F112X, GEOS F120X, MSL F111X, PHYS F102X, PHYS F115X, PHYS F123X, PHYS F124X, PHYS F165X, PHYS F211X, PHYS F212X, PHYS F213X | |

| | | |
|-----------------------------|--|--------|
| Alaska Native-themed | During the completion of coursework, 3 credits of Alaska Native-themed course(s) must be completed. See Alaska Native-themed courses chart for available courses. ¹ | |
| Major Complex | At least 33 | |
| Minor Complex | Optional: at least 15 cr | |
| Total Required | 35-40 cr | 120 cr |

¹ For a summary of the Alaska Native-themed courses see the Alaska Native-themed requirements (p. 225) chart.

Note: Courses beyond 30 credits in a major complex may be used to fulfill the B.S.R.B. degree requirements in ethics.

Alaska Native-themed Requirements

The Alaska Native-themed (ANT) requirement is a degree requirement for all bachelor's, associate of arts and associate of science degrees.

Students may choose from a number of courses to meet the total 3-credit hour Alaska Native-themed degree requirement. These courses explore Alaska Native peoples and cultures through at least one of the following: values, language, art, knowledge, governance, subsistence, experience and ways of life. This requirement does not add to the total number of credits required for General Education Requirement (GER) or degree completion. Although the Alaska Native-themed course requirement is separate from GERs, some ANT courses are also GERs. These courses are marked with an "X" and can count toward both a GER and ANT.

The University of Alaska Fairbanks is proud to acknowledge the Alaska Native nations upon whose traditional lands its seven campuses reside. In Fairbanks, the Troth Yeddha' Campus is located on the traditional lands of the Ch'eno Xwut'ana (Dena) people of the lower Tanana River, and the branch campuses and extension offices are hosted on Indigenous lands throughout the state. UAF is federally designated as an Alaska Native Serving Institution, with over 20 percent of the student body being Alaska Native and/or American Indian.

To fulfill UAF's mission and to honor the first peoples of Alaska, all incoming undergraduate students learn about Alaska Native peoples and their perspectives and worldviews through the Alaska Native-themed course requirement. This requirement was developed through the efforts of the statewide Alaska Native Studies Council and was supported by the UAF student government and the UAF Faculty Senate.

ALASKA NATIVE-THEMED COURSES

| Code | Title | Credits |
|--|--|---------|
| Complete one of the following courses: | | |
| ANS F112/RD F110 | Alaska Native Claims Settlement Act: Land Claims in the 21st Century | 1 |
| ANS/RD F113 | Alaska Natives, Indigenous Peoples and International Laws | 1 |
| ANS/RD F114 | Alaska Natives, Indigenous Peoples and North American Legal Systems | 1 |
| ANS/FLPA F161X | Introduction to Alaska Native Performance | 3 |
| ANS/ACNS/MUS F223X | Alaska Native Music | 3 |
| ANS/ART F268 | Alaska Native Art Studio I | 3 |
| ANS/RD F315 | Tribal People and Development | 3 |
| ANS/PS F325 | Alaska Native and Comparative Tribal Self-Government | 3 |
| ANS/ENGL F349 | Narrative Art of Alaska Native Peoples (in English translation) | 3 |
| ANS/FLPA F361 | Advanced Alaska Native Performance | 3 |
| ANS/ART/ANTH F365 | Alaska Native Art History | 3 |
| ANS/ART F368 | Alaska Native Art Studio II | 3 |
| ANS/FLPA F381 | Indigenous World in Film | 3 |
| ANS/RD F401 | Cultural Knowledge of Native Elders | 3 |
| ANS/ED F420 | Alaska Native Education | 3 |
| ANS/PS F425 | Federal Indian Law and Alaska Natives | 3 |
| ANS/ED F461 | Native Ways of Knowing | 3 |

| | | |
|-------------------|--|-----|
| ANS/ART F468 | Alaska Native Art Studio III | 3 |
| ART/ANS/ANTH F367 | Inuit Art | 3 |
| ANS F101 | Introduction to Alaska Native Studies | 3 |
| ANS F111X | History of Colonization in Alaska: The Indigenous Response | 3 |
| ANS F150 | Topics in Alaska Regional Cultural History | 3 |
| ANS F160 | Alaska Native Dance | 1 |
| ANS F202X | Aesthetic Appreciation of Alaska Native Performance | 3 |
| ANS F242X | Indigenous Cultures of Alaska | 3 |
| ANS F250 | Current Alaska Native Leadership Perspectives | 3 |
| ANS F251 | Practicum in Alaska Native Cultural Expression | 1-3 |
| ANS F300 | Alaska Native Writers Workshop | 3 |
| ANS F310 | Alaska Native and Comparative Indigenous Land Settlements | 3 |
| ANS F329 | Indigenous Alaska Native Language and Culture Revitalization | 3 |
| ANS F350 | Cross-cultural Communication: Alaska Perspectives | 3 |
| ANS F351 | Advanced Practicum in Alaska Native Cultural Expression | 1-3 |
| ANS F360 | Advanced Alaska Native Dance | 1 |
| ANS F375 | Native American Religion and Philosophy | 3 |
| ANS F458 | The Politics of Indigenous Identity | 3 |
| ANS F467 | Tribal Responses to Violence: Safety, Justice and Advocacy | 3 |
| ANS F475 | Alaska Native Social Change | 3 |
| ANL F101 | Introduction to Alaska Native Language Study | 3 |
| ANL F108 | Beginning Athabascan Literacy | 1-3 |
| ANL F121 | Conversational Alaska Native Language I | 1-3 |
| ANL F122 | Conversational Alaska Native Language II | 1-3 |
| ANL F141X | Beginning Dene / Athabascan I | 5 |
| ANL F142X | Beginning Dene / Athabascan II | 5 |
| ANL F150 | Interpretive Communication | 1 |
| ANL F151 | Interethnic Communications | 3 |
| ANL F199 | Practicum in Native Language Education | 3 |
| ANL F208 | Advanced Athabascan Literacy | 1-3 |
| ANL F221 | Intermediate Conversational Alaska Native Language | 1-3 |
| ANL F241 | Intermediate Dene / Athabascan I | 3 |
| ANL F242 | Intermediate Dene / Athabascan II | 3 |
| ANL F251X | Introduction to Athabascan Linguistics | 3 |
| ANL F255X | Introduction to Alaska Native Languages | 3 |

| | | | | | |
|-------------------------|--|-----|-----------|--|-----|
| ANL F256 | Introduction to Alaska Native Languages: History, Status and Maintenance | 3 | TG F112 | Federal Indian Law for Alaska Tribes | 1 |
| ANL F287 | Teaching Methods for Alaska Native Languages | 3 | TG F120 | Introduction to Tribal Natural Resources Stewardship | 3 |
| ANL F288 | Curriculum and Materials Development for Alaska Native Languages | 3 | TG F171 | Introduction to the Indian Reservation Roads Program | 1 |
| ANL F289 | Practicum in Native Language Education II | 3,4 | TG F201 | Tribal Government in Alaska II | 3 |
| ANL F315 | Alaska Native Languages: Eskimo-Aleut | 3 | TG F205 | Managing Tribal Governments II | 3 |
| ANL F316 | Alaska Native Languages: Indian Languages | 3 | TG F271 | Rural Transportation Planning | 1 |
| ANL F401 | Alaska Native Language Apprenticeship | 5 | YUP F101X | Elementary Central Yup'ik I | 5 |
| ANL F402 | Alaska Native Language Apprenticeship II | 5 | YUP F102X | Elementary Central Yup'ik II | 5 |
| ANL F452 | Principles of Linguistic Analysis for Alaska Native Languages | 3 | YUP F103 | Conversational Central Yup'ik I | 1-3 |
| ANTH F102/ EBOT F100 | Introduction to Ethnobotany | 3 | YUP F104 | Conversational Central Yup'ik II | 3 |
| ANTH F242 | Native Cultures of Alaska | 3 | YUP F109 | Central Yup'ik Orthography | 3 |
| ANTH F383 | History and Cultures of Northern Dené | 3 | YUP F121 | Elementary Central Yup'ik Apprenticeship I | 4 |
| BA F391 | Alaska Native Corporations: A Historical and Contemporaneous Perspective | 3 | YUP F122 | Elementary Central Yup'ik Apprenticeship II | 4 |
| EBOT F100 | Introduction to Ethnobotany | 3 | YUP F123 | Elementary Central Yup'ik Apprenticeship III | 4 |
| ECON F111X | The Economy of Rural Alaska | 3 | YUP F130 | Beginning Yup'ik Grammar | 3 |
| HIST F110X | History of Alaska Natives from Contact to the Present | 3 | YUP F131 | Beginning Yup'ik Grammar II | 3 |
| HSEM F461 | Human Security in Alaska | 3 | YUP F155 | Conversational Siberian Yupik I | 1-3 |
| INU F106 | Introduction to Inupiaq | 1 | YUP F156 | Conversational Siberian Yupik II | 1-3 |
| INU F111X | Elementary Inupiaq I | 5 | YUP F158 | Siberian Yupik Orthography | 1-3 |
| INU F112X | Elementary Inupiaq II | 5 | YUP F201 | Intermediate Central Yup'ik I | 3 |
| INU F115 | Conversational Inupiaq I | 1-3 | YUP F202 | Intermediate Central Yup'ik II | 3 |
| INU F116 | Conversational Inupiaq II | 1-3 | YUP F203 | Conversational Central Yup'ik III | 3 |
| INU F118 | Inupiaq Orthography | 3 | YUP F204 | Conversational Central Yup'ik IV | 3 |
| INU F211 | Intermediate Inupiaq I | 3 | YUP F205 | Regaining Fluency in Yup'ik | 3 |
| INU F212 | Intermediate Inupiaq II | 3 | YUP F206 | Regaining Fluency in Yup'ik II | 3 |
| INU F218 | Inupiaq Composition | 3 | YUP F208 | Yup'ik Composition | 3 |
| INU F417 | Advanced Inupiaq | 3 | YUP F221 | Intermediate Central Yup'ik Apprenticeship I | 3 |
| JUST F340 | Rural Justice in Alaska | 3 | YUP F222 | Intermediate Central Yup'ik Apprenticeship II | 3 |
| PSY F430 | Rural and Alaska Native Psychology | 3 | YUP F223 | Intermediate Central Yup'ik Apprenticeship III | 3 |
| RD F245 | Fisheries and Marine Wildlife Development in Rural Alaska | 3 | YUP F230 | Introduction to Interpreting and Translating I | 3 |
| RD F255 | Rural Alaska Land Issues | 3 | YUP F231 | Introduction to Interpreting and Translating II | 3 |
| RD F265 | Perspectives on Subsistence in Alaska | 3 | YUP F240 | Introduction to Reading and Writing Yup'ik | 3 |
| RD F430 | Indigenous Economic Development and Entrepreneurship | 3 | YUP F250 | Yup'ik Literature for Children | 3 |
| RD F465 | Community Healing and Wellness | 3 | YUP F251 | Teaching Beginning Yup'ik Reading and Writing | 3 |
| RD F470 | The Alaska Native Claims Settlement Act: Pre-1971 to Present | 3 | YUP F260 | Siberian Yupik I | 3 |
| TG F101 | Introduction to Tribal Government in Alaska | 3 | YUP F261 | Siberian Yupik II | 3 |
| TG F102 | Essentials of Tribal Government | 1 | YUP F301 | Advanced Central Yup'ik | 3 |
| TG F105 | Introduction to Managing Tribal Governments | 3 | YUP F330 | Yup'ik Literature/Yup'it Quliraitnek Igaryaraq | 3 |
| | | | YUP F375 | Yup'ik Philosophy/Umyuarteqsaraq | 3 |
| | | | YUP F415 | Additional Topics in Advanced Yup'ik | 3 |

| | | |
|----------|---|---|
| YUP F488 | Documenting Yup'ik Traditions/ Caliarkaq | 3 |
|----------|---|---|

Bachelor's Degree Programs

Accounting

B.B.A. Degree

The accounting department offers an extensive program for those interested in the fields of general accounting, auditing, managerial accounting, taxation and government accounting. The objectives of the program are to provide a strong business background through an understanding of accounting and to train students for employment in accounting work.

The College of Business and Security Management is accredited by the Association to Advance Collegiate Schools of Business International and is one of only approximately 1.5% of schools worldwide with an additional specialized accounting accreditation. The UAF accounting program is the only accounting program in Alaska with AACSB accreditation.

The accounting program prepares students for certification as certified public accountants, certified management accountants, certified financial managers, certified internal auditors and certified fraud examiners. The UAF accounting program places nearly 100 percent of its graduates.

Minimum Requirements for Accounting Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in accounting (<https://uaf.edu/academics/programs/bachelors/accounting.php>), including an overview of the program, career opportunities and more.

College of Business and Security Management
Accounting Program (<https://www.uaf.edu/cbsm/degrees/undergraduate/acct/>)
907-474-7461

Programs Degree

- B.B.A., Accounting (p. 228)

Minor

- Minor, Accounting (p. 229)

B.B.A., Accounting

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Accounting B.B.A.: 120 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.B.A. Degree Requirements | | |
| Complete the B.B.A. degree requirements. (p. 213) ¹ | | |
| As part of the B.B.A. degree requirements, complete: | | |
| BA F323X | Business Ethics | |
| MATH F122X | Essential Precalculus with Applications | |
| Accounting Program Requirements | | |
| Complete the following: | | |
| ACCT F330 | Income Tax | 3 |
| ACCT F342 | Managerial Cost Accounting | 3 |
| ACCT F361 | Intermediate Accounting I | 3 |
| ACCT F362 | Intermediate Accounting II | 3 |
| ACCT F452 | Auditing | 3 |
| or ACCT F472 | Internal and Government Auditing | |
| AIS F316 | Accounting Information Systems | 3 |
| AIS F324 | Advanced MS Excel | 1 |
| AIS F342 | MS Excel for Finance | 1 |
| BA F308 | Professional Development: How to Prepare for a Job and Other Survival Skills | 1 |
| BA F309 | Professional Development: Finding a Career | 1 |
| or BA F310 | Professional Development: Being Successful in Your Career | |
| BA F325 | Financial Management | 3 |
| BA F330 | The Legal Environment of Business | 4 |
| BA F343 | Principles of Marketing | 3 |
| BA F360 | Operations Management | 3 |
| BA F390 | Organizational Theory and Behavior | 3 |
| or BA F391 | Alaska Native Corporations: A Historical and Contemporaneous Perspective | |
| BA F462 | Corporate Strategy | 3 |
| HSEM F415 | Cybersecurity in the 21st Century: Technology and Ethics | 3 |
| or HSEM F416 | Cybersecurity Management | |
| or HSEM F417 | Cybersecurity Resiliency | |
| or HSEM F418 | Cybercrime, Fraud and Law | |
| HSEM F445 | Business Continuity and Crisis Management | 3 |

| | |
|-----------------------------------|----|
| Complete four from the following: | 12 |
|-----------------------------------|----|

| | |
|------------|---|
| ACCT F401 | Advanced Accounting |
| ACCT F404 | Advanced Cost Accounting and Controllershship |
| ACCT F414 | Governmental and Nonprofit Accounting |
| ACCT F430 | Advanced Taxes |
| ACCT F472 | Internal and Government Auditing |
| BA F454 | Student Investment Fund |
| or BA F421 | Business Analytics |

Electives

| |
|--|
| Electives may be taken as needed to meet 120 credits |
|--|

¹ As part of the B.B.A. degree requirements (p. 213), BA F462 fulfills the baccalaureate capstone requirement.

Note: The B.B.A. degree requires 50 percent of the accounting, business administration and economics credits to be earned at UAF. Twenty-four out of the last 30 credits earned must be taken at UAF.

Minor, Accounting

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Accounting Minor: 15 credits

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Accounting Program Requirements | | |
| Complete the following: | | |
| ACCT F261X | Principles of Financial Accounting | 3 |
| ACCT F262 | Principles of Managerial Accounting | 3 |
| | Upper-division accounting electives | 9 |

Note: Courses completed to satisfy this minor can be used to simultaneously satisfy other major or general education requirements.

Accounting, Applied

Minor

The minor in applied accounting is designed to provide you the opportunity to acquire foundation-level knowledge and skills in payables and/or receivables, bookkeeping and payroll accounting. Courses include accounting principles, payroll accounting and accounting software systems.

This minor is a great choice for Bachelor of Arts degree students who need to satisfy their minor requirement or Associate of Arts students who want to explore accounting as an area of interest.

Minimum Requirements for Applied Accounting Minor: 18 credits

Community and Technical College
Applied Accounting (<https://www.ctc.uaf.edu/programs/accounting-applied/>)
907-455-2800

Programs

Minor

- Minor, Accounting, Applied (p. 230)

Degree

- A.A.S., Accounting, Applied (p. 148)

Minor, Accounting, Applied

Students must earn a C- grade or better in each course.

Minimum Requirements for Applied Accounting Minor: 18 credits

| Code | Title | Credits |
|-------------------------|--------------------------------------|---------|
| Complete the following: | | |
| ABUS F101 | Principles of Accounting I | 3 |
| ABUS F201 | Principles of Accounting II | 3 |
| or ABUS F235 | Fund Accounting for Nonprofits | |
| ABUS F210 | Income Tax | 3 |
| ABUS F220 | Microcomputer Accounting: QuickBooks | 3 |
| BA F151X | Introduction to Business | 3 |
| CIOS F135 | Microcomputer Spreadsheets | 3 |
| or CIOS F240 | Microcomputer Databases | |

Aerospace Engineering Minor Only

UAF offers an aerospace engineering minor for students interested in a career in the aerospace industry or in expanding their knowledge of applied interdisciplinary engineering. The minor includes capstone courses in aeronautics and astronautics, with tracks emphasizing either aerodynamics or space systems. Several electives allow the program to be tailored for students' desires and schedule.

Additional Courses. Several options are available for students looking for a more focused exposure to aerospace topics. In addition to taking any of the academic courses listed in the minor, UAF currently offers the following courses in unmanned aircraft systems.

- AERO F654 — UAS Systems Design (fall even-numbered years)
- AERO F656 — Aerospace Systems Engineering (fall odd-numbered years)
- AERO F658 — Unmanned Aircraft Systems (UAS) Operations (spring)

These courses are offered at the Fairbanks campus and are available to UAA students via video link. Courses are open to all graduate and senior students in electrical, mechanical and computer engineering, as well as computer science and geomatics. Others may petition the instructor for participation.

A flowchart (<https://sites.google.com/a/alaska.edu/dr-michael-hatfield/uaf-aerospace-program/uaf-aerospace-engineering-minor/Aero%20minor%20flow%20chart.jpg>) is available for the required courses for the minor.

Aerospace Club — UAF hosts a local student chapter of the American Institute of Aeronautics and Astronautics. The club participates in AIAA's annual Design Build Fly competition, with the flight demonstration occurring in April and rotating between Wichita, Kansas, and Tucson, Arizona. UAF's team has done very well in this international competition, being within the top 100 schools to be invited for each of the past four years and placing 23rd in the 2019 competition. For more information visit UAF's Aerospace Club's website (<http://uafaiaa.weebly.com/>).

Minimum Requirements for Aerospace Engineering Minor: 15 credits

College of Engineering and Mines (<https://www.uaf.edu/cem/>)
907-474-6098

Programs Minor

- Minor, Aerospace Engineering (p. 231)

Minor, Aerospace Engineering Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Aerospace Engineering Minor: 15 credits

| Code | Title | Credits |
|---|--|---------|
| Aerospace Engineering Program Requirements | | |
| Complete the following: | | |
| ME F451 | Aerodynamics | 3 |
| ME F452 | Introduction to Astrodynamics | 3 |
| Complete three of the following: | | 9-11 |
| AERO F654 | UAS Systems Design | |
| AERO F656 | Aerospace Systems Engineering | |
| AERO F658 | Unmanned Aircraft Systems (UAS) Operations | |
| EE F444 | Embedded Systems Design | |
| EE F471 or ME F409 | Automatic Control Controls | |
| GEOS F422 | Geoscience Applications of Remote Sensing | |
| ME F408 | Mechanical Vibrations | |
| ME F450 | Theory of Flight | |
| ME F453 | Propulsion Systems | |

Note: This minor may require substantial prerequisite courses for non-ME and non-EE majors, which should be taken into consideration.

Agrometeorology

Minor Only

This minor provides an opportunity for upper-level undergraduates from sciences (e.g., natural sciences and agriculture, geosciences, geography, physics), mathematics and engineering across the University of Alaska system to pursue a concentration and specialization in agrometeorology. The minor is established in the College of Natural Science and Mathematics and fostered by worldwide specialists in the fields of meteorology, climate and agriculture from the Department of Atmospheric Sciences and the Department of Natural Resources and Environment. This minor aims to provide the student with training in state-of-the-art experimental and computational methodologies and tools, as well as with a deep theoretical understanding of the transdisciplinary process at the convergence and intersection between agriculture and meteorology/climate. All courses listed for this minor present a module for professional practices in the field and in computers so that the student can profile a pathway for workforce development.

With a minor in agrometeorology, the student would have a well-rounded and hands-on formation in all aspects involving agricultural systems that influence or are influenced by meteorological and climate processes. The program is fully compliant with the standard practices set at the U.S. Department of Agriculture, the U.S. National Weather Service and the World Meteorological Organization objectives in terms of seasonal analysis, forecasting activities and decision-making processes.

Minimum Requirements for Agrometeorology Minor: 24 credits

Department of Atmospheric Sciences (<https://www.uaf.edu/atmos/>)
907-474-7368

Programs

Minor

- Minor, Agrometeorology (p. 232)

Minor, Agrometeorology

Students must be enrolled in the upper-level division of sciences (natural resources and agriculture, geosciences, geography, etc.), mathematics or engineering at the University of Alaska system in order to complete the minor in agrometeorology. Students outside the UA system wishing to apply to this program are encouraged to contact the Department of Atmospheric Sciences (<https://www.uaf.edu/atmos/>) for options at 314 Akasofu Building, PO Box 757320, Fairbanks, AK 99775-7320. Phone: 907-474-7368, Fax: 907-474-7379

Courses scheduled for the minor in agrometeorology include 24 credits + one internship (field practice).

Students must earn a C- grade or better in each course.

Minimum Requirements for Agrometeorology Minor: 24 credits

| Code | Title | Credits |
|--------------------------------------|--|---------|
| Agrometeorology Program Requirements | | |
| Complete the following: | | |
| NRM F210 | Principles of Sustainable Agriculture | 3 |
| NRM F380 | Soils and the Environment ¹ | 3 |
| NRM F338 | Introduction to Geographic Information Systems | 3 |
| ATM F401 | Introduction to Atmospheric Sciences | 3 |
| ATM F473 | Micrometeorology with Focus on Subarctic and Arctic Ecosystems | 3 |
| NRM F435 | GIS Analysis | 4 |
| ATM F444 | Weather Analysis and Forecasting | 3 |
| NRM F480 | Soil Management for Quality and Conservation | 3 |

¹ NRM F380 is a prerequisite for NRM F480

Alaska Native Languages

Minor Only

The Alaska Native languages program offers courses in Eskimo, Aleut and Indian languages spoken in the state. Major and minor curricula are offered in Central Yup'ik Eskimo, the largest Alaska Native language in terms of number of speakers; and Inupiaq Eskimo, the second largest. Regular courses are also available in Gwich'in Athabascan. Individual or small-group instruction is available in other Athabascan languages as well as in Siberian Yup'ik, Alutiiq, Aleut and Tlingit. UAF is the only university in the United States to provide such programs. Students interested in individual or small group interaction should contact the Alaska Native Language Center.

Professional opportunities for those skilled in Alaska Native languages exist in teaching, research and cultural, educational and political development. The A.A.S. degree (p. 186) and the 30-credit certificate (p. 187) in Native language education for either Inupiaq or Athabascan are available by distance delivery. Both provide training in language and culture for people interested in becoming Native language instructors, and both may serve as a step toward further education.

The Alaska Native language teaching program benefits from the research staff and library at the Alaska Native Language Center. Students have access to researchers who are world leaders in documenting Eskimo and northern Athabascan languages. The library houses more than 15,000 items, virtually everything written about Alaska Native languages, including copies of documentation dating to the 1700s.

Minimum Requirements for Alaska Native Languages Minor: 15 credits

College of Rural and Community Development
Alaska Native Languages Program (<https://www.uaf.edu/anlc/>)
907-474-7874

Programs

Minor

- Minor, Alaska Native Languages (p. 233)

Minor, Alaska Native Languages

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Alaska Native Languages Minor: 15 credits

| Code | Title | Credits |
|---|-------|---------|
| Alaska Native Languages Program Requirements | | |
| Complete the following: | | |
| Any ANL, INU or YUP courses | | 15 |

Alaska Native Studies

B.A. Degree

Alaska Native studies is a social science program that explores current and historical Alaska and broader circumpolar issues from the indigenous perspective. The curriculum grounds students in tribal histories and cultures, governmental policies and local Indigenous affairs. The program incorporates Native traditional knowledge, wisdom and experience into contemporary issues and studies. Graduates are prepared to make leadership contributions throughout communities of the circumpolar North. They may also continue to higher education in fields such as law, policymaking and Indigenous studies.

Students will complete a concentration in one of the following areas:

- Indigenous Rights and Advocacy
- Cultural Revitalization
- Community Resiliency
- Multidisciplinary

Graduates may find employment in many different areas including government, health and social services, performance arts, justice and cultural programs. They may also serve as cultural ambassadors to promote cross-cultural communications across the North. The B.A. degree can be earned on the Fairbanks campus or through distance delivery. The department welcomes students pursuing a second major or a minor.

Students applying for acceptance into the Alaska Native studies program need to complete a department-specific written questionnaire in addition to general university admission requirements. Findings from this process will be used to support the department advising process and assist students in connecting with faculty and mentors. The questionnaire is found on the DANSRD website (<https://www.uaf.edu/dansrd/>) under the "Students" drop-down, "How to Apply."

Special application requirements and deadlines apply for distance B.A. programs.

Minimum Requirements for Alaska Native Studies Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in Alaska Native studies (<https://uaf.edu/academics/programs/bachelors/alaska-native-studies.php>), including an overview of the program, career opportunities and more.

College of Rural and Community Development
Department of Alaska Native Studies and Rural Development (<https://www.uaf.edu/dansrd/>)
907-474-6528 or toll-free 1-866-478-2721

Programs Degree

- B.A., Alaska Native Studies (p. 234)

Minor

- Minor, Alaska Native Studies (p. 236)

B.A., Alaska Native Studies

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Alaska Native Studies B.A.: 120 credits

CONCENTRATIONS: INDIGENOUS RIGHTS AND ADVOCACY (P. 235); CULTURAL REVITALIZATION (P. 235); COMMUNITY RESILIENCY (P. 235); MULTIDISCIPLINARY (P. 235)

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Upper-division Credits ¹ | | 39 |
| Alaska Native Studies Program Requirements | | |
| Complete the following: | | |
| ANS F101 | Introduction to Alaska Native Studies | 3 |
| ANS F111X | History of Colonization in Alaska: The Indigenous Response | 3 |
| ANS F242X | Indigenous Cultures of Alaska ² | 3 |
| ANS F350 | Cross-cultural Communication: Alaska Perspectives | 3 |
| ANS F401 | Cultural Knowledge of Native Elders | 3 |
| ANS F478 | Alaska Native Studies Senior Thesis ³ | 3 |
| RD F225 | Applied Communication Skills | 3 |
| RD F245 | Fisheries and Marine Wildlife Development in Rural Alaska | 3 |
| RD F340 | Community Research Toolbox | 3 |
| RD F465 | Community Healing and Wellness | 3 |
| RD F474 | Applied Community Research | 3 |
| Complete 6 ANS/RD/TG/ANL elective credits | | 6 |
| Concentrations | | |
| Complete 15 credits from one of the following concentrations | | 15 |
| Indigenous Rights and Advocacy | | |
| Cultural Revitalization | | |
| Community Resiliency | | |
| Multidisciplinary | | |

¹ Non-Fairbanks campus students choosing a minor other than rural development must verify that the required courses can be accessed via distance before declaring that minor. Courses used in the concentration area may be double-counted for the minor.

² May not be counted toward an Alaska Native studies major if used to fulfill general education requirements.

³ Fulfills the baccalaureate capstone requirement. Students may substitute RD F475 with department chair approval.

Concentrations

INDIGENOUS RIGHTS AND ADVOCACY

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| ANS F425 | Federal Indian Law and Alaska Natives | 3 |
| ANS F475 | Alaska Native Social Change | 3 |
| RD F470 | The Alaska Native Claims Settlement Act: Pre-1971 to Present | 3 |

Complete an additional 6 credits from Alaska Native studies, rural development, and/or tribal management.

- ¹ May not be counted toward an Alaska Native studies major if used to fulfill general education requirements.
- ² Recommended subject areas. Course substitutions relevant to the concentration area may be made with approval of the rural development faculty advisor.

CULTURAL REVITALIZATION

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| ANS F329 | Indigenous Alaska Native Language and Culture Revitalization | 3 |
| ANS F461 | Native Ways of Knowing | 3 |
| RD F425 | Cultural Resource Issues | 3 |

Complete an additional 6 credits from Alaska Native studies, rural development, tribal management, ethnobotany, and/or Alaska Native languages.

- ¹ May not be counted toward an Alaska Native studies major if used to fulfill general education requirements.
- ² Recommended subject areas. Course substitutions relevant to the concentration area may be made with approval of the rural development faculty advisor.

COMMUNITY RESILIENCY

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| ANS F325 | Alaska Native and Comparative Tribal Self-Government | 3 |
| ANS F458 | The Politics of Indigenous Identity | 3 |
| ANS F467 | Tribal Responses to Violence: Safety, Justice and Advocacy | 3 |

Complete an additional 6 credits from Alaska Native studies, rural development, tribal management, fisheries, and/or natural resource management.

- ¹ May not be counted toward an Alaska Native studies major if used to fulfill general education requirements.
- ² Recommended subject areas. Course substitutions relevant to the concentration area may be made with approval of the rural development faculty advisor.

MULTIDISCIPLINARY

| Code | Title | Credits |
|--|-------|---------|
| Complete the following: | | |
| Complete 15 credits from two or more existing concentrations. Courses must include at least 9 credits from the required course lists of the existing concentrations as approved by department advisor. | | 15 |

Minor, Alaska Native Studies

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Alaska Native Studies Minor: 15 credits

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Alaska Native Studies Requirements | | |
| Complete the following: | | |
| ANS course at the F300 or F400 level | | 3 |
| ANS F401 | Cultural Knowledge of Native Elders | 3 |
| Alaska Native Studies electives ¹ | | 9 |

¹ All minor electives must be approved by the head of the Department of Alaska Native Studies and Rural Development.

Anthropology

B.A. Degree

The Department of Anthropology offers a balanced and flexible program of academic courses and research in cultural anthropology, linguistic anthropology, archaeology and biological anthropology. Anthropology contributes to an understanding of the complex problems of human behavior, biology, language, cultural and social organization, and the relationship of humans to their environments. Research carried out in the field, laboratory and library emphasizes past and present modes of living and the origins and distribution of peoples and cultures throughout the world. Although special attention is given to the circumpolar North, faculty also maintain active research programs elsewhere, such as Africa and North America.

Minimum Requirements for Anthropology Bachelor’s Degrees: B.A.: 120 credits

Learn more about the bachelor’s degree in anthropology (<https://uaf.edu/academics/programs/bachelors/anthropology.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Department of Anthropology (<https://www.uaf.edu/anthro/>)
907-474-7288

Programs Degrees

- B.A., Anthropology (p. 237)

Minor

- Minor, Anthropology (p. 237)

B.A., Anthropology

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Anthropology B.A.: 120 Credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Anthropology Program Requirements | | |
| <i>Foundations of Anthropology</i> | | |
| Complete the following: | | |
| ANTH F211X | Fundamentals of Archaeology | 3 |
| ANTH F215 | Fundamentals of Social/Cultural Anthropology | 3 |
| ANTH F221 | Fundamentals of Biological Anthropology | 3 |
| ANTH F260 | Fundamentals of Linguistic Anthropology: Language in Culture and Communication | 3 |
| ANTH F384 | History of Anthropology | 3 |
| ANTH F411 | Senior Seminar in Anthropology | 3 |
| <i>Anthropological Methods</i> | | |
| Complete 6 credits from the following courses: | | 6 |
| ANTH F370 | Virtual Ethnographic Field School | |
| ANTH F405 | Archaeological Method and Theory | |
| ANTH F415 | Zooarchaeology and Taphonomy | |
| ANTH F422 | Human Osteology | |
| ANTH F424 | Analytical Techniques | |
| ANTH F470 | Oral Sources: Issues in Documentation | |
| ANTH F485 | Discourse in Society: Analyzing Language in Social Context | |
| <i>Anthropological Topics</i> | | |
| Complete 12 credits of other Anthropology Courses, at least 9 of which are at the F300 or F400 level | | 12 |

NOTE: On occasion, faculty may offer courses trial courses, special topics or seminars that would fulfill the methods or topics requirements. If so, students should consult with an anthropology faculty advisor on which requirement it meets and how to have it count toward the BA degree.

Minor, Anthropology

Program Requirements

Students must earn a C- or better in each course.

Minimum Requirements for Anthropology Minor: 18 credits

| Code | Title | Credits |
|--|--|---------|
| Anthropology Program Requirements | | |
| Complete the following: | | |
| ANTH F211X | Fundamentals of Archaeology | 3 |
| ANTH F215 | Fundamentals of Social/Cultural Anthropology | 3 |
| ANTH F221 | Fundamentals of Biological Anthropology | 3 |
| ANTH/LING F260 | Fundamentals of Linguistic Anthropology: Language in Culture and Communication | 3 |
| Anthropology electives | | 6 |

Applied Management

B.A.M. Degree

The Bachelor of Applied Management (B.A.M.) online degree is designed for individuals who have completed or will complete 18-30 credit hours in an area of specialization or trade and aspire to assume middle management-level positions in their chosen field.

Applied management majors are desired in nearly every industry including, for example, aviation, automotive technology, hospitality and the growing field of healthcare. This desirability provides a unique opportunity as only a limited number of applied management bachelor degrees exist and many of those are located in for-profit institutions.

The online Bachelor of Applied Management degree provides students with the academic education required to be proficient middle managers in their career fields. It offers students with degrees and certificates, not usually designed to fulfill the requirements within a bachelor's program, the opportunity to use their skills and degrees/certificates for academic and career growth.

Minimum Requirements for Applied Management Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in applied management (<https://uaf.edu/academics/programs/bachelors/applied-management.php>), including an overview of the program, career opportunities and more.

Learn more about the online bachelor's degree in applied management (<https://uaf.edu/academics/programs/bachelors/applied-management-online.php>), including an overview of the program, career opportunities and more.

College of Business and Security Management (<https://www.uaf.edu/cbsm/>)
907-474-7461

Programs

Degree

- B.A.M., Applied Management (p. 238)

B.A.M., Applied Management

Students must earn a C- grade or better in each course.

Minimum Requirements for Applied Management B.A.M.: 120 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F122X | Essential Precalculus with Applications | |
| B.A.M. Degree Requirements | | |
| Complete the B.A.M. degree requirements. (p. 209) | | |
| As part of the B.A.M. degree requirements, complete: | | |
| BA F323X | Business Ethics | |
| Applied Management Program Requirements | | |
| Complete the following: | | |
| Complete 18-30 credit hours in a single specialized technical area or trade | | 18-30 |
| AIS F101 | Effective Personal Computer Use | 1 |
| AIS F310 | Management of Information Systems | 3 |
| or AIS F316 | Accounting Information Systems | |
| BA F307 | Introductory Human Resources Management | 3 |
| BA F308 | Professional Development: How to Prepare for a Job and Other Survival Skills | 1 |
| BA F309 | Professional Development: Finding a Career | 1 |
| BA F330 | The Legal Environment of Business | 4 |
| BA F343 | Principles of Marketing | 3 |
| BA F490 | Services Marketing | 3 |
| or BA F360 | Operations Management | |
| BAM F320 | Management | 3 |
| BAM F352 | Accounting and Finance | 3 |
| BAM F435 | Entrepreneurship ¹ | 3 |
| BAM F462 | Project Management | 3 |
| ECON F227 | Introductory Statistics for Economics and Business | 3 |
| or STAT F200X | Elementary Statistics | |
| HSEM F416 | Cybersecurity Management | 3 |
| or HSEM F415 | Cybersecurity in the 21st Century: Technology and Ethics | |
| or HSEM F417 | Cybersecurity Resiliency | |
| or HSEM F418 | Cybercrime, Fraud and Law | |
| HSEM F445 | Business Continuity and Crisis Management | 3 |
| Choose one of the following: | | 3 |
| BA F390 | Organizational Theory and Behavior | |

| | |
|---------|---|
| BA F391 | Alaska Native Corporations: A Historical and Contemporaneous Perspective ² |
|---------|---|

| | |
|-----------|---------------------------------------|
| HSEM F461 | Human Security in Alaska ² |
|-----------|---------------------------------------|

¹ or any advisor approved 300 or 400 level BA course.

² Note that HSEM F461 or BA F391 may be used to satisfy the Alaska Native-themed (p. 225) requirement.

Arctic and Northern Studies

B.A. Degree

The B.A. in Arctic and Northern studies is an interdisciplinary and innovative program that educates students on the issues, opportunities and challenges specific to Alaska, the circumpolar North and the Arctic. Program themes include climate change, environmental issues, Indigenous studies, subsistence, politics and history, national and international security, geography, energy resources, art and music, and literature. The geographic location of UAF is outstanding for the study of Arctic and Northern issues, but students can pursue the major online as well.

Minimum Requirements for Arctic and Northern Studies Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in Arctic and Northern studies (<https://uaf.edu/academics/programs/bachelors/arctic-northern-studies.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts

Department of Arctic and Northern Studies (<https://www.uaf.edu/arctic/>)
907-474-7126

Programs Degree

- B.A., Arctic and Northern Studies (p. 240)

Minor

- Minor, Arctic and Northern Studies (p. 242)

B.A., Arctic and Northern Studies

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Arctic and Northern Studies B.A.: 120 credits

CONCENTRATIONS: ARCTIC HISTORY AND POLITICS (P. 241), ENVIRONMENTAL STUDIES (P. 241) AND NATIVE STUDIES (P. 241)

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements complete: | | |
| ATM F101X | Weather and Climate of Alaska | |
| or BIOL F104X | Natural History of Alaska | |
| or CHEM F111X | Introduction to Environmental Chemistry of the Arctic | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Arctic and Northern Studies Program Requirements | | |
| Complete the following: | | |
| ACNS F201 | The Circumpolar North: An Introductory Overview | 3 |
| ANS F242X | Indigenous Cultures of Alaska | 3 |
| or ANTH F242 | Native Cultures of Alaska | |
| or ACNS F449 | Northern and Environmental Literature | |
| or ENGL F449 | Northern and Environmental Literature | |
| HIST F483 | 20th-century Circumpolar History | 3 |
| or PS F452 | International Relations of the North | |
| or PS F469 | Arctic Politics and Governance | |
| ACNS F484 | Perspectives on the North ¹ | 3 |
| Category Requirements | | |
| Students must complete an additional 3 credits from each of the following categories. Students are limited to 3 credits per department except for Arctic and Northern Studies. | | 9 |
| Social Sciences - 3 credits | | |
| Humanities - 3 credits | | |
| Natural Sciences - 3 credits | | |
| Concentration Requirement | | |
| Complete one of the following concentrations: | | 15-19 |
| Arctic History and Politics | | |
| Environmental Studies | | |
| Native Studies | | |

¹ Fulfills the baccalaureate capstone requirement.

Special Notes:

- Students must take at least 39 upper-division credits in the B.A. degree.

- Students are not permitted to use one course to satisfy more than one major requirement.
- Students may petition the program director to substitute other courses towards the degree.
- Students are encouraged to minor in a northern language, if interested. Current northern language minors at UAF include Alaska Native Languages, Inupiaq Eskimo and Yup'ik Eskimo.

Categories

SOCIAL SCIENCES

| Code | Title | Credits |
|----------------|--|---------|
| ANS/PS F325 | Alaska Native and Comparative Tribal Self-Government | 3 |
| ANS/PS F425 | Federal Indian Law and Alaska Natives | 3 |
| GEOG/GEOS F429 | Geography of the Arctic and Circumpolar North | 3 |
| HIST F461 | History of Alaska | 3 |
| HIST F483 | 20th-century Circumpolar History | 3 |
| HSEM F461 | Human Security in Alaska | 3 |
| JUST F340 | Rural Justice in Alaska | 3 |
| PS F452 | International Relations of the North | 3 |
| PS F469 | Arctic Politics and Governance | 3 |
| RD F470 | The Alaska Native Claims Settlement Act: Pre-1971 to Present | 3 |

HUMANITIES

| Code | Title | Credits |
|-------------------|---|---------|
| ACNS/ART F425 | Visual Images of the North | 3 |
| ACNS/ENGL F449 | Northern and Environmental Literature | 3 |
| ANS F329 | Indigenous Alaska Native Language and Culture Revitalization | 3 |
| ANS/ENGL F349 | Narrative Art of Alaska Native Peoples (in English translation) | 3 |
| ANS/ANTH/ART F365 | Alaska Native Art History | 3 |
| ANS/ART F368 | Alaska Native Art Studio II | 3 |
| ANS/RD F401 | Cultural Knowledge of Native Elders | 3 |
| ANS/ART F468 | Alaska Native Art Studio III | 3 |
| ENGL F341 | Contemporary Alaska Native Literature | 3 |
| HIST F481 | Polar Exploration and Its Literature | 3 |

NATURAL SCIENCES

| Code | Title | Credits |
|------------|---|---------|
| ATM F101X | Weather and Climate of Alaska | 4 |
| BIOL F104X | Natural History of Alaska | 4 |
| CHEM F111X | Introduction to Environmental Chemistry of the Arctic | 4 |
| EBOT F100 | Introduction to Ethnobotany | 3 |
| EBOT F230 | Ethnobotanical Chemistry | 3 |
| ENVI F101 | Introduction to Environmental Science | 3 |
| ENVI F220 | Introduction to Sustainable Energy | 3 |
| FISH F110 | Fish and Fisheries in a Changing World | 3 |
| FISH F261 | Introduction to Fisheries Utilization | 3 |
| FISH F288 | Fish and Fisheries of Alaska | 3 |

Concentrations

ARCTIC HISTORY AND POLITICS

| Code | Title | Credits |
|---|--|---------|
| Complete five of the following courses: | | 15 |
| ANS F310 | Alaska Native and Comparative Indigenous Land Settlements | |
| ANS/PS F325 | Alaska Native and Comparative Tribal Self-Government | |
| ANS/PS F425 | Federal Indian Law and Alaska Natives | |
| GEOG/GEOS F429 | Geography of the Arctic and Circumpolar North | |
| HIST F404 | Modern Scandinavia | |
| HIST F461 | History of Alaska | |
| HIST F463 | Imperial Russia, 1700-1917 | |
| HIST F464 | Soviet and Post-Soviet Russia | |
| HIST F481 | Polar Exploration and Its Literature | |
| HIST F483 | 20th-century Circumpolar History | |
| PS F450 | Comparative Indigenous Rights and Policies | |
| PS F452 | International Relations of the North | |
| PS F460 | Government and Politics of Canada | |
| PS F462 | Alaska Government and Politics | |
| PS F468 | Government and Politics of Russia | |
| PS F469 | Arctic Politics and Governance | |
| RD F470 | The Alaska Native Claims Settlement Act: Pre-1971 to Present | |

ENVIRONMENTAL STUDIES

| Code | Title | Credits |
|---|--|---------|
| Complete five of the following courses: | | 15-19 |
| ACNS/ENGL F449 | Northern and Environmental Literature | |
| ATM F101X | Weather and Climate of Alaska | |
| BIOL F104X | Natural History of Alaska | |
| CHEM F104X | Introduction to Organic Chemistry and Biochemistry | |
| EBOT F100 | Introduction to Ethnobotany | |
| EBOT F230 | Ethnobotanical Chemistry | |
| ENVI F101 | Introduction to Environmental Science | |
| ENVI F220 | Introduction to Sustainable Energy | |
| FISH F110 | Fish and Fisheries in a Changing World | |
| FISH F261 | Introduction to Fisheries Utilization | |
| FISH F288 | Fish and Fisheries of Alaska | |
| HIST F411 | Environmental History | |
| NRM F101 | Natural Resources Conservation and Policy | |
| PS F455 | Political Economy of the Global Environment | |
| PS F458 | Comparative Environmental Politics | |
| RD F255 | Rural Alaska Land Issues | |
| RD F265 | Perspectives on Subsistence in Alaska | |

NATIVE STUDIES

| Code | Title | Credits |
|---|--|---------|
| Complete five of the following courses: | | 15 |
| ANS F310 | Alaska Native and Comparative Indigenous Land Settlements | |
| ANS/PS F325 | Alaska Native and Comparative Tribal Self-Government | |
| ANS F329 | Indigenous Alaska Native Language and Culture Revitalization | |
| ANS/ENGL F349 | Narrative Art of Alaska Native Peoples (in English translation) | |
| ANS F350 | Cross-cultural Communication: Alaska Perspectives | |
| ANS/ANTH/ART F365 | Alaska Native Art History | |
| ANS/ART F368 | Alaska Native Art Studio II | |
| ANS/RD F401 | Cultural Knowledge of Native Elders | |
| ANS/PS F425 | Federal Indian Law and Alaska Natives | |
| ANS/ART F468 | Alaska Native Art Studio III | |
| BA F391 | Alaska Native Corporations: A Historical and Contemporaneous Perspective | |
| ENGL F341 | Contemporary Alaska Native Literature | |
| HSEM F461 | Human Security in Alaska | |
| JUST F340 | Rural Justice in Alaska | |
| PS F450 | Comparative Indigenous Rights and Policies | |
| RD F470 | The Alaska Native Claims Settlement Act: Pre-1971 to Present | |

Minor, Arctic and Northern Studies

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Arctic and Northern Studies Minor: 15 credits

| Code | Title | Credits |
|--|---|---------|
| Arctic and Northern Studies Program Requirements | | |
| Complete the following: | | |
| ACNS F201 | The Circumpolar North: An Introductory Overview | 3 |
| Complete any additional 12 ACNS or program-approved Arctic-related credits with approval from a program director | | 12 |

Arctic Skills

Minor Only

The minor in Arctic skills is designed for anyone who lives and works in a northern climate and wishes to learn to cope with the outdoor Arctic environment.

Students who complete this minor also earn a State of Alaska EMTI certificate and may prepare to take the FAA written exam for partial fulfillment of the private pilot certificate requirements.

Minimum Requirements for Arctic Skills Minor: 15 credits

Community and Technical College
EMS/Paramedicine (<https://www.ctc.uaf.edu/programs/ems-paramedicine/>)
907-455-2800

Programs

Minor

- Minor, Arctic Skills (p. 243)

Minor, Arctic Skills

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Arctic Skills Minor: 15 credits

| Code | Title | Credits |
|---|---|---------|
| Arctic Skills Program Requirements | | |
| Complete the following: | | |
| AVTY F100 or AVTY F111 | Private Pilot Ground School Fundamentals of Aviation | 3-4 |
| AVTY F231 or EMS F257 | Arctic Survival Arctic Survival | 3 |
| EMS F170 | EMT: Emergency Medical Technician I | 6 |
| Approved electives ¹ | | 3-4 |

¹ Approved by program manager.

Art

B.A., B.F.A. Degrees

The art program encourages independent, original and creative thinking while recognizing the role and responsibility of the fine arts within the humanities.

The B.F.A. degree is professionally oriented and designed to prepare students for careers in art. It is the usual prerequisite for graduate studies in art. Admission requires a portfolio review by the art faculty, generally done in the student's junior year. Enrollment in the B.F.A. program is recommended only for students who are willing to make a considerable commitment of time and energy necessary to achieve professional competence in their major areas. Career opportunities for B.F.A. graduates include artist, designer, arts administrator, art teacher, gallery and museum administrator, and computer-related fields.

Minimum Requirements for Art Bachelor's Degrees: B.A.: 120 credits; B.F.A.: 120 credits

Learn more about the bachelor's degree in art (<https://uaf.edu/academics/programs/bachelors/art.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Department of Art (<https://www.uaf.edu/art/>)
907-474-7530

Programs Degrees

- B.A., Art (p. 244)
- B.F.A., Art (p. 245)

Minor

- Minor, Art (p. 246)
- Minor, Art History (p. 246)
- Minor, Integrated Arts (p. 247)

B.A., Art

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Art B.A.: 120 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Art Program Requirements | | |
| Complete the following: | | |
| ART F105X | Beginning Drawing | 3 |
| ART F261X and ART F262X | History of World Art I and History of World Art II | 6 |
| ART F489 | Bachelor of Arts Capstone ¹ | 0 |
| Complete two of the following: | | 6 |
| ART F161 | Two-dimensional Digital Design | |
| ART F162 | Color and Design | |
| ART F163 | Three-dimensional Design | |
| Electives | | |
| Complete three from the following electives (at least one must be a two-dimensional area, and one must be a three-dimensional area): | | 9 |
| <i>Two-dimensional Areas</i> | | |
| ART F205 | Intermediate Drawing | |
| ART F207 | Beginning Printmaking | |
| ART F213 | Beginning Painting | |
| ART F271 | Beginning Computer Art | |
| ART F283 | Basic Darkroom Photography | |
| or ART F284 | Basic Digital Photography | |
| <i>Three-dimensional Areas</i> | | |
| ART F201 | Beginning Ceramics | |
| ART F209 | Beginning Metalsmithing and Jewelry | |
| ART F211 | Beginning Sculpture | |
| ART F268 | Alaska Native Art Studio I | |
| Complete three upper-division courses from one of these areas: | | 9 |
| Ceramics | | |
| Computer Art | | |
| Drawing | | |
| Metalsmithing | | |
| Native Studio Art | | |
| Painting | | |
| Photography | | |
| Printmaking | | |
| Sculpture | | |

| | | |
|---|----------------------------|---|
| Complete one of the following upper-division art history courses: | | 3 |
| ART F363 | History of Modern Art | |
| ART F364 | Italian Renaissance Art | |
| ART F365 | Alaska Native Art History | |
| ART F425 | Visual Images of the North | |
| ART F463 | Seminar in Art History | |
| ART F490 | Current Problems | |
| Upper-division art elective | | 3 |

¹ Fulfills the baccalaureate capstone requirement.

Note: Transfer students who are candidates for the B.A. degree in art must complete a minimum of 12 credits in art while in residence.

Note: In addition to the program (major) requirements above, B.A. students will need additional upper-division credit (e.g., from the social science/humanities requirements and the minor) to equal 39 upper-division credits total.

B.F.A., Art

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Art B.F.A.: 120 credits

CONCENTRATIONS: CERAMICS, COMPUTER ART, DRAWING, METALSMITHING, NATIVE STUDIO ART, PAINTING, PHOTOGRAPHY, PRINTMAKING, SCULPTURE

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.F.A. Degree Requirements | | |
| Complete the B.F.A. degree requirements. (p. 215) | | |
| Art Program Requirements | | |
| Complete the following: | | |
| ART F105X | Beginning Drawing | 3 |
| ART F261X and ART F262X | History of World Art I and History of World Art II | 6 |
| Complete two from the following: | | 6 |
| ART F161 | Two-dimensional Digital Design | |
| ART F162 | Color and Design | |
| ART F163 | Three-dimensional Design | |
| Complete three from the following electives (at least one must be a two-dimensional area and one must be a three-dimensional area): | | 9 |
| <i>Two-dimensional Areas</i> | | |
| ART F205 | Intermediate Drawing | |
| ART F207 | Beginning Printmaking | |
| ART F213 | Beginning Painting | |
| ART F231 | Previsualization and Preproduction | |
| ART F271 | Beginning Computer Art | |
| ART F283 or ART F284 | Basic Darkroom Photography Basic Digital Photography | |
| <i>Three-dimensional Areas</i> | | |
| ART F201 | Beginning Ceramics | |
| ART F209 | Beginning Metalsmithing and Jewelry | |
| ART F211 | Beginning Sculpture | |
| ART F268 | Alaska Native Art Studio I | |
| Major program approved by B.F.A. thesis committee ¹ | | 24 |
| Complete three from the following upper-division art history courses: | | 9 |
| ART F363 | History of Modern Art | |
| ART F364 | Italian Renaissance Art | |
| ART F365 | Alaska Native Art History | |
| ART F425 | Visual Images of the North | |
| ART F463 | Seminar in Art History | |
| ART F490 | Current Problems | |
| Upper-division art electives | | 6 |

| | |
|--|---|
| Additional studio electives | 9 |
| Thesis project (including exhibition, portfolio and oral presentation) | 3 |

Complete the baccalaureate capstone requirement as determined by the program.

¹ Major program must include at least two, and no more than three, studio areas. Minimum requirement for the first area is 15 upper-division credits. Minimum requirement for the second area is 9 upper-division credits.

Note: A minor is not required for this degree.

Note: Transfer students who are candidates for the B.F.A. in art must complete a minimum of 15 credits in art while in residence.

Note: All studio areas in the department are eligible for fulfillment of specialization requirements: ceramics, computer art, metalsmithing, Native art, painting, drawing, photography, printmaking and sculpture.

Minor, Art

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Art Minor: 18 credits

| Code | Title | Credits |
|--------------------------------|--------------------------------|---------|
| Art Program Requirements | | |
| Complete the following: | | |
| ART F105X | Beginning Drawing | 3 |
| ART F261X | History of World Art I | 3 |
| or ART F262X | History of World Art II | |
| Complete one of the following: | | 3 |
| ART F161 | Two-dimensional Digital Design | |
| ART F162 | Color and Design | |
| ART F163 | Three-dimensional Design | |
| Art Electives | | 9 |

Note: A minor in art is only available to non-art majors.

Minor, Art History

Students must earn a C- grade or better in each course.

Minimum Requirements for Art History Minor: 15 credits

| Code | Title | Credits |
|--|----------------------------|---------|
| Complete the following: | | |
| ART F261X | History of World Art I | 3 |
| ART F262X | History of World Art II | 3 |
| Complete three of the following: | | 9 |
| ART F363 | History of Modern Art | |
| ART F364 | Italian Renaissance Art | |
| ART F365 | Alaska Native Art History | |
| ART F425 | Visual Images of the North | |
| ART F463 | Seminar in Art History | |
| ART F464 | History of Photography | |
| One art studio course may be substituted per department approval | | |

Minor, Integrated Arts

Overview

Minor

The integrated arts minor allows students to explore all three arts disciplines offered at UAF: art, film and performing arts, and music. After taking an introductory course in each department, students will then take electives in each discipline.

Minimum Requirements for Integrated Arts Minor: 18 credits

College of Liberal Arts

Department of Art (<https://www.uaf.edu/art/>)

907-474-7530

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Integrated Arts Minor: 18 credits

| Code | Title | Credits |
|---|------------------------|---------|
| Integrated Arts Program Requirements | | |
| Complete the following: | | |
| ART F105X | Beginning Drawing | 3 |
| FLPA F121X | Fundamentals of Acting | 3 |
| MUS F103X | Music Fundamentals | 3 |
| ART Elective | | 3 |
| FLPA Elective | | 3 |
| MUS elective | | 3 |

Asian Studies

Minor Only

A minor in Asian studies provides interdisciplinary instruction in the varieties of Asian languages and cultures. It enables students to consolidate various course offerings into a meaningful and cohesive program relevant to several major fields of specialization. (Combining a Japanese studies major with an Asian studies minor requires approval from both programs.)

Minimum Requirements for Asian Studies Minor: 15 credits

College of Liberal Arts

Department of Asian Studies (<https://www.uaf.edu/asianstudies/>)

907-474-6507

Programs

Minor

- Minor, Asian Studies (p. 248)

Minor, Asian Studies

Program Requirements

Minimum Requirements for Asian Studies Minor: 15 credits

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Asian Studies Program Requirements | | |
| Complete 15 credits from the following: ¹ | | 15 |
| <i>Anthropology</i> | | |
| ANTH F302 | Siberia: Past, Present, Future | |
| <i>Foreign Languages</i> | | |
| CHNS F101X | Elementary Chinese I | |
| CHNS F102X | Elementary Chinese II | |
| CHNS F201 | Intermediate Chinese I | |
| CHNS F202 | Intermediate Chinese II | |
| JPN F101X | Elementary Japanese I | |
| JPN F102X | Elementary Japanese II | |
| JPN F201 | Intermediate Japanese I | |
| JPN F202 | Intermediate Japanese II | |
| <i>History</i> | | |
| HIST F121 | East Asian Civilization | |
| HIST F122X | East Asian Civilization | |
| HIST F330 | Modern China | |
| HIST F331 | Modern Japan | |
| HIST F333 | Foundations of Japanese History | |
| <i>Philosophy</i> | | |
| PHIL F202 | Introduction to Eastern Philosophy | |
| <i>Political Science</i> | | |
| PS F304 | International Security | |
| PS F464 | East Asian Governments and Politics | |

¹ Courses must be distributed among at least three departments and include material on at least two Asian countries. Students are strongly encouraged to include a semester or more of Asian language.

Aviation Technology

Minor

The minor in aviation technology is designed to provide the opportunity to become familiar with the aviation field, with particular emphasis on the use of aviation as a tool and economic process within the Alaska environment.

Minimum Requirements for Aviation Technology Minor: 16 credits

Community and Technical College

Professional Piloting (<https://www.ctc.uaf.edu/programs/piloting-professional/>)
907-455-2800

Programs

Minor

- Minor, Aviation Technology (p. 249)

Degree

- A.A.S., Piloting, Professional (p. 191)

Minor, Aviation Technology

Minimum Requirements for Aviation Technology Minor: 16 credits

| Code | Title | Credits |
|---|-----------------------------|---------|
| Foundation Course | | |
| AVTY F100 | Private Pilot Ground School | 4 |
| Aviation Technology Program Requirements | | |
| AVTY F155 | Preventive Maintenance | 3 |
| AVTY F231 | Arctic Survival | 3 |
| AVTY F235 | Elements of Weather | 3 |
| Elective | | |
| AVTY elective or AFPM advisor-approved elective | | 3 |

Biological Sciences

B.A., B.S. Degrees

Biological sciences is an appropriate major for students interested in the science of life. A baccalaureate degree in biology is a foundation for careers in health, environment, science education and research, and supports advanced study in graduate and professional degree programs. Majors in biological sciences may pursue either a B.A. or a B.S. degree.

The B.A. degree is an interdisciplinary degree that invites students to combine coursework in biology with other subjects of interest in the social sciences or humanities and integrate these fields into a capstone experience. Students in the B.A. program may adopt an optional concentration in environmental change. The B.S. degree, in contrast, contains more coursework in biology and other natural sciences and is an excellent choice for students who plan a science-based career. Students in the B.S. program may adopt an optional concentration in one of four sub-disciplines: cell and molecular biology, physiology, biomedical science, or ecology and evolutionary biology.

Both the B.A. program (with and without concentration) and the B.S. program (without concentration) may be completed either in person or online.

Students majoring in biological sciences must complete a capstone project during their junior or senior year. The goal of the capstone experience is to apply the skills and information gained in coursework to an original project. B.A. students will complete an interdisciplinary project within BIOL F410, Integrative Capstone in Biological Sciences; this project will commonly integrate the major and minor subject areas of study. B.S. students will complete a research project within one of several designated courses or by working individually with a faculty mentor. B.S. students will signal their intent to complete the capstone requirement by registering for BIOL F400, Research Capstone in Biological Sciences. Biology course credit for mentored research is available as an individual study, BIOL F497. More information about the capstone requirement is posted on the Biology and Wildlife Department website. Students in the B.S. program are strongly encouraged to speak to a biology advisor well before their senior year about how they plan to satisfy the capstone requirement.

All biological sciences majors are required to take a standardized examination in the senior year for programmatic assessment purposes. The score on the exam does not affect graduation and is free to the student. The exam is taken during the required BIOL F481 course.

Minimum Requirements for Biological Sciences Bachelor's Degrees: 120 credits

Learn more about the bachelor's degree in biological sciences (<https://uaf.edu/academics/programs/bachelors/biological-sciences.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Biology and Wildlife (<https://www.uaf.edu/bw/>)
907-474-7671

Programs
Degrees

- B.A., Biological Sciences (p. 250)
- B.S., Biological Sciences (without concentration) (p. 255)
- B.S., Biological Sciences (with concentration) (p. 252)

Minor

- Minor, Biological Sciences (p. 257)

B.A., Biological Sciences

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Biological
Sciences B.A.: 120 credits

B.A. IN BIOLOGICAL SCIENCES WITHOUT
CONCENTRATION

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X and CHEM F106X | General Chemistry I and General Chemistry II | |
| STAT F200X | Elementary Statistics | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements, including minor (p. 211) ¹ | | |
| Biological Sciences Program Requirements | | |
| Complete the following: | | |
| BIOL F115X | Fundamentals of Biology I | 4 |
| BIOL F116X | Fundamentals of Biology II | 4 |
| BIOL F260 | Principles of Genetics | 4 |
| BIOL F481 | Principles of Evolution | 4 |
| CHEM F321 | Organic Chemistry I | 4 |
| PHYS F123X | College Physics I | 3-4 |
| or CS F103 | Introduction to Computer Programming | |
| or CS F201 | Computer Science I | |
| Biology Breadth Requirements | | |
| Complete two of the following: ² | | 6-12 |
| BIOL F360 | Cell and Molecular Biology | |
| BIOL F371 | Principles of Ecology | |
| BIOL F310 | Animal Physiology | |
| or BIOL F111X and BIOL F112X | Human Anatomy and Physiology I and Human Anatomy and Physiology II | |
| or BIOL F342 | Microbiology | |
| or BIOL F430 | Plant Physiology and Development | |
| Electives | | |
| Complete three of the following: ³ | | 9-12 |
| STO F401 | Communicating Science | |
| or choose from Lists A, B, C, D, or E | | |
| Capstone ⁴ | | |
| Complete the following: | | |
| BIOL F410 | Integrative Capstone in Biological Sciences | 3 |

B.A. IN BIOLOGICAL SCIENCES WITH CONCENTRATION IN ENVIRONMENTAL CHANGE

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X and CHEM F106X | General Chemistry I and General Chemistry II | 8 |
| STAT F200X | Elementary Statistics | 3 |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) ¹ | | |
| <i>As part of the B.A. degree requirements, complete:</i> ¹ | | |
| Minor in Environmental Change ^{5,6} | | |
| Biological Sciences Program Requirements | | |
| Complete the following: | | |
| BIOL F115X and BIOL F116X | Fundamentals of Biology I and Fundamentals of Biology II | 8 |
| BIOL F260 | Principles of Genetics | 4 |
| BIOL F371 | Principles of Ecology | 4 |
| BIOL F481 | Principles of Evolution | 4 |
| BIOL F385 | Global Change Biology | 3 |
| CHEM F321 | Organic Chemistry I | 4 |
| PHYS F123X or CS F103 or CS F201 | College Physics I Introduction to Computer Programming Computer Science I | 3-4 |
| Electives | | |
| Complete one of the following: | | |
| STO F401 | Communicating Science | 3-4 |
| or choose from Lists A, B, C, D, or E | | |
| Complete one course from List C | | |
| Complete one course from List D | | |
| Capstone | | |
| Complete the following: | | |
| BIOL F410 | Integrative Capstone in Biological Sciences | 3 |

¹ Students should consider the UAF requirement for 39 upper-division credits when choosing courses to fulfill humanities, social science, and minor degree credits.

² Because biology breadth courses for the B.A. degree serve as prerequisites for many upper-division biology electives, course choices should be made with consideration of the elective biology courses the student plans to complete.

³ BIOL F497, URSA F388 or URSA F488 courses may be substituted by petition for a maximum of two required elective courses in biology (3-4 credits of independent study or research per substituted course). The subject area of the independent study or research will determine which biological subject areas the credits satisfy.

⁴ Fulfills the baccalaureate capstone requirement.

⁵ Up to 7 credits of BIOL courses may be used for both the major and the minor (e.g., BIOL F385, BIOL F371, or others that appear in both the major and minor lists).

⁶ Biological Sciences majors may not count BIOL F103X toward the Environmental change minor.

Biology Elective Course Lists

Courses that satisfy upper-division elective credit may require prerequisites.

LIST A - CELL AND MOLECULAR BIOLOGY

| Code | Title | Credits |
|-----------|--|---------|
| BIOL F342 | Microbiology | 4 |
| BIOL F360 | Cell and Molecular Biology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F435 | Introduction to Biology of Cancer | 3 |
| BIOL F460 | Principles of Virology | 3 |
| BIOL F462 | Infectious Diseases | 3 |
| BIOL F466 | Advanced Cell and Molecular Laboratory | 3 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F449 | General Biochemistry: Metabolism | 3 |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F470 | Cellular and Molecular Neuroscience | 3 |
| CHEM F474 | Neurochemistry | 3 |
| DVM F606 | Veterinary Immunology | 3 |

LIST B - PHYSIOLOGY

| Code | Title | Credits |
|-----------|---|---------|
| BIOL F310 | Animal Physiology | 4 |
| BIOL F312 | Medical Physiology | 3 |
| BIOL F335 | Principles of Epidemiology | 3 |
| BIOL F342 | Microbiology | 4 |
| BIOL F412 | Exercise Physiology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F430 | Plant Physiology and Development | 3 |
| BIOL F440 | Behavioral Neuroscience Research Capstone | 3 |
| BIOL F441 | Animal Behavior | 4 |
| BIOL F455 | Environmental Toxicology | 3 |
| BIOL F457 | Environmental Microbiology | 3 |
| BIOL F462 | Infectious Diseases | 3 |

LIST C - ECOLOGY AND EVOLUTIONARY BIOLOGY

| Code | Title | Credits |
|-----------|--|---------|
| BIOL F371 | Principles of Ecology | 4 |
| BIOL F385 | Global Change Biology | 3 |
| BIOL F415 | Systematic and Comparative Biology | 4 |
| BIOL F418 | Biogeography | 3 |
| BIOL F431 | Population Genetics | 3 |
| BIOL F441 | Animal Behavior | 4 |
| BIOL F446 | Freshwater Habitat Dynamics | 3 |
| BIOL F457 | Environmental Microbiology | 3 |
| BIOL F469 | Landscape Ecology and Wildlife Habitat | 3 |
| BIOL F471 | Population Ecology | 3 |

| | | |
|-----------|---|---|
| BIOL F472 | Community Ecology | 4 |
| BIOL F473 | Limnology | 4 |
| BIOL F476 | Ecosystem Ecology | 4 |
| BIOL F483 | Stream Ecology | 3 |
| BIOL F486 | Vertebrate Paleontology | 3 |
| BIOL F487 | Conceptual Issues in Evolutionary Biology | 3 |
| BIOL F488 | Arctic Vegetation Ecology: Geobotany | 3 |
| BIOL F489 | Vegetation Description and Analysis | 3 |
| BIOL F491 | The Human Microbiome | 4 |
| WLF F301 | Design of Wildlife Studies | 3 |
| WLF F421 | Ecology and Management of Large Mammals | 3 |

LIST D - ORGANISMAL BIOLOGY

| Code | Title | Credits |
|-----------|-------------------------------------|---------|
| BIOL F239 | Introduction to Plant Biology | 4 |
| BIOL F331 | Systematic Botany | 3 |
| BIOL F406 | Entomology | 4 |
| BIOL F418 | Biogeography | 3 |
| BIOL F425 | Mammalogy | 3 |
| BIOL F426 | Ornithology | 3 |
| BIOL F427 | Ichthyology | 4 |
| BIOL F486 | Vertebrate Paleontology | 3 |
| BIOL F489 | Vegetation Description and Analysis | 3 |

LIST E - BIOMEDICAL SCIENCE

| Code | Title | Credits |
|-----------|--|---------|
| BIOL F312 | Medical Physiology | 3 |
| BIOL F335 | Principles of Epidemiology | 3 |
| BIOL F402 | Biomedical and Research Ethics | 3 |
| BIOL F412 | Exercise Physiology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F435 | Introduction to Biology of Cancer | 3 |
| BIOL F440 | Behavioral Neuroscience Research Capstone | 3 |
| BIOL F455 | Environmental Toxicology | 3 |
| BIOL F460 | Principles of Virology | 3 |
| BIOL F462 | Infectious Diseases | 3 |
| BIOL F466 | Advanced Cell and Molecular Laboratory | 3 |
| BIOL F491 | The Human Microbiome | 4 |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F470 | Cellular and Molecular Neuroscience | 3 |
| CHEM F474 | Neurochemistry | 3 |
| DVM F606 | Veterinary Immunology | 3 |

B.S., Biological Sciences with Concentration

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Biological Sciences B.S.: 120 credits

CONCENTRATIONS: BIOMEDICAL SCIENCE (P. 253);
CELL AND MOLECULAR BIOLOGY (P. 253);
ECOLOGY AND EVOLUTIONARY BIOLOGY (P. 253);
PHYSIOLOGY (P. 253)

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X and CHEM F106X | General Chemistry I and General Chemistry II | |
| MATH F230X | Essential Calculus with Applications | |
| | or MATH F251X Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| BIOL F115X | Fundamentals of Biology I | |
| BIOL F116X | Fundamentals of Biology II | |
| STAT F200X | Elementary Statistics | |
| | or STAT F300 Statistics | |
| Biological Sciences with Concentration Program Requirements | | |
| Complete the following: | | |
| BIOL F260 | Principles of Genetics | 4 |
| BIOL F481 | Principles of Evolution | 4 |
| CHEM F321 | Organic Chemistry I | 4 |
| CHEM F325 | Organic Chemistry II | 3-4 |
| | or CHEM F449 General Biochemistry: Metabolism | |
| PHYS F123X | College Physics I | 4 |
| | or PHYS F211X General Physics I | |
| PHYS F124X | College Physics II | 3-4 |
| | or PHYS F212X General Physics II | |
| | or CS F103 Introduction to Computer Programming | |
| | or CS F201 Computer Science I | |
| Complete one from the following four options: | | 4-8 |
| BIOL F111X and BIOL F112X | Human Anatomy and Physiology I and Human Anatomy and Physiology II | |
| BIOL F310 | Animal Physiology | |
| BIOL F342 | Microbiology | |
| BIOL F430 | Plant Physiology and Development | |
| Concentration | | |
| Complete one from the following concentrations: ¹ | | 21-28 |
| Biomedical Science | | |

| | | |
|---|---|-----|
| Cell and Molecular Biology | | |
| Ecology and Evolutionary Biology | | |
| Physiology | | |
| Capstone ² | | |
| BIOL F400 | Research Capstone in Biological Sciences | 0 |
| Satisfactory completion of a capstone research project which can be done either working individually with a faculty member or within one of the following courses: ^{3,4} | | 0-4 |
| BIOL F440 | Behavioral Neuroscience Research Capstone | |
| BIOL F441 | Animal Behavior | |
| BIOL F466 | Advanced Cell and Molecular Laboratory | |
| BIOL F472 | Community Ecology | |
| BIOL F473 | Limnology | |
| BIOL F491 | The Human Microbiome | |

¹ BIOL F397, BIOL F497, URSA F388 or URSA F488 courses may be substituted by petition for a maximum of two required elective courses in biology (3-4 credits of independent study or research per substituted course). The subject area of the independent study or research will determine which biological subject areas the credits satisfy.

² Fulfills the baccalaureate capstone requirement.

³ Students working individually with a faculty member may, for example, take BIOL F497 credits or work with a faculty member without taking course credits.

⁴ Capstone courses may be double counted as electives.

Concentrations

BIOMEDICAL SCIENCE

| Code | Title | Credits |
|--|--|---------|
| As part of the general education requirements, the following are recommended: | | |
| ECON F120X | Introduction to Economic Analysis | |
| or ECON F101X | Principles of Microeconomics | |
| or ECON F102X | Principles of Macroeconomics | |
| PSY F101X | Introduction to Psychology | |
| SOC F101X | Introduction to Sociology | |
| Complete the following as part of the program requirements: | | |
| BIOL F111X and BIOL F112X or BIOL F310 | Human Anatomy and Physiology I and Human Anatomy and Physiology II and Animal Physiology | |
| CHEM F325 | Organic Chemistry II | |
| PHYS F124X or PHYS F212X | College Physics II and General Physics II | |
| Complete the following: | | |
| BIOL F342 | Microbiology | 4 |
| BIOL F360 | Cell and Molecular Biology | 3 |
| CHEM F449 | General Biochemistry: Metabolism | 3 |
| Biology Breadth Electives | | |
| Complete one additional course from lists C or D | | 3-4 |
| Biomedical Electives | | |
| Complete at least three additional courses from list E | | 9-12 |

CELL AND MOLECULAR BIOLOGY

| Code | Title | Credits |
|--|--|---------|
| As part of the program requirements above, complete: | | |
| CHEM F325 | Organic Chemistry II | 4 |
| Complete the following: | | |
| BIOL F360 | Cell and Molecular Biology | 3 |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F449 | General Biochemistry: Metabolism | 3 |
| Cell and Molecular and Physiology Electives | | |
| Complete one additional course from list A | | 3-4 |
| Complete two additional courses from lists A or B | | 6-8 |
| Biology Breadth Elective | | |
| Complete one additional course from lists C or D | | 3-4 |

ECOLOGY AND EVOLUTIONARY BIOLOGY

| Code | Title | Credits |
|--|---|---------|
| As part of the program requirements above, complete: | | |
| BIOL F371 | Principles of Ecology | 4 |
| Ecology and Evolutionary Biology Electives | | |
| Complete two additional courses from list C | | 6-8 |
| Organismal Elective | | |
| Complete one additional course from list D | | 3-4 |
| Biology Breadth Elective | | |
| Complete one additional course from lists A, B, or E | | 3-4 |
| Biology Elective | | |
| Complete one additional course from lists A, B, C, D, or E | | 3-4 |
| STAT F401 or STAT F402 | Regression and Analysis of Variance and Scientific Sampling | 3-4 |

PHYSIOLOGY

| Code | Title | Credits |
|--|----------------------------|---------|
| As part of the program requirements above, complete: | | |
| BIOL F360 | Cell and Molecular Biology | 3 |
| Physiology or Cell and Molecular Biology Electives | | |
| Complete two additional courses from list B | | 6-8 |
| Complete two additional courses from lists A or B | | 6-8 |
| Biology Breadth Elective | | |
| Complete one additional course from lists C or D | | 3-4 |
| Biology Elective | | |
| Complete one additional course from lists A, B, C, D, or E | | 3-4 |

Biology Elective Course Lists

Courses that satisfy upper-division elective credit may require prerequisites.

LIST A - CELL AND MOLECULAR BIOLOGY

| Code | Title | Credits |
|-----------|-----------------------------------|---------|
| BIOL F342 | Microbiology | 4 |
| BIOL F360 | Cell and Molecular Biology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F435 | Introduction to Biology of Cancer | 3 |
| BIOL F460 | Principles of Virology | 3 |

| | | |
|-----------|--|---|
| BIOL F462 | Infectious Diseases | 3 |
| BIOL F466 | Advanced Cell and Molecular Laboratory | 3 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F470 | Cellular and Molecular Neuroscience | 3 |
| CHEM F474 | Neurochemistry | 3 |

LIST B - PHYSIOLOGY

| Code | Title | Credits |
|-----------|---|---------|
| BIOL F310 | Animal Physiology | 4 |
| BIOL F312 | Medical Physiology | 3 |
| BIOL F335 | Principles of Epidemiology | 3 |
| BIOL F342 | Microbiology | 4 |
| BIOL F412 | Exercise Physiology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F430 | Plant Physiology and Development | 3 |
| BIOL F440 | Behavioral Neuroscience Research Capstone | 3 |
| BIOL F441 | Animal Behavior | 4 |
| BIOL F455 | Environmental Toxicology | 3 |
| BIOL F457 | Environmental Microbiology | 3 |
| BIOL F462 | Infectious Diseases | 3 |

LIST C - ECOLOGY AND EVOLUTIONARY BIOLOGY

| Code | Title | Credits |
|-----------|---|---------|
| BIOL F371 | Principles of Ecology | 4 |
| BIOL F385 | Global Change Biology | 3 |
| BIOL F415 | Systematic and Comparative Biology | 4 |
| BIOL F418 | Biogeography | 3 |
| BIOL F431 | Population Genetics | 3 |
| BIOL F441 | Animal Behavior | 4 |
| BIOL F446 | Freshwater Habitat Dynamics | 3 |
| BIOL F457 | Environmental Microbiology | 3 |
| BIOL F469 | Landscape Ecology and Wildlife Habitat | 3 |
| BIOL F471 | Population Ecology | 3 |
| BIOL F472 | Community Ecology | 4 |
| BIOL F473 | Limnology | 4 |
| BIOL F483 | Stream Ecology | 3 |
| BIOL F486 | Vertebrate Paleontology | 3 |
| BIOL F487 | Conceptual Issues in Evolutionary Biology | 3 |
| BIOL F488 | Arctic Vegetation Ecology: Geobotany | 3 |
| BIOL F489 | Vegetation Description and Analysis | 3 |
| BIOL F491 | The Human Microbiome | 4 |
| WLF F301 | Design of Wildlife Studies | 3 |
| WLF F421 | Ecology and Management of Large Mammals | 3 |

LIST D - ORGANISMAL BIOLOGY

| Code | Title | Credits |
|-----------|-------------------------------|---------|
| BIOL F239 | Introduction to Plant Biology | 4 |
| BIOL F331 | Systematic Botany | 3 |

| | | |
|-----------|-------------------------------------|---|
| BIOL F406 | Entomology | 4 |
| BIOL F418 | Biogeography | 3 |
| BIOL F425 | Mammalogy | 3 |
| BIOL F426 | Ornithology | 3 |
| BIOL F427 | Ichthyology | 4 |
| BIOL F486 | Vertebrate Paleontology | 3 |
| BIOL F489 | Vegetation Description and Analysis | 3 |

LIST E - BIOMEDICAL SCIENCE

| Code | Title | Credits |
|-----------|--|---------|
| BIOL F312 | Medical Physiology | 3 |
| BIOL F335 | Principles of Epidemiology | 3 |
| BIOL F402 | Biomedical and Research Ethics | 3 |
| BIOL F412 | Exercise Physiology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F435 | Introduction to Biology of Cancer | 3 |
| BIOL F440 | Behavioral Neuroscience Research Capstone | 3 |
| BIOL F455 | Environmental Toxicology | 3 |
| BIOL F460 | Principles of Virology | 3 |
| BIOL F462 | Infectious Diseases | 3 |
| BIOL F466 | Advanced Cell and Molecular Laboratory | 3 |
| BIOL F491 | The Human Microbiome | 4 |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F470 | Cellular and Molecular Neuroscience | 3 |
| CHEM F474 | Neurochemistry | 3 |

B.S., Biological Sciences without Concentration

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Biological Sciences without Concentration B.S.: 120 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F230X | Essential Calculus with Applications | |
| | or MATH F251X Calculus I | |
| CHEM F105X | General Chemistry I | |
| | and CHEM F106X and General Chemistry II | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| BIOL F115X | Fundamentals of Biology I | |
| BIOL F116X | Fundamentals of Biology II | |
| STAT F200X | Elementary Statistics | |
| Biological Sciences without Concentration Program Requirements | | |
| Complete the following: | | |
| BIOL F260 | Principles of Genetics | 4 |
| BIOL F360 | Cell and Molecular Biology | 3 |
| BIOL F371 | Principles of Ecology | 4 |
| BIOL F481 | Principles of Evolution | 4 |
| CHEM F321 | Organic Chemistry I | 4 |
| CHEM F325 | Organic Chemistry II | 3-4 |
| | or CHEM F449 General Biochemistry: Metabolism | |
| PHYS F123X | College Physics I | 4 |
| | or PHYS F211X General Physics I | |
| PHYS F124X | College Physics II | 3-4 |
| | or PHYS F212X General Physics II | |
| | or CS F103 Introduction to Computer Programming | |
| | or CS F201 Computer Science I | |
| Complete one of the following 4 options: | | 4-8 |
| BIOL F111X | Human Anatomy and Physiology I | |
| | and BIOL F112X and Human Anatomy and Physiology II | |
| BIOL F310 | Animal Physiology | |
| BIOL F342 | Microbiology | |
| BIOL F430 | Plant Physiology and Development | |
| Electives ¹ | | |
| <i>Organismal elective</i> | | |
| Complete one additional course from the following: | | 3-4 |
| List D | | |

Biology electives

| | | |
|--|---|-------|
| Complete four additional courses from the following: | | 12-16 |
| Lists A, B, C, D, or E | | |
| Capstone ² | | |
| BIOL F400 | Research Capstone in Biological Sciences | 0 |
| Satisfactory completion of a capstone research project, which can be done either working individually with a faculty member or within one of the following courses: ^{3,4} | | |
| BIOL F440 | Behavioral Neuroscience Research Capstone | |
| BIOL F441 | Animal Behavior | |
| BIOL F466 | Advanced Cell and Molecular Laboratory | |
| BIOL F472 | Community Ecology | |
| BIOL F473 | Limnology | |
| BIOL F491 | The Human Microbiome | |

¹ BIOL F397, BIOL F497, URSA F388 or URSA F488 courses may be substituted by petition for a maximum of two required elective courses in biology (3-4 credits of independent study or research per substituted course). The subject area of the independent study or research will determine which biological subject areas the credits satisfy.

² Fulfills the baccalaureate capstone requirement.

³ Students working individually with a faculty member may, for example, take BIOL F497, or may work with a faculty member taking without course credits.

⁴ Capstone courses may be double counted as electives.

Biology Elective Course Lists

Courses that satisfy upper-division elective credit may require prerequisites.

LIST A - CELL AND MOLECULAR BIOLOGY

| Code | Title | Credits |
|-----------|--|---------|
| BIOL F342 | Microbiology | 4 |
| BIOL F360 | Cell and Molecular Biology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F435 | Introduction to Biology of Cancer | 3 |
| BIOL F460 | Principles of Virology | 3 |
| BIOL F462 | Infectious Diseases | 3 |
| BIOL F466 | Advanced Cell and Molecular Laboratory | 3 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F449 | General Biochemistry: Metabolism | 3 |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F470 | Cellular and Molecular Neuroscience | 3 |
| CHEM F474 | Neurochemistry | 3 |

LIST B - PHYSIOLOGY

| Code | Title | Credits |
|-----------|----------------------------|---------|
| BIOL F310 | Animal Physiology | 4 |
| BIOL F312 | Medical Physiology | 3 |
| BIOL F335 | Principles of Epidemiology | 3 |

| | | |
|-----------|--|---|
| BIOL F342 | Microbiology | 4 |
| BIOL F412 | Exercise Physiology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F430 | Plant Physiology and Development | 3 |
| BIOL F440 | Behavioral Neuroscience Research Capstone | 3 |
| BIOL F441 | Animal Behavior | 4 |
| BIOL F455 | Environmental Toxicology | 3 |
| BIOL F457 | Environmental Microbiology | 3 |
| BIOL F462 | Infectious Diseases | 3 |

LIST C - ECOLOGY AND EVOLUTIONARY BIOLOGY

| Code | Title | Credits |
|-----------|--|---------|
| BIOL F371 | Principles of Ecology | 4 |
| BIOL F385 | Global Change Biology | 3 |
| BIOL F415 | Systematic and Comparative Biology | 4 |
| BIOL F418 | Biogeography | 3 |
| BIOL F431 | Population Genetics | 3 |
| BIOL F441 | Animal Behavior | 4 |
| BIOL F446 | Freshwater Habitat Dynamics | 3 |
| BIOL F457 | Environmental Microbiology | 3 |
| BIOL F469 | Landscape Ecology and Wildlife Habitat | 3 |
| BIOL F471 | Population Ecology | 3 |
| BIOL F472 | Community Ecology | 4 |
| BIOL F473 | Limnology | 4 |
| BIOL F476 | Ecosystem Ecology | 4 |
| BIOL F483 | Stream Ecology | 3 |
| BIOL F486 | Vertebrate Paleontology | 3 |
| BIOL F487 | Conceptual Issues in Evolutionary Biology | 3 |
| BIOL F488 | Arctic Vegetation Ecology: Geobotany | 3 |
| BIOL F489 | Vegetation Description and Analysis | 3 |
| BIOL F491 | The Human Microbiome | 4 |
| WLF F301 | Design of Wildlife Studies | 3 |
| WLF F421 | Ecology and Management of Large Mammals | 3 |

LIST D - ORGANISMAL BIOLOGY

| Code | Title | Credits |
|-----------|-------------------------------------|---------|
| BIOL F239 | Introduction to Plant Biology | 4 |
| BIOL F331 | Systematic Botany | 3 |
| BIOL F406 | Entomology | 4 |
| BIOL F418 | Biogeography | 3 |
| BIOL F425 | Mammalogy | 3 |
| BIOL F426 | Ornithology | 3 |
| BIOL F427 | Ichthyology | 4 |
| BIOL F486 | Vertebrate Paleontology | 3 |
| BIOL F489 | Vegetation Description and Analysis | 3 |

LIST E - BIOMEDICAL SCIENCE

| Code | Title | Credits |
|-----------|----------------------------|---------|
| BIOL F312 | Medical Physiology | 3 |
| BIOL F335 | Principles of Epidemiology | 3 |

| | | |
|-----------|---|---|
| BIOL F402 | Biomedical and Research Ethics | 3 |
| BIOL F412 | Exercise Physiology | 3 |
| BIOL F417 | Neurobiology | 3 |
| BIOL F435 | Introduction to Biology of Cancer | 3 |
| BIOL F440 | Behavioral Neuroscience Research Capstone | 3 |
| BIOL F455 | Environmental Toxicology | 3 |
| BIOL F460 | Principles of Virology | 3 |
| BIOL F462 | Infectious Diseases | 3 |
| BIOL F466 | Advanced Cell and Molecular Laboratory | 3 |
| BIOL F491 | The Human Microbiome | 4 |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F470 | Cellular and Molecular Neuroscience | 3 |
| CHEM F474 | Neurochemistry | 3 |

Minor, Biological Sciences

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Biological Sciences Minor: 18 credits

| Code | Title | Credits |
|---|--|---------|
| Biological Sciences Program Requirements | | |
| Complete the following: | | |
| BIOL F115X | Fundamentals of Biology I | 4 |
| BIOL F116X | Fundamentals of Biology II | 4 |
| BIOL F260 | Principles of Genetics | 4 |
| Complete one from the following options: ¹ | | 3-8 |
| BIOL F111X and BIOL F112X | Human Anatomy and Physiology I and Human Anatomy and Physiology II | |
| BIOL F310 | Animal Physiology | |
| BIOL F342 | Microbiology | |
| BIOL F360 | Cell and Molecular Biology | |
| BIOL F371 | Principles of Ecology | |
| BIOL F481 | Principles of Evolution | |
| Complete one additional course in biology at the 200 level or above | | 3 |

¹ Courses that satisfy upper-division elective credit may require prerequisites in addition to the required biology course.

Business Administration

B.B.A. Degree

The business administration program offers professional education to students interested in finance, human resources, leadership and marketing. Competent management practices require an education that is both broad and deep. The business administration program prepares graduates to meet complex technical, economic and social problems and enables them to apply imaginative and responsible leadership to the needs of industry and government.

The undergraduate and graduate business administration programs are accredited by the Association to Advance Collegiate Schools of Business.

Minimum Requirements for Business Administration Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in business administration (<https://uaf.edu/academics/programs/bachelors/business-administration.php>), including an overview of the program, career opportunities and more.

Learn more about the online bachelor's degree in business administration (<https://uaf.edu/academics/programs/bachelors/business-administration-online.php>), including an overview of the program, career opportunities and more.

College of Business and Security Management
Department of Business Administration (<https://www.uaf.edu/cbsm/degrees/undergraduate/ba/>)
907-474-7461

Programs Degree

- B.B.A., Business Administration (p. 258)

Minors

- Minor, Finance (p. 259)
- Minor, General Business (p. 260)
- Minor, Management and Organizations (p. 260)
- Minor, Marketing (p. 261)
- Minor, Sport Management (p. 261)

B.B.A., Business Administration

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Business Administration B.B.A.: 120 credits

CONCENTRATIONS: FINANCE (P. 258) & ECONOMICS (P. 258), GENERAL BUSINESS (P. 258), LEADERSHIP (P. 259), MARKETING (P. 259), HUMAN RESOURCES (P. 259)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F122X | Essential Precalculus with Applications | |
| B.B.A. Degree Requirements ¹ | | |
| Complete the B.B.A. degree requirements. (p. 213) | | |
| As part of the B.B.A. degree requirements, complete: | | |
| BA F323X | Business Ethics | |
| Business Administration Program Requirements | | |
| AIS F310 or AIS F316 | Management of Information Systems Accounting Information Systems | 3 |
| AIS F324 | Advanced MS Excel | 1 |
| AIS F342 | MS Excel for Finance | 1 |
| BA F307 | Introductory Human Resources Management | 3 |
| BA F308 | Professional Development: How to Prepare for a Job and Other Survival Skills | 1 |
| BA F309 or BA F310 | Professional Development: Finding a Career Professional Development: Being Successful in Your Career | 1 |
| BA F325 | Financial Management | 3 |
| BA F330 | The Legal Environment of Business | 4 |
| BA F343 | Principles of Marketing | 3 |
| BA F360 | Operations Management | 3 |
| BA F390 or BA F391 | Organizational Theory and Behavior Alaska Native Corporations: A Historical and Contemporaneous Perspective | 3 |
| BA F462 | Corporate Strategy ¹ | 3 |
| HSEM F415 or HSEM F416 or HSEM F417 or HSEM F418 | Cybersecurity in the 21st Century: Technology and Ethics Cybersecurity Management Cybersecurity Resiliency Cybercrime, Fraud and Law | 3 |
| HSEM F445 | Business Continuity and Crisis Management | 3 |
| Complete one from the following: | | 3 |
| BA F460 | International Business | |

| | | |
|--|-----------------------|---|
| BA F461 | International Finance | |
| Additional 9 credits from ACCT, BA, ECON, or a second concentration. | | 9 |
| Concentrations | | |
| Complete one or more from the following concentrations: | | 9 |
| Finance & Economics | | |
| General Business | | |
| Marketing | | |
| Leadership | | |
| Human Resources | | |

¹ As part of the B.B.A. degree requirements, BA F462 fulfills the baccalaureate capstone requirement.

Students majoring in business administration may not minor in the following: finance, general business, management and organizations, marketing, or the business administration track of the leadership minor.

Note: The B.B.A. degree requires 50 percent of the accounting, business administration and economics credits to be earned at UAF. Twenty-four out of the last 30 credits earned must be taken at UAF.

Note: Students may earn a B.B.A. with more than one concentration in the above areas.

Note: Only one B.B.A. degree may be earned with a major in business administration.

Concentrations

FINANCE & ECONOMICS

| Code | Title | Credits |
|---|---|---------|
| Complete three of the following: ² | | |
| BA F423 | Investment Analysis | |
| BA F424 | Real Estate and Alternative Investments | |
| BA F454 | Student Investment Fund | |
| BA F455 | Portfolio Management | |
| BA F461 | International Finance | |
| ECON F350 | Money and Banking | |
| ECON F351 | Public Finance | |

² Classes must be different than those used to meet the BBA degree and the major requirements. Courses cannot double count.

GENERAL BUSINESS

| Code | Title | Credits |
|---|-------|---------|
| Complete 9 credits as approved by the undergraduate director | | 9 |
| At least 6 credits must be BA courses, the rest may be select AIS, ACCT, ECON, HSEM or SPRT classes. ³ | | |
| At least 6 credits must be upper-division. | | |

³ Classes must be different than those used to meet the BBA degree and the major requirements. Courses cannot double count.

LEADERSHIP

| Code | Title | Credits |
|----------------------------------|-----------------------------------|---------|
| Complete three of the following: | | 9 |
| BA/SPRT F280 | Sport Leadership | |
| BA/LEAD F470 | Leadership Theory and Development | |
| BA/LEAD F472 | Leading Change | |
| HSEM/LEAD F456 | Leaderships in Dangerous Contexts | |

MARKETING

| Code | Title | Credits |
|----------------------------------|----------------------------------|---------|
| Complete three of the following: | | 9 |
| BA F241 | Advertising, Sales and Promotion | |
| BA F436 | Consumer Behavior | |
| BA F443 | Social Media Marketing | |
| BA F445 | Marketing Research | |
| BA/SPRT F482 | Sport Marketing | |
| BA F490 | Services Marketing | |
| BA F491 | Current Topics in Marketing | |

HUMAN RESOURCES

| Code | Title | Credits |
|----------------------------------|-------------------------------------|---------|
| Complete three of the following: | | 9 |
| BA F317 | Employment Law | |
| BA F457 | Training and Management Development | |
| BA F489 | Public Sector Labor Relations | |
| PSY F390 | Psychology of Work | |

Minor, Finance**Program Requirements**

Students must earn a C- grade or better in each course.

**Minimum Requirements for Finance
Minor: 15 credits**

| Code | Title | Credits |
|----------------------------------|---|---------|
| Complete the following: | | |
| ACCT F261X | Principles of Financial Accounting | 3 |
| BA F325 | Financial Management | 3 |
| ECON F101X | Principles of Microeconomics | 3 |
| Complete two from the following: | | 6 |
| BA F423 | Investment Analysis | |
| BA F424 | Real Estate and Alternative Investments | |
| BA F454 | Student Investment Fund | |
| BA F455 | Portfolio Management | |
| BA F461 | International Finance | |

Minor, General Business

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for General Business Minor: 15 credits

| Code | Title | Credits |
|---|-------|---------|
| Complete five College of Business and Security Management-approved courses. | | 15 |
| At least three must be BA courses. | | |
| At least six hours must be upper-division. | | |

Minor, Management and Organizations

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Management and Organizations Minor: 15 credits

| Code | Title | Credits |
|-----------------------------------|---|---------|
| Complete five from the following: | | 15 |
| BA F307 | Introductory Human Resources Management | |
| BA F317 | Employment Law | |
| BA F325 | Financial Management | |
| BA F330 | The Legal Environment of Business | |
| BA F343 | Principles of Marketing | |
| BA F360 | Operations Management | |
| BA F390 | Organizational Theory and Behavior | |
| ECON F101X | Principles of Microeconomics | |

Minor, Marketing

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Marketing Minor: 15 credits

| Code | Title | Credits |
|-----------------------------------|--|---------|
| Complete five from the following: | | 15 |
| BA F241 | Advertising, Sales and Promotion | |
| BA F343 | Principles of Marketing | |
| BA F436 | Consumer Behavior | |
| BA F443 | Social Media Marketing | |
| BA F482 | Sport Marketing | |
| BA F490 | Services Marketing | |
| BA F491 | Current Topics in Marketing | |
| ECON F227 | Introductory Statistics for Economics and Business | |

Minor, Sport Management

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Sport Management Minor: 15 credits

| Code | Title | Credits |
|------------------------------------|----------------------------------|---------|
| Complete the following: | | |
| BA/SPRT F280 | Sport Leadership | 3 |
| BA/SPRT F281X | Introduction to Sport Management | 3 |
| Complete three from the following: | | 9 |
| BA/SPRT F481 | Event Management | |
| BA/SPRT F482 | Sport Marketing | |
| BA/SPRT F483 | Sport and Recreation Sales | |
| PSY F337 | Sport Psychology | |

Business, Applied

Minors

The applied business and applied accounting program offers a minor in applied business-general business that is designed to provide students the opportunity to acquire foundation-level knowledge and skills in general business. Students will complete coursework in accounting principles, finance, customer service and marketing/public relations. Also offered is a minor in applied business in recreation and guiding management that is designed to provide students the opportunity to acquire foundation-level knowledge in tourism, customer service, wilderness leadership education and emergency response.

Minimum Requirements for General Business and Recreation and Guiding Management Minors: 18 credits

Community and Technical College

Applied Business (<https://www.ctc.uaf.edu/programs/business-applied/>)
907-455-2800

Programs

Minors

- Minor, Applied Business - General Business (p. 262)
- Minor, Recreation and Guiding Management (p. 263)

Degree

- A.A.S., Business, Applied (p. 157)

Minor, Applied Business - General Business

Students must earn a C- grade or better in each course.

Minimum Requirements for General Business Minor: 18 credits

| Code | Title | Credits |
|--|---|---------|
| General Business Program Requirements | | |
| Complete the following: | | |
| ABUS F101 | Principles of Accounting I | 3 |
| ABUS F161 | Personal and Business Finance | 3 |
| ABUS F175 | Customer Service | 3 |
| ABUS F260 or ABUS F263 | Marketing Practices Public Relations | 3 |
| BA F151X | Introduction to Business | 3 |
| Complete one of the following: | | 3 |
| ABUS F232 | Contemporary Management Issues | |
| ABUS F272 | Small-Business Planning | |
| ABUS F273 | Entrepreneurship and Small Business | |

Note: Other courses specific to individual education and career goals may be substituted with program approval.

Minor, Applied Business - Recreation and Guiding Management

Students must earn a C- grade or better in each course.

Minimum Requirements for Recreation and Guiding Management Minor: 18 credits

| Code | Title | Credits |
|---|---|---------|
| Recreation and Guiding Management Program Requirements | | |
| Complete the following: | | |
| ABUS F158 | Introduction to Tourism | 3 |
| ABUS F175 | Customer Service | 3 |
| NRM F161 | Wilderness Leadership Education | 3 |
| Complete one of the following: | | 3 |
| EMS F152 | Emergency Trauma Training First Responder | |
| EMS F195 | Special Topics | |
| More advanced Emergency First Responder Training | | |
| Complete 6 credits from the following electives: | | 6 |
| RECR electives | | |
| NRM F361 | Advanced Wilderness Leadership Education | |
| ABUS/NRM/RECR-approved practicum | | |

Note: Other courses specific to individual education and career goals may be substituted with program approval.

Chemistry B.S. Degree

Our programs prepare students for employment as research chemists in federal, state, municipal, academic or industrial laboratories, and in premedicine as laboratory technicians, industry supervisors and technical sales personnel. Our programs also provide a technical base for chemistry teachers. Graduates also find positions in the environmental sciences, oceanography and related interdisciplinary fields. Many chemistry graduates elect to pursue advanced M.S., Ph.D., pharmacology or MD degrees.

The chemistry curriculum meets the American Chemical Society standards covering the basics of general, organic, inorganic, physical and analytical chemistry, and biochemistry. Undergraduate research leading to publications is strongly encouraged, and many of the laboratory-based courses have a research component built into them. The B.S. program may be completed without an optional concentration, or students can opt for an additional focus in biochemistry, environmental chemistry or forensic chemistry. The B.S. program generally prepares students for a career in chemistry or biochemistry, or for professional school. The B.S. in chemistry is an ACS-approved degree program. The environmental chemistry concentration provides courses that help students study the chemistry of the natural environment by adding geology, biology or atmospheric courses, and it prepares students for graduate studies and/or careers in the environmental industry. The biochemistry concentration provides an enhanced curriculum in biological chemistry for students seeking advanced careers in biochemistry, medicine or health sciences. Limited teaching assistantships are often available for upper-division students, which strengthen leadership and communication skills.

The bachelor's degrees in chemistry and concentrations in biochemistry and environmental chemistry provide excellent research opportunities and background for undergraduate students through connection to corresponding graduate programs. See graduate programs in chemistry (p. 435), biochemistry and molecular biology (p. 428), and environmental chemistry (p. 465).

The Chemistry and Biochemistry Department is housed in the Reichardt Building, where laboratories are equipped with research-grade instrumentation, providing hands-on experience to students for entry into graduate school or industry. Visit the Chemistry Department (<https://www.uaf.edu/chem/>) for more information.

Minimum Requirements for Chemistry Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in chemistry (<https://uaf.edu/academics/programs/bachelors/chemistry.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Chemistry and Biochemistry (<https://www.uaf.edu/chem/>)
907-474-5510

Programs Degrees

- B.S., Chemistry (p. 264)

Minor

- Minor, Biochemistry (p. 266)
- Minor, Chemistry (p. 267)

B.S., Chemistry

Program Requirements

Students must earn a C- grade or better in each course.

American Chemistry Society-approved Minimum Requirements for Chemistry B.S.: 120 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| PHYS F123X and PHYS F124X or PHYS F211X and PHYS F212X | College Physics I and College Physics II General Physics I and General Physics II | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. requirements, complete: | | |
| MATH F252X | Calculus II | |
| Chemistry Program Requirements | | |
| CHEM F105X | General Chemistry I | 4 |
| CHEM F106X | General Chemistry II | 4 |
| CHEM F202 | Basic Inorganic Chemistry | 3 |
| CHEM F212 | Chemical Equilibrium and Analysis | 4 |
| CHEM F321 | Organic Chemistry I | 4 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F331 | Physical Chemistry I | 4 |
| CHEM F332 | Physical Chemistry II | 4 |
| CHEM F434 | Chemistry Capstone Laboratory ¹ | 3 |
| CHEM F449 | General Biochemistry: Metabolism | 3 |
| CHEM F481 | Seminar ¹ | 1 |
| CHEM F482 | Seminar ¹ | 2 |
| Complete one of the following: | | 3-4 |
| CHEM F288 and CHEM F488 | Introduction to Chemical Research and Undergraduate Chemistry and Biochemistry Research (2 credits each) | |
| CHEM F488 | Undergraduate Chemistry and Biochemistry Research (3 credits) ¹ | |
| MATH F253X | Calculus III | 4 |
| Complete two of the following: | | 6 |
| CHEM F314 | Analytical Instrumental Laboratory | |
| CHEM F402 | Inorganic Chemistry | |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | |

¹ Fulfills the baccalaureate capstone requirement.

Note: Upon completing the required curriculum and fulfilling all general university requirements, students will receive a certificate from the American Chemical Society indicating approval of their degree program.

Optional Concentrations: Biochemistry, Environmental Chemistry

BIOCHEMISTRY

Minimum Requirements for Degree: 120 credits

Students must earn a C- grade or better in each course.

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| PHYS F123X | College Physics I | |
| and PHYS F124X | and College Physics II | |
| or PHYS F211X | General Physics I | |
| and PHYS F212X | and General Physics II | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| Chemistry Program Requirements | | |
| BIOL F115X | Fundamentals of Biology I | 4 |
| BIOL F116X | Fundamentals of Biology II | 4 |
| CHEM F105X | General Chemistry I | 4 |
| CHEM F106X | General Chemistry II | 4 |
| CHEM F202 | Basic Inorganic Chemistry | 3 |
| CHEM F212 | Chemical Equilibrium and Analysis | 4 |
| CHEM F321 | Organic Chemistry I | 4 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F331 | Physical Chemistry I | 4 |
| CHEM F449 | General Biochemistry: Metabolism | 3 |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F481 | Seminar | 1 |
| CHEM F482 | Seminar | 2 |
| CHEM F488 | Undergraduate Chemistry and Biochemistry Research | 3 |
| Complete four from the following: ¹ | | 12-14 |
| CHEM F332 | Physical Chemistry II | |
| CHEM F434 | Chemistry Capstone Laboratory | |
| CHEM F314 | Analytical Instrumental Laboratory | |
| CHEM F402 | Inorganic Chemistry | |
| CHEM F420 | Applications of NMR Spectroscopy | |
| MATH F253X | Calculus III | |
| Complete 10 credits from the following: ¹ | | 10 |
| BIOL F240X | Beginnings in Microbiology | |
| BIOL F260 | Principles of Genetics | |
| BIOL F310 | Animal Physiology | |

| | |
|-----------|-------------------------------------|
| BIOL F342 | Microbiology |
| BIOL F402 | Biomedical and Research Ethics |
| BIOL F417 | Neurobiology |
| BIOL F462 | Infectious Diseases |
| CHEM F360 | Cell and Molecular Biology |
| CHEM F455 | Environmental Toxicology |
| CHEM F470 | Cellular and Molecular Neuroscience |
| CHEM F474 | Neurochemistry |

¹ Courses selected under these areas must meet baccalaureate degree requirements for 39 upper-division credits.

Note: This degree is intended for students interested in careers in biochemistry or pre-professional students, providing extra depth in biological sciences. The selection of optional courses will determine if the curriculum conforms to the American Chemistry Society-approved chemistry degree. Students desiring an ACS-approved chemistry degree should consult with their advisor about optional courses that will meet ACS requirements.

ENVIRONMENTAL CHEMISTRY

Minimum Requirements for Degree: 120 credits

Students must earn a C- grade or better in each course.

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| PHYS F123X | College Physics I | |
| and PHYS F124X | and College Physics II | |
| or PHYS F211X | General Physics I | |
| and PHYS F212X | and General Physics II | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree, complete: | | |
| MATH F252X | Calculus II | |
| Chemistry Program Requirements | | |
| CHEM F105X | General Chemistry I | 4 |
| CHEM F106X | General Chemistry II | 4 |
| CHEM F202 | Basic Inorganic Chemistry | 3 |
| CHEM F212 | Chemical Equilibrium and Analysis | 4 |
| CHEM F314 | Analytical Instrumental Laboratory | 3 |
| CHEM F321 | Organic Chemistry I | 4 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F331 | Physical Chemistry I | 4 |
| CHEM F332 | Physical Chemistry II | 4 |
| CHEM F434 | Chemistry Capstone Laboratory | 3 |
| CHEM F481 | Seminar | 1 |
| CHEM F482 | Seminar | 2 |
| CHEM F488 | Undergraduate Chemistry and Biochemistry Research | 3-4 |

| | | |
|----------------------------------|---|-----|
| or CHEM F288 and CHEM F488 | Introduction to Chemical Research and Undergraduate Chemistry and Biochemistry Research | |
| MATH F253X | Calculus III | 4 |
| Complete two from the following: | | 7-8 |
| ATM F101X | Weather and Climate of Alaska | |
| BIOL F115X | Fundamentals of Biology I | |
| BIOL F116X | Fundamentals of Biology II | |
| GEOS F101X | The Dynamic Earth | |
| GEOS F262 | Rocks and Minerals | |
| Complete two from the following: | | 6-7 |
| ATM F401 | Introduction to Atmospheric Sciences | |
| BIOL F342 | Microbiology | |
| CHEM F406 | Atmospheric Chemistry | |
| CHEM F455 | Environmental Toxicology | |
| GEOS F417 | Introduction to Geochemistry | |
| NRM F380 | Soils and the Environment | |

Note: A course in statistics (e.g. STAT F200X, STAT F300, or GEOS F430) is suggested. The selection of optional courses will determine if the curriculum conforms to the American Chemistry Society-approved chemistry degree. Students desiring an ACS-approved chemistry degree should consult with their advisor about optional courses that will meet ACS requirements.

REQUIREMENTS FOR CHEMISTRY TEACHERS (GRADES 7-12)

| Code | Title | Credits |
|---|-----------------------|---------|
| Complete all the requirements of the chemistry B.A. or B.S. degree. | | |
| All prospective science teachers must complete the following: | | |
| PHIL F481 | Philosophy of Science | 3 |

Note: We strongly recommend that prospective secondary science teachers seek advising from the Alaska College of Education early in their undergraduate degree program so that they can be appropriately advised of the State of Alaska requirements for teacher licensure.

Minor, Biochemistry

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Biochemistry Minor: 26 credits

| Code | Title | Credits |
|--|--|---------|
| Biochemistry Program Requirements | | |
| Complete the following: | | |
| CHEM F105X | General Chemistry I | 4 |
| CHEM F106X | General Chemistry II | 4 |
| CHEM F202 or CHEM F212 | Basic Inorganic Chemistry Chemical Equilibrium and Analysis | 3-4 |
| CHEM F321 | Organic Chemistry I | 4 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F331 | Physical Chemistry I | 4 |
| CHEM F449 | General Biochemistry: Metabolism | 3 |

Minor, Chemistry

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Chemistry Minor: 27 credits

| Code | Title | Credits |
|---------------------------------------|--|---------|
| Chemistry Program Requirements | | |
| Complete the following: | | |
| CHEM F105X | General Chemistry I | 4 |
| CHEM F106X | General Chemistry II | 4 |
| CHEM F202 or CHEM F332 | Basic Inorganic Chemistry Physical Chemistry II | 3-4 |
| CHEM F212 | Chemical Equilibrium and Analysis | 4 |
| CHEM F321 | Organic Chemistry I | 4 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F331 | Physical Chemistry I | 4 |

Child Development and Family Studies

B.A. Degree

This program provides the necessary preparation for early childhood professionals who wish to advance their knowledge and career opportunities with specialized study in administration, curriculum and teaching, or family support.

The child development and family studies program meets professional preparation standards developed by the National Association for the Education of Young Children. These six core standards and field experience expectations guide the Child Development and Family Studies B.A. program content and outline a set of common expectations for professional knowledge, skills and dispositions within the field of early care and education in conjunction with family studies.

The program supports students who desire a strong foundation in the field of early childhood development. Students are required to complete the program major and one of the specialized concentration areas: administration within the early childhood field, curriculum and teaching, or family support. Students entering the child development and family studies B.A. program with an A.A. or A.A.S. degree specializing in early childhood from a regionally accredited college or university will receive 20 transfer credits toward the program major. Any additional courses will need to be evaluated on an individual basis.

Flexible course delivery fosters successful completion for early childhood professionals living in both rural and urban areas of Alaska. All program and concentration area courses must be completed with a minimum C- grade or better, with the exclusion of all clinical practice course work, which must be completed with a B grade or better. Completion of the Child Development and Family Studies B.A. will meet the requirements for both a major and a minor.

Minimum Requirements for Child Development and Family Studies Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in child development and family studies (<https://uaf.edu/academics/programs/bachelors/child-development-family-studies.php>), including an overview of the program, career opportunities and more.

College of Rural and Community Development
Department of Social and Human Development (<https://www.uaf.edu/rural/>)

Programs Degree

- B.A., Child Development and Family Studies (p. 268)

B.A., Child Development and Family Studies

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Child Development and Family Studies B.A.: 120 credits

CONCENTRATIONS: ADMINISTRATION WITHIN THE EARLY CHILDHOOD FIELD (P. 268), CURRICULUM AND TEACHING (P. 268), AND FAMILY SUPPORT (P. 268)

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Child Development and Family Studies Program Requirements | | |
| Complete the following: | | |
| ECE F101 | Introduction to Early Childhood Profession | 3 |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers | 3 |
| ECE F107X | Child Development II: The Preschool and Primary Years | 3 |
| ECE F110 | Safe, Healthy Learning Environments | 3 |
| ECE F130 | Culture, Learning and the Young Child | 2 |
| ECE F140 | Positive Social and Emotional Development | 3 |
| ECE F235 | Screening, Assessment and Recording | 3 |
| ECE F304 | Attachment and Social Development | 3 |
| ECE F305 | Social Emotional Development: Reflection and Practice | 3 |
| ECE F342 | Family Relationships | 3 |
| ECE F350 | Play: Foundation for Development | 3 |
| ECE F445 | Adolescence Through the Lifespan | 3 |
| ECE F480 | Child Development and Family Studies Portfolio ¹ | 1 |

Concentrations

| | |
|---|----|
| Complete one of the following concentrations: | 24 |
| Administration within the Early Childhood Field | |
| Curriculum and Teaching | |
| Family Support | |

¹ Fulfills the baccalaureate capstone requirement.

Concentrations

ADMINISTRATION WITHIN THE EARLY CHILDHOOD FIELD

| Code | Title | Credits |
|-------------------------|---|---------|
| Complete the following: | | |
| ECE F240 | Inclusion of Children with Special Needs (or department-approved course on special needs) | 3 |
| ECE F311 | Theories, Methodologies and Pedagogy for Early Childhood | 3 |
| ECE F340 | Financial Management of Early Childhood Programs | 3 |
| ECE F341 | Personnel Management of Early Childhood Programs | 3 |
| ECE F410 | Supporting Family Relationships through Mentoring | 3 |
| ECE F450 | Leadership and Advocacy in the Early Childhood Field | 3 |
| ECE F471 | Clinical Practice: Organizational Action Research ¹ | 3 |
| SWK F360 | Child Abuse and Neglect | 3 |

¹ Student must earn a B grade or higher in each course.

CURRICULUM AND TEACHING

| Code | Title | Credits |
|-------------------------|---|---------|
| Complete the following: | | |
| ECE F240 | Inclusion of Children with Special Needs (or department-approved course on special needs) | 3 |
| ECE F311 | Theories, Methodologies and Pedagogy for Early Childhood | 3 |
| ECE F365 | Social Studies Pedagogy in Early Childhood | 3 |
| ECE F420 | Developing Literacy in the Early Years | 3 |
| ECE F430 | Fine Arts for the Early Years | 3 |
| ECE F440 | Exploring Math and Science | 3 |
| ECE F472 | Clinical Practice: Classroom Research ¹ | 3 |
| ECE F473 | Clinical Practice: Classroom Management ¹ | 3 |

¹ Student must earn a B grade or higher in each course.

FAMILY SUPPORT

| Code | Title | Credits |
|-------------------------|---|---------|
| Complete the following: | | |
| ECE F242 | Child and Family Ecology | 3 |
| ECE F301 | Parents as Partners in Education | 3 |
| ECE F306 | Building Bridges to Support Family Mental Health | 3 |
| ECE F405 | Seminar in Culture and Child-rearing Practices | 3 |
| ECE F410 | Supporting Family Relationships through Mentoring | 3 |

| | | |
|----------|--|---|
| ECE F442 | Family Resource Management | 3 |
| ECE F471 | Clinical Practice: Organizational Action Research ¹ | 3 |
| SWK F360 | Child Abuse and Neglect | 3 |

¹ Student must earn a B grade or higher in each course.

For students entering the program with an A.A., A.S. or A.A.S. degree focusing in early childhood from a regionally accredited college or university.

NOTE: 20 credits will be accepted towards the program major. These credits will be applied to the following specific program requirements: ECE F101, ECE F104X, ECE F107X, ECE F110, ECE F130, ECE F140, ECE F235.

Minimum Requirements for Degree: 120 credits

Students must earn a C grade or better in each course.

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Child Development and Family Studies Program Requirements | | |
| Complete the following: | | |
| ECE F304 | Attachment and Social Development | 3 |
| ECE F305 | Social Emotional Development: Reflection and Practice | 3 |
| ECE F342 | Family Relationships | 3 |
| ECE F350 | Play: Foundation for Development | 3 |
| ECE F445 | Adolescence Through the Lifespan | 3 |
| ECE F480 | Child Development and Family Studies Portfolio ¹ | 1 |
| Concentrations ¹ | | |
| Complete one of the following concentrations: | | 24 |
| Administration within the Early Childhood Field | | |
| Curriculum and Teaching | | |
| Family Support | | |

Concentrations

ADMINISTRATION WITHIN THE EARLY CHILDHOOD FIELD

| Code | Title | Credits |
|-------------------------|---|---------|
| Complete the following: | | |
| ECE F240 | Inclusion of Children with Special Needs (or department-approved course on special needs) | 3 |

| | | |
|----------|--|---|
| ECE F311 | Theories, Methodologies and Pedagogy for Early Childhood | 3 |
| ECE F340 | Financial Management of Early Childhood Programs | 3 |
| ECE F341 | Personnel Management of Early Childhood Programs | 3 |
| ECE F410 | Supporting Family Relationships through Mentoring | 3 |
| ECE F450 | Leadership and Advocacy in the Early Childhood Field | 3 |
| ECE F471 | Clinical Practice: Organizational Action Research ¹ | 3 |
| SWK F360 | Child Abuse and Neglect | 3 |

¹ Student must earn a B grade or higher in each course.

CURRICULUM AND TEACHING

| Code | Title | Credits |
|-------------------------|---|---------|
| Complete the following: | | |
| ECE F240 | Inclusion of Children with Special Needs (or department-approved course on special needs) | 3 |
| ECE F311 | Theories, Methodologies and Pedagogy for Early Childhood | 3 |
| ECE F365 | Social Studies Pedagogy in Early Childhood | 3 |
| ECE F420 | Developing Literacy in the Early Years | 3 |
| ECE F430 | Fine Arts for the Early Years | 3 |
| ECE F440 | Exploring Math and Science | 3 |
| ECE F472 | Clinical Practice: Classroom Research ¹ | 3 |
| ECE F473 | Clinical Practice: Classroom Management ¹ | 3 |

¹ Student must earn a B grade or higher in each course.

FAMILY SUPPORT

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| ECE F242 | Child and Family Ecology | 3 |
| ECE F301 | Parents as Partners in Education | 3 |
| ECE F306 | Building Bridges to Support Family Mental Health | 3 |
| ECE F405 | Seminar in Culture and Child-rearing Practices | 3 |
| ECE F410 | Supporting Family Relationships through Mentoring | 3 |
| ECE F442 | Family Resource Management | 3 |
| ECE F471 | Clinical Practice: Organizational Action Research ¹ | 3 |
| SWK F360 | Child Abuse and Neglect | 3 |

¹ Student must earn a B grade or higher in each course.

Civil Engineering

B.S., B.S./M.S. Degrees

Civil engineers plan, design and supervise the construction of public and private structures such as bridges, buildings, tunnels, highways, transit systems, dams, offshore structures, airports, irrigation projects and water treatment and distribution facilities. Civil engineers use critical thinking, sophisticated technology and computer-aided engineering during design, construction, project scheduling and cost-control project phases. Civil engineers are creative problem solvers involved in community development and in addressing challenges of pollution, deteriorating infrastructure, traffic safety, energy needs, floods, earthquakes and urban planning.

The mission of the civil engineering program is to provide the highest level of undergraduate education, including competency in mathematics, science and engineering fundamentals, as well as training in design, the latest engineering applications and professional practice; to provide an environment encouraging research for engineers at the undergraduate, master's and doctorate levels; and to impart a desire for lifelong learning so that engineers from our program remain atop their field throughout their careers. The civil engineering program at UAF has maintained accreditation since 1940 and is currently accredited by the Engineering Accreditation Commission of ABET.

Educational Objectives of the B.S. Civil Engineering Program

1. Our graduates use their education to pursue professional careers in civil engineering and/or related fields in the public or private sectors, and/or graduate education.
2. Our graduates possess the knowledge required to meet the challenges of civil engineering problems, including those unique to remote locations and cold regions including Alaska.
3. Our graduates demonstrate professionalism through clear communication, actively serving the community, teamwork, commitment to ethical standards, and pursuit of licensure.

In addition to general civil engineering courses, the department offers specialties in transportation, geotechnical, structures, water resources, hydrology and environmental studies.

Minimum Requirements for Civil Engineering Degrees: B.A. 125 credits; B.S./M.S. Degrees: 143 credits

Learn more about the bachelor's degree in civil engineering (<https://uaf.edu/academics/programs/bachelors/civil-engineering.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Civil, Geological and Environmental Engineering (<https://www.uaf.edu/cem/programs/civil-engineering/>)
907-474-7241

Programs Degree

- B.S., Civil Engineering (p. 270)
- Accelerated B.S./M.S., Civil Engineering (p. 400)

B.S., Civil Engineering

B.S. Degree

Civil engineers plan, design, and supervise the construction of public and private structures such as bridges, buildings, tunnels, highways, transit systems, dams, offshore structures, airports, irrigation projects and water treatment and distribution facilities. Civil engineers use critical thinking, sophisticated technology and employ computer-aided engineering during design, construction, project scheduling and cost control project phases.

Civil engineers are creative problem solvers involved in community development and addressing challenges of pollution, deteriorating infrastructure, traffic safety, energy needs, floods, earthquakes and urban planning.

The mission of the civil engineering program is to provide the highest level of undergraduate education, including competency in mathematics, science, engineering fundamentals, as well as training in design, the latest engineering applications and professional practice; to provide an environment encouraging research for engineers at the undergraduate, master's and doctorate levels, and to impart a desire for life-long learning so that engineers from our program remain atop their field throughout their careers. The civil engineering program at UAF has maintained accreditation since 1940 and is currently accredited by the Engineering Accreditation Commission of ABET.

Educational Objectives of the B.S. Civil Engineering Program

1. Our graduates use their education to pursue professional careers in civil engineering and/or related fields in the public or private sectors, and/or graduate education.
2. Our graduates possess the knowledge required to meet the challenges of civil engineering problems, including those unique to remote locations and cold regions including Alaska.
3. Our graduates demonstrate professionalism through clear communication, actively serving the community, teamwork, commitment to ethical standards, and pursuit of licensure.

In addition to general civil engineering courses, the department offers specialties in transportation, geotechnical, structures, water resources, hydrology and environmental studies.

Minimum Requirements for Civil Engineering Degrees: B.A. 125 credits.

Learn more about the bachelor's degree in civil engineering (<https://uaf.edu/academics/programs/bachelors/civil-engineering.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Civil, Geological and Environmental Engineering (<https://www.uaf.edu/cem/programs/civil-engineering/>)
907-474-7241

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Civil Engineering B.S. Degree: 125 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |

General Education Requirements

Complete the general education requirements. (p. 203)

As part of the general education requirements, complete:

| | |
|------------|----------------------|
| CHEM F105X | General Chemistry I |
| CHEM F106X | General Chemistry II |
| MATH F251X | Calculus I |

B.S. Degree Requirements

Complete the B.S. degree requirements. (p. 219)

As part of the B.S. degree requirements, complete:

| | |
|------------|--------------------|
| MATH F252X | Calculus II |
| PHYS F211X | General Physics I |
| PHYS F212X | General Physics II |

Civil Engineering Program Requirements

| | | |
|------------------------|--|-----|
| CE F112 or MIN F202 | Elementary Surveying Surveying and CAD for Engineers | 2-3 |
| CE F302 | Fundamentals of Transportation Engineering | 3 |
| CE/GE F326 | Introduction to Geotechnical Engineering and Foundations | 4 |
| CE F331 | Structural Analysis | 3 |
| CE F334 | Properties of Materials | 3 |
| CE F341 | Introduction to Environmental Engineering | 4 |
| CE F344 | Water Resources Engineering | 3 |
| CE F432 | Steel Design | 3 |
| CE F438 | Design of Engineered Systems ¹ | 3 |
| DRT F210 | Intermediate CAD | 3 |
| ES F101 | Introduction to Engineering | 3 |
| ES F201 | Computer Techniques | 3 |
| ES F208 | Mechanics | 4 |
| ES F301 | Engineering Analysis | 3 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| ESM F450 | Economic Analysis and Operations | 3 |
| GE F261 | General Geology for Engineers | 3 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |

Technical Electives ²

Complete 3 credits from the fields of environmental, construction, or transportation engineering. 3

Complete 6 credits from the following areas of emphasis, or as approved by an advisor. 6

ARCTIC EMPHASIS

| | |
|---------|------------------------|
| CE F401 | Arctic Engineering |
| CE F424 | Permafrost Engineering |
| ME F441 | Heat and Mass Transfer |

CONSTRUCTION EMPHASIS

| | |
|---------|--|
| CE F451 | Construction Cost Estimating and Bid Preparation |
|---------|--|

ENVIRONMENTAL EMPHASIS

| | |
|---------|---------------------------------------|
| CE F442 | Water and Wastewater Treatment Design |
| CE F443 | Air Pollution Management |

| | |
|-----------|---------------------------|
| ENVE F446 | Biological Unit Processes |
|-----------|---------------------------|

GEOTECHNICAL EMPHASIS

| | |
|---------|------------------------|
| CE F422 | Foundation Engineering |
| GE F440 | Slope Stability |
| GE F441 | Geohazard Analysis |

STRUCTURAL EMPHASIS

| | |
|---------|----------------------------|
| CE F433 | Reinforced Concrete Design |
| CE F434 | Timber Design |

TRANSPORTATION EMPHASIS

| | |
|---------|--------------------------------|
| CE F405 | Design of Highways and Streets |
| CE F408 | Transportation Safety Analysis |

WATER RESOURCES EMPHASIS

| | |
|------------|--------------------------------|
| CE/GE F420 | Groundwater Engineering |
| CE F445 | Hydrologic Analysis and Design |

Fundamentals of Engineering (FE) Examination

Complete the Fundamentals of Engineering (FE) examination administered by the State of Alaska.

¹ Fulfills the baccalaureate capstone requirement.

² Up to two graduate-level courses may be used towards graduation. Graduate-level courses must be approved by student's advisor, and the student must be within two semesters of graduation and have at least a 3.0 GPA to take graduate-level courses.

Note: The ability to use computers for normal class work is expected in all engineering classes above the F100 level.

Communication

B.A. Degree

The communication program teaches students to communicate effectively and ethically in a rapidly changing world characterized by diversity in gender, culture and belief. It offers a comprehensive background in the discipline in preparation for employment or further education. Students majoring in other disciplines find communication electives valuable additions to their programs.

The program is both theoretical and pragmatic, designed to prepare students for the professional workplace or for advanced study.

Communication courses are available online and in the classroom.

The minor in dispute resolution gives students a theoretical background for and practice of alternative dispute resolution. The curriculum supports the developing restorative justice emphasis of the B.A. in justice, and is applicable to business administration, social work, psychology and counseling contexts.

Minimum Requirements for Communication Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in communication (<https://uaf.edu/academics/programs/bachelors/communication.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Department of Communication and Journalism (<https://www.uaf.edu/cojo/>)
907-474-6591

Programs Degree

- B.A., Communication (p. 272)

Minors

- Minor, Communication (p. 273)
- Minor, Alternative Dispute Resolution (p. 273)

B.A., Communication

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Communication B.A.: 120 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Communication Program Requirements | | |
| Complete the following: | | |
| COJO F101X | Media and Culture | 3 |
| COJO F202 | News Writing for the Media | 3 |
| COJO F330 | Intercultural Communication | 3 |
| COJO F380 | Women, Minorities and the Media | 3 |
| COJO F401 | Communication Research Methods | 3 |
| COJO F425 | Communication Theory | 3 |
| COJO F482 | Capstone Seminar in Communication ¹ | 3 |
| Complete four from the following: ² | | 12 |
| COJO F220 | Professional Interviewing | |
| COJO F300X | Communicating Ethics ³ | |
| COJO F320 | Communication and Language | |
| COJO F321 | Nonverbal Communication | |
| COJO F322 | Communication in Interpersonal Relationships | |
| COJO F331 | Advanced Group Communication | |
| COJO F335 | Organizational Communication | |
| COJO F352 | Family Communication | |
| COJO F353 | Conflict, Mediation and Communication | |
| COJO F400 | Professional Internship | |
| COJO F431 | Public Relations Campaigns | |
| COJO F432 | Professional Public Speaking | |
| COJO F441 | Persuasion | |
| COJO F462 | Communication in Health Contexts | |
| COJO F475 | Applied Communication in Training and Development | |

¹ Fulfills the baccalaureate capstone requirement.

² With approval of advisor, an appropriate-level special topics or independent studies course in communication may be used to meet this requirement.

³ If taken to meet the degree-specific requirement for ethics, then the student must take an additional F300- or F400- level communication course to complete the major.

Minor, Alternative Dispute Resolution

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Alternative Dispute Resolution Minor: 15 credits

| Code | Title | Credits |
|--|--|---------|
| Alternative Dispute Resolution Requirements | | |
| Complete the following: | | |
| COJO F201 | Dispute Resolution and Restorative Practices | 3 |
| Complete four of the following: | | 12 |
| COJO F302 | Dispute Systems Design | |
| COJO F353 | Conflict, Mediation and Communication | |
| COJO F451 | Cross-cultural Conflict Analysis and Intervention | |
| COJO F461 | Law and Science of Arbitration | |
| COJO F465 | Clinic in Mediation, Conferencing and Circle Practices | |

Note: F400-level courses require junior standing or instructor permission

Minor, Communication

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Communication Minor: 15 credits

| Code | Title | Credits |
|--|---------------------------------|---------|
| Complete the following: | | |
| COJO F101X | Media and Culture | 3 |
| COJO F330 | Intercultural Communication | 3 |
| or COJO F380 | Women, Minorities and the Media | |
| Communication electives at the F300 level or above | | 9 |

Computer Engineering

B.S. Degree

The mission of the Electrical and Computer Engineering Department is to offer the highest quality, contemporary education in electrical and computer engineering at the undergraduate and graduate levels and to perform research appropriate to the technical needs of Alaska, the nation and the world. The curriculum is designed to ensure that fundamentals and specialized skills are acquired by the student. The program prepares engineering graduates to enter practice and provides the theoretical background for students entering graduate studies.

Computer engineering is a discipline that includes hardware and software design and provides a deep understanding of their interrelationship. It combines electrical engineering fundamentals, like microelectronics, electrical circuits and devices, digital signal processing, network design, communications systems, computer architecture, hardware design and systems analysis, with computer science concepts, including algorithms, software, graphics and artificial intelligence. Computer engineers design, analyze, produce, operate, program and maintain computer and digital systems. They apply theories and principles of science and mathematics to the design of hardware, software, networks and processes to solve technical problems. Most importantly, they understand how the hardware affects the software and vice versa.

Over the past decades, computers have evolved into complex systems that may consist of single machines or many interconnected computers linked by a data network. In one form or another, computers now control telephone and communications systems, process control and manufacturing automation systems, financial technology systems, management information systems, augmented reality systems, and biomedical devices. They are in household appliances, automobiles, transportation systems and our pockets, and they're on our wrists. To work in the constantly evolving discipline of computer systems engineering, the computer engineer must acquire competence in both digital computer hardware and the fundamentals of software engineering.

Careers in computer engineering are as wide and varied as computer systems themselves. Systems range from embedded computer systems found in consumer products or medical devices to control systems for automobiles, aircraft and trains, and to more wide-ranging applications in telecommunications, financial transactions and information systems.

The Electrical and Computer Engineering Department faculty provide a positive learning environment that enables students to pursue their goals in an innovative program that is rigorous and challenging, open and supportive. The BSCpE program at UAF, long accredited by the Engineering Accreditation Commission of ABET, develops practical skills by emphasizing hands-on experience in the design, implementation and validation of electrical systems in an environment that fosters and encourages innovation and creativity. This approach builds the foundation for the program's educational objectives:

1. Breadth: Graduates will use their broad education emphasizing computer engineering as the foundation for productive careers in the public or private sectors, graduate education, lifelong learning and engineering in extreme environments.
2. Depth: Graduates will apply their understanding of the fundamental knowledge prerequisite for the practice of and/or advanced study in computer engineering, including its scientific principles, rigorous analysis and creative design.

3. Professional skills: Graduates will apply skills in clear communication, responsible teamwork, professional attitudes and ethics needed to succeed in the complex modern work environment.

These objectives serve the department, college and university missions by ensuring that all graduates of the program have received a high quality, contemporary education that prepares them for a rewarding career in computer engineering.

Candidates for the B.S. degree are required to take the state of Alaska Fundamentals of Engineering Examination in their general field.

For more information about the computer engineering program's mission, goals and educational objectives, visit the College of Engineering and Mines (<https://www.uaf.edu/cem/about/accreditation.php>) accreditation website.

Minimum Requirements for Computer Engineering B.S.
Degree: 127 credits

Learn more about the bachelor's degree in computer engineering, including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Electrical and Computer Engineering (<http://cem.uaf.edu/ece/>)
907-474-7137

Programs

Degree

- B.S., Computer Engineering (p. 275)

B.S., Computer Engineering

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Computer Engineering B.S.: 127 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X and CHEM F106X or PHYS F213X | General Chemistry I and General Chemistry II Elementary Modern Physics | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| PHYS F211X and PHYS F212X | General Physics I and General Physics II | |
| Computer Engineering Program Requirements | | |
| Complete the following: | | |
| CS F201 | Computer Science I | 3 |
| CS F202 | Computer Science II | 3 |
| CS F301 | Assembly Language Programming | 3 |
| CS F311 | Data Structures and Algorithms | 3 |
| CS F321 | Operating Systems | 3 |
| EE F102 | Introduction to Electrical and Computer Engineering | 3 |
| EE F203 | Electric Circuits | 4 |
| EE F243 | Digital Systems Design | 4 |
| EE F253 | Circuit Theory | 3 |
| EE F333 | Electronic Devices | 4 |
| EE F354 | Engineering Signal Analysis | 3 |
| EE F443 | Computer Engineering Analysis and Design | 4 |
| EE F444 | Embedded Systems Design | 4 |
| EE F451 | Digital Signal Processing | 4 |
| EE F461 | Communication Systems and Networks | 4 |
| EE F481 | Electrical and Computer Engineering Design I ¹ | 1 |
| EE F482 | Electrical and Computer Engineering Design II ¹ | 3 |
| ES F100X | Engineering Alaska - An Introduction to Engineering | 3 |
| ES F100L | Makerspace Alaska - A Laboratory Introduction to Engineering | 1 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| MATH F307 | Discrete Mathematics | 3 |

Electives

Complete two approved upper-division EE or CS Electives 6-8

Graduate level EE and CS courses may be used as electives upon approval.

Recommended Electives:

| | |
|---------|-------------------------------------|
| CS F331 | Programming Languages |
| CS F361 | Systems Security and Administration |
| CS F411 | Analysis of Algorithms |
| CS F421 | Distributed Operating Systems |
| CS F471 | Senior Capstone I |
| CS F472 | Senior Capstone II |
| EE F303 | Electric Power Systems and Machines |
| EE F311 | Engineering Electromagnetics I |
| EE F334 | Electronic Circuit Design |
| EE F464 | Advanced Communications Systems |
| EE F471 | Automatic Control |

Fundamentals of Engineering (FE) Examination

Complete the Fundamentals of Engineering (FE) examination administered by the State of Alaska.

¹ Fulfills the baccalaureate capstone requirement.

Computer Information Technology Specialist

Minor Only

The information technology specialist minor is designed to provide students the opportunity to acquire foundation-level knowledge and skills in computer and information technology support.

This minor is a great choice for Bachelor of Arts degree students who need to satisfy their minor requirement or Associate of Arts students who want to explore information technology as an area of interest.

Community and Technical College
Information Technology (<https://www.ctc.uaf.edu/its/>)
907-455-2800

Programs

Minor

- Minor, Computer Information Technology Specialist (p. 276)

Minor, Computer Information Technology Specialist

Students must earn a C- grade or better in each course.

Minimum Requirements for Computer Information Technology Specialist Minor: 15 credits

| Code | Title | Credits |
|-------------------------|-----------------------------------|---------|
| Complete the following: | | |
| CITS F204 | Introduction to Computer Networks | 3 |
| CITS F212 | Server Operating Systems | 3 |
| CITS F261 | Computer and Network Security | 3 |
| Two CITS electives | | 6 |

Computer Science

B.A., B.S., B.S./M.S. Degrees

Computer science is the study of software development, information handling, and their application to the world's problems. Computing is widely used in support of science, engineering, business, law, medicine, education and the social sciences, and offers abundant employment opportunities.

The B.A., B.S. and M.S. degrees follow the recommendations of the Association for Computing Machinery and the Institute for Electrical and Electronic Engineers. The Computing Accreditation Commission of ABET accredits the B.S. degree.

The computer science undergraduate program introduces the fundamentals of computer programming, hardware and theory. It emphasizes the application of general principles to real-world problems. The B.S. degrees provide students with deep mathematical abilities to analyze the meaning and efficiency of programs; while the B.A. is designed to provide students a broader background in uses of the technology. Combining solid fundamentals with modern technology enables graduates to not only make full use of today's computers but to help build the future.

Minimum Requirements for Computer Sciences Degrees: B.A.: 120 credits; B.S.: 120 credits; B.S./M.S.: 141 credits

Learn more about the bachelor's degree in computer science (<https://uaf.edu/academics/programs/bachelors/computer-science.php>), including an overview of the program, career opportunities and more.

Learn more about the bachelor's/master's degree in computer science (<https://uaf.edu/academics/programs/bachelors/computer-science-bs-ms.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Computer Science (<https://www.cs.uaf.edu/>)
907-474-2777

Programs Degree

- B.A., Computer Science (p. 277)
- B.S., Computer Science (p. 278)
- Accelerated B.S./M.S., Computer Science (p. 403)

Minor

- Minor, Computer Science (p. 279)

B.A., Computer Science

Admission Requirements

Complete the following admission requirements:

Students are ready to declare a B.A. in computer science when they successfully:

- pass CS F103; OR
- place into MATH F122X or MATH F151X.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Computer Science B.A.: 120 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F230X | Essential Calculus with Applications or MATH F251X Calculus I | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Computer Science Program Requirements | | |
| Complete the following: | | |
| CS F201 | Computer Science I | 3 |
| CS F202 | Computer Science II | 3 |
| CS F241 | Computer Hardware Concepts | 4 |
| CS F301 | Assembly Language Programming | 3 |
| CS F311 | Data Structures and Algorithms | 3 |
| CS F321 | Operating Systems | 3 |
| CS F331 | Programming Languages | 3 |
| CS F371 | Computer Ethics and Technical Communication | 3 |
| CS F372 | Software Construction | 3 |
| CS F441 | System Architecture | 3-4 |
| or EE F443 | Computer Engineering Analysis and Design | |
| CS F471 | Senior Capstone I ¹ | 3 |
| CS F472 | Senior Capstone II ¹ | 3 |
| STAT F200X | Elementary Statistics | 3 |
| or STAT F300 | Statistics | |
| Electives in computer science at the F300 or F400 level, or approved electives. | | 12 |

¹ Fulfills the baccalaureate capstone requirement.

B.S., Computer Science

¹ Fulfills the baccalaureate capstone requirement.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Computer Science B.S.: 120 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| MATH F253X | Calculus III | |
| MATH F307 | Discrete Mathematics | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| STAT F300 | Statistics | |
| Any approved ethics course | | |
| Complete one of the following: | | |
| MATH F302 | Differential Equations | |
| MATH F314 | Linear Algebra | |
| MATH F371 | Probability | |
| MATH F405 | Abstract Algebra | |
| MATH F408 | Mathematical Statistics | |
| MATH F426 | Numerical Analysis | |
| MATH F460 | Mathematical Modeling | |
| Computer Science Program Requirements | | |
| Complete the following: | | |
| CS F201 | Computer Science I | 3 |
| CS F202 | Computer Science II | 3 |
| CS F241 | Computer Hardware Concepts | 4 |
| CS F301 | Assembly Language Programming | 3 |
| CS F311 | Data Structures and Algorithms | 3 |
| CS F321 | Operating Systems | 3 |
| CS F331 | Programming Languages | 3 |
| CS F371 | Computer Ethics and Technical Communication | 3 |
| CS F372 | Software Construction | 3 |
| CS F411 | Analysis of Algorithms | 3 |
| CS F441 | System Architecture | 3-4 |
| or EE F443 | Computer Engineering Analysis and Design | |
| CS F471 | Senior Capstone I ¹ | 3 |
| CS F472 | Senior Capstone II ¹ | 3 |
| Electives in computer science at the F300 or F400 level, or approved electives. | | 9 |

Minor, Computer Science

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Computer Science Minor: 15 credits

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| CS F201 | Computer Science I | 3 |
| CS F202 | Computer Science II | 3 |
| Complete three from the following electives: | | 9 |
| F300 or F400 level from CS | | |
| EE F341 | Digital and Computer Analysis and Design | |
| MATH F426 | Numerical Analysis | |
| MATH F460 | Mathematical Modeling | |
| Electives approved by a computer science advisor | | |

Note: Courses completed to satisfy this minor can be used to simultaneously satisfy other major or general distribution requirements.

Digital Journalism

B.A. Degree

The digital journalism program equips students with the broad skill set valued in the nation's newsrooms and other communication fields.

In addition to the solid academic foundation delivered in the classroom, students receive practical experience working in media on and off campus. On campus, these include KUAC, a public television and radio station; KSUA, the student-owned FM radio station; and the Polaris News, the student-run online news site. Students complete their required professional media internships at a variety of radio and television stations, newspapers and other media-related businesses and organizations in and out of Alaska.

The department runs several laboratory facilities, including a digital newsroom and photography lab, dedicated audio and video bays, an advanced video editing/digital printing lab, two wet darkrooms and a photography studio.

Minimum Requirements for Digital Journalism Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in digital journalism (<https://uaf.edu/academics/programs/bachelors/digital-journalism.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts

Department of Communication and Journalism (<https://www.uaf.edu/cojo/>)

907-474-7761

Programs Degree

- B.A., Digital Journalism (p. 280)

Minor

- Minor, Digital Journalism (p. 281)

B.A., Digital Journalism

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Digital Journalism B.A.: 120 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| As part of the B.A. degree requirements, complete: | | |
| HIST F132X | History of the U.S. | |
| Digital Journalism Program Requirements | | |
| Complete the following: | | |
| COJO F101X | Media and Culture | 3 |
| COJO F202 | News Writing for the Media | 3 |
| COJO F204/ ART F284 | Basic Digital Photography | 3 |
| COJO F251 | Introduction to Video Production | 4 |
| COJO F310 | Reporting | 3 |
| COJO/WGS F380 | Women, Minorities and the Media | 3 |
| COJO F400 | Professional Internship | 1-3 |
| COJO F413 | Mass Media Law and Regulation | 3 |
| COJO F431 | Public Relations Campaigns | 3 |
| COJO F454 | Newscast | 3 |
| COJO F490 | Online Publication: "Extreme Alaska" ¹ | 3 |
| Complete one of the following: | | 3 |
| COJO F215 | Radio Production | |
| COJO F323 | Editing for Journalists | |
| COJO/FLPA F480 | Documentary Filmmaking | |
| Complete one course from the following list of approved journalism electives: | | 3 |
| COJO F215 | Radio Production | |
| COJO F220 | Professional Interviewing | |
| COJO F240 | Foreign Corresponding | |
| COJO F250 | Website Design | |
| COJO/FLPA F280 | Video Storytelling: Content Creation | |
| COJO F300X | Communicating Ethics | |
| COJO F311 | Magazine Article Writing | |
| COJO F323 | Editing for Journalists | |
| COJO F390 | Social Media Toolkit | |
| COJO F402/ ART F483 | Advanced Photography | |
| COJO F404 | Photojournalism | |
| COJO F405/ ART F465 | Advanced Photography Seminar | |
| COJO F407/ ART F487 | Digital Darkroom | |

| | | |
|---|--|----|
| COJO F411 | Writing for a Living | |
| COJO F444 | Investigative Reporting | |
| COJO F452 | Radio and Television News Writing | |
| COJO F453 | Television News Reporting | |
| COJO F454 | Newscast | |
| COJO F456 | Science Writing for the General Public | |
| COJO F480 | Documentary Filmmaking | |
| COJO/ART F484 | Multimedia Theory and Practice | |
| COJO F493 | Special Topics | |
| COJO F497 | Independent Study | |
| COJO F498 | Undergraduate Research | |
| Complete credits outside of journalism ² | | 80 |

¹ Fulfills the baccalaureate capstone requirement.

² To ensure the journalist a broad liberal arts education, 80 credits must be taken from outside of journalism-specific areas, 65 of which should be from any of these departments: ACNS, ALST, ANL, ANS, ANTH, ART, ATM, BIOL, CHEM, ECON, ENGL, ENVE, ESK, FISH, FL, FLPA, FREN, GEOG, GEOS, GER, HIST, HONR, HUM, JPN, JUST, LING, LS, MATH, MSL, MUS, NRM, PHIL, PHYS, PS, PSY, RUSS, SOC, SPAN, STAT and WGS.

Minor, Digital Journalism

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Digital Journalism Minor: 15 credits

| Code | Title | Credits |
|---|----------------------------|---------|
| Complete the following: | | |
| COJO F101X | Media and Culture | 3 |
| COJO F202 | News Writing for the Media | 3 |
| Approved electives from the Department of Communication and Journalism ¹ | | 9 |

¹ Any journalism course taken for the major serves as an approved elective for the minor. Other approved electives for the minor are the same as those listed for the major.

Early Childhood Education

Minor

The minor in early childhood education allows students to develop a foundation of knowledge and skills through coursework that includes an introduction to the early childhood profession and development of the child in their prenatal, infant and toddler years or in their preschool and primary years. Working with an early childhood program advisor, students will select the classes that are best for their interests.

This minor is a great choice for Bachelor of Arts degree students who need to satisfy their minor requirement, or for Associate of Arts students who want to explore early childhood education as an area of interest.

Minimum Requirements for Early Childhood Education Minor: 18 credits

Community and Technical College

Early Childhood Education (<https://www.ctc.uaf.edu/programs/early-childhood-education/>)

907-455-2800

Programs

Minor

- Minor, Early Childhood Education (p. 282)

Degree

- A.A.S., Early Childhood Education (p. 167)

Certificate

- Certificate, Early Childhood Education (p. 168)

Minor, Early Childhood Education

Students must earn a C- grade or better in each course.

Minimum Requirements for Early Childhood Education Minor: 18 credits

| Code | Title | Credits |
|------------------------------------|---|---------|
| Complete the following: | | |
| ECE F101 | Introduction to Early Childhood Profession | 3 |
| ECE F104X | Child Development I: Prenatal, Infants and Toddlers | 3 |
| or ECE F107X | Child Development II: The Preschool and Primary Years | |
| Select 12 ECE credits ¹ | | 12 |

¹ Including a minimum of 6 upper-division ECE credits and excluding special topics (ECE F-93) and current issue (ECE F249) courses.

Education

B.A. Degree and Postbaccalaureate Licensure

The University of Alaska Fairbanks complies fully with the institutional reporting requirements mandated in Title II of the Higher Education Act Amendments of 1998. Please contact the School of Education for a copy of the report.

The School of Education prepares students from across Alaska, as well as from other states and nations, to work in urban and rural Alaska and to work with multicultural and minority — especially Alaska Native — students. To fulfill our commitment to enhancing educational opportunities for the state's rural and Native populations, faculty actively and knowledgeably utilize educational technology to deliver all School of Education programs to students in most areas of the state.

The School of Education offers bachelor's degrees in elementary education and secondary education; and postbaccalaureate programs are offered in elementary education, secondary education, counseling and special education.

The School of Education is approved by the Alaska Department of Education and Early Development to recommend its students for Alaska licensure as elementary and secondary teachers, school counselors and special education teachers. Courses are available on-site and by distance delivery through the Kuskokwim, Bristol Bay, Interior Alaska, Chukchi and Northwest campuses, as well as on the Fairbanks campus. Faculty research in cross-cultural studies, curriculum and instruction, language and literacy, and small rural schools supports the mission of the School of Education.

Priority for enrollment in field-based courses is given to rural students formally admitted to degree and licensure programs. All inquiries should be addressed to one of the rural campuses or to the School of Education's Certification and Advising Office.

Candidates for all School of Education programs are required to have a laptop computer. Laptops may be of any type but must have capacities that enable candidates to meet School of Education requirements. If you have questions about how a laptop purchase will fit in with your current financial aid package, please contact the UAF Financial Aid Office.

LICENSURE INFORMATION

UAF education programs are approved by the Alaska State Board of Education and accredited by the National Council for the Accreditation of Teacher Education. For information about these programs, contact one of the UAF School of Education's academic advisors.

Certification is awarded by the Alaska Department of Education and Early Development in Juneau. Therefore, students must meet all requirements specified by EED at the time of their application for the teaching certificate. In addition to completing an approved teacher training program, the State of Alaska requires that all initial applicants provide evidence of passing scores on one of various state-identified skills tests; the UAF School of Education requires Praxis I or Praxis Core Academic Skills for Educators (ASE) for this purpose. For additional information, see the Alaska State Department of Education and Early Development website.

Minimum Requirements for Education Bachelor's Degree: 121-128 credits

Education Postbaccalaureate Secondary Licensure (Grades 7-12): 31 credits

Music Education: 33 credits (See the B.M. in Music Education (p. 355)).

Art K-12 Licensure: 34 credits

Learn more about the postbaccalaureate certificate in education (<https://uaf.edu/academics/programs/post-bachelor-certification/postbaccalaureate-certificate.php>), including an overview of the program, career opportunities and more.

School of Education (<https://www.uaf.edu/soe/>)
907-474-7341

Programs Degrees

- B.A. Degree, Elementary Education (K-8) (p. 285)
- B.A. Degree, Secondary Education (7-12) (p. 287)

Minors

- Minor, General Education (p. 283)
- Minor, Elementary Education (p. 289)
- Minor, Secondary Education (p. 290)
- Minor, Special Education (p. 284)

Licensures

- K-12 Art Licensure (p. 289)
- Secondary Postbaccalaureate Licensure Program (p. 290)

Certificate

- Local Knowledge Educator (p. 184)

Minor, General Education

Program Requirements

The general education minor is designed for any student interested in education issues who does not intend to pursue a license in elementary or secondary education.

Students must earn a C grade or better in each course.¹

Minimum Requirements for General Education Minor: 16 credits

| Code | Title | Credits |
|---|---|---------|
| Complete the following: | | |
| ED F110 | Becoming a Teacher in the 21st Century | 1 |
| ED F201 | Introduction to Education | 3 |
| ED/ANS F420 or ED F461 | Alaska Native Education Native Ways of Knowing | 3 |
| PSY F240 or ED/PSY F245 | Psychology of Development Child Development | 3 |
| Approved education electives ² | | 6 |

¹ Practicum may be required in each education course.

² Contact the School of Education's Certification and Advising Office for a list of approved elective courses.

Minor, Special Education

Minor

The minor in special education is designed for students pursuing teacher certification through the UAF B.A. in elementary education or the B.A. in secondary education. It leads to an additional teaching endorsement in K-12 special education. Students will progress through a series of developmentally sequenced field experiences with various age groups, types and levels of disability, and collaborative opportunities. Students are assessed relative to national and state standards, including the Council for Accreditation of Educator Preparation (CAEP) standards and the Council for Exceptional Children's (CEC) 2020 Initial Practice-Based Professional Preparation Standards for Special Educators.

Completion of the minor in special education meets the requirements for Alaska licensure as a special education teacher only if it is completed concurrently with a teacher certification program in elementary or secondary education. For special education teacher certification in the state of Alaska, a passing score on the Praxis II Special Education: Core Knowledge and Applications test (#5354) is required.

Minimum Requirements for Special Education Minor: 24 credits

School of Education (<https://www.uaf.edu/soe/>)
907-474-7341

Program Requirements

Minimum requirements for Minor in Special Education: 24 credits

| Code | Title | Credits |
|---|--|---------|
| Special Education Program Requirements | | |
| Complete the following: | | |
| EDSE F410 | Assessment of Students with Exceptionalities | 3 |
| EDSE F412 | Curriculum, Management and Strategies I: Low Incidence | 3 |
| EDSE F425 | Teaching Mathematics to Special Learners | 3 |
| EDSE F432 | Special Education Law: Principles and Practices | 3 |
| EDSE F477 | English Language Arts Assessment, Curriculum and Strategies for Special Learners | 3 |
| EDSE F478 | Special Education Clinical Practice: Initial ¹ | 3 |
| Elementary Education Students complete | | |
| EDSE F316 | Introduction to Special Education for Elementary Classroom Teachers | 3 |
| EDSE F320 | Adapting and Accommodating Instructions for Students with Disabilities | 3 |
| Secondary Education Students complete: | | |
| EDSE F422 | Curriculum, Management and Strategies II: High Incidence | 3 |
| Special Education elective | | 3 |

¹ Additional fee required. Charges are added to fee statements each semester.

B.A., Elementary Education (K-8)

B.A. Degree

Students in the Bachelor of Arts in elementary education degree program are assessed relative to national and state standards, including National Council for Accreditation of Teacher Education standards, the Alaska Teacher Standards, the Alaska Student Content and Performance Standards, and the Alaska Standards for Culturally Responsive Schools. Coursework provides students on the Fairbanks campus and in remote sites with the experience necessary to be eligible for an elementary teacher license. The integrated major/minor degree requirements are designed to prepare students to meet standards that recognize, respect and build upon Alaska's cultural, linguistic and geographic factors. Completion of the B.A. in education will meet the requirements for a major and minor.

The interdisciplinary degree requirements provide breadth in the content areas necessary for successful teaching at an elementary level. They provide depth in the opportunities to connect theory and practice in real classroom, school and community contexts. Students completing this degree benefit from collaborative efforts with academic departments across campus and from School of Education partnerships with a wide range of Alaska's rural and urban schools and districts.

The degree has four central components:

1. subject area coursework in the designated UAF general education requirements;
2. additional subject area coursework in those areas important for successful teaching at an elementary level;
3. an integrated set of education courses and fieldwork in schools and the community to provide the foundation for a successful professional internship year; and
4. a yearlong capstone school internship with a mentor teacher, with concurrent enrollment in professional coursework that focuses on the integration and application of theory, research and practice in real school environments. Students follow the calendar of the school or district in which they complete their internship. Candidates serving internships are charged a \$400 fee per semester.

Degree and program requirements include multiple types of ongoing assessments throughout the programs. There is a strong emphasis on performance assessment and portfolio development and evaluation relative to national and state standards.

Minimum Requirements for Education Bachelor's Degree: 121-128 credits

Learn more about the bachelor's degree in elementary education (K-8) (<https://uaf.edu/academics/programs/bachelors/elementary-education.php>), including an overview of the program, career opportunities and more.

School of Education (<https://www.uaf.edu/soe/>)
907-474-7341

Admission Requirements

B.A. in elementary education students should enroll in the School of Education's recommended sequence of core and major course requirements during their first two years. By following the sequence recommended in Transition One on the Criteria for Advancement through Bachelor of Arts in Elementary Education Degree (https://drive.google.com/file/d/1PS-WfnVqsm_6cjNqdRmZ8gpdNPiZTWUj/view/?usp=sharing), students will be knowledgeable about their status relative to their progress toward meeting the criteria for admission to the professional internship year. To make certain that students will be able to receive the support necessary to prepare for the internship year, all B.A. in elementary education students are required to submit Praxis I or Praxis ASE scores (passing scores are not required until applying to the internship year) to the School of Education prior to enrolling in EDSE F316, and Praxis II (test 5018) test scores must be submitted with the intern year admission packet. Prior to enrollment in professional-year courses and prior to receiving an internship placement in a classroom, all students must submit the materials listed below and meet admission requirements as described in Transition Two. **Declaring a B.A. major in elementary education does not guarantee admission to the professional internship year.**

view/?usp=sharing), students will be knowledgeable about their status relative to their progress toward meeting the criteria for admission to the professional internship year. To make certain that students will be able to receive the support necessary to prepare for the internship year, all B.A. in elementary education students are required to submit Praxis I or Praxis ASE scores (passing scores are not required until applying to the internship year) to the School of Education prior to enrolling in EDSE F316, and Praxis II (test 5018) test scores must be submitted with the intern year admission packet. Prior to enrollment in professional-year courses and prior to receiving an internship placement in a classroom, all students must submit the materials listed below and meet admission requirements as described in Transition Two. **Declaring a B.A. major in elementary education does not guarantee admission to the professional internship year.**

Internships begin in August or September on the date when teachers return to school (this varies across districts). Since internship placements are arranged with principals and mentor teachers in the spring, all materials necessary for determining admission to the School of Education must be submitted by Feb. 1. Faculty in the School of Education consider multiple criteria in making valid and reliable judgments about each applicant's knowledge, skills and professional characteristics prior to approval for the yearlong internship in a classroom with elementary school-age children.

Students must submit the following information to the School of Education by Feb. 1:

1. Copies of transcripts from all institutions attended. Evidence of plan of completion of all B.A. degree in elementary education degree courses by Aug. 1 (except for those required in the professional internship year), with a minimum of a 2.75 overall GPA, a 2.0 in each major academic area, and a C or better in all required courses. Students with less than a 2.75 overall GPA may be considered for conditional admission in special circumstances.
2. Alaska passing scores from the Praxis I or Praxis Core ASE exams in reading, writing and math, and Praxis II Elementary Content Knowledge exam (test 5018). In extenuating circumstances, applicants may be allowed to begin the internship year without yet having an Alaska qualifying Praxis II score. Students cannot complete program requirement without receiving an Alaska qualifying Praxis II score. See course description for ED F468.
3. Two letters of reference that address qualifications and potential as a teacher.
4. A current and complete resume/curriculum vitae.
5. Two one-page essays on topics determined by the School of Education.
6. Completed Elementary Teacher Education Academic Analysis and Life/Work Form to provide information on breadth and depth of prior course work and/or documented life experiences relative to ten Alaska Student Content Standard areas.
7. A one- to two-page autobiographical sketch (appropriate for presenting to prospective principals and mentor teachers).
8. Extemporaneous writing sample. Contact the School of Education advising office for date, time and location information.
9. Evidence of successful experiences in teaching and learning situations.
10. Evidence of ability to work collaboratively and respectfully in cross-cultural contexts.

11. Completed Alaska Student Teacher Authorization Packet, including fingerprint cards and criminal background check. Forms are available from the School of Education.
12. Complete an interview, when requested.

Note: Students are admitted for a specific academic year and must reapply if they do not enroll in the year in which they were reviewed.

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Elementary Education (K-8) B.A.: 121 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| ART/MUS/FLPA F200X | Explorations in Art | |
| or ANS/FLPA F161X | Introduction to Alaska Native Performance | |
| or ANS F202X | Aesthetic Appreciation of Alaska Native Performance | |
| or ANS/MUS/ACNS F223X | Alaska Native Music | |
| BIOL F100X | Human Biology | |
| or BIOL F103X | Biology and Society | |
| or BIOL F104X | Natural History of Alaska | |
| CHEM F100X | Chemistry in Complex Systems | |
| or CHEM F103X | Introduction to General Chemistry | |
| or PHYS F102X | Energy and Society | |
| or PHYS F115X | Physical Sciences | |
| ENGL F270X | Introduction to Creative Writing | |
| HIST F100X | Modern World History | |
| or HIST F102X | Western Civilization Since 1500 | |
| MATH F122X | Essential Precalculus with Applications | |
| or MATH F151X | College Algebra for Calculus | |
| H or SS Elective: Complete one of the following: ¹ | | |
| 3-5 credits of a language | | |
| ANL F255X | Introduction to Alaska Native Languages | |
| ANTH F100X | Individual, Society and Culture | |
| HIST F132X | History of the U.S. | |
| SOC F101X | Introduction to Sociology | |
| B.A. Degree and Elementary Education (K-8) Program Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Mathematics Requirements | | |
| MATH F211 | Mathematics for Elementary School Teachers | 3 |
| MATH F212 | Mathematics for Elementary School Teachers II | 3 |

Science Requirement

| | | |
|--------------------------------|---|---|
| Complete one of the following: | | 4 |
| ATM F101X | Weather and Climate of Alaska | |
| GEOS F101X | The Dynamic Earth | |
| GEOS F111X | Earth and Environment: Elements of Physical Geography | |
| GEOS F120X | Glaciers, Earthquakes and Volcanoes: Past, Present and Future | |
| MSL F111X | The Oceans | |

Social Sciences Requirements

| | | |
|-------------|--|---|
| ED/PSY F245 | Child Development | 3 |
| HIST F131 | History of the U.S. | 3 |
| PS F101X | Introduction to American Government and Politics | 3 |

| | | |
|--------------------------------|-------------------------------|---|
| Complete one of the following: | | 3 |
| ANS F242X | Indigenous Cultures of Alaska | |
| ANTH F242 | Native Cultures of Alaska | |
| HIST F115 | Alaska, Land and Its People | |
| HIST F461 | History of Alaska | |

Humanities Requirements

| | | |
|---------------|----------------------------------|---|
| ED/LING F100 | Language, Education, Linguistics | 3 |
| or LING F101X | Nature of Language | |

Education Requirements

| | | |
|-----------|--|---|
| ED F439 | Supporting Multilingual Learners in the Elementary Classroom | 3 |
| ED F110 | Becoming a Teacher in the 21st Century | 1 |
| ED F201 | Introduction to Education | 3 |
| ED F206 | Core Practices in Place and Arts-Based Teaching | 3 |
| ED F329 | Teaching with Technology | 3 |
| ED F330 | Assessment of Learning | 3 |
| ED F344 | Foundations of Literacy Development | 3 |
| EDSE F316 | Introduction to Special Education for Elementary Classroom Teachers | 3 |
| EDSE F320 | Adapting and Accommodating Instructions for Students with Disabilities | 3 |

| | | |
|--------------------------------|-------------------------|---|
| Complete one of the following: | | 3 |
| ED/ANS F420 | Alaska Native Education | |
| ED/ANS F461 | Native Ways of Knowing | |

Professional Internship Year with Integrated Coursework

First Semester

| | | |
|---------|---|---|
| ED F411 | Reading, Writing, Language Arts: Methods and Curriculum Development | 3 |
| ED F412 | Integrated Social Studies and Language Arts: Methods and Curriculum Development | 3 |
| ED F414 | Art, Music and Drama in Elementary Classrooms | 3 |
| ED F466 | Internship and Collaborative Student Teaching ² | 3 |
| ED F467 | Classroom Management Communication and Collaboration I | 2 |

| | | |
|------------------------|--|---|
| ED F478 | Mathematics Methods and Curriculum Development | 3 |
| <i>Second Semester</i> | | |
| ED F417 | Physical Activity and Health Education for Elementary Teachers | 3 |
| ED F468 | Internship and Student Teaching ² | 4 |
| ED F469 | Classroom Management Communication and Collaboration II | 2 |
| ED F476 | Assessment of Literacy Development | 1 |
| ED F479 | Science Methods and Curriculum Development | 3 |

¹ Students should consult UAF SOE advisor.

² Fulfills the baccalaureate capstone requirement.

B.A., Secondary Education (7-12)

B.A. Degree

The requirements for a secondary school teaching certificate include completion of both a major in an academic subject area appropriate to teaching in the secondary school and the professional education sequence. The degree is awarded as a B.A. with a double major. Upon declaration of a major in secondary education, students are assigned an advisor in the Education Department to plan the completion of the teaching major and the education sequence of courses.

The teaching major must be in an academic subject area approved for a State of Alaska secondary school teaching certificate and available as a B.A. degree: art, biology, English, French, German, history, mathematics, political science or Spanish.

Learn more about the bachelor's degree in secondary education (<https://uaf.edu/academics/programs/bachelors/secondary-education.php>), including an overview of the program, career opportunities and more.

Admission Requirements

Submit your undergraduate application electronically (<https://uaf.edu/admissions/apply/>) to the UAF Office of Admissions. A professional student teaching internship application has to be turned in to the secondary program before student teaching (last year before graduation).

Professional Student Teaching Internship:

In the last year before graduation, student teaching internships begin in August or January on the date when teachers return to school (this varies across districts). Since internship placements are arranged with principals and mentor teachers in the spring, all materials necessary for determining admission to the internship should be submitted by March 1.

Faculty in the School of Education consider multiple criteria in making valid and reliable judgments about each applicant's knowledge, skills, and professional characteristics prior to approval for the yearlong internship in a classroom with secondary children. A criminal background check is necessary to work in schools. Declaring a B.A. major in secondary education does not guarantee admission to the professional internship year.

Students must submit the following information before the student teaching internship year to the School of Education by March 1:

1. Copies of transcripts from all institutions attended. Evidence of plan of completion of all B.A. degree in secondary education degree courses and completion of the majority of the content major requirements by Aug. 1 (except for those required in the professional internship year), with a minimum of a 2.75 overall GPA.
2. Three current letters of reference that address qualifications and potential as a teacher.
3. A personal statement of 500 words addressing motivation to enter the teaching profession, self-assessed qualifications to teach, and experiences which have prepared the candidate for teaching.
4. Passing scores on an Alaska Department of Education and Early Development (<http://education.alaska.gov/TeacherCertification/praxis.html>)-approved basic competency exam (BCE)
5. Passing scores on the Praxis II test for each content area the applicant expects to teach. The scores must meet the score set by the State of Alaska (<https://education.alaska.gov/>)

Teacher Certification/). World language applicants may need an oral proficiency test as required by EED.

Other Information:

Secondary faculty as part of the admission process will interview applicants.

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Secondary Education (7-12) Degree: 121 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree and Major Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Secondary Education (7-12) Requirements | | |
| EDSC F110 | Becoming a Middle/High School Teacher | 1 |
| EDSC F205 or EDSC F415 | Introduction to Secondary Education Foundations of Modern Educational Practice | 3 |
| EDSC F407 | Developing Literacy in the Content Areas | 3 |
| EDSC F458 | Classroom Organization and Management | 3 |
| Complete one of the following: | | 3 |
| EDSE F316 | Introduction to Special Education for Elementary Classroom Teachers | |
| EDSE F422 | Curriculum, Management and Strategies II: High Incidence | |
| EDSE F482 | Inclusive Classrooms for All Children | |
| Professional Internship Year with Integrated Coursework | | |
| Complete one of the following: ¹ | | 3 |
| EDSC F432 | English/Language Arts Secondary Instruction and Assessment | |
| EDSC F433 | Mathematics Secondary Instruction and Assessment | |
| EDSC F434 | Science Secondary Instruction and Assessment | |
| EDSC F435 | Social Studies Secondary Instruction and Assessment | |
| EDSC F436 | Art Secondary Instruction and Assessment | |
| EDSC F437 | World Language Secondary Instruction and Assessment | |
| Complete the following: | | |
| EDSC F442 | Technology Applications in Education I | 1 |
| EDSC F443 | Technology Application in Education II | 2 |
| EDSC F457 | Multicultural Education and School-community Relations | 3 |

| | | |
|-----------|---|-----|
| EDSC F471 | Secondary Teaching: School Internship I and Seminar ² | 3 |
| EDSC F472 | Secondary Teaching: School Internship II and Seminar ² | 6-9 |

Content Area

Complete requirements for a major in content area: art, biology, chemistry, Earth science, English, foreign language (French, German or Spanish), history, mathematics or political science.

Capstone Requirement

Complete baccalaureate capstone requirement as determined by the program.

¹ Candidates must take the section or course that corresponds with their major teaching content area.

² Fulfills the baccalaureate capstone requirement.

K-12 Art Licensure Program

Offered only in Fairbanks and Anchorage, this is an intensive, classroom-based K-12 art licensure program (34 credits) that prepares postbaccalaureate candidates for K-12 teaching positions. The program is specifically designed to prepare candidates to teach in multicultural settings in Alaska. The content will specifically identify and discuss current issues of art education and applying Alaska Content/Performance Standards and Frameworks as well as National Standards for Art Education.

At the end of the program, if students have successfully met all of the program requirements, they will be eligible to apply for an Alaska initial teaching license and will receive certificates of completion from UAF.

Candidates who enter the K-12 art licensure program are required to have use of/own a laptop computer before they begin their internship in the fall semester of their professional year.

Admission Requirements

Admission Process and Requirements

Applicants will follow the admission process and requirements listed in the catalog for the secondary postbaccalaureate licensure program (p. 290), with the exception that applicants must have a bachelor's degree in art from an accredited university or college.

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for K-12 Art Licensure: 33 credits

| Code | Title | Credits |
|-------------------------|---|---------|
| Complete the following: | | |
| ED F245 | Child Development | 3 |
| ED F449 | Elementary Art Methods | 3 |
| ED F452/ART F458 | Elementary Internship | 3 |
| EDSC F415 | Foundations of Modern Educational Practice | 3 |
| or EDSC F205 | Introduction to Secondary Education | |
| EDSE F422 | Curriculum, Management and Strategies II: High Incidence | 3 |
| or EDSE F482 | Inclusive Classrooms for All Children | |
| or EDSE F316 | Introduction to Special Education for Elementary Classroom Teachers | |
| EDSC F436 | Art Secondary Instruction and Assessment | 3 |
| EDSC F442 | Technology Applications in Education I | 1 |
| EDSC F443 | Technology Application in Education II | 2 |
| EDSC F457 | Multicultural Education and School-community Relations | 3 |
| EDSC F458 | Classroom Organization and Management | 3 |
| EDSC F472 | Secondary Teaching: School Internship II and Seminar | 6-9 |

Minor, Elementary Education

Program Requirements

The elementary education minor is designed for students who intend to pursue a license in elementary education. Students who complete ED F110, ED F201, ED F330, ED F344 and EDSE F316 with grades of C or better will be allowed to substitute this sequence for ED F624, ED F625 and ED F626 in the postbaccalaureate elementary (K-8) licensure program at UAF.

Students must earn a C- or better in each course.

Minimum Requirements for Elementary Education Minor: 19 credits

| Code | Title | Credits |
|-------------------------|---|---------|
| Complete the following: | | |
| ED F110 | Becoming a Teacher in the 21st Century | 1 |
| ED F201 | Introduction to Education | 3 |
| ED F206 | Core Practices in Place and Arts-Based Teaching | 3 |
| ED F330 | Assessment of Learning | 3 |
| ED F344 | Foundations of Literacy Development | 3 |
| ED F420 | Alaska Native Education | 3 |
| or ED F461 | Native Ways of Knowing | |
| EDSE F316 | Introduction to Special Education for Elementary Classroom Teachers | 3 |

Note: Practicum may be required in each education course.

Minor, Secondary Education

Program Requirements

The secondary education minor is designed for students who are interested in pursuing careers as middle school and/or high school (grades 7-12) teachers.

Students must earn a C grade or better in each course.

Minimum Requirements for Secondary Education Minor: 16 credits

| Code | Title | Credits |
|--------------------------------|---|---------|
| Complete the following: | | |
| EDSC F110 | Becoming a Middle/High School Teacher | 1 |
| EDSC F205 or EDSC F415 | Introduction to Secondary Education Foundations of Modern Educational Practice | 3 |
| EDSC F407 | Developing Literacy in the Content Areas | 3 |
| EDSC F458 | Classroom Organization and Management | 3 |
| PSY F240 or ED/PSY F245 | Psychology of Development Child Development | 3 |
| Complete one of the following: | | 3 |
| EDSE F316 | Introduction to Special Education for Elementary Classroom Teachers | |
| EDSC F414 | Learning, Development and Special Needs Instruction | |
| EDSE F422 | Curriculum, Management and Strategies II: High Incidence | |
| EDSE F482 | Inclusive Classrooms for All Children | |

Note: Practicum may be required in each education course.

Secondary Postbaccalaureate Licensure Program

This program is offered across the state of Alaska.

This is an intensive, classroom-based secondary licensure program (31 credits) that prepares postbaccalaureate candidates for secondary (grades 7-12) teaching positions. The program is specifically designed to prepare candidates to teach in multicultural settings in Alaska. Contained specifically in EDSC F457 is content that addresses multicultural issues in general and Alaska rural issues in particular, and is a fundamental component of the course work within the program. When funding is available, all secondary Fairbanks candidates participate in a rural practicum.

Student outcomes for the program are aligned with the InTASC Model Core Teaching Standards (<https://ccsso.org/resource-library/intasc-model-core-teaching-standards-and-learning-progressions-teachers-10/>).

Students must apply to graduate with a certificate of completion through the Office of the Registrar's Graduation Services. At the end of the program, if students have successfully met all of the program requirements, they will be eligible to apply for an Alaska initial teaching license.

Candidates who enter the secondary postbaccalaureate licensure program are required to have use of/own a laptop computer before they begin their internships in the fall semester of their professional year.

Program Options

FAST-TRACK OPTION

The fast-track option is an intensive three-semester program that allows candidates (one-year unpaid interns) to complete the secondary licensure program as full-time students in 12 months. Candidates take classes "summer-fall-spring." The academic year-long internship is completed during the fall and spring semesters.

TWO-YEAR OPTION

The two-year option allows candidates (two-year unpaid interns) to complete the secondary postbaccalaureate licensure program as part-time students over a period of 18-24 months. The last semester of the program requires full-time placement at a public school site.

TEACHING-WHILE-TRAINING OPTION

The teaching-while-training option is for candidates (teacher interns) who have secured a teaching position with an Alaska school district. Generally, this option is available only to those candidates in areas of teacher shortage. Candidates complete the secondary postbaccalaureate licensure program over a period of 24 months.

Upon Acceptance to the Program

The School of Education has a systematic procedure for monitoring the progress of education students from admission through completion of their professional education program to determine if they should continue the program, be advanced to the secondary teaching internship and eventually be recommended for a teaching license. In assessing candidate progress in knowledge, skills and disposition, faculty will review grades, observations, faculty recommendations, demonstrated academic competence and recommendations from the appropriate professionals in the schools. Systematic approaches are used to assist

education candidates who are making unsatisfactory progress in their programs, but still maintain potential for successful completion.

The following are specific criteria for entry to the secondary teaching internship:

- successful completion of summer program courses;
- approval of faculty to enter the secondary education internship;
- some school districts may require candidates to pass a general physical exam and require additional shot records;
- some school districts require completion of district substitute training which may include a fee, a fingerprint card and AST background check; and
- State of Alaska certificate of student teaching authorization, fingerprint cards and money order submitted in accordance with the directions from Alaska Department of Education & Early Development by June 1 (the fee is non-refundable once submitted to the State of Alaska).

PROFESSIONAL FIELD EXPERIENCES

The secondary postbaccalaureate licensure program includes a comprehensive internship experience in an educational setting. Internship placements are arranged and supervised by university faculty in partnership with the principal and staff from the public school. University course work and classroom practice are closely linked and communication about performance in both the course work and classroom practice is shared among the partners. Internships follow the K-12 school year calendar and not the university academic year calendar.

Performance in the internship must meet stated competencies and individual outcomes. Performance evaluations determine the candidate's progress toward meeting the InTASC Model Core Teaching Standards (<https://ccsso.org/resource-library/intasc-model-core-teaching-standards-and-learning-progressions-teachers-10/>) and the International Society for Technology in Education's Standards for Educators (<https://www.iste.org/standards/for-educators/>) for All Teachers and performance guidelines of Specialty Performance Organizations.

It is expected that candidates will demonstrate appropriate professional characteristics with respect to their actions, attitudes and performance. Teacher candidates are required to adhere to the characteristics of professionalism as published in the Secondary Postbaccalaureate Licensure Handbook and to abide by the State of Alaska Code of Ethics of the Education Profession. Unacceptable academic performance, an unprofessional attitude, unsatisfactory field reports, violation of professional ethics or other factors may result in removal from the field experience and denial of the Institutional Recommendation for teacher certification.

Internship placements are made in partnership with participating school districts, which may request additional information and/or preparation from candidates according to the district's established policies and practices. Because cooperating districts also determine the number of placements available for candidates, placement may become competitive if the number of applicants exceeds the number of spaces. Districts also reserve the right to refuse or terminate placements when candidates do not meet a minimum standard of performance. Thus, while the university will make every effort to identify appropriate field experiences,

admission to the secondary postbaccalaureate licensure program does not guarantee an internship placement.

School of Education (<https://www.uaf.edu/soe/>)
907-474-7341

Admission Requirements

Admission Process and Requirements

Admission to the secondary postbaccalaureate licensure program includes meeting requirements of the UAF undergraduate admission process and of the School of Education.

Submit the following information electronically (<https://uaf.edu/admissions/apply/>) to the UAF Office of Admissions:

1. UAF undergraduate application and application fee.
2. Official transcript of bachelor's degree from an accredited institution, minimum GPA of 2.75. Applicants who have attended more than one university should include transcripts from all universities.
3. A personal statement of 500-800 words explaining your motivation for becoming a teacher. Describe how your academic qualifications and work experiences have prepared you for a career in teaching. Elaborate on your personal strengths, including your ability to work collaboratively with others. Describe your experiences with adolescents in instructional and supervisory capacities. Explain why you believe you can help young people of all cultures be successful in school.
4. A vitae/resume.
5. Three current letters of reference that address qualifications and potential as a teacher.

Submit the following information to the School of Education:

1. Passing scores on an Alaska Department of Education and Early Development approved basic competency exam (<http://education.alaska.gov/TeacherCertification/praxis.html>). SAT/ACT scores may fulfill the requirement.
2. Passing scores on the Praxis II test for each content area the applicant expects to teach. The scores must meet the score set by the State of Alaska (<https://education.alaska.gov/TeacherCertification/>). World language applicants may need an oral proficiency test as required by EED.

Additional Information:

Secondary faculty will interview applicants as part of the admission process.

Evidence of content competency in one of the UAF-approved secondary endorsement areas is necessary. Endorsement areas for teacher certification include art, biology, chemistry, Earth science, economics, English, French, German, history, mathematics, physics, political science and Spanish.

- a) Holding a degree in an approved secondary endorsement area; or
- b) Documenting content competency (e.g., transcript analysis by faculty). Additional coursework may be required.

Before student teaching, teacher candidates will need to complete the Alaska Department of Education and Early Development student

teaching authorization. Fingerprint cards and criminal background check necessary to work in schools.

APPLICATION REVIEW PROCESS

Applications for admission are due March 1 (summer or fall admission) and Oct. 15 (spring admission). Reviews for admission will be ongoing thereafter.

The secondary postbaccalaureate program is a selective teacher education program. Multiple measures are used to assess personal characteristics, communication skills and qualifications of the candidates preparing to teach.

UPON ACCEPTANCE TO THE PROGRAM

The School of Education has a systematic procedure for monitoring the progress of education students from admission through completion of their professional education program to determine if they should continue the program, be advanced to the secondary teaching internship and eventually be recommended for a teaching license. In assessing candidate progress in knowledge, skills and disposition, faculty will review grades, observations, faculty recommendations, demonstrated academic competence and recommendations from the appropriate professionals in the schools.

Program Requirements

Minimum Requirements for Secondary Postbaccalaureate Licensure: 30 credits

| Code | Title | Credits |
|---|---|---------|
| EDSC F407 | Developing Literacy in the Content Areas | 3 |
| EDSC F415 | Foundations of Modern Educational Practice | 3 |
| or EDSC F205 | Introduction to Secondary Education | |
| EDSC F442 | Technology Applications in Education I | 1 |
| EDSC F443 | Technology Application in Education II | 2 |
| EDSC F457 | Multicultural Education and School-community Relations | 3 |
| EDSC F458 | Classroom Organization and Management | 3 |
| EDSC F471 | Secondary Teaching: School Internship I and Seminar | 3 |
| EDSC F472 | Secondary Teaching: School Internship II and Seminar | 6-9 |
| Complete one from the following: | | 3 |
| EDSE F316 | Introduction to Special Education for Elementary Classroom Teachers | |
| EDSE F422 | Curriculum, Management and Strategies II: High Incidence | |
| EDSE F482 | Inclusive Classrooms for All Children | |
| Complete one from the following: ¹ | | 3 |
| EDSC F432 | English/Language Arts Secondary Instruction and Assessment | |
| EDSC F433 | Mathematics Secondary Instruction and Assessment | |
| EDSC F434 | Science Secondary Instruction and Assessment | |

EDSC F435 Social Studies Secondary Instruction and Assessment

EDSC F436 Art Secondary Instruction and Assessment

EDSC F437 World Language Secondary Instruction and Assessment

¹ Candidates must take the section or course that corresponds with their major teaching content areas.

Electrical Engineering

B.S. Degree

The mission of the UAF Electrical and Computer Engineering Department is to offer the highest-quality contemporary education at the undergraduate and graduate levels and to perform research appropriate to the technical needs of the state of Alaska, the nation and the world.

Electrical and computing engineering encompasses telecommunications, electrical power generation, transmission and distribution, control systems, and computer applications and design. Electrical engineers can typically expect gainful employment in one or more of these areas after graduation.

Communication engineers design, build and operate communication devices and systems, including satellites, antennas, wireless devices and computer networks. Electric power engineers design and oversee the construction, installation and maintenance of electrical systems that provide light, heat and power. Power engineers are also instrumental in the development of systems using modern power electronic devices to control power generation and distribution and build electric drives. People trained in computer engineering automate businesses, factories, pipelines and refineries. They design control systems and computers that guide trains, planes and space vehicles. Electrical engineers design the integrated circuits and automatic control systems used in many areas of science and engineering. Process controls in the mining and petroleum industries are also largely the responsibility of the electrical and computer engineer.

Undergraduate research and design project opportunities are available at UAF in the areas of communications, radar, sonar and lidar remote sensing, instrumentation and microwave circuit design, electric power and energy systems, digital and computer engineering and nanotechnology. The Student Rocket Project brings electrical and computer engineering and mechanical engineering students together to build and launch rockets at the Poker Flat Research Range, the only university-affiliated rocket range in the country. This program offers real engineering experience as well as fellowships, paid internships and scholarships.

The curriculum is designed to ensure that fundamentals and specialized skills are acquired by the student. The program prepares engineers to enter practice upon graduation and provides the theoretical background for students entering graduate studies. Candidates for the B.S. degree are required to take the State of Alaska Fundamentals of Engineering Examination in their general field.

The faculty of the Electrical and Computer Engineering Department provide a positive learning environment that enables students to pursue their goals in an innovative program that is rigorous and challenging, open and supportive. The BSEE program develops practical skills by emphasizing hands-on experience in the design, implementation, and validation of electrical systems in an environment that fosters and encourages innovation and creativity. This approach builds the foundation for the following program educational objectives.

1. Breadth: Graduates will utilize their broad education emphasizing electrical engineering to serve as the foundation for productive careers in the public or private sectors, graduate education, and lifelong learning.
2. Depth: Graduates will apply their understanding of the fundamental knowledge prerequisite for the practice of and/or advanced study

in electrical engineering, including its scientific principles, rigorous analysis, and creative design. The BSEE program offers depth concentration areas in communications, computer engineering, and power and control.

3. Professional skills: Graduates will apply skills for clear communication, responsible teamwork, professional attitudes and ethics needed to succeed in the complex modern work environment.

These objectives serve the department, college and university missions by ensuring that all graduates of the BSEE program have received a high-quality, contemporary education that prepares them for rewarding careers in electrical engineering.

Minimum Requirements for Electrical Engineering Bachelor's Degree: 125 credits

Learn more about the bachelor's degree in electrical engineering (<https://uaf.edu/academics/programs/bachelors/electrical-engineering.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines

Department of Electrical and Computer Engineering (<https://cem.uaf.edu/ece/>)

907-474-7137

Programs

Degree

- B.S., Electrical Engineering (p. 294)

B.S., Electrical Engineering

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Electrical Engineering B.S.: 125 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X and CHEM F106X or PHYS F213X | General Chemistry I and General Chemistry II Elementary Modern Physics | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| Electrical Engineering Program Requirements | | |
| Complete the following: | | |
| EE F102 | Introduction to Electrical and Computer Engineering | 3 |
| EE F203 | Electric Circuits | 4 |
| EE F243 | Digital Systems Design | 4 |
| EE F253 | Circuit Theory | 3 |
| EE F301 | Analytical Methods for Electrical and Computer Engineers | 3 |
| EE F303 | Electric Power Systems and Machines | 4 |
| EE F311 | Engineering Electromagnetics I | 3 |
| EE F331 | High-frequency Lab | 1 |
| EE F333 | Electronic Devices | 4 |
| EE F354 | Engineering Signal Analysis | 3 |
| EE F444 | Embedded Systems Design | 4 |
| EE F451 | Digital Signal Processing | 4 |
| EE F461 | Communication Systems and Networks | 4 |
| EE F471 | Automatic Control | 3 |
| EE F481 | Electrical and Computer Engineering Design I ¹ | 1 |
| EE F482 | Electrical and Computer Engineering Design II ¹ | 3 |
| ES F100X | Engineering Alaska - An Introduction to Engineering | 3 |
| ES F100L | Makerspace Alaska - A Laboratory Introduction to Engineering | 1 |
| ES F201 | Computer Techniques | 3 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| Electives | | |

Complete three approved upper division EE elective courses. 9-12

Graduate level EE and upper level and graduate CS courses may be used as electives upon approval.

Recommended Electives:

| | |
|---------|---|
| EE F334 | Electronic Circuit Design |
| EE F404 | Electric Power Systems Analysis |
| EE F406 | Electric Power Protection and Control Systems |
| EE F408 | Power Electronics Design |
| EE F412 | Engineering Electromagnetics II |
| EE F443 | Computer Engineering Analysis and Design |
| EE F464 | Advanced Communications Systems |

Fundamentals of Engineering (FE) Examination

Complete the Fundamentals of Engineering (FE) examination administered by the State of Alaska

Note: Students must plan their elective courses in consultation with their electrical engineering faculty advisor, and all elective courses must be approved by their electrical engineering faculty advisor.

¹ Fulfills the baccalaureate capstone requirement.

English

B.A. Degree

The B.A. in English at UAF provides training in rhetorical dexterity, critical acumen and creative ingenuity — habits of mind that develop alongside intellectual inquiries concerning the production and reception of literary and nonliterary texts. As effective creators and thoughtful consumers of print and digital information, students learn how to identify critical methods, analyze language in varying historical, cultural and institutional contexts, and employ research in writing and speaking for a professional audience in the humanities.

The department has a particular strength in creative writing; students will have the opportunity to attend lectures and workshops with respected visiting writers and scholars as well as resident faculty. Mindful of how language shapes problems, communities and environments, students are prepared for a variety of graduate programs and careers in diverse fields such as education, law and business.

Minimum Requirements for English Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in English (<https://uaf.edu/academics/programs/bachelors/english.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Department of English (<https://www.uaf.edu/english/>)
907-474-7193

Programs Degree

- B.A., English (p. 295)

Minor

- Minor, English (p. 298)
- Minor, Creative Writing (p. 297)
- Minor, Ancient, Medieval and Early Modern Studies (p. 296)

B.A., English

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for English B.A.: 120 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| English Program Requirements | | |
| Complete the following: | | |
| ENGL F310 | Literary Criticism | 3 |
| ENGL F400 | Capstone Portfolio | 0 |
| Complete three of the following: | | 9 |
| ENGL F301 | Literature of the Ancient World | |
| ENGL F302 | Medieval and Early Modern European Literature | |
| ENGL F306 | Survey of American Literature: Beginnings to the Civil War | |
| ENGL F307 | Survey of American Literature: Civil War to the Present | |
| ENGL F308 | Survey of British Literature: Beowulf to the Romantic Period | |
| ENGL F309 | Survey of British Literature: Romantic Period to the Present | |
| Complete one of the following: | | 3 |
| ENGL F422 | Shakespeare: History Plays and Tragedies | |
| ENGL F425 | Shakespeare: Comedies and Nondramatic Poetry | |
| Complete one of the following: | | 3 |
| ENGL F317 | Traditional English Grammar | |
| ENGL F318 | Modern English Grammar | |
| ENGL F462 | Applied English Linguistics | |
| ENGL F472 | History of the English Language | |
| Complete one of the following: | | 3 |
| ENGL F333 | Women's Literature | |
| ENGL F340 | Contemporary Indigenous Literature in North America | |
| ENGL F341 | Contemporary Alaska Native Literature | |
| ENGL F347 | Voices of Native American Peoples | |
| ENGL F349 | Narrative Art of Alaska Native Peoples (in English translation) | |
| ENGL F360 | Multiethnic American Literature | |
| ENGL F380 | Topics in Colonial and Postcolonial Literature | |
| ENGL F433 | Women, Gender, and Sexuality Studies in Language, Literature, and Culture | |

| | | |
|--|---|---|
| ENGL F449 | Northern and Environmental Literature | |
| Complete one of the following: | | 3 |
| ENGL F410 | Studies in American Literature to 1900 | |
| ENGL F415 | Studies in 17th- and 18th-Century British Literature | |
| ENGL F420 | Studies in Medieval and 16th-Century British Literature | |
| ENGL F440 | Studies in 20th- and 21st-Century British Literature | |
| ENGL F450 | Studies in 19th-Century British Literature | |
| ENGL F455 | Studies in 20th- and 21st-Century American Literature | |
| ENGL F460 | Studies in Comparative/World Literature | |
| Complete one of the following: | | 3 |
| ENGL F427 | Topics in Film Studies | |
| ENGL F435 | Authors | |
| ENGL F465 | Genre | |
| ENGL F482 | Topics in Language and Literature | |
| ENGL F485 | Teaching Composition in the Schools | |
| Three ENGL F300- and F400-level courses (at least one at the F400 level) | | 9 |

Minor, Ancient, Medieval and Early Modern Studies

Minor

The minor in ancient, medieval and early modern studies will provide students with a background in the Western tradition in disciplines that emphasizes key artistic, literary, philosophical, political, religious and social movements in these time periods. Students will have a better understanding of the workings and struggles, advancements and achievements, and conflicts and prejudices of these civilizations and cultures. The curriculum requires that students take classes in at least three fields of study and thereby ensures that students will engage in a well-rounded examination of these time periods.

Minimum Requirements for Ancient, Medieval and Early Modern Studies Minor: 18 credits

College of Liberal Arts
Department of English (<https://www.uaf.edu/english/>)
907-474-7193

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Ancient, Medieval and Early Modern Studies Minor: 18 credits

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| HUM F201X | Unity in the Arts | 3 |
| Complete five from the following: | | 15 |
| Only two electives from the list can be from any one discipline. | | |
| ART F261X | History of World Art I | |
| ART F364 | Italian Renaissance Art ¹ | |
| ENGL F301 | Literature of the Ancient World ¹ | |
| ENGL F302 | Medieval and Early Modern European Literature ¹ | |
| ENGL F308 | Survey of British Literature: Beowulf to the Romantic Period | |
| ENGL F415 | Studies in 17th- and 18th-Century British Literature ² | |
| ENGL F420 | Studies in Medieval and 16th-Century British Literature ² | |
| ENGL F422 | Shakespeare: History Plays and Tragedies | |
| ENGL F425 | Shakespeare: Comedies and Nondramatic Poetry | |
| HIST F101 | Western Civilization Before 1500 | |
| HIST F401 | Renaissance and Reformation Europe ¹ | |
| HIST F402 | Seventeenth- and Eighteenth-century Europe ¹ | |
| LAT F101X | Beginning Latin I | |
| LAT F102X | Beginning Latin II | |
| MUS F221 | History of Western Music I ¹ | |

| | |
|--------------|--|
| MUS F421 | Music Before 1620 |
| MUS F422 | Music in the 17th and 18th Centuries ¹ |
| PHIL F351 | History of Ancient Greek Philosophy |
| PHIL F352 | History of Modern Philosophy: Descartes to Kant |
| PHIL/PS F411 | Classical Political Theory ¹ |
| PHIL/PS F412 | Modern Political Theory |

¹ Course offered every two years.

² Course offered every three years.

Minor, Creative Writing

Students must earn a C- grade or better in each course.

Minimum Requirements for Creative Writing Minor: 15 credits

| Code | Title | Credits |
|----------------------------------|--|---------|
| Complete the following: | | |
| ENGL F270X | Introduction to Creative Writing | 3 |
| Complete two from the following: | | 6 |
| ENGL F375 | Intermediate Creative Writing: Fiction | |
| ENGL F376 | Intermediate Creative Writing: Poetry | |
| ENGL F377 | Intermediate Creative Writing: Nonfiction | |
| Complete two from the following: | | 6 |
| ENGL F470 | Topics in Creative Writing | |
| ENGL F471 | Undergraduate Writers' Workshop | |
| ENGL F488 | Dramatic Writing | |

Minor, English

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for English Minor: 18 credits

| Code | Title | Credits |
|-------------------------|--------------------------------------|---------|
| Complete the following: | | |
| ENGL | electives at the F300 level or above | 9 |
| ENGL | electives at the F400 level | 9 |

Environmental Politics

Minor Only

Students in the minor program in environmental politics explore the local, national and international contexts within which key decisions about the environment are made. Courses examine philosophical and theoretical perspectives on the environment; ways in which different countries address issues of resource development and environmental regulations; international environmental laws, treaties, and institutions; relationships between environmental protection and national security; relationships between politics and environmental science; and the effects of environmental concerns on the international political economy.

The minor may be used in conjunction with any B.A. degree program, including political science, or as an optional addition to any B.S. degree program. For further information, contact the Department of Political Science.

College of Liberal Arts
Department of Political Science (<https://www.uaf.edu/polisci/>)
907-474-7609

Programs Minor

- Minor, Environmental Politics (p. 299)

Minor, Environmental Politics

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Environmental Politics Minor: 15 credits

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| PS F101X | Introduction to American Government and Politics | 3 |
| Complete 12 elective political science credits from the following: | | 12 |
| PS F447 | U.S. Environmental Politics | |
| PS F454 | International Law and the Environment | |
| PS F455 | Political Economy of the Global Environment | |
| PS F456 | Science, Technology and Politics | |
| PS F458 | Comparative Environmental Politics | |

Eskimo

B.A. Degree

Eskimo languages are spoken by far northern people from the northeastern tip of Siberia, across Alaska and Canada, to East Greenland. The Eskimo languages include the four Yupik languages of Alaska and Siberia as well as Inuit, the Alaska sector of which is called Inupiaq. In terms of population and numbers of speakers, Central Alaska Yup'ik is by far the largest Alaska Native language; Inupiaq is the second largest. Eskimo languages are the linguistic heritage of more than half of Alaska's Native population.

Students who obtain a B.A. in Central Yup'ik or Inupiaq Eskimo may be employed as Native language instructors or language specialists for school districts or Native organizations. No other university in the United States offers a B.A. in Eskimo.

Students in linguistics or anthropology may want to complete a minor in Eskimo to add a distinctly Alaska emphasis to their education.

Minimum Requirements for Inupiaq and Yup'ik Eskimo Bachelor's Degrees: 120 credits

College of Rural and Community Development
Alaska Native Languages Program (<https://www.uaf.edu/anlc/>)
907-474-7874

Programs Degrees

- B.A., Inupiaq Eskimo (p. 300)
- B.A., Yup'ik Eskimo (p. 300)

Minor

- Minor, Eskimo (p. 301)

B.A., Inupiaq Eskimo

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Inupiaq Eskimo B.A.: 120 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Inupiaq Eskimo Program Requirements | | |
| Complete the following: | | |
| ANL F315 | Alaska Native Languages: Eskimo-Aleut | 3 |
| INU F111X | Elementary Inupiaq I | 5 |
| INU F112X | Elementary Inupiaq II | 5 |
| INU F211 | Intermediate Inupiaq I | 3 |
| INU F212 | Intermediate Inupiaq II | 3 |
| INU F417 | Advanced Inupiaq | 3 |
| LING F101X | Nature of Language | 3 |
| Complete three of the following: | | 9 |
| ANL F287 | Teaching Methods for Alaska Native Languages | |
| ANL F316 | Alaska Native Languages: Indian Languages | |
| ANS/ENGL F349 | Narrative Art of Alaska Native Peoples (in English translation) | |
| ANTH F242 | Native Cultures of Alaska | |
| HIST F110X | History of Alaska Natives from Contact to the Present | |
| INU F417 | Advanced Inupiaq ¹ | |
| LING/ED F303 | Language Acquisition | |
| LING F318 | Introduction to Phonetics and Phonology | |
| LING F320 | Introduction to Morphosyntax | |
| LING F410 | Theory and Methods of Second Language Teaching | |
| LING F430 | Historical Linguistics | |
| LING F450 | Language Policy and Planning | |
| MUS F223X | Alaska Native Music | |
| PS F263 | Alaska Native Politics | |
| Yup'ik course or approved course | | |

¹ Fulfills the baccalaureate capstone requirement.

B.A., Yup'ik Eskimo

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Yup'ik Eskimo B.A.: 120 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Yup'ik Eskimo Program Requirements | | |
| Complete the following: | | |
| ANL F315 | Alaska Native Languages: Eskimo-Aleut | 3 |
| LING F101X | Nature of Language | 3 |
| YUP F101X | Elementary Central Yup'ik I | 5 |
| YUP F102X | Elementary Central Yup'ik II | 5 |
| YUP F201 | Intermediate Central Yup'ik I | 3 |
| YUP F202 | Intermediate Central Yup'ik II | 3 |
| YUP F301 | Advanced Central Yup'ik | 3 |
| YUP F415 | Additional Topics in Advanced Yup'ik ¹ | 3 |
| Complete two of the following: | | |
| ANL F287 | Teaching Methods for Alaska Native Languages | |
| ANL F316 | Alaska Native Languages: Indian Languages | |
| ANS/ENGL F349 | Narrative Art of Alaska Native Peoples (in English translation) | |
| ANTH F242 | Native Cultures of Alaska | |
| HIST F110X | History of Alaska Natives from Contact to the Present | |
| LING/ED F303 | Language Acquisition | |
| LING F318 | Introduction to Phonetics and Phonology | |
| LING F320 | Introduction to Morphosyntax | |
| LING F430 | Historical Linguistics | |
| LING F450 | Language Policy and Planning | |
| MUS F223X | Alaska Native Music | |
| PS F263 | Alaska Native Politics | |
| Inupiaq Eskimo course or approved course | | |

¹ Fulfills the baccalaureate capstone requirement.

Minor, Eskimo

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Eskimo Minor: 15 credits

| Code | Title | Credits |
|------------------------------------|----------------------------|---------|
| Eskimo Program Requirements | | |
| Complete the following: | | |
| | Complete INU/YUP electives | 15 |

Ethnobotany

Minor

The minor in ethnobotany provides students who have completed the ethnobotany certificate program with the opportunity to continue their studies and earn a baccalaureate degree focused on the relationship of plants and humans. It also provides students who are not in the EBOT certificate program with the option of fitting ethnobotany courses into their current DANSRD or other baccalaureate programs.

Minimum Requirements for Ethnobotany Minor: 15 credits

College of Rural and Community Development
Kuskokwim Campus (<https://uaf.edu/bethel/>)
907-474-7143

Programs

Minor

- Minor, Ethnobotany (p. 302)

Minor, Ethnobotany

Students must earn a C- grade or better in each course.

Minimum Requirements for Ethnobotany Minor: 15 credits

| Code | Title | Credits |
|-------------------------------|--|---------|
| Complete the following: | | |
| EBOT F100 | Introduction to Ethnobotany | 3 |
| EBOT F200 | Seminar in Ethnobotany | 2 |
| EBOT F210 | Ethical Wildcrafting | 1 |
| EBOT F220 | Ethnobotanical Techniques | 2 |
| EBOT F230 | Ethnobotanical Chemistry | 3-4 |
| or EBOT F250 and EBOT F251 | Applied Ethnobotany Fall and Applied Ethnobotany Spring | |

Complete 4-5 credits of advisor-approved elective courses at 200 level or higher, selected from related subject areas, including (but not limited to): ANL, ANS, ANTH, BIOL and RD.

Film and Performing Arts

B.A. Degree

The Theatre and Film Department teaches courses in media and performing arts, technology, theory and criticism. The department recognizes the importance of the role of the fine and performing arts within the humanities program of a liberal arts education. Courses in film and performing arts help develop students' original, creative and critical thinking while developing mastery in technical or dramatic skills.

A degree in film and performing arts gives students a critical understanding of the history, theory and technologies of cinema, new media arts and theatre arts while giving them opportunities, tools and resources for careers in media and performing arts industries, to pursue graduate study, or become media or theatre artists. Students take a shared group of classes in performance, production design and filmmaking, and then choose either a film or theatre concentration.

Film concentration: Through an interdisciplinary approach to film and media studies, the program produces media-literate professionals who can play a leading role in an increasingly information-centered world where every profession will require skilled media creators. Film students have opportunities to produce their own creative, time-based content for a variety of multimedia applications. Emphasis is placed on the cultures, lifestyles and environments of Alaska and the North and the unique opportunities they afford for skilled media creators and artists.

Theatre concentration: Students become well-rounded and prepared artists who can contribute their design, technical and performance skills to stage and screen work. The theatre concentration emphasizes stage and screen practicum work, so students learn through hands-on experience on stage and screen sets. These experiences provide unique opportunities for creative expression and workforce development.

Classes and productions are open to film and performing arts majors, theatre or film minors, and students in other fields.

Minimum Requirements for Film and Performing Arts Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in film and performing arts (<https://uaf.edu/academics/programs/bachelors/film-performing-arts.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Department of Theatre and Film (<https://www.uaf.edu/theatrefilm/>)
907-474-6590

Programs Degree

- B.A., Film and Performing Arts (p. 303)

Minor

- Minor, Film (p. 304)
- Minor, Theatre (p. 305)

B.A., Film and Performing Arts

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Film and Performing Arts B.A.: 120 credits

CONCENTRATIONS: FILM (P. 303), THEATRE (P. 303)

| Code | Title | Credits |
|---|-----------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) ¹ | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Film and Performing Arts Program Requirements | | |
| Complete the following: | | |
| FLPA F121X | Fundamentals of Acting | 3 |
| FLPA F271 | Film Set Production I | 3 |
| FLPA F247 | Introduction to Production Design | 3 |
| Concentrations | | |
| Complete one of the following concentrations: ² | | 30 |
| Film | | |
| Theatre | | |

¹ To graduate, all students must complete 39 upper-division credits. Some of these will be covered by the upper-division required courses for the film and performing arts B.A., but not all of them. Film and performing arts students will need to take upper-division electives (in film and performing arts or other disciplines) to complete the upper-division requirement.

² FLPA film concentration majors cannot minor in film but may minor in theatre. FLPA theatre concentration majors cannot minor in theatre but may minor in film.

Concentrations

FILM

| Code | Title | Credits |
|---------------------------------------|---|---------|
| Complete the following: | | |
| FLPA/COJO/ENGL F217X | Introduction to the Study of Film | 3 |
| FLPA/ART F231 | Previsualization and Preproduction | 3 |
| FLPA F258 | Lights, Camera, Audio! | 3 |
| FLPA F260/COJO F290 | Digital Video Editing: Adobe Suite | 3 |
| FLPA F289 and FLPA F389 and FLPA F489 | Reel Workshop/Review I and Reel Workshop/Review II and Reel Workshop/Review III | 0 |
| FLPA F331 | Directing Film/Video | 3 |
| FLPA F403 | Practicum in Film Production: FRAME ¹ | 3 |
| FLPA F431 | Film Set Production II ¹ | 3 |
| Complete three of the following: | | 9 |
| FLPA F310 | Acting for the Camera | |

| | |
|---------------------------|---|
| FLPA F320 | Acting II: Voice and Speech |
| FLPA F321 | Acting III: Movement |
| FLPA F334 | Movies and Films: Watching and Analyzing |
| FLPA F371 | Digital Imaging |
| FLPA/ANS F381 | Indigenous World in Film |
| FLPA F418 | Internship in Film Production |
| FLPA F423 | Acting IV: Scene Study ¹ |
| FLPA F458 | SFX Up Your Video |
| FLPA F460 | Cross-cultural Filmmaking |
| FLPA F472 | 3D Animation |
| FLPA F480 | Documentary Filmmaking |
| FLPA F481 | Advanced Topics in Film or Stage Production |
| FLPA/ENGL F488 | Dramatic Writing |
| FLPA F498 | Undergraduate Research |
| FLPA F499 | Thesis Project ¹ |
| or approved FLPA elective | |

¹ Fulfills the baccalaureate capstone requirement.

THEATRE

| Code | Title | Credits |
|---|---|---------|
| Complete the following: | | |
| FLPA F190 and FLPA F191 | Audition or Portfolio Review Participation and Audition or Portfolio Review Participation | 0 |
| FLPA F215X | Dramatic Literature and History | 3 |
| FLPA F241 | Basic Stagecraft | 4 |
| FLPA F290 and FLPA F291 | Audition or Portfolio Review Participation II and Audition or Portfolio Review Participation II | 0 |
| FLPA F310 | Acting for the Camera | 3 |
| Complete 8 credits of the following, at least 3 of which must be FLPA F402: | | 8 |
| FLPA F401 | Theatre Practicum: Performance | |
| FLPA F402 | Theatre Practicum: Technical ¹ | |
| Complete four of the following: | | 12 |
| FLPA F320 | Acting II: Voice and Speech | |
| FLPA F321 | Acting III: Movement | |
| FLPA F332 | Stage Directing I | |
| FLPA F347 | Lighting Design | |
| FLPA/ANS F361 | Advanced Alaska Native Performance | |
| FLPA F423 | Acting IV: Scene Study ¹ | |
| FLPA F481 | Advanced Topics in Film or Stage Production | |
| FLPA/ENGL F488 | Dramatic Writing | |
| FLPA F498 | Undergraduate Research | |
| FLPA F499 | Thesis Project ¹ | |
| or approved FLPA elective | | |

¹ Fulfills the baccalaureate capstone requirement.

Note: FLPA film concentration majors cannot minor in film but may minor in theatre. FLPA theatre concentration majors cannot minor in theatre but may minor in film.

Minor, Film

Program Requirements

Minimum Requirements for Film Minor: 18 credits

| Code | Title | Credits |
|------------------------------------|-----------------------------------|---------|
| Complete the following: | | |
| FLPA F217X | Introduction to the Study of Film | 3 |
| FLPA F258 | Lights, Camera, Audio! | 3 |
| FLPA F271 | Film Set Production I | 3 |
| Department-approved FLPA electives | | 9 |

Minor, Theatre

Program Requirements

Minimum Requirements for Theatre Minor: 18 credits

| Code | Title | Credits |
|------------------------------------|---------------------------------|---------|
| Complete the following: | | |
| FLPA F121X | Fundamentals of Acting | 3 |
| FLPA F215X | Dramatic Literature and History | 3 |
| FLPA F241 | Basic Stagecraft | 4 |
| Department-approved FLPA electives | | 8 |

Fire Science

Minor

The fire science program, which presently emphasizes only municipal fire control, provides classroom education, hands-on training and practical vocational experience through local fire and rescue organizations.

Instructors provide a high level of technical expertise on a variety of emergency and fire science services. The primary goal of this program is to make our students the most attractive candidates for job openings and promotions within fire and other emergency services fields.

Community and Technical College

Fire Science (<https://www.ctc.uaf.edu/programs/emergency/>)
907-455-2800

Programs

Minor

- Minor, Fire Science (p. 306)

Degree

- A.A.S., Fire Science (p. 168)

Minor, Fire Science

Students must earn a C- grade or better in each course.

Minimum Requirements for Fire Science Minor: 18 credits

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Fire Science Program Requirements | | |
| Complete the following: | | |
| FIRE F131 | Firefighter I, Series I | 3 |
| FIRE F133 | Firefighter I, Series II | 3 |
| FIRE F135 | Firefighter I, Series III | 3 |
| FIRE F137 | Firefighter I, Series IV | 3 |
| EMS F170 | EMT: Emergency Medical Technician I | 6 |

Fisheries and Marine Sciences

B.A., B.S. Degree

The undergraduate programs in the College of Fisheries and Ocean Sciences offer students broad education and training, in the fields of fisheries biology, ecology and human dimensions, marine biology and oceanography. In addition to rigorous scientific coursework, students work with professionals from local, state, federal, tribal, university and private organizations during a required internship or research project.

The B.S. degree in fisheries and marine sciences prepares graduates to work as professionals in fisheries and aquatic management, research, conservation, education, policy, and industry organizations. Typically, fisheries and marine sciences graduates obtain employment with state, federal, provincial, Alaska Native, Native American, university and nongovernmental organizations in Alaska and throughout North America. The program also provides a solid foundation for graduate study for students contemplating careers in advanced research, management, administration and teaching.

The B.A. degree in fisheries prepares graduates to work as professionals in fishing and seafood processing, marketing and business industries, community and tribal development organizations, subsistence research and management, social sciences and other human dimensions of fisheries in Alaska and throughout North America. Typically, fisheries graduates obtain employment with fisheries governmental agencies and nongovernmental organizations in the areas of fisheries business administration, policy, education, social science, rural development and extension. The program also provides a solid foundation for graduate study for students contemplating careers in advanced research, management, administration and teaching.

The undergraduate program is administered through the Fairbanks campus. All fisheries and marine sciences courses are offered via distance education for students in outlying areas.

Minimum Requirements for Fisheries and Marine Sciences Bachelor's Degrees: 120 credits

Learn more about the bachelor's degree in fisheries (<https://uaf.edu/academics/programs/bachelors/fisheries.php>), including an overview of the program, career opportunities and more.

Learn more about the bachelor's degree in fisheries and marine sciences (<https://uaf.edu/academics/programs/bachelors/fisheries-marine-sciences.php>), including an overview of the program, career opportunities and more.

College of Fisheries and Ocean Sciences
Academic Program (<https://www.uaf.edu/cfos/academics/>)s
907-474-7289

Programs Degrees

- B.A., Fisheries (p. 307)
- B.S., Fisheries and Marine Sciences (p. 308)

With concentrations in:

- Fisheries Science (p. 308)
- Marine Biology (p. 308)

- Oceanography (p. 308)
- No Concentration (p. 308)

Minor

- Minor, Fisheries (p. 310)

B.A., Fisheries

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Fisheries B.A.: 120 credits

CONCENTRATIONS: FISHERIES BUSINESS AND SOCIAL SCIENCE (P. 307), RURAL AND COMMUNITY DEVELOPMENT (P. 308)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) ¹ | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Fisheries Program Requirements | | |
| Complete the following: | | |
| ENGL F314 or ENGL F414 | Technical Writing Research Writing | 3 |
| FISH F102 | Fact or Fishin': Case Studies in Fisheries and Marine Sciences | 1 |
| FISH F103 | The Harvest of the Sea | 2 |
| FISH F110 | Fish and Fisheries in a Changing World | 3 |
| FISH F261 | Introduction to Fisheries Utilization | 3 |
| FISH F288 | Fish and Fisheries of Alaska | 3 |
| FISH F411 | Human Dimensions of Environmental Systems | 3 |
| FISH F487 | Fisheries Management ² | 3 |
| FISH F490 | Experiential Learning: Fisheries and Marine Sciences Internship | 1 |
| STAT F200X | Elementary Statistics | 3 |
| Concentrations | | |
| Complete one of the following concentrations: | | 21 |
| Fisheries Business and Social Science | | |
| Rural and Community Development | | |

¹ To graduate, all students must complete 39 upper-division credits.

² Fulfills the baccalaureate capstone requirement.

Concentrations

FISHERIES BUSINESS AND SOCIAL SCIENCE

| Code | Title | Credits |
|-------------------------|------------------------------------|---------|
| Complete the following: | | |
| ACCT F261X | Principles of Financial Accounting | 3 |
| FISH F340 | Seafood Business | 3 |

Five upper-division classes (300-400 level; 15 credits) from social science fields including: Alaska Native Studies, Anthropology, Arctic and Northern Studies, Cross-Cultural Studies, Economics, Environmental Studies, Geography, History, Natural Resources Management, Sociology, Philosophy, Political Science, Psychology, Rural Development

RURAL AND COMMUNITY DEVELOPMENT

| Code | Title | Credits |
|---|---|---------|
| Complete the following: | | |
| RD F300 | Rural Development in a Global Perspective | 3 |
| RD F325 | Rural Development Principles and Practices | 3 |
| Four upper-division (300-400 level; 12 credits) Rural Development electives | | 12 |
| Complete one of the following: | | 3 |
| RD F245 | Fisheries and Marine Wildlife Development in Rural Alaska | |
| RD F255 | Rural Alaska Land Issues | |
| RD F265 | Perspectives on Subsistence in Alaska | |

B.S., Fisheries and Marine Sciences

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Fisheries and Marine Sciences B.S.: 120 credits

CONCENTRATIONS: FISHERIES SCIENCE (P. 309), MARINE BIOLOGY (P. 309), OCEANOGRAPHY (P. 309), NO CONCENTRATION (P. 310)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| BIOL F115X | Fundamentals of Biology I | |
| BIOL F116X | Fundamentals of Biology II | |
| ECON F101X | Principles of Microeconomics | |
| or ECON F235X | Introduction to Natural Resource Economics | |
| MATH F230X | Essential Calculus with Applications | |
| or MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| CHEM F105X | General Chemistry I | |
| CHEM F106X | General Chemistry II | |
| STAT F200X | Elementary Statistics | |
| Fisheries and Marine Sciences Program Requirements | | |
| Complete the following: | | |
| BIOL F260 | Principles of Genetics | 4 |
| BIOL F371 | Principles of Ecology | 3 |
| or MSL F320 | Aquatic Ecology | |
| FISH/MSL F102 | Fact or Fishin': Case Studies in Fisheries and Marine Sciences | 1 |
| FISH F103 | The Harvest of the Sea | 2 |
| FISH F110 | Fish and Fisheries in a Changing World | 3 |
| FISH F490 | Experiential Learning: Fisheries and Marine Sciences Internship | 1 |
| MSL F211 | Introduction to Marine Science I | 3 |
| MSL F212 | Introduction to Marine Science II | 3 |
| MSL F303 | Data Analysis and Writing for Aquatic Sciences | 3 |
| PHYS F123X | College Physics I | 4 |
| or PHYS F115X | Physical Sciences | |
| or PHYS F211X | General Physics I | |
| STAT F401 | Regression and Analysis of Variance | 4 |
| or STAT F402 | Scientific Sampling | |
| Concentrations | | |
| Complete one from the following concentrations: | | 41 |
| Fisheries Science | | |
| Marine Biology | | |

Oceanography

No concentration

Concentrations

FISHERIES SCIENCE

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| FISH F261 | Introduction to Fisheries Utilization | 3 |
| FISH F288 | Fish and Fisheries of Alaska | 3 |
| FISH F315 | Freshwater Fisheries Techniques | 3 |
| or FISH F414 | Field Methods in Marine Ecology and Fisheries | |
| FISH F411 | Human Dimensions of Environmental Systems | 3 |
| FISH F425 | Fish Ecology | 3 |
| or FISH F426 | Behavioral Ecology of Fishes | |
| or FISH F428 | Physiological Ecology of Fishes | |
| or FISH F433 | Pacific Salmon Life Histories | |
| FISH F427 | Ichthyology | 4 |
| FISH F487 | Fisheries Management ¹ | 3 |
| or FISH F498 and FISH F499 | Senior Thesis Proposal and Fisheries Senior Thesis | |
| Complete 4 credits of electives from chemistry, geology or physics. | | 4 |
| Complete 15 credits of electives from fisheries, biology, marine sciences and limnology or natural resource management (of which at least 9 credits must be upper-division). | | 15 |

¹ FISH F487, or FISH F498 and FISH F499 will serve as the capstone experience for fisheries science concentration

MARINE BIOLOGY

| Code | Title | Credits |
|---|--|---------|
| Complete the following: | | |
| CHEM F314 | Analytical Instrumental Laboratory | 3 |
| or CHEM F321 | Organic Chemistry I | |
| or CHEM F449 | General Biochemistry: Metabolism | |
| MSL F219 | Marine Mammals of the World | 2 |
| MSL F220 | Scientific Diving | 2 |
| or MSL F421 | Nearshore Ecology Field Course | |
| or MSL F450 | Marine Biology and Ecology Field Course | |
| or MSL F456 | Kelp Forest Ecology | |
| or MSL F457 | Field Techniques in Ocean Acidification Research | |
| MSL F482 | Human Impacts to the Marine Biosphere ² | 3 |
| or MSL F499 | Senior Thesis | |
| Complete three of the following courses | | |
| FISH F427 | Ichthyology | |
| MSL F306 | Aquatic Invertebrate Zoology | |
| MSL F317 | Introduction to Marine Mammal Biology | |
| MSL F410 | Marine Bird Ecology and Conservation | |
| MSL F453 | Zooplankton Ecology | |
| MSL F455 | Phytoplankton and Marine Microbes | |

| | | |
|--|--|----|
| MSL F467 | Ecology and Physiology of Marine Macroalgae | |
| Complete an additional 22 credits from the following: ¹ | | 22 |
| FISH F427 | Ichthyology | |
| FISH F435 | Data Visualization in Fisheries | |
| MSL F220 | Scientific Diving | |
| MSL F306 | Aquatic Invertebrate Zoology | |
| MSL F317 | Introduction to Marine Mammal Biology | |
| MSL F410 | Marine Bird Ecology and Conservation | |
| MSL F412 | Early Life Histories of Marine Invertebrates | |
| MSL F415 | Physiology of Marine Organisms | |
| MSL F421 | Nearshore Ecology Field Course | |
| MSL F431 | Polar Marine Science | |
| MSL F449 | Biological Oceanography | |
| MSL F450 | Marine Biology and Ecology Field Course | |
| MSL F453 | Zooplankton Ecology | |
| MSL F455 | Phytoplankton and Marine Microbes | |
| MSL F456 | Kelp Forest Ecology | |
| MSL F457 | Field Techniques in Ocean Acidification Research | |
| MSL F467 | Ecology and Physiology of Marine Macroalgae | |
| MSL F492 | Seminar | |
| STAT F461 | Applied Multivariate Statistics | |

¹ Note that courses cannot be used to satisfy requirements in more than one marine biology concentration category

² MSL F482 or MSL F499 will serve as the capstone experience for the marine biology concentration

OCEANOGRAPHY

| Code | Title | Credits |
|--|---|---------|
| Complete the following: | | |
| GEOS F111X | Earth and Environment: Elements of Physical Geography | 4 |
| or GEOS F120X | Glaciers, Earthquakes and Volcanoes: Past, Present and Future | |
| MSL F315 | Marine Geological Drama and Undersea Catastrophes | 3 |
| MSL F419 | Concepts in Physical Oceanography | 3 |
| MSL F425 | Subarctic Oceanography Field Course | 3 |
| MSL F449 | Biological Oceanography | 3 |
| MSL F461 | Chemical Oceanography | 3 |
| MSL F481 | The Oceans and Global Change ¹ | 3 |
| or MSL F499 | Senior Thesis | |
| Complete 7 credits from the following: | | 7 |
| MSL F453 | Zooplankton Ecology | |
| MSL F455 | Phytoplankton and Marine Microbes | |
| MSL F459 | Computer Programming for Scientific Applications | |
| MSL F463 | Chemical Coastal Processes | |

Complete 12 credits of electives from marine sciences and limnology, fisheries, biology, geology, chemistry or physics (of which at least 9 credits must be upper-division). 12

¹ MSL F481 or MSL F499 will serve as the capstone experience for the oceanography concentration

NO CONCENTRATION

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| Complete 38 credits of FISH and/or MSL courses (of which at least 24 credits must be upper-division) | | 38 |
| FISH F487 | Fisheries Management ¹ | 3 |
| or FISH F498 and FISH F499 | Senior Thesis Proposal and Fisheries Senior Thesis | |
| or MSL F481 | The Oceans and Global Change | |
| or MSL F482 | Human Impacts to the Marine Biosphere | |
| or MSL F499 | Senior Thesis | |

¹ FISH F487, FISH F498 and FISH F499, MSL F481, MSL F482 or MSL F499 will serve as the capstone experience for the no-concentration option.

Minor, Fisheries
Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Fisheries
Minor: 15 credits

| Code | Title | Credits |
|---|--|---------|
| Complete the following: | | |
| FISH F110 | Fish and Fisheries in a Changing World | 3 |
| FISH F288 | Fish and Fisheries of Alaska | 3 |
| A least 9 additional credit hours designated FISH | | 9 |

Foreign Languages

B.A. Degree

Open new worlds of opportunity with a degree in foreign languages at UAF. As the northernmost department of modern languages on the planet, we offer unique insights and experiences that will take you around the world and prepare you for careers in the global economy of the 21st century.

Our program gives you the opportunity to study French, German, Japanese, Russian and Spanish. Depending on your preference, you can focus your degree on one or two languages. As a foreign languages major, you'll also have exciting opportunities to study abroad and experience other cultures firsthand.

Minimum Requirements for Foreign Languages Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in foreign languages (<https://uaf.edu/academics/programs/bachelors/foreign-languages.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Department of Foreign Languages and Literatures (<https://www.uaf.edu/language/>)
907-474-7396

Programs Degree

- B.A., Foreign Languages (p. 311)

Minor

- Minor, Foreign Languages (p. 312)

B.A., Foreign Languages

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Foreign Languages B.A.: 120 credits

CONCENTRATIONS: TWO LANGUAGES (P. 311), SINGLE LANGUAGE (FRENCH, GERMAN, SPANISH) (P. 311)

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Foreign Languages Program Requirements | | |
| Complete the baccalaureate capstone requirement as determined by the program. ¹ | | |
| Concentrations | | |
| Complete one of the following concentrations: | | 30-33 |
| Two languages | | |
| French, German, Japanese or Spanish | | |

¹ The baccalaureate capstone requirement for foreign languages may be fulfilled by FREN F431, SPAN F431, JPN F475, GER F431 or GER F432.

Note: In addition to a first and second language, students should complete a well-defined minor related to their career goals. When choosing a minor it is highly recommended that students see an advisor as early as possible.

Note: Recommended background courses: LING F101X and LING F216X.

Note: F100-level language courses (which are preparatory to, but not part of the foreign language degree) may be counted toward the fulfillment of general education requirements.

Concentrations

TWO LANGUAGES

| Code | Title | Credits |
|---|-------|---------|
| F200 level or above in the first language: French, German, Japanese, or Spanish. ¹ | | 18 |
| F200 level or above in the second language: French, German, Japanese, or Spanish. | | 15 |

¹ These must include two F400-level courses in the target language taken in residence at UAF.

FRENCH, GERMAN OR SPANISH

| Code | Title | Credits |
|---|-------|---------|
| Target language at the F200 level or above ¹ | | 30 |

¹ These may include target language courses and/or courses taken in the target language on an approved study abroad program and up to

6 credits of advisor-approved electives from education or linguistics, but must include two F400-level courses in the target language taken in residence at UAF.

JAPANESE

See requirements under Japanese Studies major (p. 337).

Minor, Foreign Languages

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Foreign Languages Minor: 15 credits

| Code | Title | Credits |
|---|-------|---------|
| Complete the following: | | |
| Foreign language credits at the F100 level or above | | 3 |
| Foreign language credits at the F200 level or above | | 12 |

Geography

Minor Only

Admission to this program is currently suspended.

The geographic information systems minor will be revised and moved under the geoscience program in the 2023-2024 catalog.

The Geographic Information Systems (GIS) minor prepares students for an academic or professional career in GIS science and cognate disciplines such as geospatial data science and remote sensing. It teaches students applied skills and fundamental concepts in Geographic Information Systems (GIS), including digital mapping, remote sensing, data management, and predictive analytics. It thus prepares students to harness geospatial technologies for cutting-edge applications in geology, geophysics, environmental monitoring, and many more.

With a minor in Geographic Information Systems, the student will have a solid understanding of and applied skills in GIS analysis. These skills and concepts are highly sought after in the job market. They can boost careers in start-ups, consulting firms, and government agencies across a diverse range of fields, including mining, forestry, agriculture, conservation, and engineering.

Minimum Requirements for Geographic Information Systems Minor: 15 credits

College of Natural Science and Mathematics
Department of Geosciences
907-474-7565

Programs

Minor

- Minor, Geographic Information Systems (p. 313) - Admission to this program is currently suspended.

Minor, Geographic Information Systems

Program Requirements

Admission to this program is currently suspended.

The geographic information systems minor will be revised and moved under the geoscience program in the 2023-2024 catalog.

Students must earn a C grade or better in each course.

Minimum Requirements for Geographic Information Systems Minor: 15 credits

| Code | Title | Credits |
|-----------------------------------|---|---------|
| Complete five from the following: | | 15 |
| GEOS F102X | Wicked maps for wicked problems: Geographic Information Systems Across Disciplines | |
| NRM F338 | Introduction to Geographic Information Systems | |
| GEOS F422 | Geoscience Applications of Remote Sensing | |
| NRM F435 | GIS Analysis | |
| GEOS F458 | Applications of GPS and GIS in Geophysics | |
| GEOS F459 | Visible and Infrared Remote Sensing (In Progress Visible and Infrared Remote Sensing) | |
| GEOS F488 | Undergraduate Research | |

Geological Engineering

B.S. Degree

Geological engineering integrates geology and engineering concepts to mitigate geohazards like landslides, ensure safe construction at a site, find and manage groundwater, and locate mineral resources. Geological engineers are also interested in what the terrain can tell us about the stability of the soil or rock underneath. The Geological Engineering program at UAF has maintained ABET accreditation since 1941. Our program prepares students for employment with industry, consulting companies and government agencies.

The mission of the geological engineering program is to advance and disseminate knowledge related to geologic hazard assessment; engineering site selection; construction and construction material production; groundwater and geo-environmental engineering; and mineral and energy exploration, evaluation, development and production, through creative teaching, research and public service with an emphasis on Alaska, the North and its diverse peoples.

Educational Objectives of the B.S. Geological Engineering Program:

- 1. Our graduates use their broad education to serve as the foundation of successful careers in geological engineering and/or related fields in the public or private sectors, and/or graduate education.
- 2. Our graduates possess technical knowledge required to meet the unique challenges of geological engineering problems, especially those germane to cold regions including Alaska.
- 3. Our graduates demonstrate professionalism through clear communication, actively serving the community, teamwork, commitment to ethical standards, and life-long learning.

Minimum Requirements for Geological Engineering Bachelor's Degree: 127 credits

Learn more about the Bachelor's degree in Geological Engineering, including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Civil, Geological, and Environmental Engineering (<https://www.uaf.edu/cem/>)
907-474-7241

Programs Degree

- B.S., Geological Engineering (p. 314)

B.S., Geological Engineering

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Geological Engineering B.S.: 127 credits

| Code | Title | Credits |
|--|--|----------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X | General Chemistry I | |
| CHEM F106X | General Chemistry II | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| Geological Engineering Program Requirements | | |
| Complete the following: | | |
| ES F208 | Mechanics | 4 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| ES F346 | Introduction to Thermodynamics | 3 |
| GE F101 | Introduction to Geological Engineering | 1 |
| GE F261 | General Geology for Engineers | 3 |
| GE F326 | Introduction to Geotechnical Engineering and Foundations | 4 |
| GE F375 | Terrain Analysis and GIS | 3 |
| GE F381 | Field Methods and Applied Design I | 2 |
| GE F382 | Field Methods and Applied Design II | 2 |
| GE F405 | Engineering and Environmental Geophysics | 3 |
| GE F420 | Groundwater Engineering | 3 |
| GE F480 | Senior Design ¹ | 3 |
| GEOS F213 | Mineralogy | 4 |
| GEOS F214 | Petrology and Petrography | 4 |
| GEOS F314 | Structural Geology | 4 |
| GEOS F322 | Stratigraphy and Sedimentation | 4 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| MIN F202 | Surveying and CAD for Engineers | 2-3 |
| or CE F112 | Elementary Surveying | |
| MIN F370 | Rock Mechanics | 3 |
| MIN F390 | Geostatistics and Mineral Economics | 3-6 |
| or STAT F200X and ESM F450 | Elementary Statistics and Economic Analysis and Operations | |
| Technical Electives ² | | 6 |

Complete 6 credits from any of the following options:

GEOTECHNICAL/ARCTIC OPTION

| | |
|---------|--------------------------------------|
| GE F430 | Geomechanical Instrumentation |
| GE F440 | Slope Stability |
| GE F441 | Geohazard Analysis |
| GE F445 | Design of Earth Dams and Embankments |
| CE F422 | Foundation Engineering |
| CE F401 | Arctic Engineering |
| CE F424 | Permafrost Engineering |

GIS OPTION

| | |
|---------|--|
| GE F376 | GIS Applications in Geological and Environmental Engineering |
|---------|--|

MINING OPTION

| | |
|-----------|-----------------------------------|
| GE F435 | Exploration Design |
| MIN F482 | Computer-aided Mine Design:VULCAN |
| GEOS F332 | Ore Deposits and Structure |

PETROLEUM OPTION

| | |
|-----------|----------------------------------|
| PETE F302 | Well Logging |
| PETE F407 | Petroleum Production Engineering |
| PETE F426 | Drilling Engineering |

WATER RESOURCES/ENVIRONMENTAL ENGINEERING OPTION

| | |
|---------|---|
| CE F341 | Introduction to Environmental Engineering |
| CE F344 | Water Resources Engineering |
| CE F442 | Water and Wastewater Treatment Design |
| CE F445 | Hydrologic Analysis and Design |

Fundamentals of Engineering (FE) Examination

Complete the Fundamentals of Engineering (FE) examination administered by the State of Alaska.

¹ Fulfills the baccalaureate capstone requirement.

² Technical elective credits must contain engineering design and be selected by the student from the list of approved technical electives from the geological engineering program in conference with the advisor and approved by the department. Students are expected to complete all prerequisites required for the selected courses.

Geoscience

B.S. Degree

Graduates in geoscience have broad backgrounds in the earth sciences and firm foundations in mathematics, physics and chemistry. Four concentrations are available to allow students to pursue their own emphasis:

- geology
- paleontology
- geospatial science
- geophysics

The concentrations allow students to focus early in their studies but are flexible enough to allow students to pursue their own interests in their junior and senior years. All the concentrations prepare students for industry jobs in oil, mining and environmental consulting; jobs with agencies such as the U.S. Geological Survey, NASA, the Alaska Division of Geological and Geophysical Surveys; or graduate studies.

The geology concentration offers students a sound background in a spectrum geological disciplines with an emphasis on current field mapping techniques essential to exploration and research. The paleontology concentration is designed to provide students with the skills necessary to locate, excavate, interpret and curate specimens for museums, agencies or universities. The geospatial sciences concentration focuses on the principles, techniques and applications of remote sensing, GIS and GPS to prepare students for careers that require geospatial data analysis and visualization. The geophysics concentration challenges students to use physics in understanding geoscience concepts, emphasizing applications in seismology, volcanology and glaciology in the context of the Alaska landscape. This concentration prepares students for graduate work in geophysics and environmental engineering fields or other disciplines that use geophysical tools such as ground-penetrating radar or exploration seismology.

Minimum Requirements for Geoscience Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in geoscience (<https://uaf.edu/academics/programs/bachelors/geoscience.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Geosciences (<https://www.uaf.edu/geosciences/>)
907-474-7565

Programs Degree

- B.S., Geoscience (p. 316)

Minors

- Minor, Geology (p. 318)
- Minor, Paleontology (p. 319)
- Minor, Geospatial Sciences (p. 319)
- Minor, Geophysics (p. 318)

B.S., Geoscience

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Geoscience, B.S.: 120 credits

CONCENTRATIONS: GEOLOGY (P. 316), PALEONTOLOGY (P. 316), GEOSPATIAL SCIENCES (P. 316) AND GEOPHYSICS (P. 317)

| Code | Title | Credits |
|--|-------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X | General Chemistry I | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| Program Requirements | | |
| Complete the following: | | |
| GEOS F101X | The Dynamic Earth | 4 |
| GEOS F112X | The History of Earth and Life | 4 |
| GEOS F309 | Tectonics | 3 |
| Concentrations | | |
| Complete one of the following concentrations: | | 62-73 |
| Geology | | |
| Paleontology | | |
| Geospatial Sciences | | |
| Geophysics | | |

Concentrations GEOLOGY

| Code | Title | Credits |
|----------------------------|---|---------|
| Concentration Requirements | | |
| Complete the following: | | |
| CHEM F106X | General Chemistry II | 4 |
| GEOS F213 | Mineralogy | 4 |
| GEOS F214 | Petrology and Petrography | 4 |
| GEOS F225 | Field and Computer Methods in Geology | 2 |
| GEOS F304 | Geomorphology | 3 |
| GEOS F314 | Structural Geology | 4 |
| GEOS F315 | Paleobiology and Paleontology | 4 |
| GEOS F322 | Stratigraphy and Sedimentation | 4 |
| GEOS F430 | Statistics and Data Analysis in Geology | 3 |
| GEOS F454 | Field Geology ^{1,2} | 6 |
| PHYS F123X | College Physics I | 4 |
| PHYS F124X | College Physics II | 4 |
| STAT F200X | Elementary Statistics | 3 |

| | | |
|--|---|----|
| or STAT F300 | Statistics | |
| Complete 12 additional credits of upper-division GEOS courses or other upper-division courses approved by the undergraduate advisor including one course from the following: | | 12 |
| GEOS F317 | Paleontological Research and Laboratory Methods | |
| GEOS F375 | Oral Communication Skills for Geoscientists | |
| GEOS F483 | Research Design, Writing and Presentation Methods | |

- ¹ GEOS F454 is offered at UAF during the summer of odd-numbered years. Students may substitute a 6-credit field geology class at another institution. The geology and geophysics undergraduate advisor will assist students in placement in an approved field geology class.
- ² Fulfills the baccalaureate capstone requirement.

PALEONTOLOGY

| Code | Title | Credits |
|--|--|---------|
| Concentration Requirements | | |
| Complete the following: | | |
| CHEM F106X | General Chemistry II | 4 |
| GEOS F213 | Mineralogy | 4 |
| GEOS F214 | Petrology and Petrography | 4 |
| GEOS F225 | Field and Computer Methods in Geology | 2 |
| GEOS F314 | Structural Geology | 4 |
| GEOS F315 | Paleobiology and Paleontology | 4 |
| GEOS F317 | Paleontological Research and Laboratory Methods | 2 |
| GEOS F322 | Stratigraphy and Sedimentation | 4 |
| GEOS F454 | Field Geology ^{1,2} | 6 |
| GEOS F430 | Statistics and Data Analysis in Geology | 3 |
| PHYS F123X | College Physics I | 4 |
| STAT F200X | Elementary Statistics | 3 |
| or STAT F300 | Statistics | |
| Complete at least two from the following electives: | | 5-7 |
| GEOS F453 | Palynology and Paleopalynology | |
| GEOS F485 | Mass Extinctions, Neocatastrophism and the History of Life | |
| GEOS F486 | Vertebrate Paleontology | |
| GEOS F488 | Undergraduate Research | |
| Complete the requirements for a minor in biological sciences | | 20 |

- ¹ GEOS F454 is offered at UAF during the summer of odd-numbered years. Students may substitute a 6-credit field geology class at another institution. The geology and geophysics undergraduate advisor will assist students in placement in an approved field geology class.
- ² Fulfills the baccalaureate capstone requirement.

GEOSPATIAL SCIENCES

| Code | Title | Credits |
|----------------------------|-------|---------|
| Concentration Requirements | | |
| Complete the following: | | |

| | | |
|----------------------------|--|---|
| CHEM F106X | General Chemistry II | 4 |
| GEOS F213 | Mineralogy | 4 |
| GEOS F214 | Petrology and Petrography | 4 |
| GEOS F225 | Field and Computer Methods in Geology | 2 |
| GEOS F304 | Geomorphology | 3 |
| GEOS F314 | Structural Geology | 4 |
| GEOS F322 | Stratigraphy and Sedimentation | 4 |
| GEOS F454 | Field Geology ^{1,2} | 6 |
| GEOS F430 | Statistics and Data Analysis in Geology | 3 |
| NRM F338 | Introduction to Geographic Information Systems | 3 |
| PHYS F123X | College Physics I | 4 |
| PHYS F124X | College Physics II | 4 |
| STAT F200X or STAT F300 | Elementary Statistics Statistics | 3 |

Electives*Remote sensing electives*

| | | |
|---|---|-----|
| Complete at least two of the following: | | 4-7 |
| GEOS F422 | Geoscience Applications of Remote Sensing | |
| GEOS F488 | Undergraduate Research | |
| NRM F641 | Natural Resource Applications of Remote Sensing | |

GIS electives

| | | |
|-------------------------|---|---|
| Complete the following: | | 6 |
| GEOS F458 | Applications of GPS and GIS in Geophysics | |
| GIS course | Advisor-approved, 3 credits | |

| | | |
|---|--|---|
| Complete 9 additional credits of upper-division GEOS courses or other upper-division courses approved by the undergraduate advisor including one course from the following: | | 9 |
|---|--|---|

| | | |
|--|---|--|
| GEOS F317 | Paleontological Research and Laboratory Methods | |
| GEOS F375 | Oral Communication Skills for Geoscientists | |
| GEOS F483 | Research Design, Writing and Presentation Methods | |
| Complete one additional course from the following: | | |
| GEOS F309 | Tectonics | |
| GEOS F315 | Paleobiology and Paleontology | |

¹ GEOS F454 is offered at UAF during the summer of odd-numbered years. Students may substitute a 6-credit field geology class at another institution. The geology and geophysics undergraduate advisor will assist students in placement in an approved field geology class.

² Fulfills the baccalaureate capstone requirement.

³ Or equivalent course approved by undergraduate advisor.

| | | |
|---|---|-----|
| GEOS F375 | Oral Communication Skills for Geoscientists | 1 |
| GEOS F406 | Volcanology | 3 |
| GEOS F419 | Solid Earth Geophysics | 3 |
| GEOS F431 | Foundations of Geophysics | 4 |
| GEOS F477 | Ice in the Climate System | 3 |
| GEOS F483 | Research Design, Writing and Presentation Methods | 3 |
| GEOS F488 | Undergraduate Research ¹ | 2 |
| MATH F252X | Calculus II | 4 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| MATH F314 | Linear Algebra | 3 |
| PHYS F211X and PHYS F212X | General Physics I and General Physics II | 8 |
| PHYS F213X | Elementary Modern Physics | 4 |
| PHYS F220 | Introduction to Computational Physics | 4 |
| Complete two of the following science and engineering electives or undergraduate advisor approved substitute: | | 6-8 |
| ES F331 | Mechanics of Materials | |
| ES F341 | Fluid Mechanics | |
| GEOS F314 | Structural Geology | |
| GEOS F322 | Stratigraphy and Sedimentation | |
| GEOS F422 | Geoscience Applications of Remote Sensing | |
| ME F441 | Heat and Mass Transfer | |
| PHYS F301 | Introduction to Mathematical Physics | |
| PHYS F341 | Classical Physics I: Particle Mechanics | |
| Complete 6 additional credits of upper-division GEOS courses or other upper-division courses approved by the undergraduate advisor. | | 6 |

¹ Fulfills the baccalaureate capstone requirement.

GEOPHYSICS

| Code | Title | Credits |
|-----------------------------------|--------------------|---------|
| Concentration Requirements | | |
| Complete the following: | | |
| GEOS F262 | Rocks and Minerals | 3 |

Minor, Geology

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Geology Minor: 20 credits

| Code | Title | Credits |
|--|-------------------------------|---------|
| Geology Program Requirements | | |
| Complete the following: | | |
| GEOS F101X | The Dynamic Earth | 4 |
| GEOS F112X | The History of Earth and Life | 4 |
| Additional credits of GEOS courses as approved by the undergraduate geoscience advisor | | 12 |

Minor, Geophysics

Program Requirements

Minimum Requirements for Geophysics Minor: 21 credits

| Code | Title | Credits |
|-------------------------|-------------------------------|---------|
| Complete the following: | | |
| GEOS F101X | The Dynamic Earth | 4 |
| GEOS F112X | The History of Earth and Life | 4 |
| GEOS F406 | Volcanology | 3 |
| GEOS F419 | Solid Earth Geophysics | 3 |
| GEOS F431 | Foundations of Geophysics | 4 |
| GEOS F477 | Ice in the Climate System | 3 |

Minor, Geospatial Sciences

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Geospatial Sciences Minor: 19 credits

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| GEOS F101X | The Dynamic Earth | 4 |
| GEOS F112X | The History of Earth and Life | 4 |
| GEOS F225 | Field and Computer Methods in Geology | 2 |
| GEOS F422 | Geoscience Applications of Remote Sensing | 3 |
| GEOS F458 | Applications of GPS and GIS in Geophysics | 3 |
| NRM F338 | Introduction to Geographic Information Systems | 3 |

Minor, Paleontology

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Paleontology Minor: 16-20 credits

| Code | Title | Credits |
|------------------------------------|--|---------|
| Complete the following: | | |
| GEOS F101X | The Dynamic Earth | 4 |
| GEOS F112X | The History of Earth and Life | 4 |
| Complete three from the following: | | 8-12 |
| GEOS F315 | Paleobiology and Paleontology | |
| GEOS F317 | Paleontological Research and Laboratory Methods | |
| GEOS F322 | Stratigraphy and Sedimentation | |
| GEOS F453 | Palynology and Paleopalynology | |
| GEOS F485 | Mass Extinctions, Neocatastrophism and the History of Life | |
| GEOS F486 | Vertebrate Paleontology | |

Global Studies

Minor Only

This interdisciplinary program enhances students' understanding of issues resulting from an increasingly interdependent world and giving students an opportunity to broaden their horizons beyond their chosen major and achieve a more integrated vision of contemporary global problems, alternative concepts of global society, and strategies for moving toward a more just and humane world order.

The program's flexibility allows students, in consultation with their advisor, to select an array of courses and co-curricular experiences that best complement their majors as well as their goals for their careers and/or postbaccalaureate education.

Global studies students are encouraged to pursue opportunities for study abroad and foreign language acquisition as part of their minor requirements. Working with their advisor and the UAF Office of International Programs and Initiatives, global studies students may discover ways to build on their UAF coursework and satisfy a significant portion of their global studies minor requirements at a foreign college or university.

College of Liberal Arts (<https://www.uaf.edu/cla/>)
907-474-7231

Programs

Minor

- Minor, Global Studies (p. 320)

Minor, Global Studies

Program Requirements

Minimum Requirements for Global Studies Minor: 16-18 credits

| Code | Title | Credits |
|--|--|---------|
| Global Studies Minor Program Requirements | | |
| Complete one of the following: | | 3 |
| COJO F201 | Dispute Resolution and Restorative Practices | |
| ENGL F218 | Themes in Literature | |
| ENGL F280 | Introduction to Colonial and Postcolonial Literature | |
| LING F216X | Languages of the World | |
| PS F202 | Democracy and Global Society | |
| Complete four from the following with no more than two courses (6 credits) from the same department: | | 12 |
| ANTH/RD F315 | Human Biological Variation | |
| ANTH F428 | Ecological Anthropology | |
| ANTH/WGS F445 | Gender in Cross-cultural Perspective | |
| ANTH F446 | Economic Anthropology | |
| BIOL F476 | Ecosystem Ecology | |
| COJO F330 | Intercultural Communication | |
| COJO F353 | Conflict, Mediation and Communication | |
| COJO F451 | Cross-cultural Conflict Analysis and Intervention | |
| COJO F465 | Clinic in Mediation, Conferencing and Circle Practices | |
| ENGL F380 | Topics in Colonial and Postcolonial Literature | |
| GEOG/NRM F338 | Introduction to Geographic Information Systems | |
| HIST F316 | Europe Since 1945 | |
| HIST F411 | Environmental History | |
| PHIL/PS F472 | Ethics in International Affairs | |
| PS F201X | Comparative Politics | |
| PS F304 | International Security | |
| PS F322 | International Law and Organization | |
| PS F323 | International Political Economy | |
| PS F454 | International Law and the Environment | |
| PS F455 | Political Economy of the Global Environment | |
| PS F456 | Science, Technology and Politics | |
| RD F300 | Rural Development in a Global Perspective | |
| Civic engagement/internship project ¹ | | 1-3 |

¹ Complete a variable credit civic engagement/internship project working collaboratively with one of the faculty in the student's primary course interest. The number of credits will be determined by the student's advisor based on the number of hours worked in the nature of the academic component of the internship or project.

Note: The program in global studies also strongly encourages students to study abroad for at least one semester, and to work toward fluency in a second language.

Because of the flexibility of the program and the internship requirement, it will be important for students to work closely with an advisor familiar with the program. Please contact the program coordinator with any questions you may have about the program.

For more information and advising:

Peter A. DeCaro
Program Coordinator
907-474-6799
padecaro@alaska.edu

History

B.A. Degree

The History Department prepares students to critically analyze and interpret cultural heritage, the great problems that have faced humans throughout history and how we have sought to solve them.

If you enjoy studying and researching major cultural, social, economic and political events of the past, then a B.A. in history may be for you. Through our program, you will develop skills in oral and written presentation, research and critical thinking, and gain a greater awareness of the human condition. Our students also acquire an appreciation of the complexity of the discipline, an understanding that historical narratives are constructed, contested and always changing, and the recognition that there are varied perspectives on the past.

As liberal arts majors, history prepares students for a multitude of careers in the public, private and nonprofit sectors. History graduates may find work as educators, researchers and analysts, public relations representatives, advocates, and business professionals.

Minimum Requirements for History Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in history (<https://uaf.edu/academics/programs/bachelors/history.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Department of History (<https://www.uaf.edu/history/>)
907-474-7126

Programs Degree

- B.A., History (p. 322)

Minor

- Minor, History (p. 322)

B.A., History

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for History B.A.: 120 credits

| Code | Title | Credits |
|---|--------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| HIST F100X | Modern World History | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| History Program Requirements | | |
| Complete the following: | | |
| HIST F275 | Perspectives on History | 3 |
| Complete three from the following: | | 9 |
| HIST F101 | Western Civilization Before 1500 | |
| HIST F102X | Western Civilization Since 1500 | |
| HIST F121 | East Asian Civilization | |
| HIST F122X | East Asian Civilization | |
| HIST F131 | History of the U.S. | |
| HIST F132X | History of the U.S. | |
| Five HIST courses at the F300 or F400 level, at least two of which must be at the F400 level | | 15 |
| Of the courses for the major, at least two (at any level) must be taken in each of the following three fields: ¹ | | |
| United States history | | |
| European history | | |
| Other areas, such as: | | |
| Northern history (including Alaska) | | |
| World or non-Western (non-U.S., non-European) history | | |
| Women's history | | |
| Capstone | | |
| Complete the following: | | |
| HIST F475 | Historiography Capstone ² | 3 |
| HIST F476 | Senior Thesis Capstone ² | 3 |

¹ These courses must be approved by an advisor.
² Fulfills the baccalaureate capstone requirement.

Note: Students who are considering graduate work in history are strongly urged to take at least two years of a foreign language.

Note: History majors are strongly urged to consult with the History Department regarding the selection of a minor.

Minor, History

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for History Minor: 18 credits

| Code | Title | Credits |
|---|-------|---------|
| Complete the following: | | |
| HIST electives at the F300 level or above | | 6 |
| HIST electives | | 12 |

Homeland Security and Emergency Management

B.S.E.M. Degree

In a post-9/11 environment, the challenges faced by emergency management and homeland security professionals have reached unprecedented levels. As we experience an increase in the frequency, complexity and severity of human-made, natural and technological disasters, ever-increasing demands have been placed on emergency professionals, and the skill sets required to succeed. Today, more so than ever before, the integration of federal, state, and local resources, communication and collaboration has become the norm. Issues concerning terrorism, cyber-security, critical infrastructure protection and management, risk, business continuity, fire, hazardous materials, law enforcement, public health and safety are no longer domains unto themselves. They are now part of the new fabric of this highly integrated and complex environment. As a result, the demands placed on our first responders and those charged with these individuals and organizations' leadership and management roles have changed significantly.

The homeland security and emergency management program focuses on developing skills to lead and manage individuals and organizations in an increasingly complex environment. The program builds upon an individual's technical capabilities derived from education, training and experience in fire, information technology, law enforcement, military, homeland security and emergency management or other related fields. This technical expertise is combined with a business administration curriculum, emergency management and homeland security-based instruction. This focus gives students the operations management knowledge to lead and manage individuals, departments or agencies daily and during times of crisis. The homeland security and emergency management degree is explicitly built to meet the needs of practitioners who provide administrative oversight, leadership or management roles within the homeland security and emergency management enterprise at the local, state, federal and international levels. The degree also provides those at the responder level the opportunity to further their education, increase their competitive advantage for promotion, and advance their operational understanding of today's highly integrated emergency management and homeland security environment.

Minimum Requirements for Homeland Security and Emergency Management B.S.E.M. Degree: 120 credits

Learn more about the bachelor's degree in homeland security and emergency management (<https://uaf.edu/academics/programs/bachelors/security-emergency-management.php>), including an overview of the program, career opportunities and more.

Learn more about the online (<https://uaf.edu/academics/programs/bachelors/security-emergency-management-online.php>) bachelor's degree in homeland security and emergency management (<https://uaf.edu/academics/programs/bachelors/security-emergency-management.php>), including an overview of the program, career opportunities and more.

College of Business and Security Management
Department of Homeland Security and Emergency Management
Bachelor of Security and Emergency Management (<https://www.uaf.edu/som/degrees/undergraduate/bsem/>)
907-474-7461

Programs Degree

- B.S.E.M., Homeland Security and Emergency Management (p. 324)

Minors

- Minor, Emergency Management (p. 325)
- Minor, Military Security Studies (p. 326)

B.S.E.M., Homeland Security and Emergency Management

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Homeland Security and Emergency Management B.S.E.M.: 120 credits

CONCENTRATIONS: CYBERSECURITY AND INFORMATION TECHNOLOGY MANAGEMENT (P. 324), EMERGENCY MANAGEMENT (P. 325), EMERGENCY MEDICAL AND PUBLIC HEALTH MANAGEMENT (P. 325), FIRE ADMINISTRATION (P. 325), HOMELAND SECURITY (P. 325), LAW ENFORCEMENT MANAGEMENT (P. 325)

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.S.E.M. Degree Requirements | | |
| Complete the B.S.E.M. degree requirements. (p. 221) | | |
| Homeland Security and Emergency Management Program Requirements | | |
| Complete the following: | | |
| BA F307 | Introductory Human Resources Management | 3 |
| BA F457 | Training and Management Development | 3 |
| HSEM/ACCT F271 | Fiscal Management for Emergency Management Operations | 3 |
| HSEM F301 | Principles of Emergency Management and Homeland Security | 3 |
| HSEM F412 | Emergency Planning and Preparedness | 3 |
| HSEM F423 | Disaster Response Operations and Management | 3 |
| HSEM F434 | All-hazards Risk Analysis | 3 |
| HSEM F445 | Business Continuity and Crisis Management | 3 |
| HSEM F456 | Leaderships in Dangerous Contexts ¹ | 3 |
| 21-33 credits of major requirements from UAF HSEM lower-division courses, or any regionally accredited institution with an AA, AS, AAS-T, AAS or certificate program within these subject areas: emergency/para-medical, environmental health and safety, fire science, law enforcement, network/cyber security, process technology, public safety, or wildland fire, or commensurate military credit from the above subject areas as approved by the program director. | | 21-33 |
| Complete one of the following: | | 3 |
| BA F390 | Organizational Theory and Behavior | |
| BA F391 | Alaska Native Corporations: A Historical and Contemporaneous Perspective | |

| | | |
|--|--|----|
| HSEM F461 | Human Security in Alaska ² | |
| Complete 12 credits from the following: | | 12 |
| URSA (https://catalog.uaf.edu/courses/ursa/) | Any course | |
| HSEM (https://catalog.uaf.edu/courses/hsem/) | Any course not counted in major requirements | |
| BA F330 | The Legal Environment of Business | |
| BA F317 | Employment Law | |
| BA F490 | Services Marketing | |
| COJO F300X | Communicating Ethics | |
| COJO F335 | Organizational Communication | |
| COJO F353 | Conflict, Mediation and Communication | |
| ECON F101X | Principles of Microeconomics | |
| ENGL F314 | Technical Writing | |
| GEOS F380 | Geological Hazards | |
| HSEM F452 | Internship in Emergency Management | |
| JUST F222 | Research Methods | |
| PS F304 | International Security | |
| PSY F250 | Introductory Statistics for Social Sciences | |
| STAT F200X | Elementary Statistics | |

| | | |
|---|--|---|
| Concentrations | | |
| Complete one of the following concentrations: | | 6 |
| Cybersecurity and Information Technology Management | | |
| Emergency Management | | |
| Emergency Medical and Public Health Management | | |
| Fire Administration | | |
| Homeland Security | | |
| Law Enforcement Management | | |

¹ Fulfills the baccalaureate capstone requirement.

² HSEM F461 may be used to meet the Alaska Native-themed requirement (p. 225).

Note: Of the above, at least 39 credits must be taken in upper-division (F300-level or higher) courses.

Concentrations

CYBERSECURITY AND INFORMATION TECHNOLOGY MANAGEMENT

| Code | Title | Credits |
|--|--|---------|
| Complete 6 credits from the following: | | 6 |
| HSEM F415 | Cybersecurity in the 21st Century: Technology and Ethics | |
| HSEM F416 | Cybersecurity Management | |
| HSEM F417 | Cybersecurity Resiliency | |
| HSEM F418 | Cybercrime, Fraud and Law | |

EMERGENCY MANAGEMENT

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| HSEM F405 | Introduction to Emergency Management Exercise Design | 3 |
| HSEM F407 | Comparative Emergency Management | 3 |

EMERGENCY MEDICAL AND PUBLIC HEALTH MANAGEMENT

| Code | Title | Credits |
|--|--|---------|
| Complete 6 credits from the following: | | |
| HSEM F402 | Incident Command for Emergency Medical Services | 6 |
| HSEM F403 | Public Health in Emergencies | |
| HSEM F405 | Introduction to Emergency Management Exercise Design | |

FIRE ADMINISTRATION

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| HSEM F439 | Supervising Emergency Services | 3 |
| HSEM F440 | Advanced Principles of Fire Service Administration | 3 |

HOMELAND SECURITY

| Code | Title | Credits |
|-------------------------|-------------------------------|---------|
| Complete the following: | | |
| HSEM F406 | Comparative Homeland Security | 3 |
| HSEM F408 | Homeland Defense and Security | 3 |

LAW ENFORCEMENT MANAGEMENT

| Code | Title | Credits |
|--|---------------------------------|---------|
| Complete 6 credits from the following: | | |
| HSEM F404 | Public Safety Instruction | |
| HSEM F418 | Cybercrime, Fraud and Law | |
| HSEM F467 | Current Topics in Public Safety | |

Minor, Emergency Management Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Emergency Management Minor: 15 credits

| Code | Title | Credits |
|--|---|---------|
| Complete the following: | | |
| HSEM F301 | Principles of Emergency Management and Homeland Security | 3 |
| Complete three from the following: ² | | |
| HSEM F412 | Emergency Planning and Preparedness | |
| HSEM F423 | Disaster Response Operations and Management | |
| HSEM F434 | All-hazards Risk Analysis | |
| HSEM F445 | Business Continuity and Crisis Management | |
| HSEM F456 | Leaderships in Dangerous Contexts | |
| Complete at least 3 credits from the following: ¹ | | |
| BA F317 | Employment Law | 3 |
| BA F490 | Services Marketing | |
| COJO F335 | Organizational Communication | |
| COJO F353 | Conflict, Mediation and Communication | |
| GEOS F120X | Glaciers, Earthquakes and Volcanoes: Past, Present and Future | |

¹ Or course(s) pre-approved by the program director.

² HSEM F400 level, any 400 level HSEM course not already used in the minor

Minor, Military Security Studies

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Military Security Studies Minor: 16 credits

| Code | Title | Credits |
|----------------------------------|--|---------|
| Complete the following: | | |
| MILS electives ¹ | | 10 |
| Complete two from the following: | | 6 |
| HSEM F301 | Principles of Emergency Management and Homeland Security | |
| HSEM F412 | Emergency Planning and Preparedness | |
| HSEM F423 | Disaster Response Operations and Management | |
| HSEM F434 | All-hazards Risk Analysis | |
| HSEM F445 | Business Continuity and Crisis Management | |
| HSEM F456 | Leaderships in Dangerous Contexts | |
| MILS F442 | History of the American Military ² | |

¹ As approved by the program director, Homeland Security and Emergency Management.

² Or course(s) pre-approved by the program director.

Human Services

Minor

Students in the human services program receive skills-based training within a foundation of theory. After completing foundation courses, students select an area of concentration from the following: addictions counseling, behavioral health, or interdisciplinary concentration. Students learn interviewing and assessment, case management, crisis intervention, group counseling techniques and other specific skills needed within their concentration area.

The program prepares students for entry-level positions in human services agencies. Persons with a strong desire to help others, sincere respect for humankind and a commitment to their own personal growth may find this field rewarding. They must be emotionally stable, flexible and interested in working with people of diverse social, cultural and economic backgrounds from themselves. Recovery from life traumas and addictions can be a positive attribute if the student has successfully worked through specific issues and is willing to continue personal growth.

Students who complete an addictions concentration are eligible for certification as chemical dependency counselor technicians through the Alaska Commission for Behavioral Health Certification.

Each concentration is available to B.A. degree students as a minor. Option 1: The B.A. degree student must complete the concentration and three HUMS elective credits. Concentrations provide students with the skills needed for employment. See minor requirements. Option 2: Complete HUMS-approved elective credits (18 credits of electives must be approved by the human services program lead faculty).

This degree program is delivered collaboratively through the Community and Technical College in Fairbanks and the Kuskokwim Campus in Bethel.

College of Rural and Community Development
Department of Human Services (<https://www.ctc.uaf.edu/programs/human-services/>)
907-474-7143

Programs Minor

- Minor, Human Services (p. 327)

Minor, Human Services

Students must earn a C grade or better in each course.

Minimum Requirements for Human Services Minor: 18 credits

| Code | Title | Credits |
|--|--|---------|
| Complete one from the following options: | | 18 |
| <i>Option 1:</i> | | |
| | Complete one concentration in human services | |
| | Complete HUMS elective credits | |
| <i>Option 2:</i> | | |
| | Complete HUMS-approved elective credits ¹ | |

¹ Electives for Option 2 must be approved by the human services program lead faculty.

Interdisciplinary Studies

B.A., B.A.A.S., B.S. Degrees

The interdisciplinary studies programs provide flexibility to students who have educational goals that do not fit into one of the established majors or minors offered by the university. There are two interdisciplinary bachelor's degree tracks: Goals Option and Degree Completion. Students who are interested in an interdisciplinary studies program should meet with an advisor in the office of Undergraduate Interdisciplinary Studies to develop their educational plan. Please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<https://www.uaf.edu/inds/>).

GOALS OPTION

An interdisciplinary studies major allows students to customize and create a major or minor that is unique and different from the majors and minors offered by UAF. Interdisciplinary studies students choose the title of their major and the courses within their major with the expert guidance of a faculty committee of at least three faculty members from at least two disciplines. One faculty member will serve as the committee chair and the advisor of the student. The committee chair must be from a baccalaureate degree-awarding department. Courses in the major must also represent at least two disciplines that focus on a shared theme. All interdisciplinary proposal forms will be reviewed by the students faculty committee, the dean of the committee chair, as well as the director of Undergraduate Interdisciplinary Studies and the vice provost for final approval.

DEGREE COMPLETION (MAY NOT BE USED AS A DOUBLE MAJOR)

The interdisciplinary studies major with a general studies concentration is a pathway to graduation for students who are unable to complete a particular major offered at UAF. Students in the general studies concentration have the flexibility to choose classes that are meaningful and relevant to their educational interests and career goals. Admission to the degree completion program requires a 2.0 cumulative GPA or higher, completion of at least 100 or more college credits, as well as a consultation with an interdisciplinary degree completion advisor. Students must submit a rationale form explaining why this program is an appropriate path to graduation for them in order to be admitted to the general studies concentration of the interdisciplinary major. Students should start their path to degree completion by meeting with an interdisciplinary advisor.

Minimum Requirements for Interdisciplinary Studies, B.A., B.A.A.S., B.S. Degrees: 120-130 credits

Learn more about the bachelor's degree in interdisciplinary studies (<https://uaf.edu/academics/programs/bachelors/interdisciplinary-studies.php>), including an overview of the program, career opportunities and more.

Undergraduate Interdisciplinary Studies — Division of General Studies
Interdisciplinary Studies (<https://www.uaf.edu/inds/>)
907-474-1849

Programs
Degrees

- B.A., Interdisciplinary Studies - General Studies Concentration (Degree Completion) (p. 328)
- B.A., Interdisciplinary Studies - Goals Option (p. 329)
- B.S., Interdisciplinary Studies - General Studies Concentration (Degree Completion) (p. 332)
- B.S., Interdisciplinary Studies - Goals Option (p. 333)
- B.A.A.S., Interdisciplinary Studies - General Studies Concentration (Degree Completion) (p. 330)
- B.A.A.S., Interdisciplinary Studies - Goals Option (p. 331)

Minor

- Minor - Interdisciplinary Studies (p. 334)
- Minor - Interdisciplinary Environmental Change (p. 335)

B.A., Interdisciplinary Studies,
General Studies Concentration

Admission Requirements

Admission process for an interdisciplinary studies major with a general studies concentration

1. Contact the office of Undergraduate Interdisciplinary Studies for materials, procedures and to make an appointment with an interdisciplinary studies advisor. Please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<https://www.uaf.edu/inds/>) or call 907-474-1849 or 907-474-5164.
2. If you are not currently a UAF student, are attending as a nondegree student or are enrolled in an associate or certificate program, you need to apply for admission to a bachelor's degree with the UAF Office of Admissions (<https://www.uaf.edu/admissions/apply/>). If you are currently active in a bachelor's degree program at UAF, you do not need to reapply for admission and can skip this step. New transfer students must have official transcripts from all previous colleges sent to UAF's Office of Admissions.
3. Submit a General Studies concentration rationale form (https://docs.google.com/forms/d/e/1FAIpQLSeQmLNQdIvDfuLcJGD8te6TIDnnGk3aG0H9fGAgt7myUr4gpw/viewform?usp=sf_link). The interdisciplinary studies major with a general studies concentration is intended for students who have approximately 100 or more college credits but are not close to graduating or have obstacles preventing them from graduating with a particular major.
4. Your responses on the rationale form and a degree audit will be reviewed by a degree completion advisor, the director of the Academic Advising Center, the director of Undergraduate Interdisciplinary Studies, and the UAF vice provost for admission to the major.
5. Once admitted to the interdisciplinary studies major, you will receive a degree audit, and your DegreeWorks will be updated to show your degree requirements.
6. You will continue to work with a degree completion academic advisor on your path to graduation.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for
Interdisciplinary Studies B.A.: 130 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |

Complete the B.A. degree requirements (p. 211)

Interdisciplinary Studies Program Requirements 30

Interdisciplinary studies major courses ¹

Capstone

GENR F400 Interdisciplinary capstone or an alternative capstone course or project approved by a degree completion advisor.

¹ Students in the general studies concentration will work with a degree completion advisor to choose classes that are meaningful and relevant to their educational interests and career goals from a variety of disciplines.

Note: At least 39 upper-division (300-499) credits must be earned to complete a UAF bachelor's degree.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

B.A., Interdisciplinary Studies - Goals Option

Admission Requirements

Admission process for an interdisciplinary studies custom major (goals option)

1. Students who are interested in an interdisciplinary studies program should start by meeting with an advisor in the office of Undergraduate Interdisciplinary Studies to discuss and develop their educational plan. Please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<https://www.uaf.edu/inds/>). (<https://www.uaf.edu/inds/>)
2. If you are not currently a UAF student, are attending as a non-degree student or are enrolled in an associate or certificate program, you need to apply for admission to a bachelor's degree with the UAF Office of Admissions (<https://www.uaf.edu/admissions/apply/>). If you are currently active in a bachelor's degree program at UAF, you do not need to reapply for admission and can skip this step.
3. Create a draft of your interdisciplinary studies major plan, including its title, courses to be included, a written description and a capstone. You can work on a draft directly on the Interdisciplinary Studies Bachelor's Degree- Goals Option Approval Form. (<https://uaf.edu/inds/forms.php>) Students are also encouraged to use a plan ahead worksheet or spreadsheet to lay out a path to graduation.
4. Contact at least three faculty to serve as your interdisciplinary committee. An optional fourth committee member can be added for further expertise and advice. One faculty member will serve as the chair/advisor. The faculty chair should be affiliated with an academic unit that provides the degree level you are seeking. Students are welcome to work with faculty at all stages of their major, but once you have a draft of the approval form completed, you should arrange a formal committee meeting for all members to meet and discuss your academic plan. At this meeting, the committee will review your interdisciplinary studies major and provide feedback to help you refine your title and proposed courses. They will also help you determine an appropriate graduation capstone.
5. After receiving feedback and advice from your faculty committee, you will fill out or edit your drafted Interdisciplinary Studies Bachelor's Degree- Goals Option Approval Form. The form must be submitted electronically to the office of Undergraduate Interdisciplinary Studies, and will then be routed for electronic signatures by you, each of your committee members and the dean of your committee chair as well as the director of undergraduate interdisciplinary studies and vice provost for final approval.
6. Once your interdisciplinary studies packet is approved, you will be notified and your DegreeWorks will be updated to show your new major's courses. You will work with your committee chair as your primary academic advisor going forward.
7. Any changes to the approved curriculum are made with the approval of your faculty committee chair and submitted on a UAF Undergraduate Petition Form signed by your committee chair and the director of Undergraduate Interdisciplinary Studies. Petitions should be submitted to an interdisciplinary studies program advisor who will review the request before submitting for approval.

8. The approved title of your major will appear on your transcript and diploma when you graduate as "Your Title: Interdisciplinary Studies."

For more information visit the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Program Requirements

Students must earn a C- grade or better in each course

Minimum Requirements for Interdisciplinary Studies B.A.: 130 credits

| Code | Title | Credits |
|--|----------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree and Program Requirements | | |
| Complete the B.A. degree requirements (p. 211) | | |
| Interdisciplinary Program Requirements | | |
| Interdisciplinary studies major courses ¹ | | |
| Capstone ² | | |
| INDS F400 | Interdisciplinary Capstone | 0 |

An additional interdisciplinary capstone element will be approved by the student's interdisciplinary committee. The capstone can be, but is not limited to, an internship, a research project or a course.

¹ An interdisciplinary major must include coursework from more than one discipline, cannot be titled the same as an existing major and must demonstrate a cohesive body of knowledge skills. Courses in the major must be approved by an advisory committee of at least three faculty members, the dean of the faculty committee chair and the vice provost. An Interdisciplinary major from UAF consists of a minimum of 30 credits, at least 12 of which have to be earned at UAF.

² The capstone for Interdisciplinary Studies goals option has two elements: 1. All students take INDS F400, a zero credit class that focuses on resume development and other practical steps in post-graduation planning. 2. Students are also encouraged to have a unique capstone that is specific to their individual needs. This second element of the capstone should help tie the major together and/or help prepare students for their post-graduation goals in a meaningful way.

Note: At least 39 credits upper-division (300-499) credits must be earned to complete a UAF bachelor degree.

For more information visit the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

B.A.A.S., Interdisciplinary Studies - General Studies Concentration (Degree Completion)

Admission Requirements

Admission process for an interdisciplinary studies major with a general studies concentration

1. Contact the office of Undergraduate Interdisciplinary Studies for materials, procedures and to make an appointment with an interdisciplinary studies advisor. Please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<http://www.uaf.edu/inds/>) or call 907-474-1849 or 907-474-5164.
2. If you are not currently a UAF student, are attending as a nondegree student or are enrolled in an associate or certificate program, you need to apply for admission to a bachelor's degree with the UAF Office of Admissions (<https://www.uaf.edu/admissions/apply/>). If you are currently active in a bachelor's degree program at UAF, you do not need to reapply for admission and can skip this step. New transfer students must have official transcripts from all previous colleges sent to UAF's Office of Admissions.
3. Submit a General Studies concentration rationale form (https://docs.google.com/forms/d/e/1FAIpQLSeQmLNQdIvDfuLcJGD8te6TIDnnGk3aG0H9fGAg7myUr4gpw/viewform/?usp=sf_link). The interdisciplinary studies major with a general studies concentration is intended for students who have approximately 100 or more college credits but are not close to graduating or have obstacles preventing them from graduating with a particular major.
4. Your responses on the rationale form and a degree audit will be reviewed by a degree completion advisor, the director of the Academic Advising Center, the director of Undergraduate Interdisciplinary Studies, and the UAF vice provost for admission to the major.
5. Once admitted to the interdisciplinary studies major, you will receive a degree audit, and your DegreeWorks will be updated to show your degree requirements.
6. You will continue to work with a degree completion academic advisor on your path to graduation.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Interdisciplinary Studies B.A.A.S.: 120 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A.A.S. Degree and Program Requirements | | |

Complete the B.A.A.S. degree requirements. (p. 207)

Interdisciplinary Studies Major Requirements

Interdisciplinary studies ¹ 30

Complete an Associate of Applied Science degree from an accredited institution of higher education.

Capstone

GENR F400 Interdisciplinary capstone or an alternative capstone course or project approved by a degree completion advisor.

¹ Students in the general studies concentration will work with a degree completion advisor to choose classes that are meaningful and relevant to their educational interests and career goals from a variety of disciplines.

Note: At least 39 upper-division credits (300-499) must be earned to complete a UAF bachelor's degree.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

B.A.A.S., Interdisciplinary Studies - Goals Option

Admission Requirements

Admission process for an interdisciplinary studies custom major (goals option)

1. Students who are interested in an interdisciplinary studies program should start by meeting with an advisor in the office of Undergraduate Interdisciplinary Studies to discuss and develop their educational plan. Please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<https://www.uaf.edu/inds/>).
2. If you are not currently a UAF student, are attending as a non-degree student or are enrolled in an associate or certificate program, you need to apply for admission to a bachelor's degree with the UAF Office of Admissions (<https://www.uaf.edu/admissions/apply/>). If you are currently active in a bachelor's degree program at UAF, you do not need to reapply for admission and can skip this step.
3. Create a draft of your interdisciplinary studies major plan, including its title, courses to be included, a written description and a capstone. You can work on a draft directly on the Interdisciplinary Studies Bachelor's Degree- Goals Option Approval Form (<https://uaf.edu/inds/forms.php>). Students are also encouraged to use a plan ahead worksheet or spreadsheet to lay out a path to graduation.
4. Contact at least three faculty to serve as your interdisciplinary committee. An optional fourth committee member can be added for further expertise and advice. One faculty member will serve as the chair/advisor. The faculty chair should be affiliated with an academic unit that provides the degree level you are seeking. Students are welcome to work with faculty at all stages of their major, but once you have a draft of the approval form completed, you should arrange a formal committee meeting for all members to meet and discuss your academic plan. At this meeting, the committee will review your interdisciplinary studies major and provide feedback to help you refine your title and proposed courses. They will also help you determine an appropriate graduation capstone.
5. After receiving feedback and advice from your faculty committee, you will fill out or edit your drafted Interdisciplinary Studies Bachelor's Degree- Goals Option Approval Form. The form must be submitted electronically to the office of Undergraduate Interdisciplinary Studies, and will then be routed for electronic signatures by you, each of your committee members and the dean of your committee chair as well as the director of undergraduate interdisciplinary studies and vice provost for final approval.
6. Once your interdisciplinary studies packet is approved, you will be notified and your DegreeWorks will be updated to show your new major's courses. You will work with your committee chair as your primary academic advisor going forward.
7. Any changes to the approved curriculum are made with the approval of your faculty committee chair and submitted on a UAF Undergraduate Petition Form signed by your committee chair and the director of Undergraduate Interdisciplinary Studies.
8. The approved title of your major will appear on your transcript and diploma when you graduate as "Your Title: Interdisciplinary Studies."

For more information visit the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Interdisciplinary Studies B.A.A.S.: 120 credits

| Code | Title | Credits |
|---|----------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A.A.S. Degree and Program Requirements | | |
| Complete the B.A.A.S. degree requirements. (p. 207) | | |
| Interdisciplinary Studies Program Requirements | | |
| Interdisciplinary studies ¹ | | 30 |
| Complete an Associate of Applied Science degree from an accredited institution of higher education. | | |
| Capstone ² | | |
| INDS F400 | Interdisciplinary Capstone | |
| An interdisciplinary capstone will be approved by the student's interdisciplinary committee. The capstone can be, but is not limited to, an internship, a research project or a course. | | |

¹ An interdisciplinary major must include course work from more than one discipline, cannot be titled the same as an existing major and must demonstrate a cohesive body of knowledge or skills. Courses in the major must be approved by an advisory committee of at least three faculty members, the dean of the faculty committee chair and the vice provost. An interdisciplinary major from UAF consists of a minimum of 30 credits, at least 12 of which have to be earned at UAF.

² The capstone for Interdisciplinary Studies goals option has two elements: 1. All students take INDS F400, a zero credit class that focuses on resume development and other practical steps in post-graduation planning. 2. Students are also encouraged to have a unique capstone that is specific to their individual needs. This second element of the capstone should help tie the major together and/or help prepare students for their post-graduation goals in a meaningful way.

Note: At least 39 upper-division credits (300-499) must be earned to complete a UAF bachelor's degree.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

B.S., Interdisciplinary Studies - General Studies Concentration (Degree Completion)

Admission Requirements

Admission process for an interdisciplinary studies major with a general studies concentration

1. Contact the office of Undergraduate Interdisciplinary Studies for materials, procedures and to make an appointment with an interdisciplinary studies advisor. Please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<https://www.uaf.edu/inds/>) or call 907-474-1849 or 907-474-5164.
2. If you are not currently a UAF student, are attending as a nondegree student or are enrolled in an associate or certificate program, you need to apply for admission to a bachelor's degree with the UAF Office of Admissions (<https://www.uaf.edu/admissions/apply/>). If you are currently active in a bachelor's degree program at UAF, you do not need to reapply for admission and can skip this step. New transfer students must have official transcripts from all previous colleges sent to UAF's Office of Admissions.
3. Submit a General Studies concentration rationale form (https://docs.google.com/forms/d/e/1FAIpQLSeQmLNQdIvDfuLcJGD8te6TIDnnGk3aG0H9fGAgt7myUr4gpw/viewform/?usp=sf_link). The interdisciplinary studies major with a general studies concentration is intended for students who have approximately 100 or more college credits but are not close to graduating or have obstacles preventing them from graduating with a particular major.
4. Your responses on the rationale form and a degree audit will be reviewed by a degree completion advisor, the director of the Academic Advising Center, the director of Undergraduate Interdisciplinary Studies, and the UAF vice provost for admission to the major.
5. Once admitted to the interdisciplinary studies major, you will receive a degree audit, and your DegreeWorks will be updated to show your degree requirements.
6. You will continue to work with a degree completion academic advisor on your path to graduation.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Interdisciplinary Studies B.S.: 130 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements (p. 219) | | |

Interdisciplinary Studies Program Requirements

30

Complete the following:

Interdisciplinary studies major courses ¹**Capstone**

Complete the following:

GENR F400 Interdisciplinary Capstone ² 0

¹ Students in the general studies concentration will work with a degree completion advisor to choose classes that are meaningful and relevant to their educational interests and career goals from a variety of disciplines.

² or an alternative capstone course or project approved by a degree completion advisor.

Note: At least 39 credits upper-division (300-499) credits must be earned to complete a UAF bachelor's degree.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

B.S., Interdisciplinary Studies - Goals Option

Admission Requirements

Admission process for an interdisciplinary studies custom major (goals option)

1. Students who are interested in an interdisciplinary studies program should start by meeting with an advisor in the office of Undergraduate Interdisciplinary Studies to discuss and develop their educational plan. Please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<https://www.uaf.edu/inds/>).
2. If you are not currently a UAF student, are attending as a non-degree student or are enrolled in an associate or certificate program, you need to apply for admission to a bachelor's degree with the UAF Office of Admissions (<https://www.uaf.edu/admissions/apply/>). If you are currently active in a bachelor's degree program at UAF, you do not need to reapply for admission and can skip this step.
3. Create a draft of your interdisciplinary studies major plan, including its title, courses to be included, a written description and a capstone. You can work on a draft directly on the Interdisciplinary Studies Bachelor's Degree- Goals Option Approval Form. (<https://uaf.edu/inds/forms.php>) Students are also encouraged to use a plan ahead worksheet or spreadsheet to lay out a path to graduation.
4. Contact at least three faculty to serve as your interdisciplinary committee. An optional fourth committee member can be added for further expertise and advice. One faculty member will serve as the chair/advisor. The faculty chair should be affiliated with an academic unit that provides the degree level you are seeking. Students are welcome to work with faculty at all stages of their major, but once you have a draft of the approval form completed, you should arrange a formal committee meeting for all members to meet and discuss your academic plan. At this meeting, the committee will review your interdisciplinary studies major and provide feedback to help you refine your title and proposed courses. They will also help you determine an appropriate graduation capstone.
5. After receiving feedback and advice from your faculty committee, you will fill out or edit your drafted Interdisciplinary Studies Bachelor's Degree- Goals Option Approval Form. The form must be submitted electronically to the office of Undergraduate Interdisciplinary Studies, and will then be routed for electronic signatures by you, each of your committee members and the dean of your committee chair as well as the director of undergraduate interdisciplinary studies and vice provost for final approval.
6. Once your interdisciplinary studies packet is approved, you will be notified and your DegreeWorks will be updated to show your new major's courses. You will work with your committee chair as your primary academic advisor going forward.
7. Any changes to the approved curriculum are made with the approval of your faculty committee chair and submitted on a UAF Undergraduate Petition Form signed by your committee chair and the director of Undergraduate Interdisciplinary Studies.
8. The approved title of your major will appear on your transcript and diploma when you graduate as "Interdisciplinary Studies: Your Title."

For more information visit the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Interdisciplinary B.S.: 130 credits

| Code | Title | Credits |
|--|----------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree and Program Requirements | | |
| Complete the B.S. degree requirements (p. 219) | | |
| Interdisciplinary Program Requirements | | |
| Complete the following: | | |
| Interdisciplinary studies major courses ¹ | | |
| Capstone ² | | |
| INDS F400 | Interdisciplinary Capstone | 0 |

¹ An interdisciplinary major must include course work from more than one discipline, cannot be titled the same as an existing major and must demonstrate a cohesive body of knowledge skills. Courses in the major must be approved by an advisory committee of at least three faculty members, the dean of the faculty committee chair and the vice provost. An Interdisciplinary major from UAF consists of a minimum of 30 credits, at least 12 of which have to be earned at UAF.

² An interdisciplinary capstone will be approved by the student's interdisciplinary committee. The capstone can be, but is not limited to, an internship, a research project or a course. The capstone for Interdisciplinary Studies goals option has two elements: 1. All students take INDS F400, a zero credit class that focuses on resume development and other practical steps in post-graduation planning. 2. Students are also encouraged to have a unique capstone that is specific to their individual needs. This second element of the capstone should help tie the major together and/or help prepare students for their post-graduation goals in a meaningful way.

Note: At least 39 credits upper-division (300-499) credits must be earned to complete a UAF bachelor's degree.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Minor, Interdisciplinary Studies

Overview

The interdisciplinary minor provides flexibility to students who have educational goals that do not fit into one of the established minors offered by the university. Interdisciplinary minors must include courses from at least two different disciplines that focus on a shared theme. Students must complete the interdisciplinary studies minor approval form where they will document the title, description and list of courses within their minor. Help with the interdisciplinary studies minor approval process is available at 907-474-6396 or at the interdisciplinary studies website. All interdisciplinary proposals will be reviewed by a committee appointed by the UAF vice provost for approval.

Minimum Requirements for Interdisciplinary Studies Minor: 18 credits

Academic Advising Center - Division of General Studies
Interdisciplinary Studies (<http://www.uaf.edu/inds/>)
907-474-6396

Admission Requirements

1. Students who are interested in an interdisciplinary studies minor should meet with an advisor in the office of Undergraduate Interdisciplinary Studies to develop and discuss their proposed minor. Please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<http://www.uaf.edu/inds/>).
2. After meeting with the interdisciplinary minor advisor, complete and electronically submit an interdisciplinary studies minor approval form (<https://uaf.edu/inds/forms.php>) to uaf-interdisciplinary@alaska.edu. On the form you will list the title of your proposed minor, answer short essay questions about your minor's theme, and list courses included in the minor. An interdisciplinary minor cannot be titled the same as an existing minor and must demonstrate a cohesive body of knowledge skills. The approved title will appear on your transcript.
3. A committee appointed by the vice provost will review and approve interdisciplinary studies minors. This committee will ensure that an appropriate and cohesive body of knowledge and skills is addressed in the planned minor and that the interdisciplinary minor does not overlap with an existing minor. The committee may ask for changes to the minor before approving. Copies of the signed and approved form are sent to the student and the Office of the Registrar to be added to the student's records.

Program Requirements

Minimum Requirements for Interdisciplinary Studies Minor: 18 credits

| Code | Title | Credits |
|------|---|------------|
| | Courses from at least two different disciplines that focus on a shared theme. | 18 or more |

Note: At least 3 credits must be earned at UAF for all minors.

More information can be found on the interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Minor, Interdisciplinary Environmental Change

Minor

The minor in interdisciplinary environmental change provides students with an integrative understanding of the causes, impacts, and potential mitigation of anthropogenic environmental change by combining relevant knowledge, perspectives, and critical thinking skills from across the natural sciences, engineering, social sciences, humanities, and Alaska Native studies. This minor is intentionally interdisciplinary, reflective of the multidimensionality of the social-ecological issue of environmental change. It is flexible to allow students to pursue their individual lines of interest within this broad field. UAF is a world leader in environmental change and Arctic research due in part to its location, where the impacts of climate change can be observed and felt at an accelerated pace, and is an ideal setting in which to engage with faculty possessing expertise in multiple dimensions of environmental change, through in-person and/or online coursework.

For more information or to apply please click on the "schedule an appointment" link on the undergraduate interdisciplinary studies website (<https://www.uaf.edu/inds/>).

Minimum Requirements for Interdisciplinary Environmental Change Minor: 15 credits

Undergraduate Interdisciplinary Studies - Division of General Studies
Interdisciplinary Studies (<https://www.uaf.edu/inds/>)
907-474-1849

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for the Environmental Change Minor: 15 credits

| Code | Title | Credits |
|---|-------|---------|
| Environmental Change Program Requirements | | |
| Complete a minimum of 6 credits from each of the following lists: | | 15 |
| Natural Sciences, Engineering and Technology | | |
| Social Sciences, Humanities and Alaska Native Studies | | |
| Additional electives can be approved by an undergraduate interdisciplinary advisor ¹ | | |

LISTS

Natural Science, Engineering and Technology 6-12 credits

| Code | Title | Credits |
|----------------|--|---------|
| ATM F101X | Weather and Climate of Alaska | 4 |
| ATM F456 | Climate and Climate Change | 3 |
| ATM F473 | Micrometeorology with Focus on Subarctic and Arctic Ecosystems | 3 |
| BIOL F103X | Biology and Society | 4 |
| BIOL F104X | Natural History of Alaska | 4 |
| BIOL F371 | Principles of Ecology | 4 |
| BIOL F385 | Global Change Biology | 3 |
| CE F424 | Permafrost Engineering | 3 |
| ENVI Electives | | 1-6 |

| | | |
|---------------|---|---|
| FISH F110 | Fish and Fisheries in a Changing World | 3 |
| GE F441 | Geohazard Analysis | 3 |
| GEOS F460 | The Dynamic Alaska Coastline | 3 |
| GEOS/ATM F480 | Climate Change Processes: Past, Present, Future | 4 |
| MSL F481 | The Oceans and Global Change | 3 |
| MSL F482 | Human Impacts to the Marine Biosphere | 3 |

Additional electives can be approved by an undergraduate interdisciplinary advisor ¹

Social Sciences, Humanities and Alaska Native Studies 6-9 credits

| Code | Title | Credits |
|-----------------------|---|---------|
| ART/ACNS F425 | Visual Images of the North | 3 |
| ACNS F201 | The Circumpolar North: An Introductory Overview | 3 |
| ANS F101 | Introduction to Alaska Native Studies | 3 |
| ANS F350 | Cross-cultural Communication: Alaska Perspectives | 3 |
| ANS/ANTH/ART F365 | Alaska Native Art History | 3 |
| ANS/RD F401 | Cultural Knowledge of Native Elders | 3 |
| ACNS F429 | Geography of the Arctic and Circumpolar North | 3 |
| ANS/ED F461 | Native Ways of Knowing | 3 |
| ECON F434 | Environmental Economics | 3 |
| ENGL/ACNS F449 | Northern and Environmental Literature | 3 |
| HIST F411 | Environmental History | 3 |
| HONR/ACNS/NRM/RD F125 | Our Changing Climate: Past, Present, Future | 3 |
| NRM F101 | Natural Resources Conservation and Policy | 3 |
| NRM F111X | Introduction to Sustainability Science | 3 |
| NRM F303X | Environmental Ethics and Actions | 3 |
| NRM F403 | Environmental Decision-Making | 3 |
| NRM F407 | Environmental Law | 3 |
| PS F447 | U.S. Environmental Politics | 3 |
| PS F458 | Comparative Environmental Politics | 3 |
| RD F265 | Perspectives on Subsistence in Alaska | 3 |
| RD F300 | Rural Development in a Global Perspective | 3 |
| RD F465 | Community Healing and Wellness | 3 |

Additional electives can be approved by an undergraduate interdisciplinary advisor ¹

NOTES

¹ Students can choose from a list of pre-approved courses that span UAF's disciplinary strengths in environmental change. Students are also encouraged to explore other relevant courses, such as special topics courses, classes bringing in cross-cultural perspectives, research experiences, and study away programs. Any course that is not on the pre-approved list must be approved by the undergraduate interdisciplinary advisor for it to meet this minor's requirements.

NOTE: Students should work with their advisors to determine if courses in the minor can be shared with other degree requirements, but generally, courses meeting general education and major requirements may be shared with the Environmental Change minor.

Japanese Studies

B.A. Degree

Students majoring in Japanese studies are required to successfully complete at least one semester on an exchange program in Japan. Spending a full academic year abroad is strongly encouraged.

Minimum Requirements for Japanese Studies Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in Japanese studies (<https://uaf.edu/academics/programs/bachelors/japanese-studies.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts

Department of Foreign Languages and Literatures (<https://www.uaf.edu/language/>)

907-474-7396

Programs

Degree

- B.A., Japanese Studies (p. 337)

Minor

- Minor, Japanese Studies (p. 338)

B.A., Japanese Studies

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Japanese Studies B.A.: 120 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Japanese Studies Program Requirements (all courses in this category are taught in Japanese) | | |
| Complete the following: | | |
| JPN F301 | Advanced Japanese ¹ | 3 |
| JPN F302 | Advanced Japanese ¹ | 3 |
| JPN F431 | Studies in Japanese Culture ¹ | 3 |
| JPN F432 | Studies in Japanese Language ¹ | 3 |
| JPN F475 | Seminar on Contemporary Japan ² | 3 |
| Electives | | |
| <i>Japanese Studies Electives</i> | | |
| Complete 6 credits from the following: | | 6 |
| JPN F330 | Classical Japanese Literature | |
| JPN F331 | Women's Voices in Japanese Literature | |
| JPN F332 | Japanese Cultural Traditions and Arts | |
| JPN F333 | 20th-Century Japanese Prose Fiction | |
| JPN F482 | Selected Topics in Japanese | |
| <i>Japan-Related Electives</i> | | |
| Complete 12 credits from the following as approved by an advisor: ^{3,4} | | 12 |
| HIST F121 | East Asian Civilization | |
| HIST F122X | East Asian Civilization | |
| HIST F331 | Modern Japan | |
| HIST F333 | Foundations of Japanese History | |
| HIST F414 | Women and Gender in East Asian History | |
| JPN F210 | Beginning Kanji | |
| JPN F310 | Intermediate Kanji | |
| JPN F311 | Advanced Kanji | |
| JPN F330 | Classical Japanese Literature | |
| JPN F331 | Women's Voices in Japanese Literature | |
| JPN F332 | Japanese Cultural Traditions and Arts | |
| JPN F333 | 20th-Century Japanese Prose Fiction | |
| JPN F482 | Selected Topics in Japanese | |
| PS F221X | International Politics | |
| PS F464 | East Asian Governments and Politics | |

Completion of semester exchange in Japan or written departmental approval. ¹

¹ After completion of language training through the 200 level, students may study in Japan as long as they complete a minimum of 15 credits of Japanese language study at the upper-division level to fulfill the Japanese studies core requirements. JPN F475 must be taken in residence at UAF.

² Fulfills the baccalaureate capstone requirement.

³ Instructor-approved Japan-related courses taken during time abroad may count toward this requirement.

⁴ Courses taken to satisfy Japanese studies electives requirement may not be retaken or otherwise counted to satisfy Japan-related electives requirement.

Note: Students planning a double major for a single B.A. may double count a maximum of 9 credits from the major requirements toward a second major. Students earning two degrees are not subject to double-counting restrictions.

Minor, Japanese Studies

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Japanese Studies Minor: 15 credits

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| | Japanese course credits at the F100 level or above | 3 |
| | Japanese course credits at the F200 level or above | 12 |

Justice

B.A. Degree

The justice discipline represents a melding of theoretical and applied concepts, and both the B.A. degree in justice and the M.A. degree in justice administration reflect that dichotomy. Consequently, students explore theoretical models associated with different aspects of the criminal justice system, and also study its structure and administration.

The applied nature of the degree results in graduates with a B.A. in justice who can compete for positions in various justice employment fields. Justice juniors and seniors also enjoy opportunities for internships with various justice agencies.

Justice courses are available online and in the classroom.

Minimum Requirements for Justice Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in justice (<https://uaf.edu/academics/programs/bachelors/justice.php>), including an overview of the program, career opportunities and more.

Learn more about the online bachelor's degree in justice (<https://uaf.edu/academics/programs/bachelors/justice-online.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts

Justice Program (<https://www.uaf.edu/justice/>)
907-474-5500

Programs Degree

- B.A., Justice (p. 339)

Minor

- Minor, Justice (p. 339)

B.A., Justice

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Justice B.A.: 120 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Justice Program Requirements | | |
| Complete the following: | | |
| JUST F110X | Introduction to Justice | 3 |
| JUST F125X | Introduction to Addictive Processes | 3 |
| JUST F222 | Research Methods | 3 |
| or SWK F375 | Research Methods in Social Work | |
| or PSY F275 | Introduction to Social Science Research Methods | |
| JUST F251X | Criminology | 3 |
| JUST F300X | Ethics and Justice ¹ | 3 |
| JUST F310 | Principles of Corrections | 3 |
| JUST F340 | Rural Justice in Alaska | 3 |
| JUST F358 | Juvenile Delinquency | 3 |
| Complete 12 credits of JUST, PSY, SWK, HSEM, HUMS, LE, MILS, PLS, or course(s) approved by the department chair or department faculty advisor. | | 12 |
| Complete one of the following capstone courses: ² | | 3 |
| JUST F475 | Internship | |
| JUST F490 | Capstone: Seminar in Critical Issues in Criminal Justice | |
| JUST F498 | Research Project | |
| Complete 6 credits from the following courses: | | 6 |
| JUST F315 | Correctional Counseling and Rehabilitation | |
| JUST F335 | Gender and Crime | |
| JUST F345 | Police Problems | |
| JUST F352 | Criminal Law | |
| JUST F354 | Procedural Law | |
| JUST F453 | Comparative Criminology | |
| JUST F454 | Advanced Problems in Procedural Law | |
| JUST F475 | Internship | |
| JUST F492/F492P | Seminar | |

¹ If taken to meet the ethics requirement in the degree specific requirements, then the student must take an additional upper-division justice elective for 3 credits to complete the major.

² Fulfills the baccalaureate capstone requirement.

Minor, Justice

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Justice Minor: 15 credits

| Code | Title | Credits |
|-------------------------|-------------------------|---------|
| Complete the following: | | |
| JUST F110X | Introduction to Justice | 3 |
| JUST electives | | 12 |

Note: 400-level courses require junior standing or instructor permission

Law and Society

Minor Only

This program helps students understand law in relationship to the larger society. It is based firmly on the view that the law is a rich humanistic tradition and study of legal ideas and institutions will promote sustained reflection on such fundamental concepts and values as equality, freedom, privacy, justice and human rights.

While the program is of special interest to students who plan graduate studies in law or careers in government service, it is recommended for any student who desires to understand the role of law in society. The program provides students with tools for reasoned appraisal of how the law works, ideas and policies that underlie it, and the ability to think clearly and analyze arguments critically.

Minimum Requirements for Law and Society Minor: 15 credits

College of Liberal Arts
Department of Political Science (<https://www.uaf.edu/polisci/>)
907-474-7609

Programs Minor

- Minor, Law and Society (p. 340)

Minor, Law and Society

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Law and Society Minor: 15 credits

| Code | Title | Credits |
|---|---|---------|
| Law and Society Program Requirements | | |
| Complete the following: | | |
| PS F303 | Politics and the Judicial Process | 3 |
| PS F435 | Constitutional Law I: Federalism | 3 |
| PS F436 | Constitutional Law II: Civil Rights and Liberties | 3 |
| Complete 6 credits from the following: | | 6 |
| ANS F425 | Federal Indian Law and Alaska Natives | |
| BA F317 | Employment Law | |
| BA F330 | The Legal Environment of Business | |
| COJO F413 | Mass Media Law and Regulation | |
| JUST F352 | Criminal Law | |
| JUST F354 | Procedural Law | |
| PS F322 | International Law and Organization | |
| PS F450 | Comparative Indigenous Rights and Policies | |

Leadership Minor Only

The minor in leadership is administered by the College of Business and Security Management. Its purpose is to strengthen the abilities of UAF graduates to lead and contribute effectively in both the public and private spheres, especially in the Alaska economy.

College of Business and Security Management (<https://www.uaf.edu/cbsm/>)
907-474-7461

Programs Minor

- Minor, Leadership (p. 341)

Minor, Leadership Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Leadership Minor: 15 credits

| Code | Title | Credits |
|---|--|---------|
| Leadership Minor Requirements | | |
| Complete two of the following: | | 6 |
| HSEM/LEAD F456 | Leaderships in Dangerous Contexts ¹ | |
| LEAD/BA F470 | Leadership Theory and Development ¹ | |
| LEAD/BA F472 | Leading Change ¹ | |
| Tracks | | |
| Complete 9 credits from one of the following tracks: ² | | 9 |
| <i>Business Administration Track</i> | | |
| BA/LEAD/SPRT F280 | Sport Leadership | |
| BA F307 | Introductory Human Resources Management | |
| BA F460 | International Business | |
| <i>Military Science Track</i> | | |
| MILS F101 | Introduction to the Army | |
| MILS F102 | Foundations of Agile and Adaptive Leadership | |
| MILS F201 | Leadership and Decision Making | |
| MILS F202 | Army Doctrine and Team Development | |
| <i>Political Science Track</i> | | |
| PS F212 | Introduction to Public Administration | |
| PS F301 | American Presidency ¹ | |
| PS/PHIL F412 | Modern Political Theory ¹ | |
| PS F437 | United States Foreign Policy ¹ | |
| <i>Communication Track</i> | | |
| COJO F330 | Intercultural Communication | |
| COJO F331 | Advanced Group Communication | |
| COJO F335 | Organizational Communication | |
| COJO F475 | Applied Communication in Training and Development ¹ | |
| <i>Outdoor Leadership Track</i> | | |
| NRM F161 | Wilderness Leadership Education | |
| NRM F361 | Advanced Wilderness Leadership Education ¹ | |
| Complete 3 credits from the following skills courses for the remaining 3 credits: | | |
| EMS F150 | Wilderness Emergency Care | |
| RECR F140H | Beginning Rock Climbing | |
| RECR F140K | Advanced Rock Climbing | |
| RECR F140L | Introduction to Ice Climbing | |
| RECR F140Y | Kayaking | |
| RECR F170G | Introduction to Ski Mountaineering | |
| RECR F170N | Introduction to Winter Camping | |
| <i>Alaska Native Community Leadership Track</i> | | |

| | |
|-------------|---|
| ANS F310 | Alaska Native and Comparative Indigenous Land Settlements |
| ANS F325 | Alaska Native and Comparative Tribal Self-Government |
| ANS/RD F401 | Cultural Knowledge of Native Elders |
| ANS F425 | Federal Indian Law and Alaska Natives |
| RD F492 | Rural Development Seminar |

¹ These courses have prerequisites that need to be taken into consideration. Consult with the College of Business and Security Management.

² Complete 9 credit hours from one of the “tracks” OR with the written approval of the College of Business and Security Management, any three 3-credit hour courses from any combination of tracks.

Linguistics

B.A., Accelerated B.A./M.A. Degrees

Linguistics is the study of language and covers a variety of subjects, from theories of grammar and how we produce language to applications of linguistic knowledge in areas such as language teaching, anthropology, sociology, etc. The undergraduate degree program seeks to give an overview of the discipline to raise students’ awareness of the many aspects of that uniquely human phenomenon, language.

Minimum Requirements for Linguistics Degrees: B.A.: 120 credits; B.A./M.A.: 138 credits

Learn more about the bachelor’s degree in linguistics (<https://uaf.edu/academics/programs/bachelors/linguistics.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts

Linguistics Program (<https://www.uaf.edu/linguist/>)
907-474-7446

Programs Degree

- B.A., Linguistics (p. 343)
- B.A., Linguistics/ M.A., Applied Linguistics Accelerated Program (p. 404)

Minor

- Minor, Linguistics (p. 343)

B.A., Linguistics

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Linguistics B.A.: 120 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete two semesters of a single foreign or Alaska Native language. ¹ | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Linguistics Program Requirements | | |
| Complete the following: | | |
| Four semesters (or equivalent) of a foreign, Alaska Native or American Sign language. The language chosen must be different from that used to meet GER above. ¹ | | 12-16 |
| ENGL F318 | Modern English Grammar | 3 |
| LING F101X | Nature of Language | 3 |
| LING F318 | Introduction to Phonetics and Phonology | 3 |
| LING F320 | Introduction to Morphosyntax | 3 |
| LING F430 | Historical Linguistics | 3 |
| or LING F410 | Theory and Methods of Second Language Teaching | |
| or LING F431 | Field Methods in Descriptive Linguistics I | |
| LING F441 | Topics in Linguistics | 3 |
| LING F482 | Seminar in Linguistics ² | 3 |
| Complete four approved electives, three of which must be upper-division. ³ | | 12 |

¹ It is recommended that at least one of the languages be other than an Indo-European language.

² Fulfills the baccalaureate capstone requirement.

³ Possible electives include: ANL F251X, ANL F315, ANL F316, COJO F320, ENGL F462, ENGL F472 or any LING course not used above.

Minor, Linguistics

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Linguistics Minor: 15 credits

| Code | Title | Credits |
|---|--|---------|
| Complete the following: | | |
| LING F101X | Nature of Language | 3 |
| LING F318 | Introduction to Phonetics and Phonology | 3 |
| LING F320 or ENGL F318 | Introduction to Morphosyntax Modern English Grammar | 3 |
| Complete two LING electives: | | 6 |
| Three of these credits may be from related courses in other departments | | |
| ANL F251X | Introduction to Athabaskan Linguistics | |
| ANL F315 | Alaska Native Languages: Eskimo-Aleut | |
| ANL F316 | Alaska Native Languages: Indian Languages | |
| ANTH/WGS F308 | Language and Gender | |
| COJO F320 | Communication and Language | |
| ENGL F462 | Applied English Linguistics | |
| ENGL F472 | History of the English Language | |

Marine Science

Minor Only

Though the marine science minor is available to students in all degree programs, fisheries students will particularly benefit from the breadth this minor offers. The program will also appeal to students from other disciplines (e.g., political science, earth sciences, biology and wildlife, environmental science, resource management, education) in which possible career paths may require and/or benefit from training in marine science (policymaking, resource management, education, the seafood industry, etc.).

Students who complete the minor in marine science will possess a knowledge base and skill set that will make them more competitive for a wide variety of agency and organization positions, particularly within the state of Alaska. The education and training will be applicable to jobs within government management agencies such as the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service, as well as Alaska Native organizations, nonprofit conservation organizations, the seafood industry, or in other policy development, fisheries, education or outreach capacities.

College of Fisheries and Ocean Sciences (<http://catalog.uaf.eduhttpS://www.uaf.edu/cfos/academics/>)
907-474-7824

Programs Minor

- Minor, Marine Science (p. 344)

Minor, Marine Science

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Marine Science Minor: 15 credits

| Code | Title | Credits |
|---|---|---------|
| Complete the following: | | |
| MSL F211 | Introduction to Marine Science I | 3 |
| MSL F212 | Introduction to Marine Science II | 3 |
| MSL/FISH advisor-approved elective course | | 1 |
| Complete 3 credits from the following: | | 3 |
| MSL F315 | Marine Geological Drama and Undersea Catastrophes | |
| MSL F317 | Introduction to Marine Mammal Biology | |
| MSL F412 | Early Life Histories of Marine Invertebrates | |
| MSL F419 | Concepts in Physical Oceanography | |
| MSL F431 | Polar Marine Science | |
| MSL F449 | Biological Oceanography | |
| MSL F461 | Chemical Oceanography | |
| MSL F463 | Chemical Coastal Processes | |
| MSL F481 | The Oceans and Global Change | |
| Complete 5 credits from the following: | | 5 |
| <i>Marine Science and Limnology</i> | | |
| MSL F220 | Scientific Diving | |
| MSL F315 | Marine Geological Drama and Undersea Catastrophes | |
| MSL F317 | Introduction to Marine Mammal Biology | |
| MSL F412 | Early Life Histories of Marine Invertebrates | |
| MSL F419 | Concepts in Physical Oceanography | |
| MSL F421 | Nearshore Ecology Field Course | |
| MSL F431 | Polar Marine Science | |
| MSL F449 | Biological Oceanography | |
| MSL F450 | Marine Biology and Ecology Field Course | |
| MSL F456 | Kelp Forest Ecology | |
| MSL F461 | Chemical Oceanography | |
| MSL F463 | Chemical Coastal Processes | |
| MSL F481 | The Oceans and Global Change | |
| MSL F492 | Seminar | |
| <i>Fisheries</i> | | |
| FISH F288 | Fish and Fisheries of Alaska | |
| FISH F425 | Fish Ecology | |
| FISH/BIOL F427 | Ichthyology | |
| <i>Chemistry</i> | | |
| CHEM F202 | Basic Inorganic Chemistry | |
| CHEM F212 | Chemical Equilibrium and Analysis | |
| <i>Biology and Wildlife</i> | | |
| BIOL F473 | Limnology | |

Economics

| | |
|------------|--|
| ECON F235X | Introduction to Natural Resource Economics |
|------------|--|

Statistics

| | |
|------------|-----------------------|
| STAT F200X | Elementary Statistics |
|------------|-----------------------|

Mathematics

B.A., B.S., B.S./M.S. Degrees

B.A., B.S. DEGREES

The number of new fields in which professional mathematicians find employment grows continually. This department prepares students for careers in industry, government and education.

Two concentrations are available:

- Mathematics
- Statistics

In addition to the major programs, the department provides a number of service courses in support of other programs within the university. Current and detailed information on mathematics degrees and course offerings is available from the department.

The department maintains a math lab that is available for assistance to all students studying mathematics at the baccalaureate level.

ACCELERATED B.S./M.S. DEGREES

The combined Bachelor's of Mathematics and Masters of Mathematics degree allows dedicated mathematics students to complete two degrees in a compressed time frame (typically, five years instead of six), while still maintaining the rigor and content of both degrees.

The Department of Mathematics and Statistics also offers a minor in statistics (p. 383) as well as accelerated B.S./M.S. in Mathematics (p. 405) and B.S. Mathematics/M.S. Statistics (p. 406) programs.

Minimum Requirements for Mathematics Bachelor's Degrees: 120 credits; Accelerated Mathematics B.S./M.S. Degrees: 138 credits

Learn more about the bachelor's degree in mathematics (<https://uaf.edu/academics/programs/bachelors/mathematics.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Mathematics and Statistics (<https://www.uaf.edu/dms/>)
907-474-7332 or 907-474-5374

Programs

Degrees

- B.A., Mathematics (p. 346) with concentrations in Mathematics and Statistics
- B.S., Mathematics (p. 347) with concentrations in Mathematics and Statistics
- Accelerated B.S./M.S., Mathematics (p. 405)
- Accelerated B.S., Mathematics/M.S., Statistics (p. 406)

Minor

- Minor, Mathematics (p. 349)

B.A., Mathematics

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Mathematics B.A.: 120 credits

CONCENTRATIONS: MATHEMATICS (P. 346), STATISTICS (P. 346)

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Pre-major Requirement | | |
| Students must be ready to matriculate into MATH F251X before they will be allowed to declare mathematics as their major. | | |
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| As part of the B.A. requirements, complete: | | |
| MATH F252X | Calculus II | |
| Mathematics Program Requirements | | |
| Complete the following: | | |
| MATH F253X | Calculus III | 4 |
| MATH F265 | Introduction to Mathematical Proofs | 3 |
| MATH F314 | Linear Algebra | 3 |
| Complete one of the following concentrations: | | 29 |
| Mathematics Concentration | | |
| Statistics Concentration | | |

Concentrations

MATHEMATICS CONCENTRATION

| Code | Title | Credits |
|--|----------------------------------|---------|
| Complete the following: | | |
| MATH F401 | Introduction to Real Analysis | 3 |
| MATH F405 | Abstract Algebra | 3 |
| MATH F490 | Senior Seminar ¹ | 2 |
| Complete at least 21 additional credits of electives. ² | | |
| The following are some suggested elective packages: | | |
| <i>Pure Math Suggested Elective Package</i> | | |
| MATH F305 | Geometry | 3 |
| MATH F320 | Topics in Combinatorics | 3 |
| or MATH F321 | Number Theory | |
| MATH F404 | Introduction to Topology | 3 |
| MATH F410 | Introduction to Complex Analysis | 3 |
| additional 9 elective credits | | 9 |
| <i>Applied Math Suggested Elective Package</i> | | |
| MATH F302 | Differential Equations | 3 |
| MATH F410 | Introduction to Complex Analysis | 3 |

| | | |
|---|---|---|
| MATH F432 | Introduction to Partial Differential Equations | 3 |
| MATH F460 | Mathematical Modeling | 3 |
| Complete two of the following: | | 6 |
| MATH F307 | Discrete Mathematics | |
| MATH F426 | Numerical Analysis | |
| STAT F300 | Statistics | |
| Additional 3 elective credits | | 3 |
| <i>Elective Package for Mathematics Teachers (Grades 7-12) ³</i> | | |
| Complete the following: | | |
| CS F201 | Computer Science I | 3 |
| MATH F305 | Geometry | 3 |
| MATH F316 | Introduction to the History and Philosophy of Mathematics | 3 |
| STAT F300 | | 3 |
| or MATH F371 | Probability | |
| or MATH F408 | Mathematical Statistics | |
| Complete one of the following: | | |
| MATH F307 | Discrete Mathematics | |
| MATH F320 | Topics in Combinatorics | |
| MATH F321 | Number Theory | |
| Complete two of the following: | | |
| MATH F302 | Differential Equations | |
| MATH F410 | Introduction to Complex Analysis | |
| MATH F426 | Numerical Analysis | |
| MATH F432 | Introduction to Partial Differential Equations | |
| MATH F460 | Mathematical Modeling | |

STATISTICS CONCENTRATION

| Code | Title | Credits |
|---|--|---------|
| Complete the following: | | |
| CS F201 | Computer Science I | 3 |
| or NRM F338 | Introduction to Geographic Information Systems | |
| ENGL F314 | Technical Writing | 3 |
| or ENGL F414 | Research Writing | |
| MATH F371 | Probability | 3 |
| MATH F401 | Introduction to Real Analysis | 3 |
| or MATH F405 | Abstract Algebra | |
| MATH F408 | Mathematical Statistics | 3 |
| STAT F300 | Statistics | 3 |
| STAT F401 | Regression and Analysis of Variance | 4 |
| STAT F402 | Scientific Sampling | 3 |
| STAT F454 | Statistical Consulting Seminar ¹ | 1 |
| Additional 3 elective credits at the F300 level or above ⁴ | | 3 |

¹ Fulfills the baccalaureate capstone requirement.

² Acceptable elective courses include any math or statistics course at the F300 level or above, and CS F201. At least 15 credits must be math courses. In some cases, courses with strong mathematical content from other disciplines may be used as electives. Such an elective must be approved by an advisor in the Department of Mathematics and Statistics. The requirement that at least 15 credits be math courses still applies.

- ³ We strongly recommend that prospective secondary science teachers seek advising from the UAF School of Education early in their undergraduate degree program, so that they can be appropriately advised of the State of Alaska requirements for teacher licensure. Students may choose to pursue a double major with education or complete a postbaccalaureate teacher certification program.
- ⁴ Acceptable elective courses include any MATH or STAT course at the F300 level or above. In some cases, courses with strong mathematical content from other disciplines may be used as electives. Such an elective must be approved by an advisor in the Department of Mathematics and Statistics.

Note: All mathematics majors — including double majors — must have an advisor from the Department of Mathematics and Statistics.

Note: At least 12 approved mathematics credits at the F300 level or above must be taken while in residence on the Troth Yeddha (Fairbanks campus).

B.S., Mathematics

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Mathematics B.S.: 120 credits

CONCENTRATIONS: MATHEMATICS (P. 347), STATISTICS (P. 348)

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Pre-major Requirement | | |
| Students must be ready to matriculate into MATH F251X before they will be allowed to declare mathematics as their major. | | |
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. requirements, complete: | | |
| MATH F252X | Calculus II | |
| PHYS F123X | College Physics I | |
| and PHYS F124X | and College Physics II | |
| or PHYS F211X | General Physics I | |
| and PHYS F212X | and General Physics II | |
| Mathematics Program Requirements | | |
| Complete the following: | | |
| MATH F253X | Calculus III | 4 |
| MATH F265 | Introduction to Mathematical Proofs | 3 |
| MATH F314 | Linear Algebra | 3 |
| Complete one of the following concentrations: | | 29 |
| Mathematics Concentration | | |
| Statistics Concentration | | |

Concentrations

MATHEMATICS

| Code | Title | Credits |
|--|----------------------------------|---------|
| MATH F401 | Introduction to Real Analysis | 3 |
| MATH F405 | Abstract Algebra | 3 |
| MATH F490 | Senior Seminar ¹ | 2 |
| Complete at least 21 additional credits of electives. ² | | |
| The following are some suggested elective packages: | | |
| Pure Math Suggested Elective Package | | |
| MATH F305 | Geometry | 3 |
| MATH F320 | Topics in Combinatorics | 3 |
| or MATH F321 | Number Theory | |
| MATH F404 | Introduction to Topology | 3 |
| MATH F410 | Introduction to Complex Analysis | 3 |
| Additional 9 elective credits | | 9 |

| Applied Math Suggested Elective Package | | |
|---|---|---|
| MATH F302 | Differential Equations | 3 |
| MATH F432 | Introduction to Partial Differential Equations | 3 |
| MATH F410 | Introduction to Complex Analysis | 3 |
| MATH F460 | Mathematical Modeling | 3 |
| Complete two of the following: | | 6 |
| MATH F307 | Discrete Mathematics | |
| MATH F426 | Numerical Analysis | |
| STAT F300 | Statistics | |
| Additional 3 elective credits | | 3 |
| Elective Package for Mathematics Teachers (Grades 7-12) ³ | | |
| Complete the following: | | |
| CS F201 | Computer Science I | 3 |
| MATH F305 | Geometry | 3 |
| MATH F316 | Introduction to the History and Philosophy of Mathematics | 3 |
| STAT F300 | Statistics | 3 |
| or MATH F371 | Probability | |
| or MATH F408 | Mathematical Statistics | |
| Complete one from the following: | | 3 |
| MATH F307 | Discrete Mathematics | |
| MATH F320 | Topics in Combinatorics | |
| MATH F321 | Number Theory | |
| Complete 2 from the following: | | 6 |
| MATH F302 | Differential Equations | |
| MATH F410 | Introduction to Complex Analysis | |
| MATH F426 | Numerical Analysis | |
| MATH F432 | Introduction to Partial Differential Equations | |
| MATH F460 | Mathematical Modeling | |

STATISTICS

| Code | Title | Credits |
|---|--|----------------|
| CS F201 | Computer Science I | 3 |
| or NRM F338 | Introduction to Geographic Information Systems | |
| ENGL F314 | Technical Writing | 3 |
| or ENGL F414 | Research Writing | |
| MATH F371 | Probability | 3 |
| MATH F401 | Introduction to Real Analysis | 3 |
| or MATH F405 | Abstract Algebra | |
| MATH F408 | Mathematical Statistics | 3 |
| STAT F300 | Statistics | 3 |
| STAT F401 | Regression and Analysis of Variance | 4 |
| STAT F402 | Scientific Sampling | 3 |
| STAT F454 | Statistical Consulting Seminar ¹ | 1 |
| Additional 3 elective credits at the F300 level or above ⁴ | | |

¹ Fulfills the baccalaureate capstone requirement.

² Acceptable elective courses include any math or statistics course at the F300 level or above, and CS F201. At least 15 credits must be math courses. In some cases, courses with strong mathematical content from other disciplines may be used as electives. Such an elective must be approved by an advisor in the Department of Mathematics and

Statistics. The requirement that at least 15 credits be math courses still applies.

³ We strongly recommend that prospective secondary science teachers seek advising from the UAF School of Education early in their undergraduate degree program, so that they can be appropriately advised of the State of Alaska requirements for teacher licensure. Students may choose to pursue a double major with education or complete a postbaccalaureate teacher certification program.

⁴ Acceptable elective courses include any MATH or STAT course at the F300 level or above. In some cases, courses with strong mathematical content from other disciplines may be used as electives. Such an elective must be approved by an advisor in the Department of Mathematics and Statistics.

Note: All mathematics majors — including double majors — must have an advisor from the Department of Mathematics and Statistics.

Note: At least 12 approved mathematics credits at the F300 level or above must be taken while in residence on the Fairbanks campus.

Minor, Mathematics

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Mathematics Minor: 21 credits

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Complete the following: | | |
| MATH F251X | Calculus I | 4 |
| MATH F252X | Calculus II | 4 |
| MATH F253X | Calculus III | 4 |
| Complete at least 9 additional credits of the following: | | 9 |
| MATH F265 | Introduction to Mathematical Proofs | |
| STAT F300 | Statistics | |
| Any F300- or F400-level MATH course | | |
| Electives approved by a mathematics advisor | | |

Note: Courses completed to satisfy this minor can be used to simultaneously satisfy other major or general distribution requirements.

Mechanical Engineering

B.S., B.S./M.S. Degrees

The mission of the mechanical engineering department at UAF is to offer the highest quality contemporary education at undergraduate and graduate levels and to perform research appropriate to the technical needs of the state of Alaska, the nation and the world.

Mechanical engineers conceive, plan, design and direct the manufacturing, distribution and operation of a wide variety of devices, machines and systems for energy conversion, environmental control, materials processing, transportation, materials handling and other purposes. Mechanical engineers are engaged in creative design, applied research, development and management. A degree in mechanical engineering also frequently forms the base for entering law, medical or business school, as well as for graduate work in engineering.

The objectives of the mechanical engineering program are to produce graduates who are able to compete successfully on the world stage at the professional level; deal with the significant local, regional, national and global issues facing humankind; continue to develop as engineers through lifelong learning; and serve as resources of technical knowledge for the state as well as the nation, especially with respect to northern issues. The Engineering Accreditation Commission of ABET has accredited the B.S. degree program in mechanical engineering since 1980.

Because engineering is based on mathematics, chemistry and physics, students are introduced to the basic principles in these areas during their first two years of study. The third year encompasses courses in engineering science — extensions to the basic sciences forming the foundation to engineering synthesis and design. The design project course draws on much of the student's previous learning through a simulated industrial design project. Throughout the four-year program, courses in communication, humanities and social sciences are required because mechanical engineers must be able to communicate effectively in written, oral and graphical form.

Students may choose a concentration in mechanical, aerospace or petroleum engineering. Because of UAF's unique location, special emphasis is placed on cold regions' engineering problems. This fact is highlighted in the technical elective, Arctic engineering. Candidates for the B.S. degree in mechanical engineering are required to take the State of Alaska Fundamentals of Engineering examination in their general field.

Undergraduate students who plan to pursue graduate studies in engineering may also choose an accelerated degree for a master's in mechanical engineering. This program speeds the process and allows qualified mechanical engineering students to complete both a Bachelor of Science and a Master of Science degree in five years.

Minimum Requirements for Mechanical Engineering Degree: B.S.: 127 credits; B.S./M.S.: 148 credits

Learn more about the bachelor's degree in mechanical engineering (<https://uaf.edu/academics/programs/bachelors/mechanical-engineering.php>), including an overview of the program, career opportunities and more.

Learn more about the bachelor/master's degree in mechanical engineering (<https://uaf.edu/academics/programs/bachelors/>)

mechanical-engineering-bs-ms.php), including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Mechanical Engineering (<https://cem.uaf.edu/me/>)
907-474-7136

Programs Degrees

- B.S., Mechanical Engineering (p. 350)
- Accelerated B.S./M.S., Mechanical Engineering (p. 407)

B.S., Mechanical Engineering

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Mechanical Engineering B.S.: 127 credits

CONCENTRATIONS: AEROSPACE (P. 351),
MECHANICAL (P. 351), PETROLEUM (P. 351)

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| CHEM F105X | General Chemistry I | |
| CHEM F106X | General Chemistry II | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| Mechanical Engineering Program Requirements | | |
| Complete the following: | | |
| ES F100X | Engineering Alaska - An Introduction to Engineering | 3 |
| ES F201 | Computer Techniques | 3 |
| ES F209 | Statics | 3 |
| ES F210 | Dynamics | 3 |
| ES F301 | Engineering Analysis | 3 |
| ES F307 | Elements of Electrical Engineering | 3 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| ES F346 | Introduction to Thermodynamics | 3 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| ME F302 | Dynamics of Machinery | 4 |
| ME F308 | Instrumentation and Measurement | 3 |
| ME F313 | Mechanical Engineering Thermodynamics | 3 |
| ME F321 | Industrial Processes | 3 |
| ME F334 | Elements of Material Science/ Engineering | 3 |
| ME F403 | Machine Design | 3 |
| ME F408 | Mechanical Vibrations | 3 |
| ME F415 | Thermal Systems Laboratory | 3 |
| ME F441 | Heat and Mass Transfer | 3 |
| ME F486 | Senior Design ² | 1 |
| ME F487 | Design Project ^{1,2} | 3 |
| Fundamentals of Engineering (FE) Examination | | |

Complete the Fundamentals of Engineering (FE) examination administered by the State of Alaska.

Concentrations

Complete one of the following concentrations: 9-12

Mechanical

Aerospace

Petroleum

¹ Design project must be related to area of concentration.

² Fulfills the baccalaureate capstone requirement.

Concentrations

AEROSPACE

| Code | Title | Credits |
|-------------------------|-------------------------------|---------|
| Complete the following: | | |
| ME F450 | Theory of Flight | 3 |
| ME F451 | Aerodynamics | 3 |
| ME F452 | Introduction to Astrodynamics | 3 |
| ME F453 | Propulsion Systems | 3 |

MECHANICAL

| Code | Title | Credits |
|--|-------|---------|
| Complete the following: | | |
| Mechanical Engineering electives at the F400-level or above | | 6 |
| Advisor-approved engineering elective at the F400-level or above | | 3 |

PETROLEUM

| Code | Title | Credits |
|-------------------------|---|---------|
| Complete the following: | | |
| ME F409 | Controls | 3 |
| ME F416 | Design of Mechanical Equipment for the Petroleum Industry | 3 |
| ME F464 | Corrosion Engineering | 3 |
| PETE F426 | Drilling Engineering | 3 |

Military Science and Leadership Minor Only

The Army Reserve Officers' Training Program is America's primary program for training military officers. The Nanook Battalion is a cooperative effort agreed to by the Army and UAF as a means of providing junior officer leadership in the interest of national security. The goal of the program is to assist young men and women with leadership potential in obtaining commissions in the Army Reserve, National Guard or regular Army.

Military science and leadership is an approved minor for the B.A. degree. Army instructors train students in leadership, management and decision-making through academic instruction and practical experience laboratories. These instructors impart qualities necessary for the Army officer and civilian executive.

ROTC is divided into the basic course for freshmen and sophomores and the advanced course for juniors and seniors. Programs and courses can be adjusted to meet specific needs of individual students who desire to enroll but are past their freshman year.

Basic military science courses are open to all students regardless of whether or not they intend to seek an Army commission. There is no military obligation incurred by enrolling in any of the basic courses.

Students who complete the basic course and desire to pursue the program for a commission may apply for enrollment in the advanced course. A special basic camp, two-year program is available for transfer students and others who were unable to take ROTC prior to their last two years in school. This program allows immediate acceleration into the advanced course. Students should consult the professor of military science prior to June 1 annually for information concerning the basic camp. Students with prior military service may also apply for immediate enrollment as an advanced course student. Applicants must be physically qualified and be selected by the professor of military science. The criterion for selection is based on both academic proficiency and leadership potential.

There are many activities sponsored by the Nanook Battalion. The ROTC Color Guard team opens UAF hockey, basketball and other sporting and community events. They provide a recognized trained and dedicated guard for the national colors during the national anthem and opening ceremony. The Ranger Challenge team represents the Nanook Battalion and UAF in an annual military skill-based competition in Oregon. Army training such as Airborne School, Air Assault School, Northern Warfare Training and Mountaineering School are also offered to eligible students.

At an annual UAF ceremony, awards are presented for outstanding academic, athletic and leadership achievement, as well as excellence in ROTC skills.

Completion of the advanced program will lead to service in the Army as a commissioned officer. Students who compete for a commission are provided a monthly stipend. Advanced course students receive a monthly subsistence allowance during the school year. This allowance is tax free. Students enrolled in military science are furnished uniforms and texts by the department. Army ROTC scholarships are available for tuition and lab fees, and provide a book allowance in addition to the stipend. Scholarships are awarded for two, three or four years on a competitive basis. Interested students should contact the Military Science Department for further details.

Minimum Requirements for Military Science and Leadership Minor: 19 credits

College of Business and Security Management
Department of Military Science and Leadership (<https://www.uaf.edu/rotc/>)
907-474-7501

Programs

Minor

- Minor, Military Science and Leadership (p. 352)

Minor, Military Science and Leadership

Program Requirements

Minimum Requirements for Military Science and Leadership Minor: 19 credits

| Code | Title | Credits |
|-----------------------------|-------|---------|
| Complete the following: | | |
| MILS electives ¹ | | 19 |

¹ Electives must be approved by the department.

Mining Engineering

B.S. Degree

As the nation's northernmost accredited mining engineering program, our mission is to advance and disseminate knowledge for exploration, evaluation, development and efficient production of mineral and energy resources with assurance of the health and safety of persons involved and protection of the environment, through creative teaching, research and public service with an emphasis on Alaska, the North and its diverse peoples.

The mining engineering program emphasizes engineering as it applies to the exploration and development of mineral resources and the economics of the business of mining. The program offers specializations in exploration, mining or mineral beneficiation.

Students are prepared for job opportunities with mining and construction companies, consulting and research firms, equipment manufacturers, investment and commodity firms in the private sector, as well as with state and federal agencies.

The mining engineering program educational objectives are to graduate competent engineers who:

- apply their engineering skills and knowledge with consideration to health, safety and the environment,
- pursue careers in mineral-related industries,
- are active among the local and professional mining communities, and
- seek professional advancement of mining engineering technology and practices.

Mining engineers may aspire to, and achieve, the highest positions in the industry: operating or engineering management, government agency director or entrepreneur. Starting salaries are among the highest in the engineering profession.

Students may initiate their mining engineering program in Anchorage and transfer to Fairbanks upon completion of their freshman or sophomore year. Anchorage students intending to transfer to Fairbanks should contact faculty of the UAF Mining Engineering Department.

Candidates for the B.S. degree in mining engineering must take the State of Alaska Fundamentals of Engineering examination. The Fundamentals of Engineering examination is a first step toward registration as a professional engineer.

The minor in mining engineering provides non-mining engineering students with an opportunity to acquire employable skills in the mining profession. Students in the mining engineering minor will be trained in a broad variety of topics such as mine ventilation, ground control, mine operation, economics, environmental law and labor management. Students will have the choice of other mining topics to make up the minor requirements.

Learn more information about the mining engineering program's mission, goals and educational objectives (<https://www.uaf.edu/cem/>).

Minimum Requirements for Mining Engineering Bachelor's Degree: 124 credits

Learn more about the bachelor's degree in mining engineering (<https://uaf.edu/academics/programs/bachelors/mining-engineering.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines

Department of Mining and Geological Engineering (<https://www.uaf.edu/cem/>)

907-474-7388

Programs

Degree

- B.S., Mining Engineering (p. 354)

Minor

- Minor, Mining Engineering (p. 355)

B.S., Mining Engineering

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Mining Engineering B.S.: 124 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X | General Chemistry I | |
| CHEM F106X | General Chemistry II | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| LS F101X | Library Information and Research | |
| MATH F252X | Calculus II | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| Mining Engineering Program Requirements | | |
| ES F208 | Mechanics | 4 |
| ES F307 | Elements of Electrical Engineering | 3 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| ES F346 | Introduction to Thermodynamics | 3 |
| GE F261 | General Geology for Engineers | 3 |
| GEOS F262 | Rocks and Minerals | 3-4 |
| or GEOS F213 | Mineralogy | |
| GEOS F332 | Ore Deposits and Structure | 3-4 |
| or GEOS F214 | Petrology and Petrography | |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| MIN F110 | Elements of Mine Safety, Operations and Development | 2 |
| MIN F202 | Surveying and CAD for Engineers | 2 |
| MIN F302 | Underground Mine Environmental Engineering | 3 |
| MIN F303 | Ore Handling and Industrial Explosives | 3 |
| MIN F313 | Introduction to Mineral Preparation | 3 |
| MIN F370 | Rock Mechanics | 3 |
| MIN F390 | Geostatistics and Mineral Economics | 3 |
| MIN F407 | Mine Reclamation and Environmental Management | 2 |
| MIN F409 | Operations Research and Computer Applications in Mineral Industry | 2 |
| MIN F444 | Accidents, Emergency and Safety Management in Mines | 2 |
| MIN F454 | Underground Mining Methods | 2 |

| | | |
|--|--|---|
| MIN F482 | Computer-aided Mine Design:VULCAN | 3 |
| MIN F484 | Surface Mining Methods | 1 |
| MIN F485 | Mining Engineering Exit Interview | 0 |
| MIN F489 | Mining Design Project I ¹ | 1 |
| MIN F490 | Mining Design Project II ¹ | 2 |
| MIN F491 | Automation and Control | 2 |
| Recommended Technical Electives | | |
| Complete 3 credits from the following: ² | | 3 |
| CE F401 | Arctic Engineering (or AE A403 Arctic Engineering) | |
| GE F440 | Slope Stability | |
| MIN F401 | Mine Site Field Trips | |
| MIN F415 | Coal Preparation | |
| Approved technical electives | | |
| Fundamentals of Engineering (FE) Examination | | |
| Complete the Fundamentals of Engineering (FE) examination administered by the State of Alaska. | | |

¹ Fulfills the baccalaureate capstone requirement.

² Students must plan their elective courses in consultation with their mining engineering faculty advisor. Technical electives are selected from the list of the approved technical electives for mining engineering program and other programs course listing. All elective courses must be approved by the student's faculty advisor.

Minor, Mining Engineering

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Mining Engineering Minor: 15 credits

| Code | Title | Credits |
|---|---|---------|
| Complete the following: | | |
| MIN F110 | Elements of Mine Safety, Operations and Development | 2 |
| Complete 13 or more MIN credits from advisor-approved electives at 300 or 400 level | | 13 |

Music

B.A., B.M. Degrees

The music curriculum is designed to satisfy cultural and professional objectives. The B.A. degree in music provides broad, liberal education options for concentrations in general music, music theory, music history and music composition. The B.M. degree in music education offers thorough preparation in teacher training and develops excellence in music performance areas. The B.M. degree in music performance offers intensive specialization for those desiring professional training in music performance.

The Music Department is a full member of the National Association of Schools of Music, the national accrediting organization.

NOTES FOR ALL UNDERGRADUATE MUSIC DEGREES

The various programs, music ensembles and organizations in the department offer opportunities for students in all academic divisions of the university. Music majors are required to earn a minimum of 4 large ensemble credits in the B.A. program, a minimum of 6 large ensemble credits in the B.M. music education program, and a minimum of 8 large ensemble credits in the B.M. music performance program. Large ensembles include: MUS F101, MUS F117, MUS F203, MUS F205, MUS F211. Wind and percussion instrumentalists are required to take a minimum of 4 credits in MUS F205. Piano majors may substitute up to 2 credits of MUS F307.

Each student (major or non-major) who enrolls in private applied lessons must be concurrently enrolled in a large ensemble. Requirements for students registered for class lessons vary with disciplines and are at the discretion of the instructor.

Attendance at recitals and concerts provides students with a variety of musical experiences that expand their regular curriculum. Registration for MUS F190 recital attendance is mandatory until majors and minors have passed the number of semesters required for their program: two semesters for the minor, four semesters for the B.A., six semesters for the B.M. in music education, and eight semesters for the B.M. in music performance. All applied music students enrolled in MUS F261 or higher are required to perform in at least one Music at One program during each semester of study.

At the end of each semester, all music majors must demonstrate a satisfactory level of proficiency of performance (Performance Juries) in their applied instrumental area in order to advance to the next level of study. At the discretion of music faculty, a student may be held at the F200 level to further prepare to pass requirements for admission to upper-division study. Competency levels required for each degree must be achieved in one applied instrumental area.

Music students must earn a C grade or better for each music course in their major program in order for that course to count as a completed degree requirement. MUS F493 is repeatable up to 6 credits. MUS F307, MUS F313, MUS F317 are repeatable for credit. MUS F161-MUS F162, MUS F261-MUS F262, MUS F361-MUS F362, MUS F461-MUS F462 are repeatable up to 6 credits.

Minimum Requirements for Music and Music Education Degrees: B.A.: 120 credits; B.M.: 122-145 credits

Learn more about the bachelor’s degree in music (<https://uaf.edu/academics/programs/bachelors/music.php>), including an overview of the program, career opportunities and more.

Learn more about the bachelor’s degree in music education (<https://uaf.edu/academics/programs/bachelors/music-education.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Department of Music (<https://www.uaf.edu/music/>)
907-474-7555

Programs
Degrees

- B.A., Music (p. 356)
- B.M., Music (Performance) (p. 359)
- B.M., Music Education (p. 358)

Minor

- Minor, Music (p. 360)

B.A., Music

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Music B.A.:
120 credits

| CONCENTRATIONS: GENERAL (P. 357), MUSIC THEORY (P. 357), MUSIC HISTORY (P. 357), MUSIC COMPOSITION (P. 357) | | |
|---|--|---------|
| Code | Title | Credits |
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Audition | | |
| Complete an audition on the major instrument. | | |
| Music Program Requirements | | |
| Complete the following: | | |
| MUS F131 and MUS F132 | Basic Music Theory I and Basic Music Theory II | 6 |
| MUS F133 and MUS F134 | Basic Ear Training I and Basic Ear Training II | 4 |
| MUS F161 and MUS F162 and MUS F261 and MUS F262 | Private Lessons and Private Lessons and Private Lessons and Private Lessons (major area) ¹ | 8 |
| MUS F190 | Recital Attendance | 0 |
| MUS F221 and MUS F222 | History of Western Music I and History of Western Music II | 6 |
| MUS F223X | Alaska Native Music | 3 |
| MUS F231 and MUS F232 | Advanced Music Theory I and Advanced Music Theory II | 4 |
| MUS F233 and MUS F234 | Advanced Ear Training I and Advanced Ear Training II | 2 |
| MUS F253 | Piano Proficiency ² | 0-4 |
| MUS F331 | Form and Analysis | 3 |
| MUS F476 | Senior Project ³ | 3 |
| Large ensembles ⁴ | | 4 |
| Concentrations | | |
| Complete one of the following concentrations: | | 21-24 |
| General | | |
| Music Theory | | |
| Music History | | |
| Music Composition | | |

¹ Students with voice as their major instrument are also required to complete MUS F245 or MUS F246.
² Enrollment only following completion of piano proficiency requirements. Requirements can be met either by exam OR by the Functional Piano series (MUS F152, MUS F153, MUS F154, MUS F155).
³ Fulfills the baccalaureate capstone requirement.

- ⁴ Music majors in the B.A. program will be required to earn a minimum of 4 credits in large ensembles: MUS F117, MUS F203, MUS F205, MUS F211, MUS F317. Please work closely with your faculty advisor to determine which large ensemble course will fulfill this requirement.

Concentrations

GENERAL

| Code | Title | Credits |
|---|--------------------------------------|---------|
| Complete 12 credits from the following: | | 12 |
| MUS F410 | Women in Music History | |
| MUS F421 | Music Before 1620 | |
| MUS F422 | Music in the 17th and 18th Centuries | |
| MUS F423 | Music of the 19th Century | |
| MUS F424 | Music Since 1900 | |
| MUS F431 | Counterpoint | |
| MUS F432 | Orchestration and Arranging | |
| Complete 9 credits from the following: | | 9 |
| MUS F307 | Chamber Music | |
| MUS F351 | Conducting | |
| MUS F361 | Private Lessons (major area) | |
| MUS F362 | Private Lessons (major area) | |
| MUS F426 | Music Literature | |
| MUS F433 | Seminar in Musical Composition | |
| MUS F434 | Advanced Harmonic Analysis | |

MUSIC THEORY

| Code | Title | Credits |
|--|--------------------------------------|---------|
| Complete the following: | | |
| MUS F431 | Counterpoint | 3 |
| MUS F432 | Orchestration and Arranging | 3 |
| MUS F433 | Seminar in Musical Composition | 3 |
| MUS F434 | Advanced Harmonic Analysis | 3 |
| Complete 6 credits from the following: | | 6 |
| MUS F410 | Women in Music History | |
| MUS F421 | Music Before 1620 | |
| MUS F422 | Music in the 17th and 18th Centuries | |
| MUS F423 | Music of the 19th Century | |
| MUS F424 | Music Since 1900 | |
| Complete 6 credits from the following: | | 6 |
| MUS F307 | Chamber Music | |
| MUS F351 | Conducting | |
| MUS F361 | Private Lessons (major area) | |
| MUS F362 | Private Lessons (major area) | |
| MUS F426 | Music Literature | |
| MUS F435 | Private Lessons in Music Composition | |

MUSIC HISTORY

| Code | Title | Credits |
|-------------------------|--------------------------------------|---------|
| Complete the following: | | |
| MUS F421 | Music Before 1620 | 3 |
| MUS F422 | Music in the 17th and 18th Centuries | 3 |
| MUS F423 | Music of the 19th Century | 3 |

| | | |
|--|------------------------------|---|
| MUS F424 | Music Since 1900 | 3 |
| Complete 6 credits from the following: | | 6 |
| MUS F410 | Women in Music History | |
| MUS F426 | Music Literature | |
| MUS F431 | Counterpoint | |
| MUS F434 | Advanced Harmonic Analysis | |
| Complete 6 credits from the following: | | 6 |
| MUS F307 | Chamber Music | |
| MUS F351 | Conducting | |
| MUS F361 | Private Lessons (major area) | |
| MUS F362 | Private Lessons (major area) | |
| MUS F432 | Orchestration and Arranging | |

MUSIC COMPOSITION

| Code | Title | Credits |
|--|--------------------------------------|---------|
| Complete the following: | | |
| MUS F432 | Orchestration and Arranging | 3 |
| MUS F433 | Seminar in Musical Composition | 3 |
| MUS F435 | Private Lessons in Music Composition | 2-4 |
| Complete 6 credits from the following: | | 6 |
| MUS F410 | Women in Music History | |
| MUS F421 | Music Before 1620 | |
| MUS F422 | Music in the 17th and 18th Centuries | |
| MUS F423 | Music of the 19th Century | |
| MUS F424 | Music Since 1900 | |
| MUS F426 | Music Literature | |
| MUS F434 | Advanced Harmonic Analysis | |
| Complete 6 credits from the following: | | 6 |
| MUS F307 | Chamber Music | |
| MUS F351 | Conducting | |
| MUS F361 | Private Lessons (major area) | |
| MUS F362 | Private Lessons (major area) | |
| MUS F431 | Counterpoint | |

B.M., Music Education

Admission Requirements

Complete the following admission requirement:

- Audition on the major instrument

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Music Education B.M.: 130-145 credits

CONCENTRATIONS: ELEMENTARY (P. 358), (P. 358) SECONDARY (P. 358), K-12 (P. 358)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.M. Degree Requirements | | |
| Complete the B.M. degree requirements. (p. 217) | | |
| Music Education Program Requirements | | |
| Large ensembles ¹ | | 6 |
| ED/PSY F245 | Child Development | 3 |
| ED F420 | Alaska Native Education ² | 3 |
| or ED F461 | Native Ways of Knowing | |
| EDSE F482 | Inclusive Classrooms for All Children | 3 |
| or EDSE F316 | Introduction to Special Education for Elementary Classroom Teachers | |
| MUED F110 | Becoming a Music Teacher in the 21st Century | 2 |
| MUED F201 | Introduction to Music Education | 2 |
| MUED F315 | Music Methods and Techniques ³ | 10 |
| MUED F316 | Practicum in Middle-level Music Methods | 1 |
| MUS F131 and MUS F132 | Basic Music Theory I and Basic Music Theory II | 6 |
| MUS F133 and MUS F134 | Basic Ear Training I and Basic Ear Training II | 4 |
| MUS F161 and MUS F162 and MUS F261 and MUS F262 and MUS F361 and MUS F362 | Private Lessons and Private Lessons and Private Lessons and Private Lessons | 14 |
| MUS F190 | Recital Attendance | 0 |
| MUS F221 and MUS F222 | History of Western Music I and History of Western Music II | 6 |
| MUS F223X | Alaska Native Music | 3 |
| MUS F231 and MUS F232 | Advanced Music Theory I and Advanced Music Theory II | 4 |
| MUS F233 and MUS F234 | Advanced Ear Training I and Advanced Ear Training II | 2 |
| MUS F253 | Piano Proficiency ⁵ | 0-4 |

| | | |
|----------|-----------------------------|---|
| MUS F331 | Form and Analysis | 3 |
| MUS F351 | Conducting | 3 |
| MUS F390 | Junior Recital | 0 |
| MUS F432 | Orchestration and Arranging | 3 |

Concentrations

| | |
|---|------|
| Complete one of the following concentrations: | 6-21 |
| Elementary | |
| Secondary | |
| K-12 | |

¹ Music majors in the B.M. program will be required to earn a minimum of 6 credits in large ensembles: MUS F117, MUS F203, MUS F205, MUS F211, MUS F317. Please work closely with your faculty advisor to determine which large ensemble course will fulfill this requirement.

² ED F420 is the recommended course.

³ This course is taken five times for a total of 10 credits: voice, strings, winds, brass and percussion methods.

⁴ Students with voice as their major instrument are also required to complete MUS F245 or MUS F246.

⁵ Piano proficiency degree requirement met either by exam OR Functional Piano series (MUS F152, MUS F153, MUS F154, MUS F155).

Note: Music education majors must have completed the necessary prerequisites and be admitted to the teacher education program prior to acceptance for placement in student teaching.

Concentrations

ELEMENTARY

| Code | Title | Credits |
|-------------------------|---------------------------------|---------|
| Complete the following: | | |
| ED F452 | Elementary Internship | 3-12 |
| MUED F309 | Elementary School Music Methods | 3 |

SECONDARY

| Code | Title | Credits |
|-------------------------|--------------------------------|---------|
| Complete the following: | | |
| ED F453 | Secondary Internship | 3-12 |
| MUED F405 | Secondary School Music Methods | 3 |

K-12

| Code | Title | Credits |
|-------------------------|------------------------------------|---------|
| Complete the following: | | |
| ED F454 | Student Teaching K-12 ¹ | 15 |
| MUED F309 | Elementary School Music Methods | 3 |
| MUED F405 | Secondary School Music Methods | 3 |

¹ Fulfills the baccalaureate capstone requirement.

B.M., Music Performance

Admission Requirements

Complete the following admission requirement:

- Audition on the major instrument

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Music (Performance) B.M.: 122 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, voice majors must complete: | | |
| 10 credits foreign language ¹ | | |
| B.M. Degree Requirements | | |
| Complete the B.M. degree requirements. (p. 217) | | |
| Music (Performance) Program Requirements | | |
| Complete the following: | | |
| MUS F131 and MUS F132 | Basic Music Theory I and Basic Music Theory II | 6 |
| MUS F133 and MUS F134 | Basic Ear Training I and Basic Ear Training II | 4 |
| MUS F161 and MUS F162 and MUS F261 and MUS F262 and MUS F361 and MUS F362 and MUS F461 and MUS F462 | Private Lessons and Private Lessons and Private Lessons and Private Lessons and Private Lessons and Private Lessons and Private Lessons | 24 |
| MUS F221 and MUS F222 | History of Western Music I and History of Western Music II | 6 |
| MUS F223X | Alaska Native Music | 3 |
| MUS F231 and MUS F232 | Advanced Music Theory I and Advanced Music Theory II | 4 |
| MUS F233 and MUS F234 | Advanced Ear Training I and Advanced Ear Training II | 2 |
| MUS F253 | Piano Proficiency ³ | 0-4 |
| MUS F331 | Form and Analysis | 3 |
| MUS F351 | Conducting | 3 |
| MUS F390 | Junior Recital | 0 |
| Large ensembles ⁴ | | 8 |
| MUS F190 | Recital Attendance | 0 |
| MUS F490 | Senior Recital ⁴ | 0 |
| Complete 6 credits from the following: | | 6 |
| MUS F431 | Counterpoint | |
| MUS F432 | Orchestration and Arranging | |
| MUS F433 | Seminar in Musical Composition | |

| | |
|---|--------------------------------------|
| MUS F434 | Advanced Harmonic Analysis |
| MUS F435 | Private Lessons in Music Composition |
| Complete 6 credits from the following: ⁵ | |
| MUS F410 | Women in Music History |
| MUS F421 | Music Before 1620 |
| MUS F422 | Music in the 17th and 18th Centuries |
| MUS F423 | Music of the 19th Century |
| MUS F424 | Music Since 1900 |
| Complete 9 credits from the following: ⁶ | |
| MUS F161 | Private Lessons |
| MUS F162 | Private Lessons |
| MUS F261 | Private Lessons |
| MUS F262 | Private Lessons |
| MUS F361 | Private Lessons |
| MUS F362 | Private Lessons |
| MUS F461 | Private Lessons |
| MUS F462 | Private Lessons |
| MUS F307 | Chamber Music |
| MUS F313 | Opera Workshop |
| MUS F426 | Music Literature |
| MUS F493 | Special Topics |

¹ Selection of the language will be made in consultation with the voice advisor.

² Students with voice as their major instrument are also required to complete MUS F245 or MUS F246.

³ The Piano Proficiency degree requirement is met either by exam OR by the Functional Piano series (MUS F152, MUS F153, MUS F154, MUS F155).

⁴ Music majors in the B.M. program will be required to earn a minimum of 8 credits in large ensembles; MUS F117 MUS F203, MUS F205, MUS F211, MUS F317. Students should work closely with their faculty advisor to determine which large ensemble course will fulfill this requirement.

⁵ Fulfills the baccalaureate capstone requirement.

⁶ Courses listed that are not already applied to program requirements may also meet this requirement.

Minor, Music

Program Requirements

Students must earn a C grade or better in each course.

Minimum Requirements for Music Minor: 18 credits

Students must select from one of the options below:

OPTION A (NONPERFORMANCE EMPHASIS)

| Code | Title | Credits |
|---|--------------------------------------|---------|
| Minor Requirements | | |
| Complete 12 credits from the following: | | 12 |
| MUS F103X | Music Fundamentals | |
| MUS F131 | Basic Music Theory I | |
| MUS F132 | Basic Music Theory II | |
| MUS F133 | Basic Ear Training I | |
| MUS F134 | Basic Ear Training II | |
| MUS F221 | History of Western Music I | |
| MUS F222 | History of Western Music II | |
| MUS F223X | Alaska Native Music | |
| MUS F231 | Advanced Music Theory I | |
| MUS F232 | Advanced Music Theory II | |
| MUS F410 | Women in Music History | |
| MUS F421 | Music Before 1620 | |
| MUS F422 | Music in the 17th and 18th Centuries | |
| MUS F423 | Music of the 19th Century | |
| MUS F424 | Music Since 1900 | |
| Complete 2 credits from the following music large ensemble courses: | | 2 |
| MUS F101 | University Chorus | |
| MUS F117 | Northern Lights String Orchestra | |
| MUS F203 | Fairbanks Symphony Orchestra | |
| MUS F205 | Wind Ensemble | |
| MUS F211 | Choir of the North | |
| Complete 4 credits from the following courses in lessons or ensemble: | | 4 |
| MUS F151 | Class Lesson | |
| MUS F161 | Private Lessons | |
| MUS F162 | Private Lessons | |
| MUS F261 | Private Lessons | |
| MUS F262 | Private Lessons | |
| MUS F361 | Private Lessons | |
| MUS F362 | Private Lessons | |
| MUS F461 | Private Lessons | |
| MUS F462 | Private Lessons | |
| MUS F207 | UAF Jazz Band | |
| MUS F190 | Recital Attendance (two semesters) | 0 |

OPTION B (PERFORMANCE EMPHASIS)

| Code | Title | Credits |
|--|-------|---------|
| Minor Requirements | | |
| Complete 6 credits from the following courses: | | 6 |

| | | |
|--|--------------------------------------|---|
| MUS F103X | Music Fundamentals | |
| MUS F131 | Basic Music Theory I | |
| MUS F132 | Basic Music Theory II | |
| MUS F133 | Basic Ear Training I | |
| MUS F134 | Basic Ear Training II | |
| MUS F221 | History of Western Music I | |
| MUS F222 | History of Western Music II | |
| MUS F223X | Alaska Native Music | |
| MUS F231 | Advanced Music Theory I | |
| MUS F232 | Advanced Music Theory II | |
| MUS F410 | Women in Music History | |
| MUS F421 | Music Before 1620 | |
| MUS F422 | Music in the 17th and 18th Centuries | |
| MUS F423 | Music of the 19th Century | |
| MUS F424 | Music Since 1900 | |
| Complete 4 credits from the following music ensemble courses: | | 4 |
| MUS F101 | University Chorus | |
| MUS F117 | Northern Lights String Orchestra | |
| MUS F203 | Fairbanks Symphony Orchestra | |
| MUS F205 | Wind Ensemble | |
| MUS F211 | Choir of the North | |
| Complete 8 credits from the following courses in private lessons or chamber music: | | 8 |
| MUS F161 | Private Lessons | |
| MUS F162 | Private Lessons | |
| MUS F190 | Recital Attendance (two semesters) | |
| MUS F207 | UAF Jazz Band | |
| MUS F261 | Private Lessons | |
| MUS F262 | Private Lessons | |
| MUS F307 | Chamber Music | |
| MUS F361 | Private Lessons | |
| MUS F362 | Private Lessons | |
| MUS F461 | Private Lessons | |
| MUS F462 | Private Lessons | |

Note: No substitutions are permitted between options. It is recommended that students contact the Music Department for program advising before registering for music classes. All performance courses are subject to course enrollment and studio space limitations. Large ensemble courses are available subject to current vacancies for particular instrumental areas. Private lessons and large ensemble courses may require that students pass a performance audition. Prerequisite requirements apply.

Natural Resources and Environment B.S. Degree

The sustainability of society and its environment require an interdisciplinary approach to making and implementing natural resource and environmental decisions. The natural resources and environment degree integrates knowledge in natural science, policy, economics and human values to advance the sustainable management of natural resources and agricultural systems. Students learn through a variety of approaches, including classroom instruction, hands-on laboratory experiences, and opportunities for internships and independent research under the guidance of a faculty mentor. Successful graduates will be qualified for employment in a broad range of private enterprise, government agencies and nonprofit organizations in the various natural resources fields, and will be well-equipped for graduate studies. The natural resources and environment minor strengthens students' degree programs by providing a broad introduction into how natural and social sciences, the humanities, and policy should be integrated in order to make well-founded decisions.

Minimum Requirements for Natural Resources and Environment Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in natural resources and environment (<https://uaf.edu/academics/programs/bachelors/natural-resources-environment.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Natural Resources and Environment (<https://www.uaf.edu/nre/>)
907-474-7188

Programs Degree

- B.S., Natural Resources and Environment (p. 361)

Minor

- Minor, Natural Resources and Environment (p. 362)
- Minor, Sustainable Agriculture (p. 363)

B.S., Natural Resources and Environment

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Natural Resources and Environment B.S.: 120 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X | General Chemistry I | |
| As part of the general education requirements, complete one of the following: | | |
| MATH F230X | Essential Calculus with Applications | |
| MATH F251X | Calculus I | |
| MATH F252X | Calculus II | |
| MATH F253X | Calculus III | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| BIOL F115X | Fundamentals of Biology I | |
| BIOL F116X | Fundamentals of Biology II | |
| NRM F303X | Environmental Ethics and Actions | |
| STAT F200X | Elementary Statistics | |
| Natural Resources and Environment Program Requirements | | |
| Complete the following: | | |
| BIOL F371 | Principles of Ecology | 4 |
| ECON F235X | Introduction to Natural Resource Economics | 3 |
| NRM F101 | Natural Resources Conservation and Policy | 3 |
| NRM F210 | Principles of Sustainable Agriculture | 3 |
| NRM F111X | Introduction to Sustainability Science | 3 |
| NRM F240 | Natural Resources Measurement and Inventory | 3 |
| NRM F277 | Introduction to Conservation Biology | 3 |
| NRM F290 | Field Course of Natural Resource Management Complexity in Alaska | 2 |
| NRM F366 | Survey Research in Natural Resources Management | 3 |
| NRM F370 | Introduction to Watershed Management | 3 |
| NRM F380 | Soils and the Environment | 3 |
| NRM F403 | Environmental Decision-Making | 3 |
| NRM F430 | Resource Management Planning | 3 |
| GEOG/GEOS F483 | Research Design, Writing and Presentation Methods ¹ | 3 |
| GIS Courses | | |

| | | |
|--|--|----|
| Complete one from the following: | | |
| NRM F338 | Introduction to Geographic Information Systems | |
| NRM F435 | GIS Analysis | |
| Policy/Law Courses | | |
| NRM F204 | Public Lands Law and Policy | 3 |
| or NRM F407 | Environmental Law | |
| Minor, Pre-vet, Support Field | | |
| Complete a minor, pre-vet, or 15 credits in a support field ² | | 15 |

¹ Fulfills the baccalaureate capstone requirement.

² Complete a minor, pre-vet, or 15 credits in a support field which is a group of courses selected for its clear pertinence to a cohesive program. Support fields may include but are not limited to natural resources and environment, chemistry, communication, education, art, fisheries and wildlife management. Courses must be approved by the student’s academic advisor and department head prior to attaining senior standing. Note: students must take a total of 39 upper-division credits.

Minor, Natural Resources and Environment

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Natural Resources and Environment Minor: 18 credits

| Code | Title | Credits |
|----------------------------|---|---------|
| Complete the following: | | |
| NRM F101 | Natural Resources Conservation and Policy | 3 |
| NRM electives ¹ | | 15 |

¹ At least 6 credits must be upper-division. The minor program must be approved by an NRM advisor.

Minor, Sustainable Agriculture

The minor in sustainable agriculture is based on social, economic and environmental aspects of agriculture and food production. The curriculum supports a basic understanding of sustainability science in global and U.S. agriculture, and an appreciation for the integrated nature of the biological, physical and social sciences that make up sustainable agriculture.

Students must earn a C grade or better in each course.

Minimum Requirements for Sustainable Agriculture Minor: 18 credits

| Code | Title | Credits |
|----------------------------------|--|---------|
| Complete the following: | | |
| ECON F235X | Introduction to Natural Resource Economics | 3 |
| NRM F101 | Natural Resources Conservation and Policy | 3 |
| NRM F210 | Principles of Sustainable Agriculture | 3 |
| Complete three of the following: | | 9 |
| NRM F211 | Introduction to Applied Plant Science | |
| NRM F303X | Environmental Ethics and Actions | |
| NRM F380 | Soils and the Environment | |
| NRM F403 | Environmental Decision-Making | |

Note: Students majoring in NRM are not eligible for the sustainable agriculture minor.

Paralegal Studies

Minor

The minor in paralegal studies is designed to provide you the opportunity to develop introductory knowledge in support for legal services or multiple areas of law.

This minor is a great choice for political science, justice or any Bachelor of Arts degree-seeking students who need to satisfy their minor requirement or Associate of Arts students who want to explore paralegal studies as an area of interest.

The minor is not designed to prepare students to work as paralegals and is not an American Bar Association accredited program of study.

Community and Technical College
Department of Paralegal Studies (<https://www.ctc.uaf.edu/programs/paralegal-studies/>)
907-455-2800

Programs Minor

- Minor, Paralegal Studies (p. 364)

Degree

- A.A.S., Paralegal Studies (p. 188)

Minor, Paralegal Studies

Students must earn a C- grade or better in each course.

Minimum Requirements for Paralegal Studies Minor: 15 credits

| Code | Title | Credits |
|-------------------------|-----------------------------------|---------|
| Complete the following: | | |
| PLS F102 | Introduction to Paralegal Studies | 3 |
| PLS electives | | 12 |

Petroleum Engineering

B.S. Degree

The mission of the petroleum engineering program is to provide its students with quality education and training in the field of petroleum engineering through effective teaching, research and public service, with emphasis on Alaska petroleum resources.

Petroleum engineering offers a unique look at the challenging problems confronting the petroleum industry. This program requires an understanding of many disciplines including mathematics, physics, chemistry, geology and engineering science. Courses in petroleum engineering deal with drilling, formation evaluation, production, reservoir engineering, computer simulation and enhanced oil recovery. The curriculum prepares graduates to meet the demands of modern technology while emphasizing, whenever possible, the special problems encountered in Alaska. Located in one of the largest oil-producing states in the nation, the UAF petroleum engineering department offers one of the most modern and challenging degree programs available.

The petroleum engineering program educational objectives are:

1. Our graduates will apply their technical knowledge and data analytics skills and have successful careers in the oil and gas industry analyzing real-world petroleum engineering problems, developing innovative solutions underpinned by data and communicating these to meet the needs of multiple stakeholders within the global community.
2. Our graduates will demonstrate professionalism, commitment to ethical standards and lifelong learning through continuing professional development during their careers.
3. Our graduates will contribute significantly to the global petroleum engineering profession and they will exemplify the behaviors, including integrity, empathy, tolerance, respect and fair dealing, necessary to become industry leaders within and beyond Alaska.

Learn more about the petroleum engineering program mission, goals and educational objectives (<https://www.uaf.edu/cem/>).

Minimum Requirements for Petroleum Engineering Bachelor's Degree: 131 credits

Learn more about the bachelor's degree in petroleum engineering (<https://uaf.edu/academics/programs/bachelors/petroleum-engineering.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Petroleum Engineering (<https://www.uaf.edu/cem/>)
907-474-7734

Programs Degree

- B.S., Petroleum Engineering (p. 365)

B.S., Petroleum Engineering

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Petroleum Engineering, B.S.: 131 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X | General Chemistry I | |
| CHEM F106X | General Chemistry II | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| LS F101X | Library Information and Research | |
| MATH F252X | Calculus II | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| Petroleum Engineering Program Requirements | | |
| Complete the following: | | |
| ES F201 | Computer Techniques | 3 |
| ES F208 | Mechanics | 4 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| ES F346 | Introduction to Thermodynamics | 3 |
| GE F261 | General Geology for Engineers | 3-4 |
| or GEOS F101X | The Dynamic Earth | |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| MATH F426 | Numerical Analysis | 3 |
| or ES F301 | Engineering Analysis | |
| PETE F101 | Fundamentals of Petroleum, Drilling and Production | 2 |
| PETE F201 | Future Trends in the Oil and Gas Industry | 1 |
| PETE F301 | Reservoir Rock and Fluid Properties | 4 |
| PETE F302 | Well Logging | 3 |
| PETE F303 | Reservoir Rock and Fluid Properties Laboratory | 1 |
| PETE/GEOS F370 | Sedimentology and Structural Geology for Petroleum Engineers | 4 |
| PETE F407 | Petroleum Production Engineering | 3 |
| PETE F411 | Drilling Fluids Laboratory | 1 |
| PETE F421 | Reservoir Characterization | 3 |
| PETE F426 | Drilling Engineering | 3 |
| PETE F431 | Natural Gas Engineering | 2 |

| | | |
|---|--|---|
| PETE F456 | Petroleum Evaluation and Economic Decisions | 3 |
| PETE F469 | Enhanced Oil Recovery and Reservoir Simulation | 3 |
| PETE F476 | Petroleum Reservoir Engineering | 3 |
| PETE F478 | Well Test Analysis | 2 |
| PETE F481 | Well Completions and Stimulation Design | 3 |
| PETE F487A | Petroleum Project Design ^{1,2} | 1 |
| PETE F487B | Petroleum Project Design ² | 1 |
| STAT F300 | Statistics | 3 |
| Complete one of the following approved electives: | | 3 |
| CE F424 | Permafrost Engineering | |
| ES F307 | Elements of Electrical Engineering | |
| ESM F422 | Engineering Decisions | |
| ME F441 | Heat and Mass Transfer | |
| ME F458 | Energy and the Environment | |

Fundamentals of Engineering (FE) Examination

Fundamentals of Engineering (FE) examination administered by the State of Alaska.

¹ PETE F487A is prerequisite for PETE F487B.

² Fulfills the baccalaureate capstone requirement.

Philosophy

B.A. Degree

The courses in philosophy are designed to confront students with foundational problems related to the human experience and to introduce students to the critical assessment of those problems, thus broadening students' perspectives and critical thinking skills for various areas of specialization in science, social science and humanities.

Minimum Requirements for Philosophy Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in philosophy (<https://uaf.edu/academics/programs/bachelors/philosophy.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Philosophy and Humanities Department (<https://www.uaf.edu/philo/>)
907-474-7007

Programs Degrees

- B.A., Philosophy (p. 366)

Minor

- Minor, Philosophy (p. 367)

B.A., Philosophy

Students must earn a C- grade or better in each course.

Minimum Requirements for Philosophy B.A.: 120 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Philosophy Program Requirements | | |
| Complete the following: | | |
| PHIL F102X | Introduction to Philosophy | 3 |
| PHIL F104X | Logic and Reasoning | 3 |
| PHIL F351 | History of Ancient Greek Philosophy | 3 |
| PHIL F352 | History of Modern Philosophy: Descartes to Kant | 3 |
| PHIL F471 | Contemporary Philosophical Problems ¹ | 3 |
| PHIL F481 | Philosophy of Science | 3 |
| Complete 6 of the following: | | 18 |
| PHIL F108 | Symbolic Logic | |
| PHIL F202 | Introduction to Eastern Philosophy | |
| PHIL F322X | Ethics | |
| PHIL F341 | Theories of Knowledge | |
| PHIL F342 | Theories of Reality | |
| PHIL F361 | Philosophy in Literature | |
| PHIL F362 | Feminist Philosophy | |
| PHIL F402 | Biomedical and Research Ethics | |
| PHIL F421 | Aesthetics | |
| PHIL F436 | Ethical Theory | |
| PHIL F487 | Conceptual Issues in Evolutionary Biology | |
| PHIL F499 | B.A. Thesis in Philosophy | |

¹ Satisfy the capstone requirement by passing PHIL F471.

Minor, Philosophy

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Philosophy Minor: 18 credits

| Code | Title | Credits |
|----------------------------------|--|---------|
| PHIL F102X | Introduction to Philosophy | 3 |
| PHIL F351 | History of Ancient Greek Philosophy | 3 |
| PHIL F352 | History of Modern Philosophy: Descartes to Kant | 3 |
| PHIL elective at the F400 level | | 3 |
| Complete two from the following: | | 6 |
| PHIL F104X | Logic and Reasoning | |
| PHIL F108 | Symbolic Logic | |
| PHIL F202 | Introduction to Eastern Philosophy | |
| PHIL F322X | Ethics | |
| PHIL F341 | Theories of Knowledge | |
| PHIL F342 | Theories of Reality | |
| PHIL F361 | Philosophy in Literature | |
| PHIL F362 | Feminist Philosophy | |
| PHIL F402 | Biomedical and Research Ethics | |
| PHIL F421 | Aesthetics | |
| PHIL F436 | Ethical Theory | |
| PHIL F471 | Contemporary Philosophical Problems | |
| PHIL F481 | Philosophy of Science | |
| PHIL F487 | Conceptual Issues in Evolutionary Biology | |

Physics

B.S. Degree

Physics, together with mathematics and chemistry, provides the foundation for work in all fields of the physical sciences and engineering, and contributes greatly to other disciplines such as the biosciences and medicine.

The undergraduate curriculum provides a solid foundation in classical and modern physics, with emphasis on both its experimental and theoretical aspects. A student completing this curriculum can be well-prepared for advanced study in physics and related sciences, and for other careers in industry, government or the private sector that require refined abilities in problem-solving.

The **physics** concentration represents the classical undergraduate physics curriculum, while the **applied physics** concentration provides a solid foundation in general physics with the flexibility to include applied or interdisciplinary course work, aimed at e.g., engineering physics, biophysics or oceanography.

The **atmospheric physics** concentration is a solid foundation at the interface of physics, climate sciences and meteorology. The **computational physics** concentration is relevant for students seeking careers in any areas that require expertise in computational modeling and simulation of physical systems.

The **technical management** concentration provides an opportunity to combine basic knowledge of physics with an aptitude for leadership in business. Declared physics majors in good standing with appropriate grades, department mentoring and approval for some courses are, upon graduation, welcome to apply to the MBA program in UAF's College of Business and Security Management.

Minimum Requirements for Physics Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in physics (<https://uaf.edu/academics/programs/bachelors/physics.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Physics (<https://www.uaf.edu/physics/>)
907-474-7339

Programs Degree

- B.S., Physics (p. 368)

Minor

- Minor, Physics (p. 370)

B.S., Physics

Program Requirements

Minimum Requirements for Degree: 120 credits

Students must earn a C- grade or better in each course.

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| Physics Program Requirements | | |
| Complete the following: | | |
| MATH F253X | Calculus III | 4 |
| PHYS F213X | Elementary Modern Physics | 4 |
| PHYS F220 | Introduction to Computational Physics | 4 |
| PHYS F301 | Introduction to Mathematical Physics | 4 |
| PHYS F341 | Classical Physics I: Particle Mechanics | 4 |
| PHYS F342 | Classical Physics II: Electricity and Magnetism | 4 |
| PHYS F400 | Capstone Project ¹ | 0 |
| Concentrations | | |
| Complete one from the following concentrations: | | 31-40 |
| Physics | | |
| Applied Physics | | |
| Atmospheric Physics | | |
| Computational Physics | | |
| Technical Management | | |

¹ Satisfy the capstone project requirement by passing PHYS F400, Capstone Project (0 credits).
The capstone project can be done either as individual undergraduate research with a faculty member (by taking PHYS F488 - 2 credits) or as an independent study with a faculty member within any F300- or F400-level physics course (by taking PHYS F497 - 2 credits), or as participation in the international University Physics Competition. Credits required to fulfill the capstone experience do not count toward credits required to complete the concentration.

Concentrations

PHYSICS

| Code | Title | Credits |
|-----------------------------|-------|---------|
| Program Requirements | | |
| Complete the following: | | |

| | | |
|--|---|---|
| MATH electives at the F300 level or above ¹ | | 6 |
| PHYS F343 | Classical Physics III: Vibration and Waves | 4 |
| PHYS F351 | Thermal Physics | 2 |
| PHYS F381 | Physics Laboratory | 3 |
| PHYS F421 | Quantum Mechanics | 4 |
| PHYS F451 | Statistical Physics | 2 |
| PHYS F462 | Geometrical and Physical Optics | 4 |
| Complete 6 credits from the following: | | 6 |
| PHYS F471A | Advanced Topics in Physics I: Condensed Matter Physics I | |
| PHYS F471B | Advanced Topics in Physics I: Condensed Matter Physics II | |
| PHYS F471C | Advanced Topics in Physics I: Space and Auroral Physics | |
| PHYS F471D | Advanced Topics in Physics I: Nonlinear Dynamics | |
| PHYS F471E | Advanced Topics in Physics I: Biophysics | |
| PHYS F471F | Advanced Topics in Physics I: Nuclear and Particle Physics | |
| PHYS F471G | Advanced Topics in Physics I: General Relativity | |
| PHYS F471H | Advanced Topics in Physics I: Astrophysics | |
| PHYS F471I | Advanced Topics in Physics I: Topics in Modern Mathematical Physics | |
| PHYS F471J | Advanced Topics in Physics I: Order of Magnitude Physics | |
| PHYS F472A | Advanced Topics in Physics II: Planetary Atmospheres | |
| PHYS F472B | Advanced Topics in Physics II: Fluid Dynamics | |
| PHYS F472C | Advanced Topics in Physics II: Plasma Physics | |
| PHYS F472D | Advanced Topics in Physics II: Hamiltonian Mechanics | |
| PHYS F472E | Advanced Topics in Physics II: Physics of Glaciers | |
| PHYS F472F | Advanced Topics in Physics II: Remote Sensing | |
| PHYS F472G | Advanced Topics in Physics II: Solar Physics | |
| PHYS F472H | Advanced Topics in Physics II: Advanced Laboratory | |
| PHYS F472I | Advanced Topics in Physics II: Spectroscopy | |
| PHYS F472J | Advanced Topics in Physics II: Cosmology | |
| PHYS F472K | Advanced Topics in Physics II: Quantum Computation | |
| PHYS F472L | Advanced Topics in Physics II: Covariant Kinematics/Dynamics | |
| PHYS F472Z | Advanced Topics in Physics II: Current Topics in Physics | |

¹ Recommended courses include MATH F314, MATH F432 and MATH F410.

APPLIED PHYSICS

| Code | Title | Credits |
|--|-------|---------|
| Program Requirements | | |
| Complete the following: | | |
| MATH electives at the F300 level or above ¹ | | 6 |
| Physics credits at the F300 level or above | | 9 |
| Applied physics ² | | 17 |

¹ Recommended courses include MATH F314, MATH F432 and MATH F410.

² The credits must be in a chosen subject area and approved before the beginning of the student's final semester by the head of the Physics Department.

ATMOSPHERIC PHYSICS

| Code | Title | Credits |
|--|--------------------------------------|---------|
| Program Requirements | | |
| Complete the following: | | |
| MATH electives at the F300 level or above ¹ | | 6 |
| Physics credits at the F300 level or above | | 9 |
| ATM F401 | Introduction to Atmospheric Sciences | 3 |
| ATM F413 | Atmospheric Radiation | 3 |
| ATM F445 | Atmospheric Dynamics | 3 |
| Other relevant upper-division courses. ² | | 8 |

¹ Recommended courses include MATH F314, MATH F432 and MATH F410.

² The credits must be in a chosen subject area and approved before the beginning of the student's final semester by the head of the Physics Department.

COMPUTATIONAL PHYSICS

| Code | Title | Credits |
|--|---------------------|---------|
| Program Requirements | | |
| Complete the following: | | |
| MATH electives at the F300 level or above ¹ | | 6 |
| Physics credits at the F300 level or above | | 9 |
| CS F201 | Computer Science I | 3 |
| CS F202 | Computer Science II | 3 |
| Other relevant upper-division courses. ² | | 8 |
| MATH F426 | Numerical Analysis | 3 |

¹ Recommended courses include MATH F314, MATH F432 and MATH F410.

² The credits must be in a chosen subject area and approved before the beginning of the student's final semester by the head of the Physics Department.

TECHNICAL MANAGEMENT

| Code | Title | Credits |
|---|---|---------|
| Program Requirements | | |
| Complete the following: | | |
| MATH electives at the F300 level or above ¹ | | 3 |
| STAT F200X | Elementary Statistics | 3 |
| Physics credits at the F300 level or above | | 12 |
| ACCT F261X | Principles of Financial Accounting | 3 |
| ACCT F262 | Principles of Managerial Accounting | 3 |
| College of Business and Security Management Courses ² | | |
| BA F325 | Financial Management ³ | 3 |
| BA F330 | The Legal Environment of Business ³ | 4 |
| BA F343 | Principles of Marketing ³ | 3 |
| BA F360 | Operations Management ³ | 3 |
| BA F390 | Organizational Theory and Behavior ³ | 3 |

¹ Recommended courses include MATH F314, MATH F432 and MATH F410.

² Students must take ACCT F261X, MATH F253X and PHYS F220 before taking these courses; or have permission of the MBA director. The College of Business and Security Management agrees that such students will be allowed to register for these courses.

³ Students can be required to earn a B grade or higher if applying for the MBA program.

Note: Other courses suggested to fulfill minimum credit requirements: ES F201 and ES F307.

Note: Must exclude PHYS F123X and PHYS F124X from core curriculum natural science requirement.

Requirements for physics teachers (grades 7-12)

Students must earn a C- grade or better in each course.

| Code | Title | Credits |
|---|--|---------|
| Program Requirements | | |
| Complete all the requirements of the B.S. degree | | |
| All prospective physics teachers must complete the following: | | |
| CHEM F105X and CHEM F106X | General Chemistry I and General Chemistry II | 8 |
| PHYS F211X | General Physics I | 4 |
| PHYS F212X | General Physics II | 4 |
| PHYS F213X | Elementary Modern Physics | 4 |
| PHYS F220 | Introduction to Computational Physics | 4 |
| PHYS F301 | Introduction to Mathematical Physics | 4 |
| MATH electives | | 3 |
| Physics-approved electives | | 16 |
| All prospective science teachers must complete the following: | | |
| PHIL F481 | Philosophy of Science | 3 |

Note: We strongly recommend that prospective secondary science teachers seek advising from the Alaska College of Education early in their undergraduate degree program so they can be appropriately advised of the State of Alaska requirements for teacher licensure. Students will apply for admission to the Alaska College of Education's

postbaccalaureate teacher preparation program, a one-year intensive program, during their senior year.

Minor, Physics

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Physics

Minor: 20 credits

| Code | Title | Credits |
|---|---------------------------|---------|
| Complete the following: | | |
| PHYS F211X | General Physics I | 4 |
| PHYS F212X | General Physics II | 4 |
| PHYS F213X | Elementary Modern Physics | 4 |
| Physics electives at the F300-400 level | | 8 |

Political Science

B.A. Degree

The Department of Political Science offers a major in political science and minors in political science and in law and society. The department also offers graduate-level political science courses in the Arctic and Northern studies M.A. program and the interdisciplinary studies Ph.D. program.

The political science discipline educates students on politics, policy and citizenship in a changing world. As the study of power, political science explains who gets what, when, where and how. It examines the struggles over claims to authority that shape our lives and our world. As the study of values, it examines why citizens obey or rebel, the nature of just societies, and the ways individuals reconcile personal liberty with political authority. As the science of political behavior, it analyzes the actions of interest groups, political parties and public officials. Politics is an omnipresent force, not only in governments but in families, social organizations, schools and decision-making bodies of all types — from student councils to international institutions. A solid understanding of local, state, national and international politics will benefit all students throughout their careers.

Courses are offered in the political science fields of American politics, public policy and law, comparative politics, international politics and political theory. The department also offers specialized classes in environmental policy and politics, Indigenous studies, and Arctic and Northern studies. In addition to course offerings and faculty expertise, the department presents real-world opportunities for students to apply their learning. Those include numerous internship and scholarship opportunities in Alaska and the rest of the United States. Students can participate in the Model United Nations and Model Arctic Council, join the Political Science Department honor society, Pi Sigma Alpha, aid faculty as research assistants or create their own research projects, and take part in numerous other department projects such as bringing speakers to campus or hosting roundtables on important issues. Graduate students may also serve as teaching or research assistants.

The political science B.A. has led students to graduate work in the social sciences; employment in the media and public relations; teaching at high school and university levels; and careers in business corporations and nonprofits at the state and national levels. Political science provides a broad understanding of the formation, application and change of the law, as well as research techniques and standards of argumentation essential to legal practice. Political science is the premier major for students desiring to go to law school and also prepares students for work in various fields of government. Alaska offers job prospects for political science graduates as managers in state and local governments and as legislators and legislative staff members. Graduates are also qualified to work outside of Alaska in numerous public and private sector jobs.

Minimum Requirements for Political Science Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in political science (<https://uaf.edu/academics/programs/bachelors/political-science.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts

Department of Political Science (<https://www.uaf.edu/polisci/>)
907-474-7609

Programs Degree

- B.A., Political Science (p. 372)

Minor

- Minor, Political Science (p. 373)
- Minor, Law and Society (p. 340)

B.A., Political Science

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Political Science B.A.: 120 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete at least one of the following Political Science courses: | | |
| PS F100X | Political Economy | |
| PS F201X | Comparative Politics | |
| PS F221X | International Politics | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| As part of the B.A. degree requirements, complete: | | |
| PS F300X | Ethics and Society | |
| Political Science Program Requirements | | |
| Complete the following: | | |
| PS F101X | Introduction to American Government and Politics | 3 |
| PS F222 | Political Science Research Methods | 3 |
| Complete one of the following: | | 3 |
| PS F475 | Internship in Public Affairs | |
| PS F499 | Senior Thesis | |
| The Alaska Universities Legislative Internship Program | | |
| Other approved internship earning at least 3 transferable upper-division credits | | |
| Political Science | | |
| Complete 24 credits from the following (at least one course from four of the following sub-disciplinary groups) | | 24 |
| <i>American Government and Politics</i> | | |
| PS F301 | American Presidency | |
| PS F302 | Congress and Public Policy | |
| PS F303 | Politics and the Judicial Process | |
| PS F401 | Political Behavior | |
| PS F447 | U.S. Environmental Politics | |
| <i>Public Law</i> | | |
| PS F212 | Introduction to Public Administration | |
| PS F403 | Public Policy | |
| PS F435 | Constitutional Law I: Federalism | |
| PS F436 | Constitutional Law II: Civil Rights and Liberties | |
| PS F462 | Alaska Government and Politics | |
| <i>Comparative Politics</i> | | |
| PS F201X | Comparative Politics | |
| PS F202 | Democracy and Global Society | |
| PS F450 | Comparative Indigenous Rights and Policies | |

| | | |
|--|--|-----------|
| PS F458 | Comparative Environmental Politics | |
| PS F460 | Government and Politics of Canada | |
| PS/HIST F467 | Political Development in Latin America and the Caribbean | |
| PS F468 | Government and Politics of Russia | |
| <i>International Politics</i> | | |
| PS F221X | International Politics | |
| PS F304 | International Security | |
| PS F322 | International Law and Organization | |
| PS F323 | International Political Economy | |
| PS F437 | United States Foreign Policy | |
| PS F452 | International Relations of the North | |
| PS F454 | International Law and the Environment | |
| <i>Political Theory</i> | | |
| PS F314 | Political Ideologies | |
| PS F315 | American Political Thought | |
| PS/PHIL F411 | Classical Political Theory | |
| PS/PHIL F412 | Modern Political Theory | |
| PS F414 | Contemporary Political Philosophy | |
| Four additional Political Science courses | | 12 |
| <i>Other Courses</i> | | |
| PS F205 | Leadership, Citizenship and Choice | |
| PS/ANS F325 | Alaska Native and Comparative Tribal Self-Government | |
| PS F340 | Gender, Sex and Politics | |
| PS/ANS F425 | Federal Indian Law and Alaska Natives | |
| PS F455 | Political Economy of the Global Environment | |
| PS F456 | Science, Technology and Politics | |
| PS F469 | Arctic Politics and Governance | |
| PS F472 | Ethics in International Affairs | |
| PS F473 | Politics and Film | |

Minor, Political Science

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Political Science Minor: 15 credits

| Code | Title | Credits |
|--|--|---------|
| Political Science Program Requirements | | |
| Complete the following: | | |
| PS F101X | Introduction to American Government and Politics | 3 |
| Complete at least four political science courses at the F200, F300 or F400 level | | 12 |

Psychology

B.A., B.S. Degrees

The Department of Psychology offers B.A. and B.S. degrees in psychology. The department's focus is to provide breadth and depth in the science and profession of psychology with a commitment to honoring diversity and promoting human welfare. The curriculum develops cross-cultural knowledge, critical thinking, imagination, creativity, ethical principles and concern for social justice, as well as respect for and knowledge of diverse points of view that include feminist, multicultural, indigenous, and gay and lesbian perspectives.

In addition to active engagement in the classroom, students can participate in research and community service. Programs in psychology facilitate an understanding of the human experience as an interaction of biological, psychological, social and cultural processes.

Graduates of the undergraduate program in psychology have been successful in gaining entrance to graduate school in a variety of fields including psychology, medicine, business and law. Graduation with an undergraduate psychology degree has allowed students to become employed in a variety of entry-level human services and business positions.

Minimum Requirements for Psychology Bachelor's Degrees: 120 credits

Learn more about the bachelor's degree in psychology (<https://uaf.edu/academics/programs/bachelors/psychology.php>), including an overview of the program, career opportunities and more.

Learn more about the online bachelor's degree in psychology (<https://uaf.edu/academics/programs/bachelors/psychology-online.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts

Department of Psychology (<https://www.uaf.edu/psych/>)
907-474-7007

Programs Degree

- B.A., Psychology (p. 374)
- B.S., Psychology (p. 375)

Minor

- Minor, Psychology (p. 376)

B.A., Psychology

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Psychology B.A.: 120 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Psychology Program Requirements | | |
| Complete the following: | | |
| PSY F101X | Introduction to Psychology | 3 |
| PSY F250 | Introductory Statistics for Social Sciences | 3 |
| PSY F275 | Introduction to Social Science Research Methods | 3 |
| PSY F301 | Culture and Psychology | 3 |
| PSY F475 | Research Design and Analysis in Psychology ¹ | 3 |
| or PSY F485 | Senior Seminar | |
| or PSY F499 | Thesis | |
| Complete 6 credits from the following theoretical psychology courses: | | 6 |
| PSY F240 | Psychology of Development | |
| PSY F304 | Personality | |
| PSY F330 | Social Psychology | |
| PSY F333/ WGS F332 | Human Sexualities Across Cultures | |
| PSY F335 | Brain and Behavior | |
| PSY F345 | Abnormal Psychology | |
| PSY/WGS F360 | Psychology of Women Across Cultures | |
| PSY F370 | Drugs and Behavior | |
| PSY F440 | Learning and Cognition | |
| PSY F470 | Sensation and Perception | |
| Complete 6 credits from the following applied psychology courses: | | 6 |
| PSY F309 | Psychology of Stress | |
| PSY F337 | Sport Psychology | |
| PSY F365 | Forensic Psychology | |
| PSY F390 | Psychology of Work | |
| PSY F445 | Community Psychology | |
| PSY F455 | Clinical Psychology | |
| PSY F469 | Health Psychology | |
| PSY F475 | Research Design and Analysis in Psychology | |
| PSY F480 | Qualitative Social Science Research | |
| PSY F485 | Senior Seminar ¹ | |
| PSY F488 | Practicum in Psychology | |

| | |
|---|----------|
| PSY F498 | Research |
| PSY F499 | Thesis |
| Complete 9 additional psychology credits selected from the catalog or from electives approved by psychology faculty | |

9

¹ PSY F485 fulfills the baccalaureate capstone requirement.

Note: No course may count in more than one area (e.g. PSY F475 may NOT count toward both foundation and applied courses).

Note: Students may not count more than 6 credits of any combination of PSY F497 and PSY F498 toward the major.

Note: Students may apply an unlimited number of PSY F392/PSY F492 and PSY F393/PSY F493 credits toward the degree provided the topics are different for each course.

Note: Students should work closely with an advisor to ensure completion of 39 upper-division credits for graduation.

B.S., Psychology

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Psychology B.S. Degree: 120 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| Psychology Program Requirements | | |
| Complete the following: | | |
| PSY F101X | Introduction to Psychology | 3 |
| PSY F250 | Introductory Statistics for Social Sciences | 3 |
| PSY F275 | Introduction to Social Science Research Methods | 3 |
| PSY F301 | Culture and Psychology | 3 |
| PSY F475 | Research Design and Analysis in Psychology ¹ | 3 |
| or PSY F485 | Senior Seminar | |
| or PSY F499 | Thesis | |
| Complete 6 credits from the following theoretical psychology courses: | | 6 |
| PSY F240 | Psychology of Development | |
| PSY F304 | Personality | |
| PSY F330 | Social Psychology | |
| PSY F333/ WGS F332 | Human Sexualities Across Cultures | |
| PSY F335 | Brain and Behavior | |
| PSY F345 | Abnormal Psychology | |
| PSY/WGS F360 | Psychology of Women Across Cultures | |
| PSY F370 | Drugs and Behavior | |
| PSY F440 | Learning and Cognition | |
| PSY F470 | Sensation and Perception | |
| Complete 6 credits from the following applied psychology courses: | | 6 |
| PSY F309 | Psychology of Stress | |
| PSY F337 | Sport Psychology | |
| PSY F365 | Forensic Psychology | |
| PSY F390 | Psychology of Work | |
| PSY F445 | Community Psychology | |
| PSY F455 | Clinical Psychology | |
| PSY F469 | Health Psychology | |
| PSY F475 | Research Design and Analysis in Psychology | |
| PSY F480 | Qualitative Social Science Research | |
| PSY F485 | Senior Seminar ¹ | |
| PSY F488 | Practicum in Psychology | |

PSY F498 Research

PSY F499 Thesis

Complete 9 additional psychology credits selected from the catalog or from electives approved by psychology faculty

9

¹ PSY F485 fulfills the baccalaureate capstone requirement.

Note: No course may count in more than one area (e.g., PSY F475 may NOT count toward both foundation and applied courses).

Note: Students may not count more than 6 credits of any combination of PSY F497 and PSY F498 toward the major.

Note: Students may apply an unlimited number of PSY F392/PSY F492 and PSY F393/PSY F493 credits toward the degree provided the topics are different for each course.

Note: Students should work closely with an advisor to ensure completion of 39 upper-division credits for graduation.

Minor, Psychology

Program Requirements

Minimum Requirements for Psychology Minor: 15 credits

| Code | Title | Credits |
|-------------------------|----------------------------|---------|
| Complete the following: | | |
| PSY F101X | Introduction to Psychology | 3 |
| PSY electives | | 12 |

Rural Development

B.A. Degree

Rural development is an interdisciplinary field that teaches the history, theory and skills needed for human, social and economic development in rural communities. Rural development degree programs are designed to educate a new generation of community leaders for rural Alaska. The B.A. degree can be earned either on the Fairbanks campus or through distance delivery. Special application requirements and deadlines apply for distance B.A. degree programs. Students applying for acceptance into the Rural Development program need to complete a department-specific written questionnaire in addition to general university admission requirements. Findings from this questionnaire will be used to support the department advising process and assist students in connecting with faculty and mentors. The questionnaire is found on the DANSRD website under “How to Apply.”

Students in the rural development program gain a broad understanding of Alaska’s relationship to the global economy and an appreciation for sustainable development strategies. Students also learn specific tools essential for community leadership, including business plan and grant proposal writing, community visioning and planning processes, community-based research techniques, computer business applications, project management, and evaluation techniques. Graduates typically take positions with tribal and municipal governments, fisheries, tourism and other private businesses, Native corporations, regional health corporations or nonprofits, and state/federal agencies.

Within the B.A. degree program, students will select and develop a concentration in one of five areas:

- The human and social development concentration is for students interested in social services, social justice, community wellness and cultural development. Graduates may find employment with tribal governments, health consortia, clinics and schools.
- The tribal and municipal governance concentration is for students interested in tribal governance and rural municipal and borough government (home rule). Students develop an understanding of the history and constitutional basis for tribal governance, various home rule governance structures, basics of federal Indian law, principles and practices of self-determination, and the mandates of the Alaska Native Claims Settlement Act. They develop skills in planning, budgeting and human resources management. Students can pursue a special interest, such as management of health programs, tribal governance programs or Alaska Native corporations, and tailor the concentration to these specifications through choice of related courses and electives. Graduates may find employment with tribal and municipal governments and organizations, ANCSA corporations, and state and federal agencies.
- The integrated resource management concentration is designed for students interested in land use, subsistence, cultural resources and co-management. Students learn about traditional ecological knowledge, principles of natural resources management and policy, adaptive management, conservation and ecotourism, and skills for effective public/private/tribal collaboration in resource management. Management strategies for addressing climate change are explored. Graduates may find employment with ANCSA corporations, regional and tribal entities, or state and federal agencies.

- The entrepreneurship and economic development concentration is for students interested in creating sustainable economies in rural and indigenous communities, with a focus on small business development. Students learn to develop business and marketing plans, economic development planning, and basic principles of financial and human resources management for rural enterprises. Graduates find employment in ANCSA corporations, regional development organizations, economic development agencies and as local entrepreneurs.
- The multidisciplinary concentration is intended for students who wish to combine two or more rural development concentrations or combine a rural development concentration with another discipline. Students will work closely with their advisor to select the appropriate courses for the concentration.

Minimum Requirements for Rural Development Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in rural development (<https://uaf.edu/academics/programs/bachelors/rural-development.php>), including an overview of the program, career opportunities and more.

College of Rural and Community Development
Department of Alaska Native Studies and Rural Development (<https://www.uaf.edu/dansrd/>)
907-474-6528 Toll-free 1-866-478-2721

Programs Degree

- B.A., Rural Development (p. 377)

Minor

- Minor, Rural Development (p. 379)

B.A., Rural Development

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Rural Development B.A.: 120 credits

CONCENTRATIONS: HUMAN AND SOCIAL DEVELOPMENT (P. 378); TRIBAL AND MUNICIPAL GOVERNANCE (P. 378); INTEGRATED RESOURCE MANAGEMENT (P. 378); ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT (P. 378); MULTIDISCIPLINARY (P. 378)

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements ¹ | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Including 39 upper-division credits | | |
| Rural Development Program Requirements | | |
| Complete the following: | | |
| RD F225 | Applied Communication Skills | 3 |
| RD F300 | Rural Development in a Global Perspective | 3 |
| RD F325 | Rural Development Principles and Practices | 3 |
| RD F340 | Community Research Toolbox | 3 |
| RD F351 | Strategic Planning and Decision Making | 3 |
| RD F352 | Rural Business Planning and Proposal Development | 3 |
| RD F450 | Managing Rural Projects and Programs | 3 |
| RD F474 | Applied Community Research | 3 |
| RD F475 | Rural Development Senior Project ² | 3 |
| RD elective | | 3 |
| RD, ANS, TG or ED electives | | 6 |
| Concentrations ³ | | |
| Complete one from the following concentrations: | | 15 |
| Human and Social Development | | |
| Tribal and Municipal Governance | | |
| Integrated Resource Management | | |
| Entrepreneurship and Economic Development | | |
| Multidisciplinary | | |

¹ Students outside the Fairbanks area should verify that their chosen minor can be completed via distance delivery before declaring.

² Fulfills the baccalaureate capstone requirement.

³ Courses used in the concentration area may be double-counted for the minor.

Concentrations

HUMAN AND SOCIAL DEVELOPMENT

| Code | Title | Credits |
|--|--------------------------------------|---------|
| Complete the following: | | |
| ANS/RD F315 | Tribal People and Development | 3 |
| RD F465 | Community Healing and Wellness | 3 |
| RD F468 | Human Development and Social Justice | 3 |
| Complete an additional 6 credits from rural development, Alaska Native studies, ethnobotany, human services, psychology, rural development, rural human services, social work and/or tribal management. ¹ | | 6 |

¹ Recommended subject areas. Course substitutions relevant to the concentration area may be made with approval of the rural development faculty advisor.

TRIBAL AND MUNICIPAL GOVERNANCE

| Code | Title | Credits |
|--|---|---------|
| Complete the following: | | |
| ANS F325 | Alaska Native and Comparative Tribal Self-Government | 3 |
| RD F427 | Tribal Contracting and Compacting | 3 |
| ANS/RD F435 | Participatory Policy-making in Tribal, State and Federal Government | 3 |
| Complete an additional 6 credits from rural development, Alaska Native studies, applied business, business administration and or tribal management. ¹ | | 6 |

¹ Recommended subject areas. Course substitutions relevant to the concentration area may be made with approval of the rural development faculty advisor.

INTEGRATED RESOURCE MANAGEMENT

| Code | Title | Credits |
|--|---------------------------------------|---------|
| Complete the following: | | |
| RD F255 | Rural Alaska Land Issues | 3 |
| RD F265 | Perspectives on Subsistence in Alaska | 3 |
| RD F425 | Cultural Resource Issues | 3 |
| Complete an additional 6 credits from rural development, Alaska Native studies, environmental studies, ethnobotany, fisheries, high latitude range management, natural resource management, rural development and/or tribal management. ¹ | | 6 |

¹ Recommended subject areas. Course substitutions relevant to the concentration area may be made with approval of the rural development faculty advisor.

ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| RD F430 | Indigenous Economic Development and Entrepreneurship | 3 |
| RD F470 | The Alaska Native Claims Settlement Act: Pre-1971 to Present | 3 |

| | | |
|---------|---|---|
| RD F471 | Corporate Social Responsibility and Accountability in Rural and Indigenous Contexts | 3 |
|---------|---|---|

Complete an additional 6 credits from rural development, Alaska Native studies, applied business, business administration, construction trades technology, economics and/or tribal management. ¹

¹ Recommended subject areas. Course substitutions relevant to the concentration area may be made with approval of the rural development faculty advisor.

MULTIDISCIPLINARY

| Code | Title | Credits |
|--|-------|---------|
| Complete the following: | | |
| Complete 15 credits from two or more existing concentrations. Courses must include at least 9 credits from the required course lists of the existing concentrations as approved by department advisor. | | 15 |

Minor, Rural Development

Program Requirements

Minimum Requirements for Rural Development Minor: 15 credits

| Code | Title | Credits |
|--|-------|---------|
| Any three-credit RD course at the 300 level or above | | 3 |
| RD electives at the F200 level or above | | 12 |

Social Work

B.A. Degree

We educate generalist social work practitioners to promote the health and well-being of individuals, families and communities, emphasizing the diversity and uniqueness of rural Alaska.

We create a community of critical thinkers dedicated to becoming competent, culturally sensitive professionals engaged in lifelong learning. We prepare students for generalist social work practice with individuals, families, groups, organizations and communities; to integrate the values and ethics of the social work profession into generalist practice; to apply critical thinking to inform and communicate professional judgments; to engage diversity in generalist practice to advance human rights and advocate for social and economic justice; and to understand bio-psycho-social, spiritual, and cultural functioning and apply it to all client systems.

Graduates in social work qualify for beginning practice positions in child welfare, mental health, services for the aged, family agencies, youth programs, health services, Native corporations and other social agencies. Social work applies knowledge in the behavioral sciences to deal with the emotional and social problems of individuals, families and communities.

The curriculum includes a liberal arts base, foundation requirements in the behavioral sciences, and sequences in social policy and services, practice methods and field instruction. A major emphasis is the preparation of the student for beginning social work practice with rural and Alaska Native populations.

Students learn to engage people on a personal level and are placed in a social service agency as part of their course work during the senior year. Students must apply to participate in a senior field placement and are required to complete a minimum of 400 hours over the course of two semesters in a social service agency practicing the skills learned in the program.

The UAF baccalaureate social work program is accredited by the Council on Social Work Education. This degree program is delivered collaboratively within the UA system.

Minimum Requirements for Social Work Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in social work (<https://uaf.edu/academics/programs/bachelors/social-work.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts

Department of Social Work (<https://www.uaf.edu/socwork/>)
907-474-7240

Programs Degree

- B.A., Social Work (p. 380)

Minor

- Minor, Social Work (p. 381)

B.A., Social Work

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Social Work Bachelor's Degree: 120 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| <i>Social Sciences</i> | | |
| PSY F101X | Introduction to Psychology | |
| SOC F101X | Introduction to Sociology | |
| or ANTH F100X | Individual, Society and Culture | |
| <i>Natural Sciences</i> | | |
| Complete one of the following: | | 4 |
| BIOL F100X | Human Biology | |
| BIOL F103X | Biology and Society | |
| BIOL F111X | Human Anatomy and Physiology I | |
| BIOL F112X | Human Anatomy and Physiology II | |
| BIOL F115X | Fundamentals of Biology I | |
| BIOL F116X | Fundamentals of Biology II | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| As part of the B.A. degree requirements, complete: | | |
| ANS F242X | Indigenous Cultures of Alaska | |
| or ANTH F242 | Native Cultures of Alaska | |
| Social Work Program Requirements | | |
| Complete the following: | | |
| SWK F103X | Introduction to Social Work | 3 |
| SWK F220 | Ethics, Values and Social Work Practice | 3 |
| SWK F305 | Social Welfare History | 3 |
| SWK F306 | Social Welfare: Policies and Issues | 3 |
| SWK F320 | Rural Social Work | 3 |
| SWK F341 | Human Behavior in the Social Environment I | 3 |
| SWK F342 | Human Behavior in the Social Environment II | 3 |
| SWK F375 | Research Methods in Social Work | 3 |
| SWK F460 | Social Work Practice I | 3 |
| SWK F461 | Practicum in Social Work I ^{1,2} | 6 |
| SWK F463 | Social Work Practice II | 3 |
| SWK F464 | Practicum in Social Work II ^{1,2} | 6 |
| SWK F466 | Practicum in Social Work III ¹ | 3-6 |
| Special Problem Areas | | |
| Complete two of the following: | | 6 |
| HUMS F205 | Basic Principles of Group Counseling | |
| HUMS F305 | Substance Abuse Counseling | |
| SWK F330 | Seminar in International Social Work | |

| | |
|----------|---|
| SWK F350 | Women's Issues in Social Welfare and Social Work Practices |
| SWK F360 | Child Abuse and Neglect |
| SWK F370 | Services and Support for an Aging Society |
| SWK F390 | Trauma and Wellness: Historical and Contemporary Perspectives |
| SWK F440 | Social Work Practice with Military Families |
| SWK F470 | Substance Abuse Theories and Treatment |
| SWK F484 | Seminar in Social Work Practice Areas |
| SWK F405 | Mental Health and Wellness: A Social Work Approach |

- ¹ Students must complete a total of 12 credits of practicum, and students must take SWK F461 and SWK F464 for at least 6 of these credits. SWK F466 is an option for students who have completed SWK F461 and SWK F464 for less than 12 credits.

- ² Fulfills the baccalaureate capstone requirement.

Minor, Social Work

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Social Work Minor: 15 credits

| Code | Title | Credits |
|--|---|---------|
| Complete the following: | | |
| SWK F103X | Introduction to Social Work | 3 |
| SWK F220 | Ethics, Values and Social Work Practice | 3 |
| Complete three SWK designated courses, excluding SWK F460, SWK F461, SWK F463 and SWK F464 | | 9 |

Sport and Recreation Business

Admission to this program is currently suspended.

B.S.R.B. Degree

The Bachelor of Sport and Recreation Business (BSRB) degree is designed for undergraduate students interested in pursuing careers in sport, recreation and/or tourism. The degree emphasizes critical business areas including accounting, marketing, management, economics and finance and applies them to the sport, recreation and tourism industries. The combination of business, leadership and hands-on education is what sets our students up to make an immediate impact within an organization.

Students can choose between concentrations in recreation management or sport management. In both concentrations, students will design a pathway through electives to tailor their degree to best fit their needs. For example, a student wanting to work in the esports industry would concentrate in sport management and take a suggested pathway of electives to prepare them for the industry. Similarly, a student wanting to be a hunting guide or open their own outdoor business would concentrate in recreation and take a suggested pathway of electives. Students will be challenged to apply classroom content to real-world situations, gaining valuable resume-building experience in the process. Students benefit from in-person and online classes designed to complement a working student's schedule.

Minimum Requirements for Sport and Recreation Business Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in sport and recreation business (<https://uaf.edu/academics/programs/bachelors/sport-recreation-business-online.php>), including an overview of the program, career opportunities and more.

Learn more about the online bachelor's degree in sport and recreation business (<https://uaf.edu/academics/programs/bachelors/sport-recreation-business-online.php>), including an overview of the program, career opportunities and more.

College of Business and Security Management (<https://www.uaf.edu/cbsm/>)
907-474-7461

Programs Degree

- B.S.R.B., Sport and Recreation Business (p. 382) - Admission to this program is currently suspended.

B.S.R.B., Sport and Recreation Business

Program Requirements

Admission to this program is currently suspended.

Students must earn a C- grade or better in each course.

Minimum Requirements for Sport and Recreation Business B.S.R.B.: 120 credits

CONCENTRATIONS: SPORT MANAGEMENT (P. 382), RECREATION MANAGEMENT (P. 382)

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 409) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F122X | Essential Precalculus with Applications | |
| SPRT F281X | Introduction to Sport Management | |
| B.S.R.B. Degree Requirements | | |
| Complete the B.S.R.B. degree requirements. (p. 223) | | |
| As part of the B.S.R.B. degree requirements, complete: | | |
| BA F323X | Business Ethics | |
| Sport and Recreation Business Program Requirements | | |
| Complete the following: | | |
| ACCT F261X | Principles of Financial Accounting | 3 |
| BA F343 | Principles of Marketing | 3 |
| SPRT/BA F481 | Event Management | 3 |
| SPRT F483 | Sport and Recreation Sales | 3 |
| SPRT F484 | Legal Aspects of Sport and Recreation Management | 3 |
| SPRT/BA F485 | Sport and Recreation Facilities | 3 |
| Additional 12 credits of ACCT, BA, ECON, HSEM, SPRT or additional concentration courses as approved by advisor | | 12 |
| Concentrations | | |
| Choose one or more from the following concentrations: | | 9 |
| Sport Management | | |
| Recreation Management | | |
| Electives | | |
| Electives may be taken to meet 120 credits | | |

Concentrations

SPORT MANAGEMENT

| Code | Title | Credits |
|--------------------------------------|---|---------|
| Select 9 credits from the following: | | |
| BA F307 | Introductory Human Resources Management | |
| PSY F337 | Sport Psychology | |
| SPRT/BA/LEAD F280 | Sport Leadership | |

| | |
|--------------|------------------------------------|
| SPRT/BA F488 | Sport Analytics |
| SPRT/BA F482 | Sport Marketing |
| SPRT/BA F375 | Introduction to Esports Management |

RECREATION MANAGEMENT

| Code | Title | Credits |
|--|--|---------|
| Select 9 credits from the following: | | |
| BA F317 | Employment Law | |
| BA F360 | Operations Management | |
| BA F490 | Services Marketing | |
| NRM F365 | Principles of Outdoor Recreation Management | |
| RD F268 | Rural Tourism: Planning and Principles | |
| SPRT F367 | Huntology: The Science, Business and Philosophy of Hunting | |
| SPRT/BA F486 | Entrepreneurship in Outdoor Recreation Industries | |
| Recreation (RECR) electives ¹ | | 9 |

¹ No more than 3 credits of recreation (RECR) courses may count toward the concentration.

Statistics

Minor

Statistics is a collection of methods and theories for making decisions or estimating unknown quantities from incomplete information. Statistical techniques are useful, for example, in estimating plant, animal and mineral abundances; forecasting social, political and economic trends; planning field plot experiments in agriculture; performing clinical trials in medical research; and maintaining quality control in industry. Employment opportunities are excellent for statisticians in many of these areas of application.

The Department of Mathematics and Statistics also offers a concentration in statistics (p. 345) and an accelerated B.S. Mathematics/M.S. Statistics program (p. 406).

College of Natural Science and Mathematics

Department of Mathematics and Statistics (<https://www.uaf.edu/dms/>)
907-474-7332

Programs

Minor

- Minor, Statistics (p. 383)

Minor, Statistics

Minimum Requirements for Statistics

Minor: 16 credits

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Complete the following: | | |
| MATH F371 | Probability ¹ | 3 |
| MATH F408 | Mathematical Statistics | 3 |
| STAT F200X or STAT F300 | Elementary Statistics Statistics | 3 |
| STAT F401 | Regression and Analysis of Variance | 4 |
| MATH, STAT or STAT related coursework ² | | 3 |

¹ MATH F371 requires MATH F251X, MATH F252X and MATH F253X as prerequisites.

² e.g., BA F360, GEOS F430, ANTH F424, MATH F460, etc.

Note: Courses completed to satisfy this minor can be used to simultaneously satisfy other major or general distribution requirements.

Note: Fisheries majors selecting the research option for their major need only to complete MATH F371 and MATH F408 in addition to their fisheries requirements in order to obtain a minor in statistics.

Teaching English to Speakers of Other Languages

Minor Only

The minor in teaching English to speakers of other languages will provide students with a theoretical and practical foundation for the teaching of English as a second language in the United States or as a foreign language in other countries. The curriculum will benefit students in foreign languages, linguistics, English, education and other fields of study who are interested in short- or long-term employment in the TESOL field.

College of Liberal Arts
Department of Linguistics (<https://www.uaf.edu/linguist/>)
907-474-6585

Programs Minor

- Minor, Teaching English to Speakers of Other Languages (p. 384)

Minor, Teaching English to Speakers of Other Languages

Program Requirements

Students must earn a C- grade or better in each course except LING F200, which is graded on a pass/fail basis.

Minimum Requirements for Teaching English to Speakers of Other Languages Minor: 16 credits

| Code | Title | Credits |
|----------------------------|---|---------|
| Complete the following: | | |
| LING F100 or LING F101X | Language, Education, Linguistics ¹ Nature of Language | 3 |
| LING F200 | The Field of Teaching English to Speakers of Other Languages | 1 |
| LING F302 | Introduction to Second Language Acquisition | 3 |
| LING F315 | English Language for Second Language Teaching | 3 |
| LING F410 | Theory and Methods of Second Language Teaching | 3 |
| LING F451 or FL F451 | English Second Language Teaching Practicum Foreign Language Teaching Practicum | 3 |

¹ For LING F100, grade of 'B' or higher is required.

Note: F400-level courses require junior standing or instructor permission.

Tribal Governance

Minor

The minor in tribal governance provides students with the skills and knowledge needed for positions within tribal, local, and community governments and organizations across Alaska. The tribal governance program provides students with fundamental knowledge of tribal governance, law, policy and management through academic and hands-on education and training in subject areas important to tribal governments. The curriculum gives students a foundation to apply the knowledge gained in their majors to tribal and community governance and management contexts.

Minimum Requirements for Tribal Governance Minor: 15 credits

College of Rural and Community Development
Tribal Governance Program (<https://tribal.uaf.edu/>)
907-474-7143

Programs

Minor

- Minor, Tribal Governance (p. 385)

Minor, Tribal Governance

Students must earn C- grade or better in each course.

Minimum Requirements for Tribal Governance Minor: 15 credits

| Code | Title | Credits |
|-----------------------------|---|---------|
| Complete the following: | | |
| TG F101 | Introduction to Tribal Government in Alaska | 3 |
| TG F105 | Introduction to Managing Tribal Governments | 3 |
| TG F201 | Tribal Government in Alaska II | 3 |
| TG F205 | Managing Tribal Governments II | 3 |
| Tribal management electives | | 3 |

Wildlife Biology and Conservation

B.S. Degree

The undergraduate wildlife program provides basic education and training. This degree is designed for students whose objective is to accomplish the research needed to provide additional information on wild animal populations, their habitat and habitat-animal relationships. This degree is also for students whose primary interests involve interpreting, applying or disseminating research findings, rather than their acquisition. A wildlife B.S. degree is appropriate for students contemplating careers in wildlife agency administration, in developing and implementing wildlife management plans and in public information and education. The curriculum provides a solid foundation for graduate study and meets requirements for certification by The Wildlife Society.

The geographic location of the university is particularly advantageous for the study of wildlife biology. Spruce forest, aspen-birch forest, alpine tundra, bogs and several types of aquatic habitats are within easy reach. Studies can be made in many other habitats ranging from the dense forests of southeastern Alaska to Arctic tundra.

Adequate study collections of plants and animals are available, and a 2,000-acre study area is near the campus. Wildlife biology students have ample opportunity for close association with the personnel of the Alaska Cooperative Fish and Wildlife Research Unit, Institute of Arctic Biology and several local offices of the federal and state conservation agencies. These agencies often provide support for graduate student projects, and program faculty usually hire a number of students for summer fieldwork. Thus, an unusually good opportunity is available for students to gain experience and to make job connections.

Minimum Requirements for Wildlife Biology and Conservation Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in wildlife biology and conservation (<https://uaf.edu/academics/programs/bachelors/wildlife-biology-conservation.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Biology and Wildlife (<https://www.bw.uaf.edu>)
907-474-7671

Programs Degree

- B.S., Wildlife Biology and Conservation (p. 386)

Minor

- Minor, Wildlife Biology and Conservation (p. 388)

B.S., Wildlife Biology and Conservation

B.S. Degree

The Wildlife Biology and Conservation B.S. program prepares students for a career focused on the study and management of wild animal populations and their habitats. Career paths include wildlife agency administration, development and implementation of management plans, and communication about wildlife to the public. The wildlife program also provides a solid foundation for further study at the graduate level. The curriculum meets requirements for certification as a Wildlife Biologist by The Wildlife Society.

The geographic location of the university is particularly advantageous for the study of wildlife biology. Alaska contains vast areas of wilderness with intact ecosystems housing large populations of vertebrate herbivores and predators. Spruce forest, aspen-birch forest, alpine tundra, bogs, and several types of aquatic habitats are within easy reach of UAF. Farther afield, studies can be conducted in other habitats, from the dense forests of southeastern Alaska to Arctic tundra.

Wildlife biology students at UAF may interact with the personnel of the Alaska Cooperative Fish and Wildlife Research Unit, the Institute of Arctic Biology, and several local offices of the federal and state conservation agencies. Opportunities for summer fieldwork assisting government agencies and university researchers arise frequently, providing a valuable opportunity to gain experience and to make job connections.

Minimum Requirements for Wildlife Biology and Conservation Degree: 120 credits

Learn more about the bachelor's degree in wildlife biology and conservation (<https://uaf.edu/academics/programs/bachelors/wildlife-biology-conservation.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Biology and Wildlife

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Wildlife Biology and Conservation B.S.: 120 credits

| Code | Title | Credits |
|--|----------------------|---------|
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X | General Chemistry I | |
| CHEM F106X | General Chemistry II | |
| MATH F251X | Calculus I | |
| or MATH F230X Essential Calculus with Applications | | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |

| | |
|----------------------------|-------------------------------------|
| BIOL F115X | Fundamentals of Biology I |
| BIOL F116X | Fundamentals of Biology II |
| STAT F200X or STAT F300 | Elementary Statistics Statistics |

Wildlife Biology and Conservation Program Requirements

Complete the following:

| | | |
|-----------|--|---|
| BIOL F260 | Principles of Genetics | 4 |
| BIOL F310 | Animal Physiology | 4 |
| BIOL F371 | Principles of Ecology | 4 |
| BIOL F471 | Population Ecology | 3 |
| WLF F101 | Survey of Wildlife Science | 2 |
| WLF F301 | Design of Wildlife Studies | 3 |
| WLF F322 | Principles and Techniques of Wildlife Management | 3 |
| WLF F469 | Landscape Ecology and Wildlife Habitat | 3 |
| WLF F470 | Human Dimensions of Wildlife Management | 3 |

Complete three of the following: 9

| | |
|--|--|
| BIOL F425 | Mammalogy |
| BIOL F426 | Ornithology |
| WLF F421 | Ecology and Management of Large Mammals |
| WLF F425 | Ecology and Management of Birds |
| BIOL F239 | Introduction to Plant Biology |
| BIOL F331 or BIOL F320 | Systematic Botany Winter Botany |
| BIOL F190 or BIOL F430 or BIOL F488 | Introduction to Alaska Flora Plant Physiology and Development Arctic Vegetation Ecology: Geobotany |
| ENGL F314 or ENGL F414 | Technical Writing Research Writing |
| PHYS F123X or GEOS F101X or NRM F380 | College Physics I The Dynamic Earth Soils and the Environment |
| STAT F401 | Regression and Analysis of Variance |

Complete two of the following: 6

| | |
|------------|--|
| ECON F235X | Introduction to Natural Resource Economics |
| HIST F411 | Environmental History |
| NRM F204 | Public Lands Law and Policy |
| NRM F403 | Environmental Decision-Making |
| NRM F407 | Environmental Law |
| PS F447 | U.S. Environmental Politics |

Complete at least one additional course at the F300 level or higher (3 or 4 credits) in biology, wildlife biology, fisheries or natural resources management 3-4

Capstone¹

Satisfactory completion of course WLF F470 with either junior or senior standing

Note: At least 9 credits of botany are required for certification by The Wildlife Society

¹ Fulfills the baccalaureate capstone requirement (junior or senior standing required)**Note:** B.S. degree candidates are strongly urged to obtain work experience in wildlife-related positions with public resource agencies or private firms. Faculty members can help students contact potential employers.

Requirements for biology teachers (grades 7-12)

Note: We strongly recommend that prospective secondary science teachers seek advising from the Alaska College of Education early in their undergraduate degree program so they can be appropriately advised of the State of Alaska requirements for teacher licensure. Students will apply for admission to the Alaska College of Education's postbaccalaureate teacher preparation program, a one-year intensive program, during their senior year. The above requirements apply to all candidates who apply to the Alaska College of Education for licensure in biology.

| Code | Title | Credits |
|--|---|---------|
| Complete all the requirements of the wildlife biology B.S. degree. | | |
| All prospective biology teachers must complete the following: | | |
| BIOL F342 | Microbiology | 4 |
| BIOL F481 | Principles of Evolution | 4 |
| CHEM F321 and CHEM F325 | Organic Chemistry I and Organic Chemistry II | 8 |
| All prospective science teachers must complete the following: | | |
| PHIL F481 | Philosophy of Science | 3 |

Minor, Wildlife Biology and Conservation

Minor

The minor in wildlife biology and conservation offers a minimum set of courses to provide students with an understanding of the principles upon which management of wildlife populations is based and to familiarize students with techniques used in wildlife management and research.

College of Natural Science and Mathematics
Department of Biology and Wildlife (<https://www.bw.uaf.edu/>)
907-474-7671

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Wildlife Biology and Conservation Minor: 15 credits

| Code | Title | Credits |
|--|--|---------|
| BIOL F471 | Population Ecology | 3 |
| WLF F301 | Design of Wildlife Studies | 3 |
| WLF F322 | Principles and Techniques of Wildlife Management | 3 |
| Approved BIOL and WLF electives ¹ | | 6 |

¹ Only biology or wildlife electives that are not required for the student's major. Electives must be 300- or 400 level courses and must be approved by the chair of the wildlife biology and conservation program.

Note: Prerequisites for required courses include BIOL F115X, BIOL F116X, BIOL F371, CHEM F105X, MATH F151X, and WLF F101. Depending upon a student's major, some of these prerequisites may satisfy the 6 elective credits in biology and wildlife required for this minor.

Women, Gender and Sexuality Studies

Minor Only

Women, gender and sexuality studies offers an interdisciplinary minor focusing on women, gender and sexuality in historical and contemporary experiences. In addition, the minor offers students the opportunity to study multiple issues related to gender, such as masculinities, femininities and sexualities. In addition to an introductory course and a theory course focusing on women's studies, the minor draws from a variety of other disciplines, including Alaska Native studies, anthropology, communication, education, English, foreign languages, history, journalism, justice, linguistics, literature, music, philosophy, political science, psychology, social work and sociology. The particular strength of the program lies in being interdisciplinary, with diverse course offerings and inquiry into gender and sexuality issues. The multiple voices and perspectives provide broad understanding of issues related to women, gender and sexuality. The minor helps students prepare for a variety of personal and career pursuits, as gender issues and women are involved in every aspect of human experience.

Minimum Requirements for Women, Gender and Sexuality Studies Minor: 15 credits

College of Liberal Arts
Department of Women, Gender and Sexuality Studies (<https://www.uaf.edu/women/>)
907-474-6249

Programs Minor

- Minor, Women, Gender and Sexuality Studies (p. 389)

Minor, Women, Gender and Sexuality Studies

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Women, Gender and Sexuality Studies Minor: 15 credits

| Code | Title | Credits |
|---|---|---------|
| Women, Gender and Sexuality Studies Program Requirements | | |
| Complete the following: | | |
| WGS F201X | Introduction to Women, Gender and Sexuality Studies | 3 |
| Complete at least 12 additional credits ¹ | | 12 |

¹ Additional credits from courses cross-listed with WGS and that are from two or more disciplines are subject to the approval of a women, gender and sexuality studies advisor.

Yup'ik Language and Culture

B.A. Degree

The Yup'ik language and culture, or Yupiit Nakmiin Qaneryaraat Piciryaraat-Illu, program strives to reinforce a Yup'ik identity that is centrally dependent on the language and culture, prepares the student for success in the world, and leads to acceptance at home. The program is based on the philosophy that a strong command of the Yup'ik language leads to a complete understanding of the Yup'ik way of life, the world around us, and our place in it.

Depending on interest, students in the program are encouraged to complete a minor in education or Alaska Native and rural development.

Minimum Requirements for Yup'ik Language and Culture Bachelor's Degree: 120 credits

Learn more about the bachelor's degree in Yup'ik language and culture (<https://uaf.edu/academics/programs/bachelors/yupik-language-culture.php>), including an overview of the program, career opportunities and more.

College of Rural and Community Development
Department of Alaska Native Languages (<https://www.uaf.edu/anlc/>)
907-543-4500 or 907-474-7874
Program available at Kuskokwim Campus only

Programs

Degree

- B.A., Yup'ik Language and Culture (p. 390)

B.A., Yup'ik Language and Culture

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Yup'ik Language and Culture B.A.: 120 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) | | |
| Yup'ik Language and Culture Program Requirements | | |
| Complete the following: | | |
| ANS F401 or ANS F461 | Cultural Knowledge of Native Elders Native Ways of Knowing | 3 |
| YUP F130 | Beginning Yup'ik Grammar | 3 |
| YUP F131 | Beginning Yup'ik Grammar II | 3 |
| YUP F203 | Conversational Central Yup'ik III | 3 |
| YUP F204 | Conversational Central Yup'ik IV | 3 |
| YUP F205 | Regaining Fluency in Yup'ik | 3 |
| YUP F206 | Regaining Fluency in Yup'ik II | 3 |
| YUP F208 | Yup'ik Composition | 3 |
| YUP F240 | Introduction to Reading and Writing Yup'ik | 3 |
| YUP F301 | Advanced Central Yup'ik | 3 |
| YUP F330 | Yup'ik Literature/Yupiit Quliraitnek Igaryaraq | 3 |
| YUP F375 | Yup'ik Philosophy/Umyuarteqsaraq | 3 |
| YUP F488 | Documenting Yup'ik Traditions/ Caliarkaq ¹ | 3 |

¹ Fulfills the baccalaureate capstone requirement.

PRE-PROFESSIONAL PREPARATION

Pre-professional advising provides information about the groundwork for admission to specific graduate programs or professional schools. Most professional schools do not require a specific major for admission to their program. However, many courses may be required before admittance into the program, so a student must research admissions requirements carefully. Students should work with their academic advisor to choose a combination of major and minor that best prepares them to apply for postbaccalaureate professional schools. Students may also choose to develop an interdisciplinary program of study that prepares them for various professional or graduate programs. For more information about interdisciplinary options contact the Office of (<https://uaf.edu/inds/>) Undergraduate Interdisciplinary Studies (<https://uaf.edu/inds/>).

The Academic Advising Center (907-474-6396, uaf.advising@alaska.edu) provides academic advising for all pre-professional areas (<https://www.uaf.edu/advising/student-resources/#preprof>). The Biology and Wildlife Department (<https://www.bw.uaf.edu/>) and the Department of Chemistry and Biochemistry (<https://www.uaf.edu/chem/>) provide additional academic advising for the medical, dental, pharmacy, veterinary and allied health pre-professional programs. The Justice Department (<https://www.uaf.edu/justice/>) offers academic advising for law pre-professional programs.

POSTBACCALAUREATE CERTIFICATES

REQUIREMENTS FOR POSTBACCALAUREATE CERTIFICATES

1. The student must complete at least 24 approved semester credits to earn a postbaccalaureate certificate. (See Regents' Policy 10.04.030 (<https://www.alaska.edu/bor/policy/10.04-Academic%20Programs.pdf>))
2. Completion of a bachelor's degree from an accredited institution or from a non-US institution that is considered to be a US equivalent degree.
3. Previously earned credits at accredited institutions can be assigned to the certificate as long as at least 40% of credits applicable to the student's certificate program are earned through UAF after acceptance into the program.
4. Certificate programs may include non-coursework requirements.
5. Courses at the 500-level are for professional development and are not applicable toward any postbaccalaureate certificate, even by petition.
6. At all course levels, a student must earn a C- grade or higher in all courses required for the postbaccalaureate certificate unless otherwise specified by the program.
7. At least two-thirds of the credits required for the postbaccalaureate certificate must be taken at the upper-division (300-400) or graduate (600) level.
8. If the requirements for a postbaccalaureate certificate are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission requirements in effect at the time of readmission or graduation. (See How to Earn a Bachelor's Degree (p. 198))
9. All credits counted toward the postbaccalaureate certificate, including transfer credits, must be earned within the consecutive seven-year period prior to graduation. (See How to Earn a Bachelor's Degree (p. 198))
10. Students may be awarded two or more postbaccalaureate certificates simultaneously if the 15 additional credits and other requirements have been earned for each additional postbaccalaureate certificate.

CONCURRENT CERTIFICATES

Students may pursue concurrent postbaccalaureate certificates as long as they have formally applied and been accepted to each program through the Office of Admissions.

Postbaccalaureate Certificate and Licensure Programs

Postbaccalaureate Certificates

- Accounting (p. 393)
- Special Education K-12 Postbaccalaureate Certificate of Completion (p. 459)

Licensures

- Art K-12 Licensure Program toward M.Ed., Secondary Education (p. 447)
- Elementary (K-8) Postbaccalaureate Licensure Program (p. 448)
- Secondary Postbaccalaureate Licensure Program (p. 290)
- Secondary Postbaccalaureate Licensure Program toward M.Ed., Secondary Education (p. 456)

Accounting

Overview

Postbaccalaureate Certificate

The accounting postbaccalaureate certificate provides candidates who already have a bachelor's degree in another field of study with the accounting program core body of knowledge that will enable them to complete the CPA exam and seek professional employment as an accounting professional.

Minimum Requirements for Accounting Postbaccalaureate Certificate: 30 credits

College of Business and Security Management
Department of Accounting and Information Systems (<https://www.uaf.edu/cbsm/programs/accounting/>)
907-474-7461

Programs

Degrees

- P.B.C.T., Accounting (p. 393)

P.B.C.T., Accounting

Admission Requirements

Complete the following admission requirements:

- Students need to have a completed baccalaureate degree.
- Both ACCT F261X and ACCT F262, or equivalents, must be completed prior to starting the program.

Program Requirements

Minimum Requirements for Accounting Postbaccalaureate Certificate: 30 credits

| Code | Title | Credits |
|---|---|---------|
| Postbaccalaureate Certificate Requirements | | |
| Complete the postbaccalaureate certificate requirements. (p. 392) | | |
| Accounting Program Requirements | | |
| Complete the following: | | |
| ACCT F330 | Income Tax | 3 |
| ACCT F342 | Managerial Cost Accounting | 3 |
| ACCT F361 | Intermediate Accounting I | 3 |
| ACCT F362 | Intermediate Accounting II | 3 |
| ACCT F452 | Auditing | 3 |
| or ACCT F472 | Internal and Government Auditing | |
| AIS F316 | Accounting Information Systems | 3 |
| Complete four from the following: | | 12 |
| ACCT F401 | Advanced Accounting | |
| ACCT F404 | Advanced Cost Accounting and Controllershship | |
| ACCT F414 | Governmental and Nonprofit Accounting | |
| ACCT F430 | Advanced Taxes | |
| ACCT F472 | Internal and Government Auditing | |
| BA F454 | Student Investment Fund | |
| or BA F421 | Business Analytics | |

Special Education K-12 Postbaccalaureate Certificate of Completion

Admission Requirements

Admission Requirements for Certified Teachers

Complete the following admission requirements:

- Admission requirements for the graduate program.
- Current teaching certificate or equivalent coursework towards an Alaska teaching certificate.

Prerequisite or corequisite: EDSE F482 or comparable transfer course from another institution

Admission Requirements for Initial Certification

1. Complete the following admission requirements:
 - a. Admission requirements for the graduate program.
 - b. Baccalaureate degree along with the following prerequisites:
 - i. Documented recent experience (minimum 12 hours) in an educational setting with children experiencing disabilities.
 - ii. UAF prerequisite or corequisite courses or comparable transfer courses. Courses may be completed prior to admission or during the program:

| Code | Title | Credits |
|--------------------------------|---|---------|
| ED F245 | Child Development | 3 |
| EDSE F482 | Inclusive Classrooms for All Children | 3 |
| Complete one of the following: | | 3 |
| ED F201 | Introduction to Education | |
| ED F624 | Foundations of Education in Alaska: From Segregation to Standards | |
| EDSC F205 | Introduction to Secondary Education | |
| EDSC F415 | Foundations of Modern Educational Practice | |
 - iii. Passing scores on the Praxis Academic Skills for Educators test (or Praxis I) or another test acceptable to the Alaska Department of Education and Early Development before or during the first semester of classes. Current test numbers and minimum scores can be found at the Basic Competency Examination Requirements page. (<https://education.alaska.gov/teacher certification/praxis/>)
 - iv. Passing scores on the appropriate Praxis II Exam(s) required before entering EDSE F678. Current test numbers and minimum scores can be found on the Content Area Exam Information pdf. (https://education.alaska.gov/teacher certification/pdf/content_area_exams.pdf) Candidates should consult the employing school district to determine preferred tests based on teaching assignment.
 - v. Passing scores on the Special Education: Core Knowledge and Applications Praxis Exam (test #5354) or another test

acceptable to the Alaska Department of Education and Early Development before or during EDSE F680. Passing scores are required to complete EDSE F680 and graduate from the Special Education K-12 Postbaccalaureate Certificate of Completion.

2. The following are recommended prior to admission or during the program. They are not required for the degree, but they are required for Alaska teacher certification:
 - a. An Alaska studies course approved by the Alaska Department of Education and Early Development. See the Teacher Certification site (<http://education.alaska.gov/teacher certification/>).
 - b. A multicultural education/cross-cultural communication course approved by the Alaska Department of Education and Early Development. See the Teacher Certification site (<http://education.alaska.gov/teacher certification/>).
3. All prerequisite or corequisite courses must be completed with a minimum final grade of B.

Program Requirements

Program Requirements for Certified Teachers

Minimum Requirements for Certification: 24 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Corequisite Requirements ¹ | | |
| EDSE F482 | Inclusive Classrooms for All Children | 3 |
| Program Requirements | | |
| EDSE F610 | Assessment of Students with Exceptionalities | 3 |
| EDSE F612 | Curriculum, Management and Strategies I: Low Incidence | 3 |
| EDSE F622 | Curriculum, Management and Strategies II: High Incidence | 3 |
| EDSE F625 | Teaching Mathematics to Special Learners | 3 |
| EDSE F632 | Special Education Law: Principles and Practices | 3 |
| EDSE F677 | English Language Arts Assessment, Curriculum and Strategies for Special Learners | 3 |
| EDSE F680 | Special Education Clinical Practice ^{2,3} | 3 |
| Electives | | |
| Complete one of the following: | | 3 |
| EDSE F605 | Early Childhood Special Education | |
| EDSE F624 | Social/Emotional Development, Assessment and Intervention | |
| EDSE F633 | Autism and Other Developmental Disabilities: Communication and Social Interventions | |
| EDSE F640 | Culturally Responsive Collaboration: Working with Parents, Colleagues and Paraprofessionals | |
| EDSE F642 | Autism Spectrum Disorders and Other Developmental Disabilities: Sensory and Behavioral Interventions | |

| | |
|-----------|--|
| EDSE F648 | Understanding FASD: Diagnosis, Intervention and Strategies |
|-----------|--|

¹ Complete the corequisite course before or during admittance to the program; or have a comparable transfer course from another university.

² Students pursuing a K-12 special education certificate must complete clinical practice in a public school setting.

³ Additional fee required. Charges are added to fee statements every semester.

Program Requirements for Initial Certification

Minimum Requirements for Certification: 27 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Corequisite Requirements ¹ | | |
| ED F245 | Child Development | 3 |
| EDSE F482 | Inclusive Classrooms for All Children | 3 |
| Complete one of the following: | | 3 |
| ED F201 | Introduction to Education | |
| ED F624 | Foundations of Education in Alaska: From Segregation to Standards | |
| EDSC F205 | Introduction to Secondary Education | |
| EDSC F415 | Foundations of Modern Educational Practice | |
| Program Requirements | | |
| EDSE F610 | Assessment of Students with Exceptionalities | 3 |
| EDSE F612 | Curriculum, Management and Strategies I: Low Incidence | 3 |
| EDSE F622 | Curriculum, Management and Strategies II: High Incidence | 3 |
| EDSE F625 | Teaching Mathematics to Special Learners | 3 |
| EDSE F632 | Special Education Law: Principles and Practices | 3 |
| EDSE F677 | English Language Arts Assessment, Curriculum and Strategies for Special Learners | 3 |
| EDSE F678 | Special Education Clinical Practice: Initial ³ | 3 |
| EDSE F680 | Special Education Clinical Practice ^{2,3} | 3 |
| Electives | | |
| Complete one of the following: | | 3 |
| EDSE F605 | Early Childhood Special Education | |
| EDSE F624 | Social/Emotional Development, Assessment and Intervention | |
| EDSE F633 | Autism and Other Developmental Disabilities: Communication and Social Interventions | |
| EDSE F640 | Culturally Responsive Collaboration: Working with Parents, Colleagues and Paraprofessionals | |

| | |
|-----------|--|
| EDSE F642 | Autism Spectrum Disorders and Other Developmental Disabilities: Sensory and Behavioral Interventions |
|-----------|--|

| | |
|-----------|--|
| EDSE F648 | Understanding FASD: Diagnosis, Intervention and Strategies |
|-----------|--|

¹ Complete the corequisite courses before or during admittance to the program; or have comparable transfer courses from another university.

² Students pursuing a K-12 special education certificate must complete a clinical practice in a public school setting.

³ Additional fee required. Charges are added to fee statements every semester.

Note: Students who do not have a current Alaska teacher certificate must take 6 credits of clinical practice. Clinical practice courses are taken the last two semesters of the program. To enter the clinical practice, students must apply for authorization from the State of Alaska. This includes fingerprinting and a background check. Fingerprint clearance may take up to six months to complete. Submit the clinical practice application two semesters prior to the desired placement. Failure to comply with the requirement, falsification of information, or evidence of a criminal conviction that is named in the law or the Professional Teaching Practices Commission is considered an ethics violation. This will result in denied access to field placement in Alaska school districts. Authorization is required before clinical practice can begin.

COMBINED UNDERGRADUATE/ GRADUATE PROGRAMS

How to Earn Accelerated Bachelor's/ Master's Degrees

Bachelor's/master's or "accelerated master's" degree programs are designed to allow qualified students to earn both a bachelor's and master's degree through an integrated program in a cost-effective, academically rigorous and timely manner. Requirements for the available majors are found in the accelerated programs list (p. 396) section.

Benefits to Student

- Time to completion of the graduate degree can be reduced;
- Cost of completion of the combined undergraduate and graduate degrees can be reduced;
- Undergraduate and graduate courses may be chosen with greater flexibility;
- Graduate courses may be taken after entering the accelerated degree program;
- Work on a thesis/project or research may begin upon acceptance to the accelerated degree program; and
- Continuity with facilities, faculty and colleagues is maintained.

Admission Requirements

Minimum admissions requirements for an accelerated master's degree program include:

- Current admission into a bachelor's degree program;
- A 3.0 cumulative GPA;
- Completing 24 credits in the undergraduate major program requirements; and
- Junior standing

Individual degree programs or departments may establish different admission criteria while meeting these minimum requirements (i.e. a higher GPA, standing, etc.).

Degree Requirements

An accelerated master's program requires a minimum of 138 credits as opposed to the minimum of 150 credits required for separate bachelor's (120 credits) and master's programs (30 credits). All general requirements for bachelor's degrees (e.g., general education, ethics, degree-specific requirements) are maintained, but departments may have different choices of major requirements for a bachelor's degree and an accelerated master's degree. Minors are allowed but not required for either the accelerated Bachelor of Science or the accelerated Bachelor of Arts. At least 30 credits, with a minimum of 21 credits at the 600 level, must be applied to the master's degree. Students in accelerated programs will still be expected to complete a Graduate Study Plan and the other requirements of a master's degree.

After Admission

Students must maintain a cumulative GPA established by the accelerated degree program, or the university minimum of 3.0, while in the accelerated degree program. Students accepted into an accelerated master's degree program must complete all degree requirements within seven years from admission to the program and comply with all other graduate school policies and requirements. Students admitted to an accelerated master's program may be eligible for graduate research assistantships.

A student has the option to transfer back from the accelerated program to the bachelor's program. In this situation, they can graduate with a bachelor's degree once they satisfy all the bachelor's degree requirements (which may be different from the requirements in the accelerated master's program). Departments proposing accelerated master's degree programs must indicate paths for students to graduate with a bachelor's degree via this route. If a student graduates by this route, they have left the accelerated program, and cannot later apply for the master's degree based upon the accelerated program degree requirements. However, they can apply coursework not used for bachelor's graduation requirements toward the completion of a conventional master's degree.

A student who graduates from the accelerated master's program will receive both their bachelor's and master's degrees in the same semester.

Accelerated Degree Programs

- B.A. Linguistics/M.A., Applied Linguistics (p. 404)
- B.S., Math/M.S., Statistics and Data Science (p. 406)
- B.S./M.S., Chemistry (p. 397)
- B.S./M.S., Civil Engineering (p. 400)
- B.S./M.S., Computer Science (p. 403)
- B.S./M.S., Mathematics (p. 405)
- B.S./M.S., Mechanical Engineering (p. 407)

Accelerated Programs List

- B.A. Linguistics/M.A., Applied Linguistics (p. 404)
- B.S., Math/M.S., Statistics and Data Science (p. 406)
- B.S./M.S., Chemistry (p. 397)
- B.S./M.S., Civil Engineering (p. 400)
- B.S./M.S., Computer Science (p. 403)
- B.S./M.S., Mathematics (p. 405)
- B.S./M.S., Mechanical Engineering (p. 407)

B.S./M.S., Chemistry

Accelerated B.S./M.S. Degrees

The Chemistry BS/MS program with thesis or project prepares students for employment as research chemists in federal, state, municipal, academic or industrial laboratories, and in pre-medicine as laboratory technicians, industry supervisors and technical sales personnel. Graduates also find positions in the environmental sciences, oceanography and related interdisciplinary fields. Many chemistry graduates elect to pursue advanced PhD, pharmacology or MD degrees. The BS/MS program will assist students in successfully preparing for post-graduate programs by helping students follow a curriculum specifically needed for developing successful licensing school applications or scientific careers while enhancing their critical thinking skill sets, scientific knowledge, writing and presentation skill, and to be overall well-rounded professionals.

The Chemistry BS/MS program is designed to assist students in earning both BS and MS degrees quicker and with less cost than earning the degrees individually. This is accomplished by having 12 credits of 400 and 600-level courses count as electives in both degrees. Additionally, in the program, students begin to conduct research in a research laboratory at the beginning of their third year. This early research start will allow students to develop technical laboratory skills and to become familiar with their potential MS project early on in their program.

To complete the MS portion of this program, students will complete a research thesis or a project, in addition to the coursework. This will allow students to tailor their graduate studies to meet their interests and prospective career needs. Students pursuing an MS with a research thesis will conduct laboratory research and produce a thesis generally equivalent to a manuscript for a peer-reviewed journal. Students pursuing an MS with a project will conduct a research project that may be based solely or partly in literature review/synthesis. This can include writing a review article or a different activity as decided by the student's committee. To ensure the success of students in this program, students will need to be advised very carefully by their faculty advisor and committee.

Minimum Requirements for Accelerated Mathematics B.S./M.S. Degrees:
138 credits

Learn more about the bachelor's degree in chemistry (<https://uaf.edu/academics/programs/bachelors/chemistry.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Chemistry and Biochemistry (<https://www.uaf.edu/chem/>)
907-474-5510

Admission Requirements

BS Applicants must complete the following admission requirements:

- Be admitted to the Chemistry baccalaureate program and have at least junior standing;
- Have a 3.0 GPA, and have completed 24 of their undergraduate major requirements;
- Submit a study goal statement;
- Submit a UAF graduate application for admission.

Program Requirements

Students must earn a C- or better in all the below courses

Minimum Requirements for Chemistry B.S./M.S. Degree: 138 credits*

*Some concentrations may require greater than 138 credits.

CONCENTRATIONS: CHEMISTRY

(P. 398), BIOCHEMISTRY AND NEUROSCIENCE

(P. 398), ENVIRONMENTAL CHEMISTRY (P. 398)

| Code | Title | Credits |
|--|-----------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements ¹ | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | 4 |
| PHYS F123X | College Physics I | 8 |
| and PHYS F124X | and College Physics II | |
| or PHYS F211X | General Physics I | |
| and PHYS F212X | and General Physics II | |
| BS Degree Requirements ¹ | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. requirements, complete: | | |
| MATH F252X | Calculus II | |
| Chemistry Program Requirements ¹ | | |
| Complete the following: | | |
| CHEM F105X | General Chemistry I | 4 |
| and CHEM F105L | and Chemistry F105X Lab | |
| CHEM F106X | General Chemistry II | 4 |
| and CHEM F106L | and Chemistry F106X Lab | |
| CHEM F202 | Basic Inorganic Chemistry | 3 |
| CHEM F212 | Chemical Equilibrium and Analysis | 4 |
| CHEM F321 | Organic Chemistry I | 4 |
| CHEM F325 | Organic Chemistry II | 4 |
| CHEM F331 | Physical Chemistry I | 4 |
| CHEM F332 | Physical Chemistry II | 4 |
| CHEM F434 | Chemistry Capstone Laboratory | 3 |
| CHEM F449 | General Biochemistry: Metabolism | 3 |
| CHEM F481 | Seminar | 1 |
| CHEM F482 | Seminar | 2 |
| As part of the ACS-certification, complete: | | |
| MATH F253X | Calculus III | 4 |
| Complete one of the following concentrations | | 9-24 |
| Chemistry | | |
| Biochemistry and Neuroscience | | |
| Environmental Chemistry | | |

¹ Students must earn a C- or better.

Concentrations

CHEMISTRY

| Code | Title | Credits |
|---|---|---------|
| Chemistry Concentration Requirements | | |
| Complete one of the following options: | | 3-5 |
| CHEM F488 | Undergraduate Chemistry and Biochemistry Research (3-4 credits) | |
| or | | |
| CHEM F288 and CHEM F488 | Introduction to Chemical Research and Undergraduate Chemistry and Biochemistry Research (2-3 credits) | |
| Complete two of the following: | | 6 |
| CHEM F314 | Analytical Instrumental Laboratory | |
| CHEM F402 | Inorganic Chemistry | |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | |

BIOCHEMISTRY AND NEUROSCIENCE

| Code | Title | Credits |
|---|--|---------|
| Biochemistry and Neuroscience Concentration Requirements | | |
| Complete the following: | | |
| BIOL F115X | Fundamentals of Biology I | 4 |
| and BIOL F115L | and BIOL F115X Laboratory | |
| BIOL F116X | Fundamentals of Biology II | 4 |
| and BIOL F116L | and BIOL F116X Laboratory | |
| CHEM F450 | Information Storage and Transfer: Molecules and Pathways | 3 |
| CHEM F488 | Undergraduate Chemistry and Biochemistry Research | 3 |
| Complete 10 credits from the following: ² | | 10 |
| BIOL F240X | Beginnings in Microbiology | |
| BIOL F260 and F260L | Principles of Genetics and BIOL F260 Laboratory | |
| BIOL F310 and F310L | Animal Physiology and BIOL F310 Laboratory | |
| BIOL F342 and F342L | Microbiology and BIOL F342 Laboratory | |
| BIOL F402 | Biomedical and Research Ethics | |
| BIOL F417 | Neurobiology | |
| BIOL F462 | Infectious Diseases | |
| CHEM F360 | Cell and Molecular Biology | |
| CHEM F455 | Environmental Toxicology | |
| CHEM F470 | Cellular and Molecular Neuroscience | |
| CHEM F474 | Neurochemistry | |

² Courses selected under these areas must meet baccalaureate degree requirements for 39 upper-division credits.

ENVIRONMENTAL CHEMISTRY

| Code | Title | Credits |
|---|------------------------------------|---------|
| Environmental Chemistry Concentration Requirements | | |
| Complete the following: | | |
| CHEM F314 | Analytical Instrumental Laboratory | 3 |

| | | |
|----------------------------------|---|-----|
| CHEM F488 | Undergraduate Chemistry and Biochemistry Research | 3 |
| Complete two from the following: | | 6-8 |
| ATM F401 | Introduction to Atmospheric Sciences | |
| BIOL F240X | Beginnings in Microbiology | |
| BIOL F342 | Microbiology | |
| BIOL F457 | Environmental Microbiology | |
| GEOS F417 | Introduction to Geochemistry | |
| NRM F380 | Soils and the Environment | |

MS portion of the Chemistry BS/MS program with Thesis or Project Requirements

CONCENTRATIONS: BIOCHEMISTRY AND NEUROSCIENCE (P. 399), ENVIRONMENTAL CHEMISTRY (P. 399)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| As part of the master's degree requirements complete: | | |
| Oral and Written Comprehensive Exam | | |
| Chemistry Program Requirements | | |
| Complete any deficiencies concurrently with this degree. | | |
| Complete two credits of advisory committee-approved seminar courses from the two seminar course choices below. | | 2 |
| CHEM F691 | Research Presentation Techniques | |
| CHEM F688 | Biochemical and Molecular Biology Seminar | |
| Complete 6-9 credits from relevant advisory-committee approved graduate-level courses or select one of the following concentrations | | 6-9 |
| Biochemistry and Neuroscience | | |
| Environmental Chemistry | | |
| Complete 7-10 credits of courses approved by the advisory committee. | | 7-10 |
| Thesis or Project Requirements | | 12 |
| Complete the thesis or project option as described below. | | 4,5 |

Thesis or Project Options

THESIS OPTION

| Code | Title | Credits |
|--|--------|------------------|
| CHEM F699 | Thesis | 6 |
| Thesis credits or committee-approved courses that are F400-level or higher. | | 6 ^{4,6} |
| Submit a committee-approved, written research-based thesis proposal and pass an oral comprehensive examination centered on the proposal. | | |

Complete a committee-approved, research-based written thesis and pass an oral defense of the thesis.

PROJECT OPTION

| Code | Title | Credits |
|---|-----------------------------|------------------|
| CHEM F698 | Non-thesis Research/Project | 6 |
| Committee-approved courses that are F400-level or higher. | | 6 ^{4,6} |
| Submit a committee-approved, literature-based written project proposal and pass an oral comprehensive examination centered on the proposal. | | |
| Complete a committee-approved, literature-based written project and pass an oral defense of the project. | | |

³ Students in the Biochemistry and Neuroscience concentration should take Biochemical and Molecular Biology Seminar and students in Environmental Chemistry concentration should take Research Presentation Techniques.

⁴ The minimum credits required is 30. The required M.S. coursework above represents 18 credits. The minimum number of thesis credits required is 6. For the thesis option the remaining 6 credits can either be thesis credits or courses at the F400-level or higher. For the project option, the remaining 6 credits can be courses at the F400-level or higher.

⁵ No more than 12 cr thesis (CHEM F699) and no more than 6 cr project (CHEM F698)

⁶ Six (6) 400-level credits earned during the B.S. portion of the program count towards the MS.

Concentrations

BIOCHEMISTRY AND NEUROSCIENCE

| Code | Title | Credits |
|---|--|---------|
| Biochemistry and Neuroscience Concentration Requirements | | |
| Complete 9 credits from the following: | | 9 |
| CHEM F654 | Protein Structure and Function | |
| CHEM F657 | Molecular Foundations of Gene Expression | |
| CHEM F670 | Cellular and Molecular Neuroscience | |
| CHEM F674 | Membrane Biochemistry and Biophysics | |
| CHEM F675 | Cellular Signaling | |

ENVIRONMENTAL CHEMISTRY

| Code | Title | Credits |
|---|--|---------|
| Environmental Chemistry Concentration Requirements | | |
| Complete 6 credits from the following: | | 6 |
| CHEM F606 | Atmospheric Chemistry | |
| CHEM F609 | Aqueous and Environmental Geochemistry | |
| CHEM F631 | Environmental Fate and Transport | |
| CHEM F655 | Environmental Toxicology | |

See Biochemistry and Neuroscience (p. 428)
 See Environmental Chemistry (p. 465)

B.S./M.S., Civil Engineering

Accelerated B.S./M.S. Degrees

The civil engineering integrated B.S./M.S. program allows qualified and dedicated students to complete both B.S. and M.S. degrees in a shorter time (typically, five years instead of six) than traditional B.S. plus M.S. degrees and with less cost than earning the degrees individually. This is accomplished by having 12 credits of 400- and 600-level courses count toward both degrees. The B.S. degree is accredited by the Accreditation Board for Engineering and Technology (ABET). Students will need to apply for the B.S./M.S. option at the start of their third year in the B.S. program, and form a graduate committee by the fourth year. For the M.S. portion of this integrated B.S./M.S. degree, students will select one of two tracks: environmental/water resources or civil infrastructure.

To complete the M.S. portion of this program, students will complete a research thesis or a project in addition to the coursework. This will allow students to tailor their graduate studies to meet their interests and prospective career needs. Students admitted to the B.S./M.S. program typically begin their research thesis or project during their third year. This early research start allows students to develop technical skills and to become familiar with their potential M.S. project early on in their program. Students pursuing an M.S. with a research thesis will conduct field/laboratory research and produce a thesis generally equivalent to a manuscript for a peer-reviewed journal. Students pursuing an M.S. with a project will conduct a research project that may be based solely or partly on technical analysis, meta-analysis, or literature review and synthesis. This can include writing a technical report, review article, or a different activity as decided by the faculty advisor and the student committee. To ensure the success of students in this program, students will need to closely work with their faculty advisor and the graduate committee.

Minimum Requirements for Civil Engineering B.S./M.S. Degrees: 143 credits

College of Engineering and Mines
 Department of Civil, Geological and Environmental Engineering (<https://cem.uaf.edu/cee/>)
 907-474-7241

Admission Requirements

Complete the following admission requirements:

- CE major (junior preferred) or senior standing.
- A GPA 3.25 or above (based on a minimum of 24 credits in CE major requirements) is required for admission. Students must maintain a cumulative GPA of at least 3.0 to remain in the program.
- Submit three letters of reference.
- Submit GRE (general) scores.
- Submit a study goal statement.
- Submit a UAF graduate application for admission.

Program Requirements

Minimum Requirements for Civil Engineering B.S./M.S. Degree: 143 credits

Students must satisfy the General University Requirements for minimum grades for the respective B.S. or M.S. program (major) requirements.

| Code | Title | Credits |
|--|--|--------------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| CHEM F105X | General Chemistry I | 4 |
| CHEM F106X | General Chemistry II | 4 |
| MATH F251X | Calculus I | 4 |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | 4 |
| PHYS F211X | General Physics I | 4 |
| PHYS F212X | General Physics II | 4 |
| Undergraduate Civil Engineering Program Requirements | | |
| CE F112 | Elementary Surveying | 2-3 |
| or MIN F202 | Surveying and CAD for Engineers | |
| CE F302 | Fundamentals of Transportation Engineering | 3 |
| CE F326 | Introduction to Geotechnical Engineering and Foundations | 4 |
| CE F331 | Structural Analysis | 3 |
| CE F334 | Properties of Materials | 3 |
| CE F341 | Introduction to Environmental Engineering | 4 |
| CE F344 | Water Resources Engineering | 3 |
| CE F432 | Steel Design | 3 |
| DRT F210 | Intermediate CAD | 3 |
| ES F101 | Introduction to Engineering | 3 |
| ES F201 | Computer Techniques | 3 |
| ES F208 | Mechanics | 4 |
| ES F301 | Engineering Analysis | 3 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| ESM F450 | Economic Analysis and Operations | 3 |
| GE F261 | General Geology for Engineers | 3 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| Fundamentals of Engineering (FE) Examination | | |
| Complete the Fundamentals of Engineering (FE) examination administered by the State of Alaska. | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p.) | | |
| Complete comprehensive exam | | |
| Complete the thesis or the non-thesis (project) option: | | |
| CE F699 | Thesis | 9 |
| CE F698 | Non-thesis Research/Project | 6 |
| Complete one of the following concentrations | | 21-24 |
| Environmental/Water Resources | | |
| Civil Infrastructure | | |

Concentrations

ENVIRONMENTAL/WATER RESOURCES

| Code | Title | Credits |
|---|--|---------|
| Complete the following (required courses): | | |
| CE F438 | Design of Engineered Systems ¹ | 3 |
| CE F442 | Water and Wastewater Treatment Design ² | 3 |
| or ENVE F643 | Air Pollution Management | |
| CE F661 | Advanced Water Resources Engineering | 3 |
| or CE F683 | Arctic Hydrology and Hydraulic Engineering | |
| or CHEM F609 | Aqueous and Environmental Geochemistry | |
| CE F662 | Open Channel and River Engineering | 3 |
| or CE F663 | Groundwater Hydrology | |
| Approved electives from the Environmental/Water Resources concentration area course list below (9 credits for thesis, 12 credits for project), or as approved by the committee ³ | | 9-12 |

CIVIL INFRASTRUCTURE

| Code | Title | Credits |
|--|---|---------|
| Complete the following: | | |
| CE F438 | Design of Engineered Systems ¹ | 3 |
| CE F433 | Reinforced Concrete Design ² | 3 |
| CE F635 | Numerical Methods for Geomechanics and Soil-Structure Interaction | 3 |
| CE F622 | Foundations and Retaining Structures | 3 |
| or CE F605 | Pavement Design | |
| Approved electives from the Civil Infrastructure concentration area course list below (9 credits for thesis, 12 credits for project), or as approved by the committee ³ | | 9-12 |

¹ Fulfills the baccalaureate capstone requirement

² Fulfills the ABET requirement (for the B.S. degree) of one upper-level course in the field of environmental engineering, construction, or transportation.

³ Only one course (3 credits) can be at the 400 level

Recommended Elective Courses for Concentration Areas

ENVIRONMENTAL/WATER RESOURCES

| Code | Title | Credits |
|---------|--|---------|
| CE F442 | Water and Wastewater Treatment Design | 3 |
| CE F401 | Arctic Engineering | 3 |
| CE F445 | Hydrologic Analysis and Design | 3 |
| CE F601 | Engineering Research Communication | 3 |
| CE F624 | Permafrost Engineering | 3 |
| CE F661 | Advanced Water Resources Engineering | 3 |
| CE F662 | Open Channel and River Engineering | 3 |
| CE F663 | Groundwater Hydrology | 3 |
| CE F664 | Sediment Transport | 3 |
| CE F665 | Watershed Hydrology | 3 |
| CE F683 | Arctic Hydrology and Hydraulic Engineering | 3 |

| | | |
|-----------|---|---|
| CE F684 | Arctic Utility Distribution | 3 |
| ENVE F641 | Aquatic Chemistry | 3 |
| ENVE F642 | Contaminant Hydrology | 3 |
| ENVE F643 | Air Pollution Management | 3 |
| ENVE F644 | Environmental Management and Permitting | 3 |
| ENVE F645 | Unit Processes: Chemical and Physical | 3 |
| ENVE F646 | Biological Unit Processes | 3 |
| ENVE F647 | Biotechnology | 3 |
| ENVE F649 | Hazardous and Toxic Waste Management | 3 |
| ENVE F651 | Environmental Risk Assessment | 3 |
| ENVE F652 | Introduction to Toxicology for Engineers and Scientists | 3 |
| ENVE F653 | Environmental Measurements Laboratory | 1 |
| ME F658 | Energy and the Environment | 3 |
| BIOL F657 | Environmental Microbiology | 3 |
| CHEM F609 | Aqueous and Environmental Geochemistry | 3 |
| CHEM F631 | Environmental Fate and Transport | 3 |
| CHEM F655 | Environmental Toxicology | 3 |
| GEOS F616 | Permafrost | 3 |
| GEOS F617 | Glaciers | 3 |

| | | |
|----------|--|---|
| CE F683 | Arctic Hydrology and Hydraulic Engineering | 3 |
| CE F684 | Arctic Utility Distribution | 3 |
| CE F685 | Topics in Frozen Ground Engineering | 3 |
| ESM F621 | Operations Research | 3 |
| GE F440 | Slope Stability | 3 |
| ME F601 | Finite Element Analysis in Engineering | 3 |
| ME F631 | Advanced Mechanics of Materials | 3 |
| ME F642 | Advanced Heat Transfer | 3 |
| ME F685 | Arctic Heat and Mass Transfer | 3 |

CIVIL INFRASTRUCTURE

| Code | Title | Credits |
|---------|---|---------|
| CE F401 | Arctic Engineering | 3 |
| CE F405 | Design of Highways and Streets | 3 |
| CE F422 | Foundation Engineering | 3 |
| CE F434 | Timber Design | 3 |
| CE F451 | Construction Cost Estimating and Bid Preparation | 3 |
| CE F605 | Pavement Design | 3 |
| CE F607 | GIS Applications in Civil Engineering | 3 |
| CE F622 | Foundations and Retaining Structures | 3 |
| CE F624 | Permafrost Engineering | 3 |
| CE F625 | Soil Stabilization and Embankment Design | 3 |
| CE F626 | Thermal Geotechnics | 3 |
| CE F627 | Geotechnical Earthquake Engineering | 3 |
| CE F628 | Unsaturated Soils Mechanics | 3 |
| CE F630 | Advanced Structural Mechanics | 3 |
| CE F631 | Advanced Structural Analysis | 3 |
| CE F633 | Theory of Elastic Stability | 3 |
| CE F634 | Structural Dynamics | 3 |
| CE F635 | Numerical Methods for Geomechanics and Soil-Structure Interaction | 3 |
| CE F637 | Earthquakes: Seismic Response of Structures | 3 |
| CE F640 | Prestressed Concrete | 3 |
| CE F646 | Structural Composites | 3 |
| CE F650 | Bridge Engineering | 3 |
| CE F682 | Ice Engineering | 3 |

B.S./M.S., Computer Science

Accelerated B.S./M.S. Degrees

Computer science is the study of information handling and its application to the problems of the world. Computing is widely used in support of science, engineering, business, law, medicine, education and the social sciences, and offers abundant employment opportunities.

The B.S. and M.S. degrees follow the recommendations of the Association for Computing Machinery and the Institute for Electrical and Electronic Engineers. The B.S. degree is accredited by the Computing Accreditation Commission of ABET.

The computer science undergraduate program introduces the fundamentals of computer programming, hardware and theory. It emphasizes the application of general principles to real-world problems. Mathematics and engineering play critical roles in the core. A solid background in fundamentals enables graduates to understand the uses of today's computers and to participate in future developments.

Minimum Requirements for Computer Sciences B.S./M.S. Degrees: 141 credits

Learn more about the bachelor's/master's degree in computer science (<https://uaf.edu/academics/programs/bachelors/computer-science-bs-ms.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines

Department of Computer Science (<https://www.cs.uaf.edu/>)
907-474-2777

Admission Requirements

Complete the following admission requirements:

1. Computer science major, junior standing, with CS F311 completed
2. GPA 3.25 or above based on a minimum of 24 credits. Students must maintain a cumulative GPA of 3.0 to remain in the program.
3. Submit a study goal statement.
4. Submit a UAF graduate application for admission.

Program Requirements

Students must earn a C- grade or better in each course.¹

Minimum Requirements for Computer Science B.S./M.S.: 141 credits

| Code | Title | Credits |
|--|--------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F251X | Calculus I | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| MATH F253X | Calculus III | |

| | | |
|--|---|-----|
| MATH F307 | Discrete Mathematics | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| STAT F300 | Statistics | |
| Any approved ethics course | | |
| Computer Science Undergraduate Program Requirements | | |
| Complete the following: | | |
| CS F201 | Computer Science I | 3 |
| CS F202 | Computer Science II | 3 |
| CS F241 | Computer Hardware Concepts | 4 |
| CS F301 | Assembly Language Programming | 3 |
| CS F311 | Data Structures and Algorithms | 3 |
| CS F321 | Operating Systems | 3 |
| CS F331 | Programming Languages | 3 |
| CS F371 | Computer Ethics and Technical Communication | 3 |
| CS F372 | Software Construction | 3 |
| CS F411 | Analysis of Algorithms | 3 |
| CS F441 | System Architecture | 3-4 |
| or EE F443 | Computer Engineering Analysis and Design | |
| CS F471 | Senior Capstone I ² | 3 |
| CS F472 | Senior Capstone II ² | 3 |
| MATH elective at the F300/F400 level | | 3 |

M.S. Requirements

General University Requirements

Complete the general university requirements. (p. 416)

Master's Degree Requirements

Complete the master's degree requirements. (p. 418)

Computer Science Graduate Program Requirements

Complete the following:

| | | |
|---|--|----|
| CS F600 | Professional Software Development | 4 |
| CS F601 | Algorithms, Architecture and Languages | 4 |
| CS F690 | Graduate Seminar and Project | 3 |
| CS F691 | Graduate Seminar and Project | 3 |
| Approved electives at the 400 or 600 level ³ | | 16 |

Exam

Pass a comprehensive exam in computer science theory and practice.

¹ For the master's degree, a student must earn an A or B grade in F400-level courses. A grade of C will be accepted in F600-level courses provided a B grade point average is maintained.

² Fulfills the baccalaureate capstone requirement.

³ 9 credits max at the 400 level.

Note: This degree program must be completed in seven years or the student will be disqualified from the program. If a student is disqualified, a B.S. in computer science will be awarded if:

1. completed in 10 years, and
2. the student meets the B.S. degree requirements for computer science.

B.A. Linguistics/M.A., Applied Linguistics

Overview

Accelerated B.A./M.A. Degrees

The accelerated M.A. in applied linguistics provides students with a thorough background in second-language acquisition, language teaching and assessment. Graduates from the program are well prepared to teach in language classrooms, both at home and abroad, or enter the Ph.D. program of their choice.

Minimum Requirements for Accelerated Linguistics B.A./Applied Linguistics M.A. Degrees: 138 credits

College of Liberal Arts
Linguistics Program (<https://www.uaf.edu/linguist/>)
907-474-7446

Admission Requirements

Students entering the accelerated master’s in applied linguistics must:

- be admitted into the B.A. in linguistics;
- have completed a minimum of 24 credits toward the B.A. in linguistics, including LING F101X, LING F318, LING F320, LING F315, LING F302; and ENGL F318;
- have a minimum 3.0 GPA overall and a 3.5 GPA in linguistics;
- obtain a letter of recommendation from a current linguistics faculty member who is willing to serve as chair of their graduate committee;
- have junior standing.

Program Requirements

Minimum Requirements for Linguistics B.A./Applied Linguistics M.A. Degree: 138 credits

Students must satisfy the General University Requirements for minimum grades for the respective B.A. or M.A. program (major) requirements.

Students must earn a C- grade or better in each course for the B.A.

CONCENTRATIONS: GENERAL (P. 404), LANGUAGE DOCUMENTATION (P. 404), SECOND LANGUAGE ACQUISITION TEACHER EDUCATION (P. 405)

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete two semesters of a single foreign or Alaska Native language. ¹ | | |
| B.A. Degree Requirements | | |
| Complete the B.A. degree requirements. (p. 211) ² | | |
| Linguistics Program Requirements | | |
| Four semesters (or equivalent) of a foreign, Alaska Native or American Sign language. The language chosen must be different from that used to meet GER above. ¹ | | 12-16 |

| | | |
|------------|---|---|
| ENGL F318 | Modern English Grammar | 3 |
| LING F101X | Nature of Language | 3 |
| LING F302 | Introduction to Second Language Acquisition | 3 |
| LING F315 | English Language for Second Language Teaching | 3 |
| LING F318 | Introduction to Phonetics and Phonology | 3 |
| LING F320 | Introduction to Morphosyntax | 3 |
| LING F441 | Topics in Linguistics | 3 |
| LING F451 | English Second Language Teaching Practicum | 3 |
| or FL F451 | Foreign Language Teaching Practicum | |
| LING F481 | Seminar in Applied Linguistic Research | 1 |
| Elective | | 3 |

Any course in LING or approved by faculty committee

General University Requirements

Complete the general university requirements. (p. 416)

Master’s Degree Requirements

Complete the master’s degree requirements. (p. 416)

Applied Linguistics Program Requirements

| | | |
|-------------------------|--|-----|
| Complete the following: | | |
| LING F410 | Theory and Methods of Second Language Teaching | 3 |
| LING F450 | Language Policy and Planning | 3 |
| LING F482 | Seminar in Linguistics | 3 |
| LING F600 | Research Methods for Applied Linguistics | 3 |
| LING F601 | Principles of Linguistic Analysis | 3 |
| LING F602 | Second Language Acquisition | 3 |
| LING F610 | Theory and Methods of Second Language Teaching | 3 |
| LING F611 | Second Language Materials and Assessment | 3 |
| LING F698 | Non-thesis Research/Project | 1-9 |
| or LING F699 | Thesis | |

CONCENTRATIONS

General

| Code | Title | Credits |
|-------------------------|-----------------------------|---------|
| Complete the following: | | |
| LING F602 | Second Language Acquisition | 3 |
| LING F603 | Phonetics and Phonology | 3 |
| LING F604 | Morphology and Syntax | 3 |

Language Documentation

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| LING F603 | Phonetics and Phonology | 3 |
| LING F604 | Morphology and Syntax | 3 |
| LING F631 | Field Methods in Descriptive Linguistics I | 3 |

Second Language Acquisition Teacher Education

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| LING F602 | Second Language Acquisition | 3 |
| LING F610 | Theory and Methods of Second Language Teaching | 3 |
| LING F611 | Second Language Materials and Assessment | 3 |
| or ED F683 | Instruction and Assessment in Literacy | |

ELECTIVE COURSES

This is a non-exhaustive list of possible electives.

| Code | Title | Credits |
|--------------|--|---------|
| ED F601 | Introduction to Applied Social Science Research ³ | 3 |
| ED F670 | Developing Literacy: ECE-12 ³ | 3 |
| ED F673 | Literacy in the Content Area ³ | 3 |
| ED F683 | Instruction and Assessment in Literacy ³ | 3 |
| LING F441 | Topics in Linguistics ¹ | 3 |
| LING/FL F451 | English Second Language Teaching Practicum ¹ | 3 |
| LING F602 | Second Language Acquisition | 3 |
| LING F603 | Phonetics and Phonology | 3 |
| LING F604 | Morphology and Syntax | 3 |
| LING F610 | Theory and Methods of Second Language Teaching | 3 |
| LING F611 | Second Language Materials and Assessment | 3 |
| LING F631 | Field Methods in Descriptive Linguistics I | 3 |
| LING F650 | Language Policy and Planning | 3 |

¹ It is recommended that at least one of the languages be other than an Indo-European Language.

² Except for the minor complex. A minor complex is not required for an accelerated Master of Arts.

³ Per Graduate School rules, up to 6 credits of committee-approved elective credit at the 400 level may be counted toward a graduate degree.

B.S./M.S., Mathematics**Overview****Accelerated B.S./M.S. Degrees**

The combined B.S./M.S. degree allows dedicated mathematics students to complete two degrees in a compressed time frame (typically, five years instead of six), while still maintaining the rigor and content of both degrees. Students will receive a B.S. in mathematics with a concentration in mathematics and an M.S. in mathematics.

Minimum Requirements for Accelerated Mathematics B.S./M.S. Degrees: 138 credits

College of Natural Science and Mathematics
Department of Mathematics and Statistics (<https://www.uaf.edu/dms/>)
907-474-7332

Admission Requirements

Complete the following admission requirements:

- Current admission into a baccalaureate degree program
- At least a 3.0 cumulative GPA
- Completion of 24 credits in the undergraduate major program requirements
- Junior standing

Program Requirements**Minimum Requirements for Mathematics B.S./M.S.: 138 credits**

| Code | Title | Credits |
|---|-------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F252X | Calculus II | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. requirements, complete: | | |
| MATH F253X | Calculus III | |
| PHYS F123X | College Physics I | |
| and PHYS F124X | and College Physics II | |
| or PHYS F211X | General Physics I | |
| and PHYS F212X | and General Physics II | |
| Undergraduate Mathematics Program Requirements | | |
| Complete the following: | | |
| MATH F265 | Introduction to Mathematical Proofs | 3 |
| MATH F314 | Linear Algebra | 3 |
| MATH F401 | Introduction to Real Analysis | 3 |
| MATH F405 | Abstract Algebra | 3 |
| MATH F410 | Introduction to Complex Analysis | 3 |
| MATH F490 | Senior Seminar ¹ | 2 |
| Upper-division Mathematics Electives ² | | 9 |
| Upper-division mathematics or statistics electives ³ | | 6 |

Graduate Mathematics Program Requirements

| Code | Title | Credits |
|--|-----------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Complete a written comprehensive exam | | |
| MATH F404 | Introduction to Topology | 3 |
| MATH F631 | Algebra I | 4 |
| MATH F641 | Real Analysis | 4 |
| MATH F645 | Complex Analysis | 4 |
| MATH F651 | Topology | 4 |
| Graduate Mathematics Electives ⁴ | | 6 |
| MATH F692 | Seminar | 1 |
| MATH F698 | Non-thesis Research/Project | 6 |
| or MATH F699 | Thesis | |

¹ Fulfills the baccalaureate capstone requirement.

² Acceptable electives include any 3- or 4-credit mathematics course at the 300-level or above.

³ Acceptable elective courses include any mathematics or statistics course at the F300 level or above, and CS F201. In some cases, courses with strong mathematical content from other disciplines may be used as electives. Such an elective must be approved by an advisor in the Department of Mathematics and Statistics.

⁴ Acceptable elective courses include any mathematics course at the F600 level or above. In some cases, courses with strong mathematical content from other disciplines may be used as electives. Such an elective must be approved by an advisor in the Department of Mathematics and Statistics.

Note: All mathematics majors must have an advisor from the Department of Mathematics and Statistics.

Note: At least 12 approved mathematics credits at the F300 level or above must be taken while in residence on the Fairbanks campus.

B.S., Math/M.S., Statistics and Data Science

Accelerated B.S./M.S. Degrees

The combined Bachelors of Mathematics with a concentration in Statistics and Masters of Statistics and Data Science degree allows dedicated statistics students to complete two degrees in a compressed time frame (typically, five years instead of six), while still maintaining the rigor and content of both degrees. Students will receive a BS in Mathematics with a concentration in Statistics, and an MS in Statistics and Data Science.

Minimum Requirements for Accelerated Math B.S./Statistics and Data Science M.S. Degrees: 138 credits

College of Natural Science and Mathematics
Department of Mathematics and Statistics (<http://www.uaf.edu/dms/>)
907-474-7332

Admission Requirements

- Complete the following admission requirements:
- Current admission into a baccalaureate degree program
 - At least a 3.0 cumulative GPA
 - Completion of 24 credits in the undergraduate major program requirements
 - Junior standing

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Math B.S./ Statistics and Data Science M.S.: 138 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| As part of the general education requirements, complete: | | |
| MATH F252X | Calculus II | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. requirements, complete: | | |
| MATH F253X | Calculus III | |
| PHYS F123X | College Physics I | |
| and PHYS F124X | and College Physics II | |
| or PHYS F211X | General Physics I | |
| and PHYS F212X | and General Physics II | |
| Undergraduate Math Program Requirements | | |
| CS F201 | Computer Science I | 3 |
| or NRM F338 | Introduction to Geographic Information Systems | |
| ENGL F314 | Technical Writing | 3 |
| or ENGL F414 | Research Writing | |
| MATH F265 | Introduction to Mathematical Proofs | 3 |

| | | |
|---|---|---|
| MATH F314 | Linear Algebra | 3 |
| MATH F371 | Probability | 3 |
| MATH F401 or MATH F405 | Introduction to Real Analysis Abstract Algebra | 3 |
| MATH F408 | Mathematical Statistics | 3 |
| STAT F300 | Statistics | 3 |
| STAT F401 | Regression and Analysis of Variance | 4 |
| STAT F454 | Statistical Consulting Seminar ¹ | 1 |
| Upper-division mathematics or statistics electives ² | | 3 |

Graduate Statistics and Data Science Program Requirements

| Code | Title | Credits |
|--|---------------------------------------|---------|
| Complete the following: | | |
| STAT F402 | Scientific Sampling | 3 |
| STAT F651 | Statistical Theory I | 3 |
| STAT F652 | Statistical Theory II | 4 |
| STAT F653 | Statistical Theory III: Linear Models | 3 |
| STAT F654 | Statistical Consulting Seminar | 1 |
| Complete two of the following: | | 6 |
| STAT F461 | Applied Multivariate Statistics | |
| STAT F602 | Experimental Design | |
| STAT F605 | Spatial Statistics | |
| STAT F611 | Time Series | |
| STAT F621 | Nonparametric Statistics | |
| STAT F631 | Categorical Data Analysis | |
| STAT F641 | Bayesian Statistics | |
| STAT F661 | Sampling Theory | |
| Graduate Statistics Electives ³ | | 6 |
| STAT F698 | Non-thesis Research/Project | 6 |

¹ Fulfills the baccalaureate capstone requirement.

² Acceptable elective courses include any mathematics or statistics course at the F300 level or above. In some cases, courses with strong statistical content from other disciplines may be used as electives. Such an elective must be approved by an advisor in the Department of Mathematics and Statistics.

³ Acceptable elective courses include any statistics course at the F600 level or above. In some cases, courses with strong statistical content from other disciplines may be used as electives. Such an elective must be approved by an advisor in the Department of Mathematics and Statistics.

Note: All mathematics majors must have an advisor from the Department of Mathematics and Statistics.

Note: At least 12 approved mathematics or statistics credits at the F300 level or above must be taken while in residence on the Fairbanks campus.

B.S./M.S., Mechanical Engineering Accelerated B.S./M.S. Degrees

The mission of the mechanical engineering department at UAF is to offer the highest-quality contemporary education at undergraduate and graduate levels and to perform research appropriate to the technical needs of the state of Alaska, the nation and the world.

Mechanical engineers conceive, plan, design and direct the manufacturing, distribution and operation of a wide variety of devices, machines and systems for energy conversion, environmental control, materials processing, transportation, materials handling and other purposes. Mechanical engineers are engaged in creative design, applied research, development and management. A degree in mechanical engineering also frequently forms the base for entering law, medical or business school, as well as for graduate work in engineering.

The objectives of the mechanical engineering program are to produce graduates who are able to compete successfully on the world stage at the professional level; understand the significant local, regional, national and global issues facing humankind; continue to develop as engineers through lifelong learning; and serve as resources of technical knowledge for the state as well as the nation, especially with respect to northern issues. The Engineering Accreditation Commission of ABET has accredited the B.S. degree program in mechanical engineering since 1980.

Because engineering is based on mathematics, chemistry and physics, students are introduced to the basic principles in these areas during their first two years of study. The third year encompasses courses in engineering science — extensions to the basic sciences forming the foundation to engineering synthesis and design. The design project course draws on much of the student's previous learning through a simulated industrial design project. Throughout the four-year program, courses in communication, humanities and social sciences are required because mechanical engineers must be able to communicate effectively in written, oral and graphical form.

Students may choose a concentration in mechanical, aerospace or petroleum engineering. Because of UAF's unique location, special emphasis is placed on cold regions' engineering problems. This fact is highlighted in the technical elective, Arctic engineering. Candidates for the B.S. degree in mechanical engineering are required to take the State of Alaska Fundamentals of Engineering examination in their general field.

Undergraduate students who plan to pursue graduate studies in engineering may also choose an accelerated degree for a master's in mechanical engineering. This program speeds the process and allows qualified mechanical engineering students to complete both a Bachelor of Science and a Master of Science degree in five years.

Minimum Requirements for Mechanical Engineering Degree: B.S./M.S.: 148 credits

Learn more about the bachelor/master's degree in mechanical engineering (<https://uaf.edu/academics/programs/bachelors/mechanical-engineering-bs-ms.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines

Department of Mechanical Engineering (<https://www.uaf.edu/cem/>)
907-474-7136

Admission Requirements

Complete the following admission requirements:

1. ME major (junior preferred) or senior standing.
2. GPA 3.25 or above (based on minimum of 24 credits in ME major requirements). Students must maintain a cumulative GPA of 3.0 to remain in the program.
3. Submit a study goal statement.
4. Submit a UAF graduate application for admission.

Program Requirements

Minimum Requirements for Mechanical Engineering B.S./M.S.: 148 credits

Students must satisfy the General University Requirements for minimum grades for the respective B.S. or M.S. program (major) requirements.

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 198) | | |
| General Education Requirements | | |
| Complete the general education requirements. (p. 203) | | |
| B.S. Degree Requirements | | |
| Complete the B.S. degree requirements. (p. 219) | | |
| As part of the B.S. degree requirements, complete: | | |
| MATH F252X | Calculus II | |
| PHYS F211X | General Physics I | |
| PHYS F212X | General Physics II | |
| B.S. Program Requirements | | |
| Complete the following: | | |
| ES F100X | Engineering Alaska - An Introduction to Engineering | 3 |
| ES F201 | Computer Techniques | 3 |
| ES F209 | Statics | 3 |
| ES F210 | Dynamics | 3 |
| ES F301 | Engineering Analysis | 3 |
| ES F307 | Elements of Electrical Engineering | 3 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| ES F346 | Introduction to Thermodynamics | 3 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| ME F302 | Dynamics of Machinery | 4 |
| ME F308 | Instrumentation and Measurement | 3 |
| ME F313 | Mechanical Engineering Thermodynamics | 3 |
| ME F321 | Industrial Processes | 3 |
| ME F334 | Elements of Material Science/Engineering | 3 |
| ME F403 | Machine Design | 3 |
| ME F408 | Mechanical Vibrations | 3 |
| ME F415 | Thermal Systems Laboratory | 3 |
| ME F441 | Heat and Mass Transfer | 3 |
| ME F486 | Senior Design ¹ | 1 |

| | | |
|---------|-----------------------------|---|
| ME F487 | Design Project ¹ | 3 |
|---------|-----------------------------|---|

Fundamentals of Engineering Examination

Complete State of Alaska Fundamentals of Engineering examination.

¹ Fulfills the baccalaureate capstone requirement.

Note: This degree program must be completed in seven years or the student will be disqualified from the program. If a student is disqualified for exceeding the seven-year limit, a mechanical engineering B.S. degree will be awarded if:

- coursework is completed in 10 years, and
- the student meets all Mechanical Engineering B.S. requirements.

Graduate Mechanical Engineering Program Requirements

| Code | Title | Credits |
|--|-----------------------------|---------|
| General University Requirements | | |
| Complete the graduate general university requirements. (p. 414) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Mechanical Engineering Program Requirements | | |
| <i>Program Electives</i> | | 15 |
| Any 600-level ME Course; up to 6 credits may be at the 400 level ² | | |
| <i>General Electives</i> | | 9 |
| Any 600-level courses approved by the student's advisory committee; up to 6 credits may be at the 400 level ² | | |
| <i>Thesis or Non-thesis Option</i> | | 6 |
| ME F699 | Thesis | |
| ME F698 | Non-thesis Research/Project | |

² At least 15 total program and general elective credits must be at the 600-level.

Note: This degree program must be completed in seven years or the student will be disqualified from the program. If a student is disqualified for exceeding the seven-year limit, a mechanical engineering B.S. degree will be awarded if:

- coursework is completed in 10 years, and
- the student meets all Mechanical Engineering B.S. requirements.

HOW TO EARN A GRADUATE DEGREE

General university and specific degree requirements for UAF graduate programs are described in this section of the catalog, along with requirements for each graduate program. Instructions for applying for admission can be found in the Applying for Admission: Graduate Degree Programs (p. 34) section.

Academics, Policies and Regulations

Many academic policies and regulations apply to both graduate and undergraduate students. These guidelines are relevant to the student's academic experience at UAF and are important for them to read and understand. Topics include definitions and requirements for official university communications, full- and part-time student status, academic progress, academic dismissal, grading system and policies, FERPA and the student code of conduct. See UAF academics, policies and regulations (p. 73).

Master's

How to Earn a Master's Degree

TYPES OF MASTER'S DEGREES (P. 416)

GENERAL UNIVERSITY REQUIREMENTS (P. 416)

GRADUATE ADVISORY COMMITTEE

A graduate advisory committee guides students in developing and completing their degree programs. The student should form the committee and have it appointed within the first two semesters of their study. Committee members for graduate degrees are approved by the appropriate dean, usually upon recommendation of the department head, and by the director of the Graduate School. For interdisciplinary students, the graduate advisory committee chair's home department and college/school will also be the academic home of the interdisciplinary student and the student will follow the procedures of that home department.

The graduate advisory committee's major responsibilities are to formulate a graduate study plan in consultation with the student by the end of the student's second semester in the graduate program; to develop a tentative timetable for completion of all requirements for the degree program; to monitor the student's progress in course work and research; to provide advice and feedback to the student on that progress; to file a Report of Advisory Committee with the Graduate School; to approve, where appropriate, a research topic; to supervise the preparation of the research thesis or project when one is required; to uphold the standards of the college/school and the university; to inform the unit dean, in writing, if a student's performance is inadequate and provide relevant recommendations; and to formulate and conduct the comprehensive examination and other exams as required by the department. The student's advisor (major professor, advisory committee chair) acts as chair of the graduate advisory committee and takes the lead in fulfilling these responsibilities.

Committee Composition

- The advisory committee of master's degree students must consist of at least three approved UAF faculty members. Committee membership must be approved by the home department, unit dean and the director of the Graduate School.

- Retired or emeritus UAF faculty who have an association with the home department may serve on master's advisory committees, upon expressed approval by the home department.
- Faculty from other universities and other professionals who are not employed by UAF may serve as committee members on master's advisory committees upon expressed approval by the home department. They may not serve as the chair of an advisory committee but may serve as a co-chair.

GRADUATE STUDY PLAN

Graduate students must file a Graduate Study Plan (GSP) with the Graduate School before the end of their second semester in a UAF graduate degree program. The GSP outlines the curriculum of study and a timetable the student must follow in meeting graduate degree requirements. The GSP is prepared by the advisory committee in consultation with the student. It is an agreement of mutual expectations between the student and the faculty committee. The GSP not only contains the specific degree requirements but also indicates the mechanism for fulfilling these requirements (e.g., via course work, examinations, readings, internships or other supervised experience) and a projected timetable.

ADVANCEMENT TO CANDIDACY

Advancement to candidacy formally establishes the graduate student's specific degree requirements. Students may apply for advancement to candidacy for a specific master's degree if they meet the following requirements:

1. They are in good academic standing.
2. Satisfactorily completed at least 9 semester credits of graduate study at UAF (study after admission to a specific degree program).
3. Received approval of a provisional thesis or project topic, if applicable.
4. Received approval of the finalized Graduate Study Plan, including specific coursework to be completed and any other requirements.

Students should apply as soon as possible after meeting the requirements. The application for advancement to candidacy is required at least one semester before the degree can be awarded.

The finalized Graduate Study Plan should be the basis for completing the Advancement to Candidacy form. Students must have a cumulative GPA of 3.0 in the courses identified on the Advancement to Candidacy form. For the purpose of satisfying degree requirements, students must earn a B (3.0) or better (no P grades) in each F400-level course and a C grade (2.0) or better in each 600-level course. A B- is less than a 3.0 and, if obtained in an F400 course, will not count for meeting degree requirements; likewise a C- is less than a 2.0, and if obtained in an F600-level course, will not count for meeting degree requirements.

Admission to graduate study does not imply advancement to candidacy for a degree. The graduate advisory committee has the option of refusing to recommend a student for candidacy.

EXAMINATIONS

Examinations are given in both written and oral form, depending upon the policy of the program unit, the decision of the advisory committee, and the specific examination being taken.

- **Placement Examinations**

Some master's degree programs have formalized placement exams designed to pinpoint a student's strengths and weaknesses as an aid in developing the Graduate Study Plan. This evaluation is carried out during the student's first semester at the university, preferably in the first month, and may be written, oral, or both.

- **Qualifying Examinations**

Some master's degree programs require the student to complete a written and/or oral qualifying examination before advancement to candidacy. This examination is an interim evaluation of academic progress; the student may pass unconditionally or conditionally. A conditional pass indicates specific weaknesses that the student must remedy before degree requirements are completed. The Graduate Study Plan and later the Advancement to Candidacy form should include mechanisms for addressing these weaknesses.

- **Comprehensive Examination**

The comprehensive examination is given to determine whether the student has integrated knowledge and understanding of the principles and concepts underlying major and related fields. It may be oral or written or a combination of both.

- **Defense of Project**

Graduate students who are required to complete a project in partial fulfillment of degree requirements must pass an oral defense of project examination. The defense will consist of a presentation followed by questions on the research, analysis and written presentation. All committee members must participate in the project defense.

The graduate project defense examinations are public events and open to the university and the wider community. The student should submit their name and project title and the date, time, and location of their defense examination to the Graduate School at least two weeks prior to their defense examination date. The Graduate School, along with the home program, department, college, or school, will advertise the examination.

The defense examination includes a public presentation of the project moderated by the chair of the graduate advisory committee, followed by a private executive examination by the committee.

- **Defense of Thesis Examination**

Graduate students who are required to complete a thesis in partial fulfillment of degree requirements must pass an oral defense of thesis examination. The defense will consist of a presentation followed by questions on the research, analysis and written presentation. The Graduate School will not accept a thesis for final submission until the student has successfully defended it. All committee members must participate in the defense of the thesis. The graduate thesis defense examinations are public events and open to the university and the wider community. The student should submit their name and thesis title, and the date, time, and location of their defense examination to the Graduate School at least two weeks prior to their defense examination date. The Graduate School, along with the home program, department, college, or school, will advertise the examination.

The defense examination includes a public presentation of the thesis moderated by the chair of the graduate advisory committee, followed by a private executive examination by the committee.

- **Examination Committee**

In most cases, the student's graduate advisory committee prepares and gives the examinations under guidelines formulated by the faculty of the department in which the degree is being taken. In a few programs, examinations are replaced or supplemented by

departmental or school examinations and administered by an established examining committee.

- **Language/Research Tool Requirement**

Proficiency in a second language or a research tool is not a university-wide requirement but may be required by some departments or programs. An advisory committee may specify a language or research tool in addition to the requirements of the program.

The specific language or research tool is determined by the advisory committee, guided by the policies of the administrative unit in which the degree is offered. Generally, competency in a second language is required. However, upon approval of the department or program head, the committee may substitute computer languages, statistics, mathematics, or study in areas such as history or philosophy of science, business, administration, law, or economics. In all instances, the topics selected must support the student's degree program.

REQUIREMENTS FOR MASTER'S DEGREES

Types of Master's Degrees (p. 416)

UAF offers research-oriented (thesis or project) and practice-oriented (non-thesis) master's degrees. Research-oriented programs are designed to direct graduate students toward scholarly activity that leads to the acquisition of new knowledge. Practice-oriented programs prepare graduate students for professional practice and direct them toward the application or transmission of existing knowledge. All degree requirements must be completed within a seven-year period. UAF tenured faculty, tenure-track faculty, and research faculty are not eligible to become candidates for a graduate degree within the discipline in which they teach.

The minimum requirements for a master's degree at UAF are as follows (individual departments may have additional requirements):

- **Steps Required for All Master's Degrees (excludes MBA and M.S.D.M. degrees)**

1. Formulate a unified degree program in cooperation with the student's graduate advisory committee. Degree programs must be composed of courses in the discipline or clearly related to and/or supportive of that discipline. All courses to be applied toward the degree must be approved by the advisory committee and follow the requirements set forth by the department that sponsors the degree.
2. Master's degree students must:
 - a. Meet all requirements set forth in the General University Requirements (<https://catalog.uaf.edu/graduate/mastersdegrees/#generaluniversityrequirementstext>) section.
 - b. Submit an Appointment of Committee form by the end of the second semester of study.
 - c. Submit a Graduate Study Plan by the end of the second semester of study.
 - d. Submit a Report of Advisory Committee form by May 15 or October 15 (for students starting in the Fall or Spring semester respectively) of every year.
 - e. Pass a written and/or oral comprehensive examination which may be combined with a project or thesis defense. Some programs (e.g., the M.Ed. degree program) may substitute a synthesizing paper for the comprehensive examination. This includes a demonstration of the ability to synthesize information in the field at a level appropriate for a master's degree.

- f. Submit an Advancement to Candidacy form to the Graduate School. Once submitted, this form supplants the GSP and formally establishes specific degree requirements.
- g. Pass an oral defense of the thesis or project if a thesis or project is required.
- h. Register as necessary and apply to graduate per the requirements noted in the Graduation (p.) section.
- i. Complete all degree requirements within the seven-year time limit.
- j. Archive thesis or project in the UAF Rasmuson Library if a thesis or project is required.

• Steps Required for MBA and M.S.D.M. degrees

1. Formulate a unified degree program in cooperation with the student's graduate advisor. Degree programs must be composed of courses in the discipline or clearly related to and/or supportive of that discipline. All courses to be applied toward the degree must be approved by the advisor and follow the requirements set forth by the department that sponsors the degree.
2. MBA and M.S.D.M. degree students must:
 - a. Meet all requirements set forth in the General University Requirements section.
 - b. Submit a Report of Advisory Committee form by May 15 or October 15 of every year (for students starting in the Fall or Spring semester respectively) every year.
 - c. Submit an Advancement to Candidacy form (or equivalent as pertains to MBA and M.S.D.M. programs) to the Graduate School. Once submitted, this form formally establishes the specific degree requirements.
 - d. Register as necessary and apply to graduate per the requirements noted in the Graduation section.
 - e. Complete all degree requirements within the seven-year time limit.

• Credit Requirements

1. Successfully complete a minimum of 30 semester credits, of which 21 semester credits must be at the graduate level, including thesis and research. The remaining credits may be applied from courses at the F400-level.
2. No F100-, F200-, F300-, or F500-level credits or audited courses may be applied toward master's degree requirements.
3. For programs requiring a thesis, a maximum of 12 credits of thesis (699)/research (698) (with a minimum of 6 credits of thesis) may be applied toward degree requirements. For programs requiring a project, a maximum of 6 research (698) credits may be applied toward degree requirements. A student may enroll in as many thesis and/or research credits as needed to remain in good standing.

• Second Master's Degree Programs

At the discretion of the student's advisory committee, admitting department, and dean, the student may transfer up to 20% of the minimum number of credits required for a UAF master's degree from a previously earned master's degree. Transferred credit may not be research, project or thesis credit. The transferred credit must be for completed graduate-level courses and not for portions of a course. For a 30-credit master's degree, for example, up to 6 graduate credits may be transferred; for a 45-credit master's degree, up to 9 graduate

credits may be transferred. The following requirements apply to students who wish to pursue a second master's degree:

1. Submit a new application, including the application processing fee, updated transcripts, and three new reference letters.
2. Acceptable GRE scores submitted previously may be applied to a second master's degree.
3. Fulfill all general university requirements for the second master's degree, including taking a comprehensive exam (if required), completing a minimum of 30 semester credits (including thesis, research and transfer credits), and passing defense of thesis or project.
4. All work used to fulfill degree requirements for a second master's degree must be completed within seven years.

• Exceptions to Degree Requirements

Deviations from academic requirements and regulations for graduate students must be approved by academic petition using the form available on the Graduate School website. Petitions must be approved by the student's graduate advisory committee, the department chair of the student's program, the dean of the school or college, and the director of the Graduate School.

Ph.D.

How to Earn a Doctoral Degree

GENERAL UNIVERSITY REQUIREMENTS (P. 414) GRADUATE ADVISORY COMMITTEE

A graduate advisory committee guides students in developing and completing their degree programs. The student should form the committee and have it appointed within the first two semesters of their study. Committee members for graduate degrees are approved by the appropriate dean, usually upon recommendation of the department head, and by the director of the Graduate School. For interdisciplinary students, the graduate advisory committee chair's home department and college/school will also be the academic home of the interdisciplinary student and the student will follow the procedures of that home department.

The graduate advisory committee's major responsibilities are to formulate a graduate study plan in consultation with the student by the end of the student's second semester in the graduate program; to develop a tentative timetable for completion of all requirements for the degree program; to monitor the student's progress in course work and research; to provide advice and feedback to the student on that progress; to file a Report of Graduate Student Advisory Committee with the Graduate School; to approve, where appropriate, a research topic; to supervise the preparation of the research thesis or project when one is required; to uphold the standards of the college/school and the university; to inform the unit dean, in writing, if a student's performance is inadequate and provide relevant recommendations; and to formulate and conduct the comprehensive examination and other exams as required by the department. The student's advisor (major professor, advisory committee chair) acts as chair of the graduate advisory committee and takes the lead in fulfilling these responsibilities.

Committee Composition

- The advisory committee of doctoral degree students must consist of at least four approved UAF faculty members. At least four of the committee members must each have an earned Ph.D. or equivalent. For interdisciplinary students, one advisory committee member must be from a Ph.D.-granting department or be approved as the graduate school representative by the graduate school director, based on prior experience advising Ph.D. students. Committee membership must be

approved by the home department, unit dean, and the director of the Graduate School.

- Retired or emeritus UAF faculty who have an association with the home department may serve on doctoral advisory committees upon expressed approval by the home department.
- Faculty may serve as committee members on doctoral advisory committees (all must have a Ph.D. or equivalent) upon expressed approval by the home department. They may not serve as the chair of an advisory committee but may serve as co-chairs.

GRADUATE STUDY PLAN

Graduate students must file a Graduate Study Plan with the Graduate School before the end of their second semester in a UAF graduate degree program. The GSP outlines the curriculum of study and a timetable the student must follow in meeting graduate degree requirements. The GSP is prepared by the advisory committee in consultation with the student. It is an agreement of mutual expectations between the student and the faculty committee. The GSP not only contains the specific degree requirements but also indicates the mechanism for fulfilling these requirements (e.g., via course work, examinations, readings, internships, or other supervised experience) and a projected timetable.

ADVANCEMENT TO CANDIDACY

Advancement to candidacy formally establishes a student's specific degree requirements and should be done as soon as possible after qualifying. The student is required to submit an application for advancement to candidacy one semester before the student plans to graduate.

The Graduate Study Plan should be the basis for completing the Advancement to Candidacy form. Students must have a cumulative GPA of 3.0 in the courses identified on the Advancement to Candidacy form. For the purpose of satisfying degree requirements, students must earn a B (3.0) or better (no P grades) in each F400-level course and a C grade (2.0) or better in each 600-level course. The grade of B- is less than a 3.0 and, if obtained in an F400 course, will not count for meeting degree requirements; likewise a C- is less than a 2.0, and if obtained in an F600-level course, will not count for meeting degree requirements.

Admission to graduate study does not imply advancement to candidacy for a degree. The graduate advisory committee has the option of refusing to recommend a student for candidacy.

Graduate students may apply for advancement to candidacy for the Ph.D. degree if they meet the following requirements:

1. They are in good academic standing.
2. Completed the full-time equivalent of two academic years of graduate study.
3. Completed at least 9 UAF credits.
4. Received approval of the Graduate Study Plan.
5. Obtained approval of the advisory committee for the title and synopsis of the thesis.
6. Passed a written comprehensive examination.

EXAMINATIONS

Examinations are given in both written and oral form, depending upon the policy of the program unit, the decision of the advisory committee, and the specific examination being taken.

• Placement Examinations

Some programs have formalized placement exams designed to pinpoint a student's strengths and weaknesses as an aid in developing the Graduate Study Plan. This evaluation is carried out during the student's first semester at the university, preferably in the first month, and may be written, oral, or both.

• Comprehensive Examination

The comprehensive examination is given to determine whether the student has integrated knowledge and understanding of the principles and concepts underlying major and related fields. It may be oral or written or a combination of both. Ph.D. degree students normally take a written comprehensive examination within two academic years of entering the program, but no later than two academic years before the expected completion of the degree (whichever is earliest). The Ph.D. student's advisory committee may choose to give an oral examination to supplement the written comprehensive examination. Each Ph.D. student must pass the comprehensive examination prior to advancement to candidacy.

• Defense of Dissertation Examination

Doctoral students are required to complete a dissertation in partial fulfillment of their degree requirement and must pass an oral defense of dissertation examination. The defense will consist of a presentation followed by questions on the research, analysis, and written presentation. The Graduate School will not accept a dissertation for final submission until the student has successfully defended it. The Ph.D. dissertation defense is to be conducted on any UAF campus. All committee members must participate in the defense of the dissertation.

The dissertation defense examinations are public events and open to the university and the wider community. The student should submit their name and dissertation title and the date, time, and location of their defense examination to the Graduate School at least two weeks prior to their defense examination date. The Graduate School, along with the home program, department, college, or school, will advertise the examination.

The defense examination includes a public presentation of the dissertation moderated by the chair of the graduate advisory committee, followed by a private executive examination by the committee.

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Examination Committee

In most cases, the student's graduate advisory committee prepares and gives the examinations under guidelines formulated by the faculty of the department in which the degree is being taken. In a few programs, examinations are replaced or supplemented by departmental or school examinations and administered by an examining committee that is established by the program.

• Outside Examiner

An outside examiner representing and appointed by the director of the Graduate School is required at all Ph.D. oral examinations. The examiner must be from a different department than the student and the chair of the advisory committee. The outside examiner is present to determine that a stringent, unbiased examination is fairly administered and evaluated.

• Language/Research Tool Requirement

Proficiency in a second language or a research tool is not a university-wide requirement but may be required by some programs. An advisory committee may specify a language or research tool in addition to the requirements of the program.

The specific language or research tool is determined by the advisory committee, guided by the policies of the administrative unit in which the degree is offered. Generally, competency in a second language is required. However, upon approval of the department or program head, the committee may substitute computer languages, statistics, mathematics, or study in areas such as history or philosophy of science, business, administration, law, or economics. In all instances, the topics selected must support the student's degree program.

REQUIREMENTS FOR PH.D.S

The Doctor of Philosophy degree is granted in recognition of scholarly attainment and proven ability. UAF tenured faculty, tenure track faculty, and research faculty are not eligible to become candidates for a graduate degree within the discipline in which they teach at UAF.

• Steps Required for all Doctoral Degrees

1. The Ph.D. degree requires at least three full years of study beyond the baccalaureate degree. (See transfer credit (p. 38).)
2. In addition to the satisfactory completion of a plan of study developed in accordance with the requirements listed above, the Ph.D. candidate must:
 - a. Meet all requirements set forth in the General University Requirements (p. 414) section.
 - b. Submit an Appointment of Committee form by the end of the second semester of study.
 - c. Submit a Graduate Study Plan by the end of the second semester.
 - d. Submit a Report of Advisory Committee form by May 15 or October 15 (for students starting in the Fall or Spring semester respectively) of every year.
 - e. Pass a written comprehensive exam.
 - f. Submit an Advancement to Candidacy form to the Graduate School. Once submitted, this form supplants the GSP and formally establishes specific degree requirements.
 - g. Satisfactorily complete a dissertation that is a substantial contribution to the body of knowledge in the area studied.
 - h. Pass an oral defense of the dissertation (an outside examiner is required). The oral defense of the dissertation must be conducted on any UAF campus.
 - i. Apply for graduation and be registered for a minimum of 3 graduate credits within the student's discipline and maintain enrollment in the semester that the student successfully defends their thesis and must be registered for a minimum of 1 graduate credit within the student's discipline and maintain enrollment during the semester of graduation.
 - j. Complete all degree requirements within the 10-year time limit.
 - k. Archive dissertation in the UAF Rasmuson Library.

• Credit Requirements

- a. A minimum of 18 thesis (F699) UAF credits must be earned.
- b. No F100-, F200-, F300-, or F500-level credits or audited courses may be applied toward the Ph.D.'s degree requirements.

• Exceptions to Degree Requirements

Deviations from academic requirements and regulations for graduate students must be approved by academic petition using the form available on the Graduate School website. Petitions must be approved by the student's graduate advisory committee, the department chair of the student's program, the dean of the school or college, and the director of the Graduate School.

Graduate or Postbaccalaureate Certificates How to Earn Graduate Certificates and/or Postbaccalaureate Certificates

GENERAL UNIVERSITY REQUIREMENTS (P. 416)

Graduate certificate programs are designed to provide education past the baccalaureate level and/or to meet clearly defined educational needs of students who have already completed a master's degree. Completion of a graduate certificate should prepare students to better accomplish their goals or meet employment criteria.

These programs provide the student with formal recognition of mastery of a clearly defined academic topic.

GENERAL UNIVERSITY REQUIREMENTS (GURS) FOR ALL GRADUATE CERTIFICATES ARE AS FOLLOWS:

1. A student must be admitted to the graduate certificate program. Students must fulfill all GURs and graduate certificate program requirements.
2. A minimum of 12 credits is required for any Graduate Certificate. Courses used to meet requirements for Graduate Certificates may be applied to other graduate programs where applicable.
3. A student may elect to graduate under the graduate certificate requirements in effect and published in the UAF catalog in any one of the previous seven years in which they are enrolled as a graduate certificate student.
All non-academic policies and regulations listed in the current catalog apply, regardless of the catalog the student is using for their graduate certificate requirements. A student must satisfactorily complete all coursework and all other graduate certificate requirements within seven years for a graduate certificate.
Students may earn more than one graduate certificate by completing all requirements for each additional program.
4. A cumulative GPA of at least 3.0 (B) must be earned in courses identified on the GSP.
5. In 400-level courses, a minimum grade of B is required for the course to count toward the graduate certificate program requirements. In 600-level courses, a grade of C is minimally acceptable, provided the student maintains a cumulative GPA of 3.0 (B) in all courses applicable to the graduate certificate program. At least two-thirds of the credits required for the graduate certificate must be taken at the graduate level (600-).
6. Credit by examination, audited courses, F100-, F200-, F300-, and F500-level courses, or courses taken under the credit/no credit option, may not be used to fulfill the basic course requirements of any degree program.
7. No more than one-quarter of approved program credits may be transferred from other accredited institutions, including those inside the UA system unless the graduate certificate is a joint program with another UA university. Transferred credits may not be used from previously earned undergraduate degrees. A minimum B grade (3.0)

is required in all graduate courses presented for transfer. A P grade (pass) is not acceptable for transfer credit.

8. If the requirements for a graduate certificate are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission.

REQUIREMENTS FOR POSTBACCALAUREATE CERTIFICATES

For information regarding Postbaccalaureate Certificate Requirements visit the Postbaccalaureate Certificate page. (p. 392)

CONCURRENT CERTIFICATES

Students may pursue concurrent postbaccalaureate certificates as long as they have formally applied and been accepted to each program through the Office of Admissions.

Graduate Assistantships Graduate Assistantships

Graduate students receive graduate assistantship stipends on a semester or academic year basis. Graduate assistantships may include tuition, stipend, graduate student health insurance, and fees. Graduate assistants can be paid for a maximum of 20 hours per week while school is in session. Students with assistantships must be registered for at least 6 credits during both the fall and spring semesters (with the exception of foreign nationals on temporary student visas who must be registered full-time). (Audited credits do not apply.) Graduate students must maintain a 3.0 minimum GPA to receive a graduate assistantship and may lose the assistantship if they do not maintain their GPA.

Any request by an assistant to work more than 20 hours per week must be approved by the student's committee chair, department head and unit dean. Complete a Graduate Student Employee Workload Exception Request (<https://www.uaf.edu/gradschool/current-students/forms.php>) to request approval of more than 20 hours per week. Foreign nationals on temporary student visas are not permitted to work more than 20 hours a week while classes are in session and are not eligible for an overload waiver.

Teaching assistantships include a tuition payment by the university for no more than 10 to 20 hours per week. If the workload is 10 to 14 hours per week, no more than 5-credits will be included. No tuition will be included if the workload is less than 10 hours per week.

Research assistantships include a tuition payment by grants/contracts for no more than 10-credits each semester if the workload is 15 to 20 hours per week. If the workload is 10 to 14 hours per week, no more than 5-credits will be included. No tuition will be included if the workload is less than 10 hours per week.

Tuition payments should be used for courses directly related to the student's degree program. All fees are the responsibility of the student unless the department or institute makes other arrangements with the UAF Graduate School prior to registration.

A graduate student with a GPA of less than 3.0 for one semester will need to apply for an appeal with Financial Aid to continue with the assistantship. Please see the Financial Aid forms page (<https://www.uaf.edu/finaid/forms/>) for more information.

General University Requirements for Ph.D.

General University Requirements

• Catalog and Time Limit

Graduate students may elect to graduate under the degree requirements in effect and published in the UAF catalog in any one of the previous 10 years as doctoral students. To be considered enrolled in their doctoral degree program they must meet the registration requirements per academic year. If enrollment occurs through the non-degree student registration process, the student is not considered enrolled as a degree student during that time. All nonacademic policies and regulations listed in the current catalog apply, regardless of the catalog used for degree requirements. Students must satisfactorily complete all coursework listed on the individual's Advancement to Candidacy form and all other degree requirements within 10 years as a doctoral student.

• Grades and Grade Point Average

Graduate students must have a cumulative GPA of 3.0 in the courses identified on their Advancement to Candidacy form to both remain in good standing and graduate. In addition, for the purpose of satisfying degree requirements, students must earn a B (3.0) or better (no P grades) in each F400-level course and a C grade (2.0) or better in each F600-level course. A B- is less than a 3.0 and, if obtained in an F400-level course, will not count for meeting degree requirements; likewise, a C- is less than a 2.0 and, if obtained in an F600-level course, will not count for meeting degree requirements.

• Registration Requirement

Graduate students must be registered for at least 6 credits per year (fall, spring, summer), at the graduate or F400-level in courses relevant to the graduate degree, while actively working toward a degree. Those who wish to temporarily suspend their studies should formally request a leave of absence.

Additionally, graduate students must be registered in both the semester of dissertation defense and the semester in which the degree is received as per the requirements under Graduation (p. 415).

• Temporary Leave of Absence

If a student needs to temporarily suspend studies while earning a graduate degree, they must obtain an approved leave of absence. If a student fails to register for at least 6 graduate or F400-level credits in a school year (fall, spring or summer semester) or to obtain a leave of absence, will be dropped from graduate study and will have to be reinstated before resuming graduate studies. Contact the Graduate School for information at 907-474-7464.

• Transfer Credit

Up to one-half of all graduate degree credits approved for a graduate program may be transferred from UAA and UAS. No more than one-third of approved program credits may be transferred from other accredited institutions outside the UA system. Transferred credits may not be used from previously earned undergraduate degrees. A minimum B grade (3.0) is required in all graduate courses presented for transfer. A P grade (pass) is not acceptable for transfer credit.

• Credits Earned While Nondegree Seeking

A student who earned post-baccalaureate degree credits while studying as a nondegree student at UAF may, with approval of the graduate advisory committee, apply those credits toward a graduate degree. However, no more than one-half of all credits used to meet

the requirements of a graduate degree may be credits earned as a nondegree student.

- **Course Restrictions**

Credit by examination, audited courses, F100-, F200-, F300-, and F500-level courses, or courses that are taken under the credit/no credit option cannot be used to fulfill the basic course requirements of any degree program. No more than 12 credits of special topics courses (F693 or F695) or individual study (F697) may be used toward a graduate degree. The director of the Graduate School must approve requests for exceptions to the limit.

- **Deficiencies**

The graduate advisory committee may require that students remedy any deficiencies. The committee will determine early in the program both how to remedy the deficiencies and the minimum level of performance required of the student. Graded undergraduate courses taken to remedy a deficiency must receive a grade of B (3.0) or better. Deficiency courses cannot be listed on the Advancement to Candidacy form.

- **English Proficiency**

Graduate students must be proficient in written and oral English. The graduate advisory committee will determine the requirements to address any deficiencies in communication. These requirements may not be used to fulfill departmental language/research tool requirements.

- **Cooperative Programs**

Some students may develop cooperative programs using specific courses from other universities before being admitted to graduate study at UAF. As part of the application process, the cooperative program must be included in an approved Graduate Study Plan. The student must complete a minimum of 12-semester credits in residence at UAF, in addition to thesis and research. The following guidelines are for collaborative Ph.D. graduate studies across all UA academic units. Some individual degree programs have additional requirements which are included in specific program descriptions in the graduate degree program (p. 419) section. The guidelines described here apply only to programs that have not established different requirements.

- At least four faculty members shall serve on the graduate advisory committee for each Ph.D. student. At least two committee members shall be UAF faculty. One of the UAF committee members must be on a tenure-track appointment in a Ph.D.-granting department. The committee shall be chaired or co-chaired by a UAF faculty member.
- The graduate advisory committee and its chair and/or co-chairs must be approved by the program director and the dean of the Graduate School.
- UAF rules and regulations on graduate studies shall apply to all UAF graduate students, including those concurrently enrolled at UAA and UAS.
- The graduate advisory committee must meet at least once a year to update the Graduate Study Plan and to review the student's progress toward the degree. The annual progress report must be signed by all committee members and submitted to the dean of the UAF Graduate School.
- A comprehensive exam committee composed of the student's advisory committee will administer the Ph.D. comprehensive exam for each student.
- The Ph.D. thesis defense is to be conducted on the UAF campus.

Changing Programs

A graduate student may change their program. To change to a program in a different department, school or college (e.g., from an M.S. in civil engineering to an M.S. in biology), the student must submit a new application for admission so faculty in the new degree program can fully review the student's credentials. To change the area of emphasis, add a degree or the degree within the same department (e.g., from an M.A. in anthropology to a or add a Ph.D. in anthropology, or from a Ph.D. in biochemistry and molecular biology to a Ph.D. in environmental chemistry) the student may change or add programs by completing a change of major form. The form is available from the Graduate School's website. Regardless of when the form is submitted, a change of program doesn't become effective until the beginning of the upcoming fall or spring semester. For more information, contact the Graduate School at 907-474-7464.

Graduation

- **Responsibility**

The student is responsible for meeting all requirements for graduation. The Advancement to Candidacy must be received by the Graduate School the semester before the student intends to graduate.

- All Ph.D. programs

- The student must be registered for a minimum of 3 graduate-level credits within their discipline the semester of successfully defending their dissertation and plan to graduate.
- If the student has already successfully defended but missed the previous semester's graduation deadline, then they must be registered for a minimum of 1 graduate-level credit within their discipline the semester that they plan to graduate.

Additional information on the steps or paperwork required to graduate for all Ph.D. programs is available on the Graduate School's website (<https://www.uaf.edu/gradsch/current/ready-to-graduate/>).

- **Application for Graduation**

The student must file an application for graduation and a non-refundable fee with the Office of the Registrar. The Graduate School encourages the student to work with their advisor/committee chair before applying for graduation to meet any departmental deadlines. Applications for graduation filed after the published deadline will be processed for graduation the following semester. The student needs not to have all requirements met before they apply for graduation. The application is an indication that they are planning to finish all degree requirements during the intended graduation semester. Students who apply for graduation and who do not complete degree requirements by the end of the semester must reapply for graduation and pay the fee again.

- **Diplomas and Commencement**

UAF issues diplomas to graduates three times each year: in September, January and June. All students who complete degree requirements during the academic year are invited to participate in the annual commencement ceremony at the end of the spring semester. Names of students receiving degrees appear in the commencement program and are released to the media unless the student has a confidential hold on file with the Office of the Registrar. Students who do not want their names to be released may so indicate

on the application for graduation form. Graduates are responsible for ordering caps and gowns through the UAF bookstore in early spring.

Types of Master's Degrees

General University Requirements

General University Requirements for Master's Degrees

- **Catalog and Time Limit**

Graduate students may elect to graduate under the degree requirements in effect and published in the UAF catalog in any one of the previous seven years in which they are enrolled as a master's degree student, or in the previous 10 years if they are a doctoral student. To be considered enrolled in their master's or doctoral degree program, they must meet the registration requirements per academic year. If a student is enrolled through the nondegree student registration process, they are not considered enrolled as a degree student during that time.

All nonacademic policies and regulations listed in the current catalog apply, regardless of the catalog used for degree requirements.

Students must satisfactorily complete all coursework listed on their Advancement to Candidacy form and all other degree requirements within seven years for a master's degree.

- **Grades and Grade Point Average**

Graduate students must have a cumulative GPA of 3.0 in the courses identified on their Advancement to Candidacy form to both remain in good standing and graduate. In addition, for the purpose of satisfying degree requirements, students must earn a B (3.0) or better (no P grades) in each F400-level course and a C grade (2.0) or better in each F600-level course. A B- is less than a 3.0 and, if obtained in an F400-level course, will not count for meeting degree requirements; likewise, a C- is less than a 2.0 and, if obtained in an F600-level course, will not count for meeting degree requirements.

- **Registration Requirement**

Graduate students must be registered for at least 6 credits per year (fall, spring, summer), at the graduate or F400 level in courses relevant to the graduate degree, while actively working toward a degree. Those who wish to temporarily suspend their studies should formally request a leave of absence.

Additionally, graduate students must be registered in both the semester that they defend their thesis dissertation and the semester in which they receive their degree as per the requirements under Graduation (<https://catalog.uaf.edu/graduate/>).

- **Temporary Leave of Absence**

If a student needs to temporarily suspend studies while earning a graduate degree, they must obtain an approved leave of absence. If the student fails to register for at least 6 graduate or F400-level credits in a school year (fall, spring, or summer semester) or to obtain a leave of absence, they will be dropped from graduate study and will have to be reinstated before resuming graduate studies. Contact the Graduate School for information at 907-474-7464.

- **Transfer Credit**

Up to one-half of all graduate degree credits approved for a graduate program may be transferred from UAA and UAS. No more than one-third of approved program credits may be transferred from other accredited institutions outside the UA system. Transferred credits may not be used from previously earned undergraduate degrees. A minimum B grade (3.0) is required in all graduate courses presented for transfer. A P grade (pass) is not acceptable for transfer credit.

- **Credits Earned While Nondegree Seeking**

A student who earned postbaccalaureate degree credits while studying as a nondegree student at UAF may, with approval of the

graduate advisory committee, apply those credits toward a graduate degree. However, no more than one-half of all credits used to meet the requirements of a graduate degree may be credits earned as a nondegree student.

- **Course Restrictions**

Credit by examination, audited courses, F100-, F200-, F300- and F500-level courses, and courses that are taken under the credit/no credit option cannot be used to fulfill the basic course requirements of any degree program. No more than 12 credits of special topics courses (F693 or F695) or individual study (F697) may be used toward a graduate degree. The director of the Graduate School must approve requests for exceptions to the limit.

- **Deficiencies**

The graduate advisory committee may require that students remedy any deficiencies. The committee will determine early in the program both how to remedy the deficiencies and the minimum level of performance required of the student. Graded undergraduate courses taken to remedy a deficiency must receive a grade of B (3.0) or better. Deficiency courses cannot be listed on the Advancement to Candidacy form.

- **English Proficiency**

Graduate students must be proficient in written and oral English. The graduate advisory committee will determine the requirements to address any deficiencies in communication. These requirements may not be used to fulfill departmental language/research tool requirements.

CHANGING PROGRAMS

Graduate students may change their program. To change to a program in a different department, school or college (e.g., from an M.S. in civil engineering to an M.S. in biology), the student must submit a new application for admission so faculty in the new degree program can fully review the student's credentials. To change the area of emphasis, add a degree or change the degree within the same department (e.g., from an M.A. in anthropology to a or add a Ph.D. in anthropology, or from a Ph.D. in biochemistry and molecular biology to a Ph.D. in environmental chemistry), the student may change or add programs by completing a change of major form. The form is available from the Graduate School's website. Regardless of when the form is submitted, a change of program doesn't become effective until the beginning of the upcoming fall or spring semester. For more information, contact the Graduate School at 907-474-7464.

GRADUATION

- **Responsibility**

The student is responsible for meeting all requirements for graduation. The Advancement to Candidacy must be received by the Graduate School the semester before they intend to graduate.

- Master's with thesis or project
 - The student must be registered for a minimum of 3 graduate-level credits within their discipline the semester that they successfully defend their dissertation and plan to graduate.
 - If the student has already successfully defended but missed the previous semester's graduation deadline, then they must be registered for a minimum of 1 graduate-level credit within their discipline the semester that they plan to graduate.

- Master's with non-thesis/non-project

- The student is not required to register for the semester within which they plan to graduate.

For additional information on the steps or paperwork required to graduate for all master's programs, please visit the Ready to Graduate webpage (https://www.uaf.edu/gradschool/students/ready_to_graduate/).

- **Application for Graduation**

The student must file an application for graduation and a nonrefundable fee with the Office of the Registrar. The Graduate School encourages the student to work with their advisor/committee chair before applying for graduation to meet any departmental deadlines. Applications for graduation filed after the published deadline will be processed for graduation the following semester. The student does not need to have all requirements met before they apply for graduation. The application is an indication that they are planning to finish all degree requirements during the intended graduation semester. Students who apply for graduation and who do not complete degree requirements by the end of the semester must reapply for graduation and pay the fee again.

- **Diplomas and Commencement**

UAF issues diplomas to graduates three times each year: in September, January and June. All students who complete degree requirements during the academic year are invited to participate in the annual commencement ceremony at the end of the spring semester. Names of students receiving degrees appear in the commencement program and are released to the media unless the student has a confidential hold on file with the Office of the Registrar. Students who do not want their names to be released may so indicate on the application for graduation form. Graduates are responsible for ordering caps and gowns through the UAF bookstore in early spring.

Types of Master's Degrees

Types of Master's Degrees

Additional information is available at uaf-grad-school@alaska.edu or 907-474-7464.

MASTER OF ARTS – COURSEWORK FOCUS

1. Complete at least 30 credits of coursework. At least 24 credits must be at the F600 level.
2. Pass a written or oral comprehensive examination, which may be integrated with the capstone course.
3. Successful completion of a capstone course that includes a demonstration of the ability to synthesize information in the field at a level appropriate for a master's degree.

MASTER OF ARTS – WITH PROJECT

1. Successfully complete at least 30 credits of course work, including at least 6 credits of project work (F698) unless the degree requirements of a particular program specify that a 3-credit project is permitted. No more than 6 research (F698) credits may be counted toward the minimum degree credits. At least 21 credits, including those earned for thesis and research/project, must be at the F600 level.
2. Pass a written and/or oral comprehensive examination (may be combined with the project defense).
3. Present and defend the project.

4. Submit a completed and signed project defense form to the Graduate School.
5. Archive the project in the UAF Rasmuson Library.

MASTER OF ARTS – WITH THESIS

1. Successfully complete at least 30 credits of course work, including at least 6 credits of thesis (F699). No more than 12 thesis/research (F699/F698) credits may be counted toward the minimum degree credits. At least 21 credits, including those earned for thesis and research/project, must be at the F600 level.
2. Pass a written and/or oral comprehensive examination (may be combined with the thesis defense).
3. Present and defend the thesis.
4. Submit a completed and signed thesis defense form to the Graduate School.
5. Archive the thesis in the UAF Rasmuson Library.

MASTER OF BUSINESS ADMINISTRATION

1. Complete at least 30 credits of coursework. At least 24 credits must be at the F600 level (6 credits at the F400 level).
2. Successful completion of a capstone course that includes a demonstration of the ability to synthesize information in the field at a level appropriate for a master's degree.

MASTER OF EDUCATION

A general description is available in education (p. 446).

MASTER OF FINE ARTS

A general description is available in creative writing (see English (p. 463)) and art (p. 425).

MASTER OF MARINE POLICY

A general description is available in marine policy (p. 487).

MASTER OF MARINE STUDIES

A general description is available in marine studies (p. 490).

MASTER OF MUSIC

1. Minimum credits required — 36 credits
2. Successfully complete the performance of a graduate music recital.
3. Successfully complete an oral defense of an approved research project paper.

MASTER OF NATURAL RESOURCES AND ENVIRONMENT

A general description is available in natural resources and environment (p. 497).

MASTER OF SCIENCE – COURSEWORK FOCUS

1. Complete at least 30 credits of coursework. At least 24 credits must be at the F600 level.
2. Pass a written or oral comprehensive examination, which may be integrated with the capstone course.
3. Successful completion of a capstone course that includes a demonstration of the ability to synthesize information in the field at a level appropriate for a master's degree.

MASTER OF SCIENCE – WITH PROJECT

1. Successfully complete at least 30 credits of course work, including at least 6 credits of project work (F698) unless the degree requirements

of a particular program specify that a 3-credit project is permitted. No more than 6 research (F698) credits may be counted toward the minimum degree credits. At least 21 credits, including those earned for thesis and research/project, must be at the F600 level.

2. Pass a written and/or oral comprehensive examination (may be combined with the project defense).
3. Present and defend the project.
4. Submit a completed and signed project defense form to the Graduate School.
5. Archive the project in the UAF Rasmuson Library.

MASTER OF SCIENCE – WITH THESIS

1. Successfully complete at least 30 credits of course work, including at least 6 credits of thesis (F699). No more than 12 thesis/research (F699/F698) credits may be counted toward the minimum degree credits. At least 21 credits, including those earned for thesis and research/project, must be at the F600 level.
2. Pass a written and/or oral comprehensive examination (may be combined with the thesis defense).
3. Present and defend the thesis.
4. Submit a completed and signed thesis defense form to the Graduate School.
5. Archive the thesis in the UAF Rasmuson Library.

MASTER OF SECURITY AND DISASTER MANAGEMENT

1. Complete at least 30 credits of coursework. At least 24 credits must be at the F600 level (6 credits at the F400 level).
2. Successful completion of a capstone course that includes a demonstration of the ability to synthesize information in the field at a level appropriate for a master's degree.

ONE HEALTH MASTER

1. Complete at least 30 credits of coursework. At least 24 credits must be at the F600 level or higher (6 credits at the F400 level).
2. Successful completion of a capstone course that includes a demonstration of the ability to synthesize information in the field at a level appropriate for a master's degree.

Graduate Degree Programs

Aerospace Engineering Graduate Certificate

This program provides graduate students the opportunity to focus a portion of their studies toward the discipline of aerospace engineering and to highlight this specialization on their academic transcripts. The topics within aerospace engineering may vary according to student desires and course topic availability but may include unmanned aircraft systems (UAS), as well as aeronautical systems, rocketry, and space systems.

Minimum Requirements for Aerospace Engineering Graduate Certificate: 12 credits

College of Engineering and Mines (<https://www.uaf.edu/cem/>)
907-474-6098

Programs Graduate Certificate

- Graduate Certificate, Aerospace Engineering (p. 419)

Graduate Certificate, Aerospace Engineering

Admission Requirements

Complete the following admission requirements:

- Admission into a master's degree program within the College of Engineering and Mines or approval by the program administrator.

Program Requirements

Minimum requirements for Aerospace Engineering Graduate Certificate: 12 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Aerospace Engineering Graduate Certificate Program Requirements: | | |
| Complete a minimum of two courses from the following: | | 6 |
| AERO F654 | UAS Systems Design | |
| AERO/ME F656 | Aerospace Systems Engineering | |
| AERO/CS F658 | Unmanned Aircraft Systems (UAS) Operations | |
| Complete up to 6 credits from the following courses: | | 3-6 |
| ATM F645 | Atmospheric Dynamics | |
| CS F665 | Computer and Network Security | |
| GEOS F654 | Visible and Infrared Remote Sensing | |
| GEOS F657 | Microwave Remote Sensing | |
| ME F609 | Advanced Vibrations | |
| PHYS/ATM F647 | Fundamentals of Geophysical Fluid Dynamics | |
| Complete up to 3 credits from the following courses: | | 0-3 |
| CS F453 | Robotics & 3D Printing | |
| ME F451 | Aerodynamics | |
| ME F452 | Introduction to Astrodynamics | |
| ME F453 | Propulsion Systems | |

Anthropology

M.A., Ph.D. Degrees

The anthropology program offers a balanced and flexible program of academic courses and research opportunities in cultural anthropology, linguistic anthropology, archaeology and biological anthropology. Anthropology contributes to an understanding of the complex problems of human behavior, biology, language, cultural and social organization, and the relationship of humans to their environments. Research carried out in the field, laboratory and library emphasizes past and present modes of living and the origins and distribution of peoples and cultures throughout the world, with special attention to the circumpolar North.

The graduate program emphasizes general preparation in the field of anthropology. Such preparation enables graduates of the master's program to pursue more advanced training leading to the Ph.D. in anthropology, prepares them to teach anthropology within secondary education and undergraduate levels of higher education, and prepares students for careers with various levels of government in which some anthropological background or expertise is beneficial. Field research in Alaska is a common experience for graduate students in anthropology. All students must have fieldwork and laboratory experience appropriate to the discipline or subdiscipline.

The primary focus of the Ph.D. program is on the circumpolar North, although graduate students and faculty also conduct research elsewhere, in particular Africa and North America. The Ph.D. is available with an emphasis in any of the four subfields of anthropology.

Minimum Requirements for Anthropology Master's and Doctorate Degrees: M.A.: 30-36 credits; Ph.D.: 18 thesis credits

College of Liberal Arts
Department of Anthropology (<https://www.uaf.edu/anthro/>)
907-474-7288

Programs Degrees

- M.A., Anthropology (p. 420)
- Ph.D., Anthropology (p. 421)

M.A., Anthropology

Admission Requirements

Complete the admission process including the following:

- Submit GRE scores.

Program Requirements

Minimum Requirements for Anthropology M.A.: 30-36 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Anthropology Program Requirements | | |
| Complete the following: | | |
| ANTH F629 | Structures of Anthropological Argument | 3 |
| ANTH F652 | Research Design and Professional Development Seminar | 3 |
| ANTH F698 or ANTH F699 | Non-thesis Research/Project Thesis | 6 |
| Complete four semesters of a foreign language or proficiency in a research tool. ¹ | | |
| Complete 18 credits established by the advisory committee | | 18 |

¹ Students wanting a linguistic anthropology emphasis must complete the foreign language option as well as taking ANTH F631 and ANTH F632 as part of their 18 credits.

Note: At least 24 credits must be regular course work (not research or thesis) with 21 of these credits at the F600 level.

Ph.D., Anthropology

Admission Requirements

Complete the admission process including the following:

- Submit GRE scores.

Program Requirements

Minimum Requirements for Anthropology

Ph.D.: 18 credits

| Code | Title | Credits |
|---|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Anthropology Program Requirements | | |
| Complete course work in anthropology and related disciplines as determined by the advisory committee. | | |
| Complete one foreign language and a research tool, or two foreign languages. | | |

Arctic and Northern Studies

Graduate Certificate, M.A. Degree

Arctic and Northern studies is an interdisciplinary program at the University of Alaska Fairbanks (<https://www.uaf.edu/>) that focuses on the opportunities, challenges and policy issues specific to the Arctic and circumpolar North, specifically from social sciences and humanities perspectives.

Arctic and Northern studies M.A. concentrations include:

- Arctic politics and policy
- Northern history
- Individualized

At UAF, Arctic and Northern studies students benefit from the extensive Northern expertise and research activities of UAF faculty, the Alaska and circumpolar North collections of the UAF Rasmuson Library and University of Alaska Museum of the North, and, of course, being located in a northern environment. Arctic and Northern studies faculty have won major awards for excellence in teaching, research and public service.

Minimum Requirements for Arctic and Northern Studies Graduate Certificate: 15 credits; M.A.: 30 credits

College of Liberal Arts

Arctic and Northern Studies (<https://www.uaf.edu/arctic/>)
907-474-7126

Programs

Degree

- M.A., Arctic and Northern Studies (p. 423)

Graduate Certificate

- Graduate Certificate, Arctic and Northern Studies (p. 422)

Graduate Certificate, Arctic and Northern Studies

Graduate Certificate

The objective of the graduate certificate in Arctic and Northern Studies is to provide working professionals and others with graduate-level educational training and skills related to understanding, living and working in the circumpolar North. Through this certificate program, students will gain proficiency in environmental, political, historical, geographical, cultural, anthropological and other aspects of the North as well as knowledge of Northern peoples, including Indigenous peoples and their unique challenges and opportunities.

College of Liberal Arts

Interdisciplinary

Arctic and Northern Studies (<https://www.uaf.edu/arctic/>)

907-474-7126

Admission Requirements

Complete the following admission requirements:

- Students must have a completed baccalaureate degree.
- Students should have an undergraduate GPA of 3.0 or higher.

Program Requirements

Minimum Requirements for Arctic and Northern Studies Graduate Certificate: 15 credits

| Code | Title | Credits |
|--|---------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 409) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Arctic and Northern Studies Program Requirements | | |
| Complete the following: | | |
| ACNS/HIST F600 | Perspectives on the North | 3 |
| Complete one course in each of the following areas: | | 12 |
| Environmental Studies | | |
| Indigenous Studies | | |
| International Studies | | |
| Regional Studies | | |

Areas

ENVIRONMENTAL STUDIES

| Code | Title | Credits |
|--------------------------------|---------------------------------------|---------|
| Complete one of the following: | | |
| ACNS/ENGL F449 | Northern and Environmental Literature | |
| ACNS F611 | Environmental History | |
| ACNS/PS F658 | Comparative Environmental Politics | |

INDIGENOUS STUDIES

| Code | Title | Credits |
|--------------------------------|---|---------|
| Complete one of the following: | | |
| ACNS/ANTH F610 | Northern Indigenous Peoples and Contemporary Issues | 3 |
| ACNS F657/ PS F650 | Comparative Indigenous Rights and Policies | |
| CCS F608 | Indigenous Knowledge Systems | |

INTERNATIONAL STUDIES

| Code | Title | Credits |
|--------------------------------|--|---------|
| Complete one of the following: | | |
| ACNS F629 | Geography of the Arctic and Circumpolar North | |
| ACNS/PS F652 | International Relations of the North | |
| ACNS/PS F669 | Arctic Politics and Governance | |
| ACNS/HIST F683 | 20th-century Circumpolar History | |
| HSEM F621 | Circumpolar Competition-Arctic Diplomacy and Defense | |

REGIONAL STUDIES

| Code | Title | Credits |
|--------------------------------|-----------------------------------|---------|
| Complete one of the following: | | |
| ACNS/HIST F604 | Modern Scandinavia | |
| ACNS/PS F660 | Government and Politics of Canada | |
| ACNS F661/ HIST F664 | History of Alaska | |
| ACNS/PS F662 | Alaska Government and Politics | |
| ACNS/HIST F664 | Soviet and Post-Soviet Russia | |
| ACNS/PS F668 | Government and Politics of Russia | |

M.A., Arctic and Northern Studies

Admission Requirements

Complete the following admission requirements:

- A bachelor's degree from an accredited university.
- A minimum cumulative grade point average of 3.0 in undergraduate studies (exceptions are made for students with outstanding qualifications).
- A minimum grade point average of 3.0 in the undergraduate major (exceptions are made for students with outstanding qualifications).

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Arctic and Northern Studies M.A.: 30 credits

CONCENTRATIONS: ARCTIC POLITICS AND POLICY (P. 423), NORTHERN HISTORY (P. 423), INDIVIDUALIZED STUDY (P. 423)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 416) | | |
| Arctic and Northern Studies Program Requirements | | |
| Complete the following: | | |
| ACNS F600 | Perspectives on the North | 3 |
| ACNS F601 | Research Methods and Sources in the North | 3 |
| ACNS F689 | Thesis Writing Workshop | 3 |
| ACNS F698 or ACNS F699 | Non-thesis Research/Project Thesis | 6-12 |
| Complete 3 elective credits at 400 or 600 level | | 3 |
| Concentrations | | |
| Complete one of the following concentrations: | | 12 |
| Arctic Politics and Policy | | |
| Northern History | | |
| Individualized Study | | |

Concentrations

ARCTIC POLITICS AND POLICY

| Code | Title | Credits |
|----------------------------------|---|---------|
| Complete one of the following: | | |
| ACNS/PS F652 | International Relations of the North | 3 |
| ACNS/PS F669 | Arctic Politics and Governance | |
| Complete three of the following: | | 9 |
| ACNS/PS F603 | Public Policy | |
| ACNS/GEOG/ GEOS F629 | Geography of the Arctic and Circumpolar North | |
| ACNS/PS F647 | U.S. Environmental Politics | |
| ACNS/PS F652 | International Relations of the North | |

| | |
|-----------------------|---|
| ACNS/PS F655 | Political Economy of the Global Environment |
| ACNS F657/ PS F650 | Comparative Indigenous Rights and Policies |
| ACNS/PS F660 | Government and Politics of Canada |
| ACNS/PS F662 | Alaska Government and Politics |
| ACNS/PS F668 | Government and Politics of Russia |
| ACNS/PS F669 | Arctic Politics and Governance |

NORTHERN HISTORY

| Code | Title | Credits |
|----------------------------------|--------------------------------------|---------|
| Complete the following: | | |
| ACNS F675 | Historiography Capstone | 3 |
| Complete three of the following: | | 9 |
| ACNS/HIST F604 | Modern Scandinavia | |
| ACNS F611 | Environmental History | |
| ACNS F661/ HIST F662 | History of Alaska | |
| ACNS/HIST F663 | Imperial Russia, 1700-1917 | |
| ACNS/HIST F664 | Soviet and Post-Soviet Russia | |
| ACNS/HIST F681 | Polar Exploration and Its Literature | |
| ACNS/HIST F683 | 20th-century Circumpolar History | |

INDIVIDUALIZED STUDY

| Code | Title | Credits |
|---|-------|---------|
| Complete 12 credits of the following: | | 12 |
| Courses offered in the Arctic and Northern studies program or other approved courses, selected with the approval of your graduate advisory committee members. | | |

Arctic Security

Graduate Certificate

The Arctic security graduate certificate gives students the education and expertise to understand and better navigate the numerous concerns surrounding the Arctic region. With the transforming Arctic and its associated climate, security, geopolitical and resilience-related developments, a thorough understanding of the region will be key to those who work within the fabric of local, state, national and international settings.

An Arctic security graduate certificate represents an endorsement of advanced academic education and a more robust understanding of the operational context of the Arctic.

Minimum Requirements for Arctic Security Graduate Certificate: 12 credits

College of Business and Security Management
Department of Homeland Security and Emergency Management (<https://www.uaf.edu/som/degrees/graduate/msdm/>)
907-474-7461

Programs

Graduate Certificate

- Graduate Certificate, Arctic Security (p. 424)

Graduate Certificate, Arctic Security

Admission Requirements

Complete the following admission requirements:

- Student must have a completed baccalaureate degree.
- If the degree is in a non-security or arctic related field and has a 3.0 or higher cumulative GPA, they will be required to start with one 400-level course, which is an elective option for the degree.
- Students that have already obtained a graduate degree will not be required to complete an entrance exam or complete a 400-level course first.
- Students with a baccalaureate degree in a related field, with a cumulative GPA of 3.0 or higher will not have any additional testing or entry course requirements.
- If the student has a cumulative GPA between 3.0 and 2.75, regardless of the field of study, they will be required to complete the Watson Glaser Critical Thinking Exam.
- If a student has a cumulative GPA below 2.75, they will be required to submit results from either the GRE or GMAT.

Program Requirements

Minimum Requirements for Arctic Security Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Arctic Security Program Requirements | | |
| Complete the following: | | |
| HSEM F607 | Vulnerability and Protection | 3 |
| HSEM F621 | Circumpolar Competition-Arctic Diplomacy and Defense | 3 |
| HSEM F622 | Arctic Strategies and Operations | 3 |
| Complete one of the following: | | 3 |
| HSEM F406 | Comparative Homeland Security | |
| HSEM F408 | Homeland Defense and Security | |
| HSEM F609 | Human Security | |
| HSEM F692 | Security and Disaster Management Seminar | |
| ACNS F652 | International Relations of the North | |

Art

M.F.A. Degree

The M.F.A. degree provides artists with the necessary background to compete for state, national and international positions. Career opportunities include placement in state and federal arts organizations, galleries, museums, colleges and universities. This degree includes exposure to contemporary art world issues, the historic role of the artist and northern art. The M.F.A. degree in visual art is a terminal degree. Study is two-thirds in studio art. The degree culminates in a solo gallery exhibition.

Minimum Requirements for Art Master's Degree: 60 credits

College of Liberal Arts
Department of Art (<https://www.uaf.edu/art/>)
907-474-7530

Programs Degrees

- M.F.A., Art (p. 425)

M.F.A., Art

Admission Requirements

Complete the following admission requirements:

- Submit a separate portfolio of work as specified in the Art Department guidelines.
- Complete a B.F.A. or B.A. in art from a university other than UAF (or from UAF with special permission from the Art Department faculty), or complete one consecutive year of classes from an accredited M.F.A. program other than UAF. In cases where an exceptional portfolio is submitted, students with another undergraduate degree will be accepted provisionally and with the condition that they make up any deficiencies as determined by their graduate committee.

Program Requirements

Minimum Requirements for Art M.F.A.: 60 credits

CONCENTRATIONS: CERAMICS, COMPUTER ART, DRAWING, NATIVE ARTS, PAINTING, PHOTOGRAPHY, PRINTMAKING, SCULPTURE

| Code | Title | Credits |
|---|--|---------|
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Art Program Requirements | | |
| Complete the following: | | |
| ART F661 | Mentored Teaching in Art | 1 |
| ART F663 | Seminar in Art History | 3 |
| ART F690 | Current Problems | 3 |
| or ART F688 | Professional Practices for Visual Artists | |
| ART F698 | Non-thesis Research/Project ¹ | 5 |
| or ART F699 | M.F.A. Thesis Project | |
| Electives in art history, humanities or philosophy ² | | 6 |
| Courses may be chosen from the following: | | |
| ART F624 | Field Artists of the North | |
| ART F625 | Visual Images of the North | |
| ART F663 | Seminar in Art History | |
| ART F673 | History of the Role of the Artist | |
| Complete at least two studio areas at the F600 level ³ | | 42 |
| Courses may be chosen from the following: | | |
| ART F601 | Ceramics | |
| ART F603 | Graduate Photography | |
| ART F605 | Drawing | |
| ART F607 | Printmaking | |
| ART F609 | Metalsmithing | |
| ART F611 | Sculpture | |
| ART F613 | Painting | |
| ART F619 | Life Drawing | |
| ART F633 | Graduate Field Painting | |
| ART F668 | Alaska Native Art Studio | |
| ART F671 | Two- and Three-dimensional Computer Design | |

| | |
|------------------------|--|
| ART F672 | Advanced Computer Visualization in Art |
| ART F684 | Multimedia Theory and Practice |
| COJO F605/ ART F665 | Advanced Photography Seminar |

- ¹ Studio with two-hour oral comprehensive examination.
- ² Students should seek approval of art history, humanities or philosophy elective courses from their advisor and/or committee prior to registration. Additional elective options may be available and F400 level courses may be taken with additional requirements.
- ³ Students should take 20 credits from their primary studio area, and 9 credits from their secondary studio area. The remaining credits should be comprised of studio credits and/or additional Mentored Teaching in Art ART F661 credits. Advisor and/or committee approval should be sought to ensure correct completion of the credit requirement.

Note: Students with a graduate teaching assistantship (TA) are required to be enrolled in ART F661 Mentored Teaching in Art each semester they have a TA award.

Atmospheric Sciences

M.S., Ph.D. Degrees

The field of atmospheric science covers a wide variety of disciplines involving the physical and chemical properties and processes of the atmosphere. Emerging trends in atmospheric science stress the interactions of the atmosphere with other components (e.g., land, sea ice, ocean) in the total earth system.

The UAF Geophysical Institute, the International Arctic Research Center and other university research institutes support active research programs in high-latitude atmospheric science that include faculty from biology, chemistry, physics, engineering and other departments. Current research by atmospheric sciences focuses on: atmospheric chemistry and biogeochemistry, climate modeling, cloud and aerosol physics, mesoscale modeling, numerical weather prediction and aviation weather, and upper atmosphere (stratosphere and mesosphere). In addition, scientists affiliated with the research institutes conduct research on ocean-atmosphere interactions, dynamic meteorology, micrometeorology and microclimatology, polar meteorology, radiative transfer, cryosphere-atmosphere interactions and remote sensing.

Graduate students are an integral component of this research, both in the experiments in the laboratory and the field as well as in high-performance computing. Research institutes provide excellent environments for research in atmospheric science as well as interdisciplinary research with scientists in other research areas.

Minimum Requirements for Degrees: M.S.: 30 credits; Ph.D.: 18 thesis credits

College of Natural Science and Mathematics
Department of Atmospheric Sciences (<https://www.uaf.edu/atmos/>)
907-474-7368

Admission Requirements

Admission to the Department of Atmospheric Sciences generally requires a degree in a scientific discipline, one year of calculus-based physics, math through differential equations, and one semester of chemistry. Since atmospheric science is a highly interdisciplinary field, incoming students' backgrounds vary considerably. Thus, acceptance into the program is made on a case-by-case basis.

Programs Degrees

- M.S., Atmospheric Sciences (p. 427)
- Ph.D., Atmospheric Sciences (p. 427)

M.S., Atmospheric Sciences

Program Requirements

Minimum Requirements for Atmospheric Sciences M.S.: 30 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Atmospheric Sciences Program Requirements | | |
| Complete four from the following basic courses in atmospheric sciences: | | 12 |
| ATM F601 | Introduction to Atmospheric Sciences | |
| ATM F613 | Atmospheric Radiation | |
| ATM F615 | Cloud Physics | |
| ATM F645 | Atmospheric Dynamics | |
| ATM F646 | Atmospheric Dynamics II: Climate Dynamics | |
| Complete one Thesis or Non-Thesis option listed below | | 18-24 |

Options

THESIS OPTION

| Code | Title | Credits |
|--|-------|---------|
| Complete the following: | | 18-24 |
| ATM F699 Thesis - 6-12 credits | | |
| Approved F600-Level Courses - 6-12 credits | | |

NON-THESIS OPTION A

| Code | Title | Credits |
|--------------------------------------|-------|---------|
| Complete the following: | | |
| ATM F698 Non-Thesis Research/Project | | 3 |
| ATM F600-Level Course | | 6 |
| Approved F600-Level Courses | | 9 |

NON-THESIS OPTION B

| Code | Title | Credits |
|--------------------------------------|-------|---------|
| Complete the following: | | |
| ATM F698 Non-Thesis Research/Project | | 6 |
| ATM F600-Level Course | | 6 |
| Approved F600-Level Courses | | 6 |

Ph.D., Atmospheric Sciences

Program Requirements

Minimum Requirements for Atmospheric Sciences Ph.D.: 45 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Atmospheric Sciences Program Requirements | | |
| Complete the following: | | |
| ATM F601 | Introduction to Atmospheric Sciences | 3 |
| ATM F613 | Atmospheric Radiation | 3 |
| ATM F615 | Cloud Physics | 3 |
| ATM F645 | Atmospheric Dynamics | 3 |
| ATM F646 | Atmospheric Dynamics II: Climate Dynamics | 3 |
| Complete 12 additional approved credits, 6 of which should be ATM courses | | 12 |
| Complete minimum of 18 thesis credits | | 18 |

Biochemistry and Neuroscience

Ph.D. Degree

Biochemistry and neuroscience is an interdepartmental program administered by the Department of Chemistry and Biochemistry with research support through the Institute of Arctic Biology. A broad range of biomedical research experiences is available, including molecular and cellular neuroscience, proteomics, protein structure-function and molecular toxicology. The Arctic environment provides additional research opportunities in environmental biochemistry, adaptations and molecular genetics. Students seeking an M.S. degree in these research areas should see the M.S. chemistry with concentration in biochemistry and neuroscience degree.

UAF faculty and affiliate faculty at collaborating institutions provide a rich academic environment encompassing both research and comprehensive course offerings. Students with career interests in biotechnology, pharmaceutical sciences, environmental health, genetics and biomedicine are encouraged to apply. Students are normally accepted with financial support (fellowships, research assistantships and/or teaching assistantships) along with tuition waivers.

Minimum Requirements for Biochemistry and Neuroscience Doctorate Degree: 18 thesis credits

College of Natural Science and Mathematics
Department of Chemistry and Biochemistry (<https://www.uaf.edu/chem/>)
907-474-5510

Programs Degrees

- Ph.D., Biochemistry and Neuroscience with Biochemistry Concentration (p. 428)
- Ph.D., Biochemistry and Neuroscience with Neuroscience Concentration (p. 429)

Ph.D., Biochemistry and Neuroscience with Biochemistry Concentration

Admission Requirements

Complete the following admission requirements:

- Submit GRE General Test scores
- If English is not your native language, submit scores from both the Test of Spoken English and the Test of Written English, as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.

Program Requirements

Minimum Requirements for Biochemistry and Neuroscience Ph.D. (including core courses): 38 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Biochemistry and Neuroscience Program Requirements | | |
| Complete three of the following: | | 9 |
| CHEM F654 | Protein Structure and Function | |
| CHEM F657 | Molecular Foundations of Gene Expression | |
| CHEM F670 | Cellular and Molecular Neuroscience | |
| CHEM F674 | Membrane Biochemistry and Biophysics | |
| CHEM F675 | Cellular Signaling | |
| Complete 9 credits of electives excluding thesis or project (CHEM F699 and CHEM F698). | | 9 |
| Complete Ph.D. dissertation | | |
| Complete seminar series CHEM F688 at least twice. | | 2 |
| CHEM F688 | Biochemical and Molecular Biology Seminar | |

See Chemistry B.S. (p. 263) and M.S. (p. 435) programs.

See Environmental Chemistry (p. 465).

Ph.D., Biochemistry and Neuroscience with Neuroscience Concentration

Admission Requirements

Complete the following admission requirements:

- Submit GRE General Test scores
- If English is not your native language, submit scores from both the Test of Spoken English and the Test of Written English, as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.

Program Requirements

Minimum Requirements for Biochemistry and Neuroscience Ph.D. (including core courses): 38 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Biochemistry and Neuroscience Program Requirements | | |
| Complete the following: | | |
| CHEM F670 | Cellular and Molecular Neuroscience | 3 |
| CHEM F676 | Neurochemistry | 3 |
| Complete one of the following: | | 3 |
| CHEM F654 | Protein Structure and Function | |
| CHEM F657 | Molecular Foundations of Gene Expression | |
| CHEM F674 | Membrane Biochemistry and Biophysics | |
| CHEM F675 | Cellular Signaling | |
| Complete nine credits of electives at the 400- or 600-level, as approved by the graduate committee, excluding thesis or project (CHEM F699 and CHEM F698), with at most two courses at the 400-level | | 9 |
| Complete Ph.D. dissertation in a field of neuroscience | | |
| Complete the seminar series, CHEM F688, at least twice. | | 2 |
| CHEM F688 | Biochemical and Molecular Biology Seminar | |

See Chemistry B.S. (p. 263) and M.S. (p. 435) programs.

See Environmental Chemistry (p. 465).

Biological Sciences

M.S., Ph.D. Degrees

UAF biological sciences graduate students have extraordinary opportunities to conduct independent biological research in controlled-experiment or field settings, taking advantage of Arctic, alpine and boreal environments near campus or at remote locations.

The department has close connections with the National Science Foundation taiga Long Term Ecological Research site, located about 20 miles from campus. Our students also have access to the tundra LTER site at Toolik Lake, where the UAF Institute of Arctic Biology runs a field station.

Facilities available to graduate students on the Troth Yeddha' (Fairbanks) Campus include small mammal colonies, the Large Animal Research Station, both electron and light microscope laboratories, an imaging laboratory and a greenhouse facility. Students and faculty work on systematic collections in the UA Museum of the North using a variety of approaches from traditional morphology to molecular biology.

The program has strong research emphases in Arctic plant ecophysiology, plant-animal coevolution, insect ecology (terrestrial and aquatic), bird and mammal physiological ecology, vertebrate population dynamics, biology of seabirds, molecular evolution and systematics, pollution ecology, wetland ecology, population genetics, ungulate biology and wildlife management.

Advanced degree recipients gain significant teaching experience conducting labs, and a few take primary responsibility for instruction in a course at the undergraduate level. Our graduates have pursued careers in education at the university, community college and secondary levels. Many find professional positions with state and federal resource agencies, with whom the department faculty maintain close contact.

The Department of Biology and Wildlife has approximately 75 graduate students. The atmosphere is informal and students and faculty interact frequently, not only in small-enrollment classes but also on field trips and in community and social settings.

Research assistantships are available on a competitive basis. Teaching assistantships in department courses provide excellent experience. Competitive fellowships are available through the UAF Graduate School. Applicants interested in graduate assistantships should contact the department for assistantship application forms.

Minimum Requirements for Biological Sciences Master's and Doctorate Degrees: M.S.: 30 credits; Ph.D.: 18 thesis credits

College of Natural Science and Mathematics
Department of Biology and Wildlife (<https://www.bw.uaf.edu>)
907-474-7671

Programs Degrees

- M.S., Biological Sciences (p. 430)
- Ph.D., Biological Sciences (p. 431)

M.S., Biological Sciences

Admission Requirements

Complete the admission process including the following:

- Application for admission (<https://uaf.edu/admissions/apply/>) and application fee
- Official transcripts from all universities or colleges attended. Grades are considered as part of the review process to assess academic success.
- Curriculum vitae
- Statement of Purpose
 - The statement of purpose tells the admissions committee who you are and why you are applying.
 - It should include relevant aspects of your background, research interests and experience, and professional aspirations. Explain why you wish to study in the UAF Department of Biology & Wildlife. Provide the names of faculty you have corresponded with and who might be appropriate mentors.
 - The statement is also a good place to elaborate on aspects of your application that might be misinterpreted or overlooked.
 - Excellent statements of interest are specific, informative, focused, and concise.
- Three letters of reference from individuals who can address your potential to succeed in graduate school. Ideally, letters of reference should come from university faculty, research staff, or professionals familiar with your academic or relevant work (including service, e.g., Peace Corps or AmeriCorps) experience and the expectations of graduate school.
- Optional: Scores from the GRE General Test will be considered, if submitted.
- International students: Please consult UAF’s most recent requirements (<https://catalog.uaf.edu/getting-started/admission-international-students/>).
- Note: Students are typically not admitted to the program unless a faculty advisor has agreed to serve as the mentor. Applicants should contact potential advisors before applying.

| | |
|---------------|---|
| BIOL/WLF F602 | Research Design |
| BIOL/WLF F604 | Scientific Writing, Editing and Revising in the Biological Sciences |
| BIOL/WLF F680 | Data Analysis in Biology |

Program Requirements

Minimum Requirements for Biological Sciences M.S.: 30 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master’s (with Thesis) Degree Requirements | | |
| Complete the master’s degree requirements. (p. 418) | | |
| Complete and pass the departmental written and oral master’s comprehensive examination | | |
| Complete at least one of the following: | | 3 |

Ph.D., Biological Sciences

Admission Requirements

Complete the admission process including the following:

- Application for admission (<https://uaf.edu/admissions/apply/>) and application fee
- Official transcripts from all universities or colleges attended. Grades are considered as part of the review process to assess academic success.
- Curriculum vitae
- Statement of Purpose
 - The statement of purpose tells the admissions committee who you are and why you are applying.
 - It should include relevant aspects of your background, research interests and experience, and professional aspirations. Explain why you wish to study in the UAF Department of Biology & Wildlife. Provide the names of faculty you have corresponded with and who might be appropriate mentors.
 - The statement is also a good place to elaborate on aspects of your application that might be misinterpreted or overlooked.
 - Excellent statements of interest are specific, informative, focused, and concise.
- Three letters of reference from individuals who can address your potential to succeed in graduate school. Ideally, letters of reference should come from university faculty, research staff, or professionals familiar with your academic or relevant work (including service, e.g., Peace Corps or AmeriCorps) experience and the expectations of graduate school.
- Optional: Scores from the GRE General Test and/or the GRE Subject Test in Biology will be considered, if submitted.
- International students: Please consult UAF's most recent requirements (<https://catalog.uaf.edu/getting-started/admission-international-students/>).
- Note: Students are typically not admitted to the program unless a faculty advisor has agreed to serve as the mentor. Applicants should contact potential advisors before applying.

If entering with only a bachelor's degree, complete and pass the departmental written and oral Ph.D. qualifying examination

Complete and pass a written and oral comprehensive examination administered by the graduate advisory committee

In this program or in previous postbaccalaureate programs, complete coursework at least equivalent to that required for the M.S. degree

For optional concentration see Wildlife Biology and Conservation (p. 520).

Program Requirements

Minimum Requirements for Biological Sciences Ph.D.: 18 credits

OPTIONAL CONCENTRATION: WILDLIFE BIOLOGY AND CONSERVATION

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |

Business Administration

MBA Degree

The College of Business and Security Management offers professional education applicable to the fields of management, finance, human resource management, international business, marketing, and scientific and technical management to individuals interested in entering industry or government.

The program prepares graduates to meet the complex problems of the technical, economic and social environment and to enable them to provide imaginative and responsible leadership to industry and government.

The UAF program recognizes that competence in the practice of management necessitates education with both breadth and depth. The graduate program is accredited by the Association to Advance Collegiate Schools of Business.

All applications will be reviewed to determine if the applicant has the required body of knowledge to begin MBA courses. Those deficient may be required to complete prerequisite modules prior to admission or prior to enrolling in specific courses.

Minimum Requirements for Business Administration MBA: 30 credits

Learn more about the master's degree in business administration (<https://uaf.edu/academics/programs/masters/mba-online.php>), including an overview of the program, career opportunities and more.

College of Business and Security Management
Masters of Business Administration (<https://www.uaf.edu/som/degrees/graduate/mba/>)
907-474-4622

Programs Degree

- MBA, Business Administration (p. 432)

MBA, Business Administration

Admission Requirements

Applications will be reviewed on a continuous basis. Complete the admission process including the following:

- Students with a graduate degree from an accredited institution may be admitted without taking the GMAT or GRE exam.
- UAF B.B.A. graduates with an overall GPA of 3.25 or above may be admitted without taking the GMAT or GRE exam. Those with GPA between 3.25 and 2.75 must submit results of the Watson-Glaser Critical Thinking exam for review. Those with GPA below 2.75 must submit results from the GMAT or GRE for review.
- Non-UAF applicants with a bachelor's degree in business from an AACSB-accredited institution and an overall GPA of 3.25 or above may be admitted without taking the GMAT or GRE. Those with GPA between 3.25 and 2.75 must submit results of the Watson-Glaser Critical Thinking exam for review. Those with GPA below 2.75 must submit results from the GMAT or GRE for review.
- Applicants with non-business degrees and GPA from 4.00 to 2.75 must submit results of the Watson-Glaser Critical Thinking exam for review. Those with GPA below 2.75 must submit results from the GMAT or GRE for review.

Program Requirements

Minimum Requirements for Business Administration MBA: 30 credits

CONCENTRATIONS: BLUE (P. 433), BUSINESS ANALYTICS (P. 433), BUSINESS CONTINUITY (P. 433), (P. 433) CYBERSECURITY (P. 433), GENERAL MANAGEMENT (P. 433), STEM (P. 433)

| Code | Title | Credits |
|--|------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Business Administration Program Requirements ¹ | | |
| Complete the following: | | |
| MBA F617 | Organizational Theory for Managers | 3 |
| MBA F643 | Marketing Management | 3 |
| MBA F675 | Quantitative Methods for Managers | 3 |
| MBA F680 | Financial Markets and Strategy | 3 |
| Complete the following capstone course: | | 3 |
| MBA F690 | Corporate Strategy | |
| Concentrations ² | | |
| Complete one of the following concentrations: | | 15 |
| BLUE | | |
| Business Analytics | | |
| Business Continuity | | |
| Cybersecurity | | |
| General Management | | |
| STEM | | |

¹ Complete the following MBA core courses after any required modules are completed.

² More than one concentration may be earned for the degree; however, courses used in one concentration may not be used to meet requirements in another concentration.

Students who earn grades of two Cs, one D, or one F in courses that are part of their MBA program will no longer be in good standing in the MBA program even if their cumulative GPA remains at or above 3.0. MBA students who are not in good standing will be subject to review and may be dismissed by the MBA committee. Students may not use more than two F600-level courses with C grades on their Advancement to Candidacy application. An A or B grade must be earned in F400-level courses.

Students with no prior course work in business subjects may be required to complete up to seven self-study modules prior to beginning courses. Contact the CBSM MBA program for more information. These are not UAF courses and will not count toward the 30 required program credits.

Concentrations

BLUE

The Blue concentration is designed for students interested in fisheries and marine science.

| Code | Title | Credits |
|--|---|---------|
| Complete three of the following: | | 9 |
| FISH F611 | Human Dimensions of Environmental Systems | |
| FISH F687 | Fisheries Management | |
| MSL F681 | The Oceans and Global Change | |
| Any other 600-level fisheries or marine science courses can be taken to satisfy concentration requirements, although these courses may require being taken in residence. | | |
| Complete two approved CBSM or CFOS electives at the F400 or F600 level. | | 6 |

BUSINESS ANALYTICS

| Code | Title | Credits |
|--|---------------------------|---------|
| Complete the following: | | |
| MBA F623 | Business Analytics | 3 |
| MBA F635 | Storytelling with Data | 3 |
| Complete one of the following: | | 3 |
| MBA F633 | Human Resources Analytics | |
| MBA F634 | Marketing Analytics | |
| Complete two approved CBSM electives at the F400 or F600 level | | 6 |

BUSINESS CONTINUITY

| Code | Title | Credits |
|----------------------------------|---|---------|
| Complete three of the following: | | 9 |
| MBA F632 | Project Management | |
| MBA F645 | Crisis Management | |
| MBA F646 | Business Continuity and Risk Assessment | |
| MBA F647 | Business Continuity Audit | |

| | | |
|--|--|---|
| Complete two approved CBSM electives at the F400 or F600 level | | 6 |
|--|--|---|

CYBERSECURITY

| Code | Title | Credits |
|--|--|---------|
| Complete three of the following: | | 9 |
| MBA F641 | Information Assurance and Risk Assessment | |
| MBA F648 | Perspectives in Addressing Cybersecurity & Critical Infrastructure | |
| MBA F649 | Cyber Threats and Vulnerabilities | |
| Complete two approved CBSM electives at the F400 or F600 level | | 6 |

GENERAL MANAGEMENT

| Code | Title | Credits |
|--|--|---------|
| Complete three of the following: | | 9 |
| MBA F605 | Contemporary Topics in Accounting | |
| MBA F607 | Human Resources Management | |
| MBA F624 | Controllershship | |
| MBA F627 | Business Law and Ethics | |
| MBA F632 | Project Management | |
| MBA F642 | Economics of Environmental and Business Sustainability | |
| MBA F665 | Strategic Collaboration | |
| MBA F673 | Innovation Management | |
| MBA F674 | New Venture Development | |
| MBA F682 | Financial Statement Analysis | |
| MBA F683 | Advanced Topics in Marketing | |
| MBA F691 | Advanced Topics in Business | |
| Complete two approved CBSM electives at the F400 or F600 level | | 6 |

STEM

This concentration may require some courses to be taken in residence.

| Code | Title | Credits |
|--|-------|---------|
| Students will take three graduate-level courses in their approved STEM field. These courses must be approved by the MBA advisor. | | 9 |
| Complete two approved CBSM electives at the F400 or F600 level. | | 6 |

Business Continuity

Graduate Certificate

The business continuity graduate certificate provides students an in-depth overview of those processes required to build resilience and provide for disaster recovery within both public and private entities. Planning and preparing for the adverse effects of a major crisis brought on by natural disasters, cyber threats and even common emergencies are key to the survival of an organization post-event. Business continuity is an important component in having a successful business, and as such, many organizations are adapting their employee's roles to include continuity components. This certificate will help students understand those components, teach them how to develop a plan, and cover best practices to survive and thrive despite a crisis or disaster. This knowledge, in turn, better prepares employees and businesses for any business disruption that may occur.

Minimum Requirements for Business Continuity Graduate Certificate: 12 credits

College of Business and Security Management
Department of Homeland Security and Emergency Management (<https://www.uaf.edu/som/degrees/certificates/>)
907-474-7461

Programs

Graduate Certificate

- Graduate Certificate, Business Continuity (p. 434)

Graduate Certificate, Business Continuity

Admission Requirements

Admission Requirements:

- Students must have a completed baccalaureate degree.
- If the degree is in a non-security or business continuity-related field and has a 3.0 or higher cumulative GPA, students will be required to start with one 400-level course, that is an elective option for the degree.
- Students who have already obtained a graduate degree will not be required to complete an entrance exam or complete a 400-level course first.
- Students with a baccalaureate degree with a cumulative GPA of 3.0 or higher in a related field will not have any additional testing or entry course requirements.
- Students with a cumulative GPA between 3.0 and 2.75, regardless of the field of study, will be required to complete the Watson Glaser Critical Thinking Exam.
- Students with a cumulative GPA below 2.75, will be required to submit results from either the GRE or GMAT.

Program Requirements

Minimum Requirements for Business Continuity Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Business Continuity Program Requirements | | |
| Complete the following: | | |
| HSEM F645 | Crisis Management | 3 |
| HSEM F646 | Business Continuity and Risk Assessment | 3 |
| HSEM F632 | Project Management | 3 |
| Complete one of the following: | | 3 |
| HSEM F445 | Business Continuity and Crisis Management ¹ | |
| HSEM F417 | Cybersecurity Resiliency | |
| HSEM F647 | Business Continuity Audit | |

¹ If no prior experience in business continuity, HSEM F445 is a required prerequisite for this certificate.

Chemistry

M.S. Degree

Graduates in chemistry qualify for employment in many fields as teachers of chemistry; supervisors in industry; technical sales personnel; research chemists in federal, state, municipal, academic or industrial laboratories; in pre-medicine; and as laboratory technicians. The rapid introduction of chemical techniques in all branches of commerce and the creation of many synthetic products have caused substantial growth in the profession. In addition to the traditional employment opportunities in chemistry, well-qualified graduates find positions in the fields of environmental sciences, oceanography, biochemistry, neuroscience, and related interdisciplinary fields. Many recipients of chemistry master's degrees continue their education to obtain Ph.D. degrees at UAF or other universities. The M.S. program also has concentrations in the departmental focal areas of biochemistry and neuroscience and environmental chemistry. The department also offers Ph.D. degrees in each of these areas. See the biochemistry and neuroscience (p. 428) and environmental chemistry (p. 465) Ph.D. programs.

The department offers well-equipped laboratories housing instrumentation for nuclear magnetic resonance spectrometry, infrared, ultraviolet/visible and atomic absorption spectrophotometry, mass spectrometry, gas chromatography, amino acid analysis and HPLC. Additional equipment for gas chromatography/mass spectrometry, X-ray diffractometry, electron microscopy and liquid scintillating counters is available in cooperation with other UAF departments and institutes.

Minimum Requirements for Chemistry Masters Degree: 30 credits

College of Natural Science and Mathematics
Department of Chemistry and Biochemistry (<https://www.uaf.edu/chem/>)
907-474-5510

Programs Degrees

- M.S., Chemistry (p. 435)
- Accelerated B.S./M.S., Chemistry (p. 397)

M.S., Chemistry

Admission Requirements

Complete the following admission requirements:

- Submit GRE General Test scores.
- If English is not your native language, submit scores from both the Test of Spoken English and the Test of Written English, as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.

Program Requirements

Minimum Requirements for Chemistry M.S.: 30 credits

OPTIONAL CONCENTRATIONS: BIOCHEMISTRY AND NEUROSCIENCE (P. 436), ENVIRONMENTAL CHEMISTRY (P. 436)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Chemistry Program Requirements | | |
| Complete any deficiencies concurrently with this degree. | | |
| Complete two credits of advisory committee-approved seminar courses from the two seminar course choices below. ¹ | | 2 |
| CHEM F691 | Research Presentation Techniques | |
| CHEM F688 | Biochemical and Molecular Biology Seminar | |
| Complete 6-9 credits from relevant advisory-committee approved graduate-level courses or select one of the following concentrations | | 6-9 |
| Biochemistry and Neuroscience | | |
| Environmental Chemistry | | |
| Complete 7-10 credits of courses approved by the advisory committee. | | 7-10 |
| Thesis or Project Requirements | | |
| Complete the thesis or project option as described below. ² | | 12 |

¹ Students in the Biochemistry and Neuroscience concentration should take Biochemical and Molecular Biology Seminar and students in Environmental Chemistry concentration should take Research Presentation Techniques.

² The minimum credits required is 30. The required M.S. course work above represents 18 credits. The minimum number of thesis credits required is 6. For the thesis option the remaining 6 credits can either be thesis credits or courses at the F400 level or higher. For the project option, the remaining 6 credits can be courses at the F400 level or higher.

THESIS OR PROJECT OPTIONS

Thesis Option

| Code | Title | Credits |
|-----------|--------|---------|
| CHEM F699 | Thesis | 6 |

Thesis credits or committee-approved courses that are F400 level or higher. 6

Submit a committee-approved, written research-based thesis proposal and pass an oral comprehensive examination centered on the proposal.

Complete a committee-approved, research-based written thesis and pass an oral defense of the thesis.

Project Option

| Code | Title | Credits |
|-----------|-----------------------------|---------|
| CHEM F698 | Non-thesis Research/Project | 6 |

Committee-approved courses that are F400 level or higher. 6

Submit a committee-approved, literature-based written project proposal and pass an oral comprehensive examination centered on the proposal.

Complete a committee-approved, literature-based written project and pass an oral defense of the project.

OPTIONAL CONCENTRATIONS

Biochemistry and Neuroscience

| Code | Title | Credits |
|------|-------|---------|
|------|-------|---------|

Complete 9 credits from the following list of core courses 9

| | |
|-----------|--|
| CHEM F654 | Protein Structure and Function |
| CHEM F657 | Molecular Foundations of Gene Expression |
| CHEM F670 | Cellular and Molecular Neuroscience |
| CHEM F674 | Membrane Biochemistry and Biophysics |
| CHEM F675 | Cellular Signaling |

Environmental Chemistry

| Code | Title | Credits |
|------|-------|---------|
|------|-------|---------|

Complete 6 credits from the following list of core courses: 6

| | |
|-----------|--|
| CHEM F606 | Atmospheric Chemistry |
| CHEM F609 | Aqueous and Environmental Geochemistry |
| CHEM F631 | Environmental Fate and Transport |
| CHEM F655 | Environmental Toxicology |

SEE BIOCHEMISTRY AND NEUROSCIENCE (P. 428).

SEE ENVIRONMENTAL CHEMISTRY (P. 465).

Civil Engineering

M.S. Degree

Civil engineers plan, design and supervise the construction of facilities essential to modern life in both the public and private sectors. These facilities vary widely in nature, size and scope: space launching facilities, offshore structures, bridges, buildings, tunnels, highways, transit systems, dams, airports, irrigation projects, treatment and distribution facilities for water and collection and treatment facilities for wastewater.

Civil engineers use sophisticated technology and employ computer-aided engineering during project phases of design, construction, project scheduling and cost control. Civil engineers are problem solvers involved in community development and improvement. They meet the challenges of pollution, deteriorating infrastructure, traffic congestion, energy needs, floods, earthquakes, urban redevelopment and community planning. The opportunity for creativity is unlimited.

The civil engineering program at UAF began in 1922, had its first graduate in 1931 and since has graduated more than 800 men and women.

Many of these graduates work in Alaska's cities, towns and villages in a wide range of responsible positions. More than 60 percent of Alaska's professional engineers practice in civil engineering. The UAF civil engineering program has been accredited since 1940 by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. All engineering programs in the department give special attention to problems of Northern regions.

In addition to general civil engineering courses, specialties are available in Arctic engineering, transportation, geotechnical, structures, water resources, hydrology, and design and construction management. Many courses emphasize principles of analysis, planning and engineering design in northern regions.

A master's degree program can include courses in environmental engineering (ENVE), engineering management (ESM) and other areas. An advanced degree in water and environmental science, administered within the Civil Engineering Department, is available.

Minimum Requirements for Civil Engineering Master's Degree: 30 credits

College of Engineering and Mines

Department of Civil, Geological and Environmental Engineering (<https://www.uaf.edu/cem/programs/civil-engineering/>)
907-474-7241

Programs

Degrees

- M.S., Civil Engineering (p. 437)
- Accelerated B.S./M.S. Civil Engineering (p. 400)

M.S., Civil Engineering

Admission Requirements

Complete the following admission requirements:

- Complete a bachelor's degree in engineering or natural sciences.¹
- Submit GRE scores

¹ If applying with a non-engineering degree, submit a graduate study plan, including required deficiency courses, to be approved by a committee.

DEFICIENCY REQUIREMENTS²

| Code | Title | Credits |
|---|------------------------|---------|
| Fundamentals of Engineering Exam | | |
| MATH F251X | Calculus I | 4 |
| MATH F252X | Calculus II | 4 |
| MATH F253X | Calculus III | 4 |
| MATH F302 | Differential Equations | 3 |
| Two approved science courses | | 8 |
| Three F200-level or above engineering courses | | |
| Four F400-level CE courses ³ | | |

² If taken before, these courses can be credited as deficiency courses as approved by the department chair.

³ Two must be design classes in different fields of civil engineering.

Program Requirements

Minimum Requirements for Civil Engineering M.S.: 30 credits

CONCENTRATIONS: ARCTIC ENGINEERING (P. 437), ENVIRONMENTAL ENGINEERING (P. 437), DESIGN AND CONSTRUCTION MANAGEMENT, (P. 437) GEOTECHNICAL ENGINEERING (P. 438), STRUCTURAL ENGINEERING (P. 438), TRANSPORTATION ENGINEERING (P. 438), WATER RESOURCES ENGINEERING (P. 438)

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Civil Engineering Program Requirements | | |
| Complete a thesis or project | | 3-9 |
| Complete comprehensive exam | | |
| Complete one from the following concentrations | | 21-27 |
| Arctic Engineering | | |
| Environmental Engineering | | |
| Engineering Design and Construction | | |
| Geotechnical Engineering | | |
| Structural Engineering | | |

Transportation Engineering

Water Resources Engineering

Concentrations

ARCTIC ENGINEERING

| Code | Title | Credits |
|--|--|---------|
| Complete the following: | | |
| CE F401 | Arctic Engineering | 3 |
| CE F624 | Permafrost Engineering | 3 |
| CE F682 | Ice Engineering | 3 |
| or GEOS F615 | Sea Ice | |
| CE F683 | Arctic Hydrology and Hydraulic Engineering | 3 |
| ME F685 | Arctic Heat and Mass Transfer | 3 |
| or ME F642 | Advanced Heat Transfer | |
| Approved electives (6 credits for thesis; 12 credits for project) ¹ | | 6-12 |

¹ Recommended electives include: CE F422, CE F601, CE F625, CE F628, CE F635, CE F684, CE F685, MATH F460 and MATH F615.

ENVIRONMENTAL ENGINEERING

| Code | Title | Credits |
|--|---------------------------------------|---------|
| Complete the following: | | |
| CE F601 | Engineering Research Communication | 3 |
| ENVE F641 | Aquatic Chemistry | 3 |
| or CHEM F605 | Aquatic Chemistry | |
| ENVE F645 | Unit Processes: Chemical and Physical | 3 |
| ENVE F647 | Biotechnology | 3 |
| Approved electives (9 credits for thesis; 15 credits for project) ¹ | | 9-15 |

¹ Recommended electives include: BIOL F657, CE F401, CE F663, CE F684, CHEM F609, CHEM F631, CHEM F655, ENVE F642, ENVE F643, ENVE F644, ENVE F646, ENVE F649, ENVE F652 and ME F658.

DESIGN AND CONSTRUCTION MANAGEMENT

| Code | Title | Credits |
|--|-------|---------|
| Complete the following: | | |
| Personnel, leadership, business communications, marketing electives ¹ | | 6 |
| Design and construction management electives ² | | 6 |
| Accounting, finance, economics electives ³ | | 3 |
| Design and construction technical electives ⁴ | | 9 |
| Project only: | | 3 |
| Complete additional approved elective ⁵ | | |

¹ Recommended electives include: CE F601, ESM F601, MBA F607 and MBA F617.

² Recommended electives include: CE F620, ESM F608, ESM F609 and MBA F627.

³ Recommended electives include: ESM F605.

⁴ Recommended electives include: CE F451.

⁵ Recommended electives include: CE F401 and ENVE F644.

GEOTECHNICAL ENGINEERING

| Code | Title | Credits |
|---|---|---------|
| Complete 15 credits from the following: | | 15 |
| CE F605 | Pavement Design | |
| CE F622 | Foundations and Retaining Structures | |
| CE F624 | Permafrost Engineering | |
| CE F625 | Soil Stabilization and Embankment Design | |
| CE F627 | Geotechnical Earthquake Engineering | |
| CE F628 | Unsaturated Soils Mechanics | |
| CE F633 | Theory of Elastic Stability | |
| CE F635 | Numerical Methods for Geomechanics and Soil-Structure Interaction | |
| Additional approved electives (6 credits for thesis; 12 credits for project) ¹ | | 6-12 |

¹ Recommended electives include: CE F401, CE F422, CE F601, CE F637, GE F440 and ME F601.

STRUCTURAL ENGINEERING

| Code | Title | Credits |
|---|---|---------|
| Complete 15 credits from the following: | | 15 |
| CE F601 | Engineering Research Communication | |
| CE F622 | Foundations and Retaining Structures | |
| CE F630 | Advanced Structural Mechanics | |
| CE F633 | Theory of Elastic Stability | |
| CE F634 | Structural Dynamics | |
| CE F635 | Numerical Methods for Geomechanics and Soil-Structure Interaction | |
| Additional approved electives (6 credits for thesis; 12 credits for project) ¹ | | 6-12 |

¹ Recommended electives include: CE F631, CE F637, CE F640, CE F646 and CE F650.

TRANSPORTATION ENGINEERING

| Code | Title | Credits |
|--|-------|---------|
| Complete the following: | | |
| Approved engineering electives (9 credits for thesis; 15 credits for project) ¹ | | 9-15 |
| Additional approved electives ² | | 12 |

¹ Recommended engineering electives include: CE F401, CE F601, CE F605, CE F624, CE F682, ESM F621, ESM F622 and ME F631.

² At least 3 credits must be in advanced mathematics or statistical methods. Recommended electives include: MATH F408, MATH F661, STAT F402, STAT F461, STAT F602, STAT F605 and STAT F611.

WATER RESOURCES ENGINEERING

| Code | Title | Credits |
|---|--------------------------------------|---------|
| Complete 12 credits from the following: | | 12 |
| CE F661 | Advanced Water Resources Engineering | |

| | |
|---------|--|
| CE F662 | Open Channel and River Engineering |
| CE F663 | Groundwater Hydrology |
| CE F664 | Sediment Transport |
| CE F683 | Arctic Hydrology and Hydraulic Engineering |

Additional approved electives (9 credits for thesis; 15 credits for project) ¹

¹ Recommended electives include: CE F401, CE F445, CE F601, CE F665, GEOS F616, GEOS F617, GEOS F694, NRM F435 and NRM F670.

See Engineering (p. 462) for Ph.D. program.

Climate Security Graduate Certificate

The climate security graduate certificate provides students with the education and expertise required to understand and better navigate the numerous concerns surrounding climate-related challenges in the realm of security and disaster management. With significant shifts in global climate, new concerns in human, national and international security are emerging, creating challenges for resilience and governance. Understanding how prior climate disaster knowledge can be combined with an understanding of future models, scenarios and planning tools will be needed to navigate the unforeseen consequences and the impacts on populations. A climate security graduate certificate represents an endorsement of advanced academic education and a more robust understanding of climate-related security and resilience concerns and planning considerations.

Minimum Requirements for Climate Security Graduate Certificate: 12 credits

College of Business and Security Management
Department of Homeland Security and Emergency Management (<http://www.uaf.edu/som/degrees/graduate/msdm/>)
907-474-7461

Programs Degree

- Graduate Certificate, Climate Security (p. 439)

Graduate Certificate, Climate Security

Admission Requirements

Complete the following admission requirements:

- Students that have already obtained a graduate degree will not be required to complete an entrance exam or complete a 400-level course first.
- Students with a baccalaureate degree in a related field, with a cumulative GPA of 3.0 or higher will not have any additional testing or entry course requirements.
- If the student has a cumulative GPA between 3.0 and 2.75, regardless of the field of study, they will be required to complete the Watson Glaser Critical Thinking Exam.
- If a student has a cumulative GPA below 2.75, they will be required to submit results from either the GRE or GMAT.

Program Requirements

Minimum Requirements for Climate Security Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Climate Security Program Requirements | | |
| Complete the following: | | |
| HSEM F609 | Human Security | 3 |
| HSEM F672 | Climate Catastrophes: A Case Study Approach | 3 |
| HSEM F673 | Models and Scenarios for Disaster Risk Reduction | 3 |
| Complete one of the following: | | 3-4 |
| ACNS/PS F647 | U.S. Environmental Politics | |
| ACNS/PS F658 | Comparative Environmental Politics | |
| ATM F680 | Climate Change Processes: Past, Present, Future | |
| ATM F657 | Climate Change in the Arctic: Methods and Impact Assessment | |
| HSEM F670 | Environmental Security | |
| MBA F642 | Economics of Environmental and Business Sustainability | |

Communication, Professional

M.A. Degree

The communication program prepares students to handle the challenges of communicating effectively and ethically in a rapidly changing world characterized by diversity in gender, cultural background and belief.

The M.A. in professional communication provides advanced education for individuals in or pursuing communication-related careers in public/ nonprofit organizations, media organizations, health care organizations or higher education. Students take courses that focus on organizational communication theory and practices.

The program is both theoretically and pragmatically oriented to prepare students for the professional workplace or for doctoral study in organizations.

Minimum Requirements for Professional Communication M.A. Degree: 30-34 credits

College of Liberal Arts
 Department of Communication and Journalism (<https://www.uaf.edu/cojo/>)
 907-474-6591

Programs
 Degree

- M.A., Communication, Professional (p. 440)

M.A., Communication, Professional

Admission Requirements

Complete the following additional admission requirement:

- Submit academic writing sample.

Program Requirements
 Minimum Requirements for Professional
 Communication M.A. Degree: 30-34
 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 416) | | |
| Professional Communication Program Requirements | | |
| Complete the following: | | |
| COJO F600 | Introduction to Professional Communication | 3 |
| COJO F601 | Communication Research Methodologies: Social Science | 3 |
| COJO F602 | Communication Research Methodologies: Human Science | 3 |
| COJO F625 | Communication Theory | 3 |
| COJO F675 | Training and Development Communication | 3 |
| COJO F680 | Communication and Diversity in the Professional World | 3 |
| COJO F699 | Thesis | 6 |
| or COJO F698 | Non-thesis Research/Project | |
| Electives | | |
| Complete two of the following: ¹ | | 6 |
| COJO F622 | Interpersonal Interaction | |
| COJO F631 | Teambuilding | |
| COJO F635 | Organizational Culture and Communication | |
| COJO F642 | Health Communication | |
| COJO F682 | Seminar in Communication | |
| Teaching assistants complete the following: | | 1-4 |
| COJO F661 | Mentored Teaching in Communication ² | |

¹ Students may take F400- and F600-level courses in art, education, English, journalism, communication, marketing, business administration, and Arctic and Northern studies as well as graduate-level independent studies to fulfill 6 credits of the elective requirement, if approved by the student's committee. Students will also be able to apply up to 6 credits of appropriate graduate-level course work from other universities in the elective area if approved by the student's committee.

² This 1-credit course may be taken up to four times.

Note: A maximum of 6 credits of approved F400-level courses may be included in the 30-34 credit requirement.

Note: The comprehensive examination is to be taken no later than the student's fourth semester of work.

Computer Science

M.S. Degree

Computer science is the study of information handling and its application to the problems of the world. Computing is widely used in support of activities in science, engineering, business, law, medicine, education and the social sciences.

The M.S. degree follows the recommendations of the Association for Computing Machinery and the Institute for Electrical and Electronic Engineers. The program provides breadth and depth in course work and culminates with a major unifying project. This program is available to students who have completed a B.S. degree in computer science at most institutions. Students from other universities who have completed a substantial portion of a bachelor's level computer science program may be admitted to the M.S. program. In such cases, undergraduate courses may be required to remedy deficiencies.

For admission to the M.S. computer science program, the GRE general and computer science subject exam is required.

Minimum Requirements for Computer Science Master's Degree: 30 credits

Learn more about the bachelor's/master's degree in computer science (<https://uaf.edu/academics/programs/bachelors/computer-science-bs-ms.php>), including an overview of the program, career opportunities and more.

College of Engineering and Mines
Department of Computer Science (<https://www.cs.uaf.edu>)
907-474-2777

Programs Degree

- M.S., Computer Science (p. 442)
- Accelerated B.S./M.S, Computer Science (p. 403)

M.S., Computer Science

Admission Requirements

Complete the UAF admission process including the following:

- 1. Submit GRE general exam scores.
- 2. Submit a portfolio of code that you wrote, including comments, bug fixes, and commit messages, as the URL of an internet accessible version control repository.
- 3. For teaching assistantship consideration, foreign applicants whose native language is not English must submit a TOEFL score of at least 600.
- 4. The department gives preference to applicants who also submit results of the Test of Spoken English.

Program Requirements

Minimum Requirements for Computer Science M.S.: 30 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master’s Degree Requirements | | |
| Complete the master’s degree requirements. (p. 418) | | |
| Computer Science Program Requirements | | |
| Complete the following: | | |
| CS F600 | Professional Software Development | 4 |
| CS F601 | Algorithms, Architecture and Languages | 4 |
| CS F690 | Graduate Seminar and Project | 3 |
| CS F691 | Graduate Seminar and Project | 3 |
| Approved electives | | 16 |

Counseling

M.Ed. Degree

The University of Alaska Fairbanks graduate counseling program prepares students to become culturally responsive, effective professional counselors for Alaska counseling practitioners through coursework and supervised internship experiences that emphasize the development of the necessary knowledge, skills and dispositions associated with the counseling field ecological perspective. Students who complete the school counseling track, a 48-credit-hour program, are eligible for certification as school counselors in Alaska. Students who complete the clinical mental health counseling track, a 60-credit-hour program, are eligible for licensure in Alaska as professional counselors with additional post-degree requirements. Students who complete this track are eligible to work in community and mental health agencies or as private clinicians in clinical mental health organizations once licensed.

The Council for Accreditation of Counseling and Related Educational Programs, a specialized accrediting body recognized by the Council for Higher Education Accreditation, has granted accreditation to the following programs in the UAF School of Education counseling program: clinical mental health counseling (M.Ed.) and school counseling (M.Ed.).

Minimum Requirements for Counseling Master’s Degree: 48-60 credits; School Counselor certification: 39-42 credits

Learn more about the master’s degree in counseling (<https://uaf.edu/academics/programs/masters/school-counseling.php>), including an overview of the program, career opportunities and more.

School of Education (<https://www.uaf.edu/educ/graduate/>) 907-474-7341

Programs Degree

- M.Ed., Counseling (p. 443)

Certification

- School Counselor Certification Program (p. 445)

M.Ed., Counseling

Overview

M.Ed. Degree

The University of Alaska Fairbanks' graduate counseling program prepares students to become culturally responsive, effective counseling practitioners through coursework and supervised internship experiences that emphasize an ecological perspective. Students who complete the school counseling track, a 48-credit-hour program, are eligible to be certified as school counselors in Alaska. Students who complete the clinical mental health counseling track, a 60-credit-hour program, are eligible for licensure as professional counselors with additional post-degree requirements. Students who complete this track are eligible to work in community and mental health agencies or as private clinicians once licensed.

The Council for Accreditation of Counseling and Related Educational Programs, a specialized accrediting body recognized by the Council for Higher Education Accreditation, has granted accreditation to the following programs in the UAF School of Education counseling program: clinical mental health counseling (M.Ed.) and school counseling (M.Ed.).

School of Education (<https://www.uaf.edu/soe/academics.php#grad>)
907-474-7341

Admission Requirements

Complete the following admission requirements:

1. Application deadline: February 10 for admission to the following fall semester. Admission to the spring semester will be offered only when space is available in the program. Deadline for spring admission, when offered, is September 15.
2. Application requires a bachelor's degree preferably in a human service area such as education, social work, psychology, human services, etc. Graduates from other undergraduate majors, who have experience in the human service field or demonstrated motivation to enter the field of counseling, may also apply.
3. Applicants must have a GPA of 3.0 or higher in their undergraduate degree or take the Graduate Record Exam.
4. Statement of academic goals addressing applicant's motivations, personal characteristics, experience, education and intentions for earning the counseling degree. Contact the counseling department for writing guideline.
5. Professional resume including education, work, volunteer or life experience relevant to the field of counseling.
6. Three letters of references from professional, academic or character sources.
7. All applicants will be required to interview with the counseling faculty as part of the admissions process.

Additional requirements:

1. Submit a national-level criminal background check through the Federal Bureau of Investigation (<http://www.fbi.gov/about-us/cjis/identity-history-summary-checks/>) prior to seeing clients during COUN F634P.
2. Complete internship placements appropriate to the student's declared area of interest.

3. Complete background check procedure required by the school or clinical mental health field practicum or internship placement. The procedure varies depending on placement.
4. Pass a comprehensive exam.
5. Complete a project, thesis, or other.

Program Requirements

Minimum Requirements for Counseling M.Ed.: 48-60 credits

CONCENTRATIONS: SCHOOL COUNSELING

(P. 444), K-12 SCHOOL COUNSELING

(P. 444), CLINICAL MENTAL HEALTH

(P. 444), CLINICAL MENTAL HEALTH AND SCHOOL COUNSELING (P. 444), CLINICAL MENTAL HEALTH AND K-12 SCHOOL COUNSELING (P. 444)

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Counseling Program Requirements | | |
| Complete the following: | | |
| COUN F601 | Research in Counseling and Educational Settings | 3 |
| COUN F615 | Foundations of Counseling | 3 |
| COUN F623 | Counseling Theories and Applications I | 3 |
| COUN F627 | Developmental Interventions | 3 |
| COUN F628 | Child and Adolescent Development | 3 |
| COUN F632 | Career Development | 3 |
| COUN F630 | Appraisal for Counselors | 3 |
| COUN F635 | Field Practicum | 3 |
| COUN F636 | Internship I ¹ | 3 |
| COUN F647 | Professional Ethics | 3 |
| COUN F660 | Multicultural Counseling | 3 |
| COUN F674 | Group Counseling | 3 |
| COUN F686 | Internship II ¹ | 3 |
| Complete 3-6 credits from the following | | 3-6 |
| COUN F698 | Non-thesis Research/Project ² | |
| COUN F699 | Thesis | |
| Other department approved electives | | |
| Concentrations | | |
| Complete one from the following concentrations: | | 3-30 |
| School Counseling (elementary or secondary) | | |
| K-12 School Counseling (elementary and secondary) | | |
| Clinical Mental Health | | |

¹ Additional fee required. Charges are added to fee statements each semester.

² Students may complete the M. Ed. using one of three options: complete a project (3 credits); complete a thesis (6 credits); or complete other - a department approved elective (3 credits).

Note: Courses assigned by the student's graduate committee to remove deficiencies will not be allowed as part of the graduate program.

Concentrations

SCHOOL COUNSELING

| Code | Title | Credits |
|-------------------------|-------------------|---------|
| Complete the following: | | |
| COUN F617P | Pre-practicum | 3 |
| or COUN F634P | Practicum | |
| COUN F646 | School Counseling | 3 |

K-12 SCHOOL COUNSELING

| Code | Title | Credits |
|-------------------------|-----------------------------|---------|
| Complete the following: | | |
| COUN F617P | Pre-practicum | 3 |
| or COUN F634P | Practicum | |
| COUN F646 | School Counseling | 3 |
| COUN F687 | Internship III ¹ | 3 |

¹ Additional fee required. Charges are added to fee statements each semester.

CLINICAL MENTAL HEALTH AND K-12 SCHOOL COUNSELING

| Code | Title | Credits |
|--|-------------------------------------|---------|
| Complete the following courses for both clinical mental health concentration and K-12 school counseling (elementary and secondary) | | |
| COUN F629 | Counseling Interventions for Adults | 3 |
| COUN F634P | Practicum | 3 |
| COUN F636 | Internship I ¹ | 3 |
| COUN F638 | Adult Development | 3 |
| COUN F646 | School Counseling | 3 |
| COUN F650 | Multicultural Psychopathology | 3 |
| COUN F651 | Counseling for Addictions | 3 |
| COUN F666 | Family and Couples Counseling | 3 |
| COUN F686 | Internship II ¹ | 3 |
| COUN F687 | Internship III ¹ | 3 |

¹ Additional fee required. Charges are added to fee statements each semester.

CLINICAL MENTAL HEALTH

| Code | Title | Credits |
|-------------------------|-------------------------------------|---------|
| Complete the following: | | |
| COUN F629 | Counseling Interventions for Adults | 3 |
| COUN F634P | Practicum | 3 |
| COUN F638 | Adult Development | 3 |
| COUN F650 | Multicultural Psychopathology | 3 |
| COUN F651 | Counseling for Addictions | 3 |
| COUN F666 | Family and Couples Counseling | 3 |

CLINICAL MENTAL HEALTH AND SCHOOL COUNSELING

| Code | Title | Credits |
|---|-------------------------------------|---------|
| Complete the following courses for both clinical mental health concentration and school counseling at one level (elementary or secondary) | | |
| COUN F629 | Counseling Interventions for Adults | 3 |
| COUN F634P | Practicum | 3 |
| COUN F636 | Internship I ¹ | 3 |
| COUN F638 | Adult Development | 3 |
| COUN F646 | School Counseling | 3 |
| COUN F650 | Multicultural Psychopathology | 3 |
| COUN F651 | Counseling for Addictions | 3 |
| COUN F666 | Family and Couples Counseling | 3 |
| COUN F686 | Internship II ¹ | 3 |

¹ Additional fee required. Charges are added to fee statements each semester.

School Counselor Certification Program

Overview

Graduate Certificate

The school counselor certification program prepares graduates to become certified elementary, secondary or K-12 school counselors. Applicants must currently hold a master's degree or higher, preferably in a human services area. Graduates from other majors who have experience in the human service field or who have demonstrated motivation to enter the field of school counseling may also apply.

Transfer credit from previous graduate degrees may satisfy program requirements. Faculty members in the UAF counseling program determine which program requirements have been met. A course of study is designed for each admitted student.

Those wishing to become certified school counselors but who do not have a master's degree or higher will complete the Master of Education in school counseling.

Minimum Requirements for School Counselor Graduate Certificate: 39-42 credits

School of Education (<https://www.uaf.edu/educ/graduate/>)
907-474-7341

Admission Requirements

Complete the following admission requirements:

- Application to the school counselor certification program follows the same admission requirements and procedures as for the M.Ed. in counseling
- Application requires a master's degree or higher preferably in a human service area such as education, social work, psychology, human services, etc. Graduates from other majors who have experience in the human service field or who have demonstrated motivation to enter the field of school counseling may also apply.

Additional requirements:

- Submit a disclosure statement upon admission to the program. Resubmit annually.
- Submit a national-level criminal background check through the Federal Bureau of Investigation (<http://www.fbi.gov/about-us/cjis/identity-history-summary-checks/>) prior to seeing clients during COUN F634P.
- Complete internship placements appropriate to the student's declared area of interest.
- Complete background check procedure required by the school internship placement. The procedure varies depending on placement.

Program Requirements

Minimum Requirements for School Counselor Graduate Certificate: 39-42 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| School Counselor Program Requirements | | |
| Complete the following program requirements for certification in one level (elementary or secondary): | | |
| COUN F615 | Foundations of Counseling | 3 |
| COUN F617P or COUN F634P | Pre-practicum Practicum | 3 |
| COUN F623 | Counseling Theories and Applications I | 3 |
| COUN F627 | Developmental Interventions | 3 |
| COUN F628 | Child and Adolescent Development | 3 |
| COUN F630 | Appraisal for Counselors | 3 |
| COUN F632 | Career Development | 3 |
| COUN F636 | Internship I ¹ | 3 |
| COUN F646 | School Counseling | 3 |
| COUN F647 | Professional Ethics | 3 |
| COUN F660 | Multicultural Counseling | 3 |
| COUN F674 | Group Counseling | 3 |
| COUN F686 | Internship II ¹ | 3 |
| Complete the following optional class for K-12 school counseling certification (elementary and secondary) | | 3 |
| COUN F687 | Internship III ¹ | |

¹ Additional fee required. Charges are added to fee statements each semester.

Education

M.Ed. Degree and Postbaccalaureate Licensures

The University of Alaska Fairbanks complies fully with the institutional reporting requirements mandated in Title II of the Higher Education Act Amendments of 1998. Please contact the School of Education for a copy of the complete report.

The School of Education is dedicated to culturally responsive, place-based teaching, counseling, research and service for Alaska's diverse communities. To fulfill our commitment to enhancing educational opportunities for the state's rural and Indigenous populations, faculty actively and knowledgeably utilize educational technology to deliver School of Education programs through distance delivery strategies, as well as in person.

The School of Education offers programs in elementary education, secondary education and special education at both the postbaccalaureate and Master of Education degree levels. We also offer a Master of Education Degree in School Counseling or Clinical Mental Health Counseling and a graduate certificate in School Counseling.

LICENSURE INFORMATION

UAF education programs are approved by the Alaska State Board of Education standards and accredited by the Council for the Accreditation of Educator Preparation (<http://caepnet.org>).

The UAF School of Education is approved by the Alaska Department of Education and Early Development to recommend its students for Alaska licensure as elementary, secondary, or special education teachers and school counselors.

The State of Alaska requires that all initial applicants for a teaching certificate pass a Basic Competency Exam (BCE) (<https://education.alaska.gov/teachercertification/praxis/>) from the list of exams accepted by the Alaska State Department of Education and Early Development.

In addition, Content Area Examinations (Praxis II) (<https://education.alaska.gov/teachercertification/contentareaexams/>) are required for the Initial 2-3 Year, Professional, and Master teaching certificates. A list of accepted exams and passing scores is available on the website of the Alaska State Department of Education and Early Development.

Minimum Requirements for:

Art K-12 Postbaccalaureate Licensure: 36 credits;
Elementary Postbaccalaureate Licensure: 39 credits;
Secondary Postbaccalaureate Licensure: 34 credits;
Special Education K-12 Postbaccalaureate Licensure: 24-27 credits;
Master of Education: 30-60 credits

Learn more about the Master's degree in school counseling (<https://www.uaf.edu/academics/programs/masters/school-counseling.php>), including an overview of the program, career opportunities and more.
Learn more about the Master's degree in elementary education (<https://www.uaf.edu/academics/programs/masters/elementary-education.php>), including an overview of the program, career opportunities and more.

Learn more about the Master's degree in secondary education (<https://www.uaf.edu/academics/programs/masters/secondary-education.php>), including an overview of the program, career opportunities and more.

Learn more about the Master's degree in special education (<https://www.uaf.edu/academics/programs/masters/special-education.php>), including an overview of the program, career opportunities and more.

Learn more about the Master's degree in clinical mental health counseling (<https://www.uaf.edu/academics/programs/masters/clinical-mental-health-counseling.php>), including an overview of the program, career opportunities and more.

Learn more about the Elementary (K-8) postbaccalaureate licensure (<https://www.uaf.edu/academics/programs/post-bachelor-certification/postbaccalaureate-certificate.php>), including an overview of the program, career opportunities and more.

Learn more about the Art K-12 postbaccalaureate licensure (<https://www.uaf.edu/academics/programs/post-bachelor-certification/postbaccalaureate-certificate.php>), including an overview of the program, career opportunities and more.

Learn more about the Special education K-12 postbaccalaureate licensure (<https://www.uaf.edu/academics/programs/post-bachelor-certification/postbaccalaureate-certificate.php>), including an overview of the program, career opportunities and more.

School of Education
907-474-7341

Programs Licensures

- Art K-12 Licensure Program toward M.Ed., Secondary Education (p. 447)
- Elementary (K-8) Postbaccalaureate Licensure Program (p. 448)
- Secondary Postbaccalaureate Licensure Program toward M.Ed., Secondary Education (p. 456)
- Special Education K-12 Postbaccalaureate Certificate of Completion (p. 459)

Degrees

- Master of Education in Counseling (p. 450)
- Master of Education in Elementary Education (p. 450)
- Master of Education in Secondary Education (p. 452)
- Master of Education in Special Education (p. 453)
- Interdisciplinary Ph.D. (p. 449)

Certification

- School Counselor Certification Program (p. 445)

Art K-12 Licensure Program toward M.Ed., Secondary Education

Offered on the Troth Yeddha' (Fairbanks) Campus only, this is an intensive, classroom-based K-12 art licensure program (34 credits) that prepares postbaccalaureate candidates for K-12 teaching positions. The program is specifically designed to prepare candidates to teach in multicultural settings in Alaska. The content will specifically identify and discuss current issues of art education and applying Alaska content/performance standards and frameworks as well as national standards for art education.

Candidates who apply as graduate applicants may simultaneously pursue teacher licensure and the M.Ed. secondary education degree. Significant additional coursework will be required. (See requirements for M.Ed. secondary education (p. 452).)

At the end of the program, if students have successfully met all of the program requirements, they will be eligible to apply for an Alaska initial teaching license and will receive certificates of completion from UAF.

Candidates who enter the K-12 art licensure program are required to have use of/own a laptop computer before they begin their internships in the fall semester of their professional year.

For program options and professional field experiences information, please see information listed in the catalog for the secondary postbaccalaureate licensure program (p. 456).

Admission to the K-12 art licensure program toward M.Ed. in secondary education includes meeting requirements of the UAF Graduate School and the School of Education. Candidates take five of the licensure courses at the F600 level.

For information on the application process, acceptance to the program and professional field experience, please refer to the secondary postbaccalaureate licensure program toward M.Ed. (p. 456) section.

School of Education (<https://www.uaf.edu/soe/>)
907-474-7341

Admission Requirements

Complete the following admission requirements:

- Applicants will follow the admission process and requirements listed in the catalog for the (<https://bachelors/bachelors-degree-programs/education/secondary-postbacc-licensure/>)secondary postbaccalaureate licensure program (p. 290), with the exception that applicants must have a bachelor's degree in art from an accredited university or college. Applicants should be aware that additional content coursework may be required, depending on content of degree. Additional coursework, as determined by the appropriate departments, may mean a delay of program admission until requirements are fulfilled.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Art K-12 Licensure Program Toward M.ED, Secondary Education: 33 credits

| Code | Title | Credits |
|---|--|---------|
| Art K-12 Licensure Program Toward M.ED, Secondary Education Program Requirements | | |
| Complete the following: | | |
| ED F245 | Child Development | 3 |
| ED F452 | Elementary Internship | 3 |
| ED F649 | Elementary Art Methods | 3 |
| EDSC F415 | Foundations of Modern Educational Practice | 3 |
| or EDSC F205 | Introduction to Secondary Education | |
| EDSC F636 | Art Secondary Instruction and Assessment | 3 |
| EDSC F642 | Technology Applications in Education I | 1 |
| EDSC F643 | Technology Application in Education II | 2 |
| EDSC F657 | Multicultural Education and School-community Relations | 3 |
| EDSC F658 | Classroom Organization and Management | 3 |
| EDSC F672 | Secondary Teaching: School Internship II and Seminar | 6-9 |
| EDSE F622 | Curriculum, Management and Strategies II: High Incidence | 3 |

Elementary (K-8) Postbaccalaureate Licensure Program

This program is offered in Fairbanks and College of Rural and Community Development campus service areas. The elementary teacher postbaccalaureate program is an intensive, year-long program designed to provide students with the coursework and internship experience necessary to meet the Alaska Teacher Standards and be eligible for licensure as an elementary teacher in Alaska. This classroom-based program is built upon the principle of partnership – a cooperative effort between interns, mentor teachers and university faculty partners.

Students begin the program in the summer with a 9-credit block of courses. Students who complete the undergraduate courses ED F110, ED F201, ED F330, ED F344 and EDSE F316 can use these to fulfill the summer requirements. During the academic year of the school district, all students complete two semesters of integrated university courses and internship.

Students must apply through the Office of the Registrar to graduate with a certificate of completion. At the end of the school year, if students have successfully met all of the program requirements, they will be eligible to apply for an Alaska Elementary License.

Elementary applicants apply as graduate-level licensure students. They may choose to complete this licensure program as part of the M.Ed. degree in elementary education. However, application to the M.Ed. degree program should be made at the beginning of elementary postbaccalaureate course work to avoid losing credits for the M.Ed. degree. (See M.Ed. elementary education (p. 450) options requirements.) Candidates who enter the elementary postbaccalaureate licensure program are required to have laptop computers prior to enrolling in ED F344 or ED F624.

School of Education (<https://www.uaf.edu/soe/>)
907-474-7341

Admission Requirements Admission and Application Information

Admissions deadline is Feb 15. It is strongly recommended that applicants contact the School of Education several months prior to the deadline as it will allow sufficient time to complete prerequisites if necessary. Applications will be reviewed as submitted. Applicants may submit after the deadline with department faculty approval.

Admission includes meeting both UAF graduate admission requirements and the School of Education admission requirements.

GRADUATE SCHOOL REQUIREMENTS

Submit the following to the UAF Office of Admissions with a copy to the School of Education:

1. UAF graduate application and fee.
2. Official transcript of bachelor's degree from an accredited institution and official transcripts from all institutions attended. A GPA of at least 3.0 (B grade) in undergraduate degree is required but students with less than a 3.0 may be considered for conditional admission in special circumstances.
3. Three letters of reference that address qualifications and potential as a teacher.
4. A vitae/resume.

5. Four- to five-page essay indicating: reasons for wanting to become a teacher, assessment of academic and personal strengths relative to teaching, future plans and reasons for selecting the elementary postbaccalaureate program.

SCHOOL OF EDUCATION REQUIREMENTS

Submit the following information directly to the School of Education, using School of Education forms:

1. Alaska passing scores from the Praxis I or Praxis Core ASE exam in reading, writing and mathematics and Praxis II Elementary Content exam (test 5018). In extenuating circumstances, applicants may be allowed to begin the internship year without yet having an Alaska qualifying Praxis II score. Students cannot complete program requirements without receiving an Alaska qualifying Praxis II score.
2. Completed academic analysis form to provide information on breadth and depth of prior course work relative to 10 Alaska Student Content Standard areas. If additional course work is required, it must be completed prior to beginning the program.
3. A writing sample, autobiography, evidence of successful paid or volunteer teaching/learning experience, evidence of successful cross-cultural experience.
4. Evidence of technology competence through successful completion of ED F237A, ED F237B, ED F237C and ED F237D or by successfully challenging each of the four components of the two-credit course.
5. Completed Alaska Department of Education and Early Development authorization packet (fingerprint cards and criminal background check necessary to work in schools). Packet is available from the School of Education.
6. Some school districts may require interns to submit a physical examination form.

Program Requirements

Students must earn a C grade or better in each 600-level course. Students must earn a B grade or better in each 400-level course.

Minimum Requirements for Elementary (K-8) Postbaccalaureate Certificate and Licensure: 39 credits

| Code | Title | Credits |
|--------------------------------------|---|---------|
| Elementary (K-8) Requirements | | |
| Complete the following: | | |
| <i>Summer Semester</i> ¹ | | |
| ED F624 | Foundations of Education in Alaska: From Segregation to Standards ² | 3 |
| ED F625 | Exceptional Learners and Child Development: Individual and Cultural Characteristics | 3 |
| ED F626 | Teaching Reading, Writing and Language Arts | 3 |
| <i>Fall Semester</i> | | |
| ED F411 | Reading, Writing, Language Arts: Methods and Curriculum Development | 3 |
| ED F466 | Internship and Collaborative Student Teaching | 3 |
| ED F467 | Classroom Management Communication and Collaboration I | 2 |

| | | |
|------------------------|--|---|
| ED F478/F678 | Mathematics Methods and Curriculum Development ³ | 3 |
| ED F412/F602 | Integrated Social Studies and Language Arts: Methods and Curriculum Development ³ | 3 |
| ED F479/F688 | Science Methods and Curriculum Development ³ | 3 |
| <i>Spring Semester</i> | | |
| ED F414/F605 | Art, Music and Drama in Elementary Classrooms ³ | 3 |
| ED F417/F617 | Physical Activity and Health Education for Elementary Teachers ³ | 3 |
| ED F468 | Internship and Student Teaching | 4 |
| ED F469 | Classroom Management Communication and Collaboration II | 2 |
| ED F476 | Assessment of Literacy Development | 1 |

¹ Or complete ED F110, ED F201, ED F330, ED F344 and EDSE F316 prior to Aug. 1 of the internship year.

² ED F624 meets the State of Alaska requirement for an approved multicultural/cross-cultural communication course.

³ Students intending to complete the M.Ed., Elementary Education are required to take these stacked courses at the 600-level.

Interdisciplinary Ph.D. Degree

Program Requirements

Students wishing to further their education beyond a Master of Education degree may pursue an interdisciplinary Ph.D. degree. For more information, refer to the program section on interdisciplinary studies – Ph.D. degree (p. 480).

M.Ed., Counseling

Program Requirements

Students may earn an M.Ed. degree in counseling with specialization in school or community counseling. Refer to the counseling program section (p. 442) for more information.

M.Ed., Elementary Education

Following completion of the yearlong UAF, postbaccalaureate elementary licensure program, students can pursue an M.Ed. degree in elementary education if they choose to do so. Fifteen specified graduate credits from the elementary licensure program can be used to meet the M.Ed. elementary education requirements. Courses are available through UAF by distance delivery and on the Fairbanks campus. Students can enroll in courses throughout the year. Licensure and the master's degree requirements must be met within seven years of the beginning of the program.

Students who have completed undergraduate courses ED F110, ED F201, ED F330, ED F344 and EDSE F316 as part of their licensure program must complete additional graduate-level coursework to receive a master's degree. Please contact the School of Education Student Services Office for additional information.

Admission Requirements

Admission and Application Information

Deadline is Feb. 15. It is recommended that students submit applications before Dec. 15 to provide time to complete prerequisites if necessary. Applications will be reviewed as submitted.

Admission includes meeting both UAF graduate admissions requirements and the School of Education admissions requirements.

GRADUATE SCHOOL REQUIREMENTS

Submit the following to the UAF Office of Admissions with a copy to the School of Education:

1. UAF graduate application and fee.
2. Official transcript of bachelor's degree from an accredited institution and official transcripts from all institutions attended. A GPA of at least 3.0 (B grade) in undergraduate degree is required but students with less than a 3.0 may be considered for conditional admission in special circumstances.
3. Three letters of reference that address qualifications and potential as a teacher.
4. A vitae/resume.
5. Four- to five-page essay indicating: reasons for wanting to become a teacher, assessment of academic and personal strengths relative to teaching, future plans and reasons for selecting the elementary postbaccalaureate program.

SCHOOL OF EDUCATION REQUIREMENTS

Submit the following information directly to the School of Education, using School of Education forms:

1. Alaska passing scores from the Praxis I or Praxis Core ASE exam in reading, writing and mathematics and score from Praxis II Elementary Content exam (test 5014 or 5018).
2. Completed academic analysis form to provide information on breadth and depth of prior course work relative to 10 Alaska Student Content Standard areas.
If additional coursework is required, it must be completed prior to beginning the program.
3. A writing sample, autobiography, evidence of successful paid or volunteer teaching/learning experience, evidence of successful cross-cultural experience.

4. Evidence of technology competence through successful completion of ED F237A, ED F237B, ED F237C and ED F237D or by successfully challenging each of the four components of the two-credit course.
5. Completed Alaska Department of Education and Early Development authorization packet (fingerprint cards and criminal background check necessary to work in schools). Packet is available from the School of Education.

| | | |
|------------|---|---|
| ED F601 | Introduction to Applied Social Science Research | 3 |
| or ED F630 | Curriculum Development | |
| ED F698 | Non-thesis Research/Project | 3 |

¹ Students must earn a grade of B or better in each 400-level course.

Program Requirements

Students must earn a C grade or better in each 600-level course. Students must earn a B grade or better in each 400-level course.

Minimum Requirements for Elementary Education M.Ed.: 30 credits

| Code | Title | Credits |
|------|-------|---------|
|------|-------|---------|

General University Requirements

Complete the general university requirements. (p. 409)

Master of Education Degree Requirements

Complete the master of education degree requirements. (p. 417)

Complete the admission requirements for the graduate-level elementary postbaccalaureate licensure program.

Elementary Education Program Requirements

Complete the following requirements for the Elementary (K-8) Postbaccalaureate Certificate and Licensure Program:

| | |
|---------|---|
| ED F411 | Reading, Writing, Language Arts: Methods and Curriculum Development ¹ |
| ED F466 | Internship and Collaborative Student Teaching ¹ |
| ED F467 | Classroom Management Communication and Collaboration I ¹ |
| ED F468 | Internship and Student Teaching ¹ |
| ED F469 | Classroom Management Communication and Collaboration II ¹ |
| ED F476 | Assessment of Literacy Development ¹ |
| ED F602 | Integrated Social Studies and Language Arts: Methods and Curriculum Development |
| ED F605 | Art, Music and Drama in Elementary Classrooms |
| ED F617 | Physical Activity and Health Education for Elementary Teachers |
| ED F624 | Foundations of Education in Alaska: From Segregation to Standards |
| ED F625 | Exceptional Learners and Child Development: Individual and Cultural Characteristics |
| ED F626 | Teaching Reading, Writing and Language Arts |
| ED F678 | Mathematics Methods and Curriculum Development |
| ED F688 | Science Methods and Curriculum Development |

After completing the requirements for the Elementary (K-8) Postbaccalaureate Certificate and Licensure Program then complete the following:

M.Ed., Secondary Education

The Master of Education (M.Ed.) in secondary education program with graduate postbaccalaureate teacher licensure offers a pathway for college graduates to earn a teaching certificate and obtain knowledge and skills in practice-based pedagogy. Courses are available on campus at the University of Alaska Fairbanks and by distance delivery across the state of Alaska. The program provides disciplinary and multicultural approaches to teaching students in the diverse contexts of today's educational settings. Students participate in intensive, mentored and supervised experiences in secondary classrooms, which includes one semester of part-time student teaching and one semester of full-time student teaching.

Students admitted to the M.Ed. in secondary education are concurrently admitted to the secondary postbaccalaureate licensure program. The M.Ed. in secondary education may not be earned without completing the requirements for both programs.

Admission Requirements

Admission and Application Requirements

Admission to the graduate secondary postbaccalaureate licensure program and the M.Ed. in secondary education includes meeting requirements of the UAF Graduate School and of the School of Education.

Submit the following information to the UAF Office of the Registrar:

- 1. UAF graduate application and application fee.
- 2. Official transcript of bachelor's degree from an accredited institution, minimum GPA of 3.0. Applicants who have attended more than one university should include transcripts from all universities.
- 3. Three current letters of reference that address qualifications and potential as a teacher.
- 4. A vitae/resume.
- 5. A personal statement of 1,200-1,500 words explaining your motivation for becoming a teacher. Describe how your academic qualifications and work experiences have prepared you for a career in teaching. Elaborate on your personal strengths, including your ability to work collaboratively with others. Describe your experiences with adolescents in instructional and supervisory capacities. Explain why you believe you can help young people of all cultures be successful in school.

Send the following scores directly to the School of Education:

- 1. Passing scores on an Alaska Department of Education and Early Development (EED) approved basic competency exam (<http://education.alaska.gov/TeacherCertification/praxis.html>).
- 2. Passing scores on the Praxis II test for each content area the applicant expects to teach. The scores must meet the score set by the State of Alaska (<https://education.alaska.gov/TeacherCertification/>). World language applicants may need an oral proficiency test as required by EED.
- 3. Secondary faculty will interview applicants as part of the admission process.

Additional Information:

Evidence of content competency in one of the UAF-approved secondary endorsement areas is necessary.

Endorsement areas for teacher certification include art, biology, chemistry, Earth science, economics, English, French, German, history, mathematics, physics, political science and Spanish. A student can establish content competency by:

- a) Holding a degree in an approved secondary endorsement area; or
 - b) Documenting content competency (e.g., transcript analysis by faculty).
- Additional coursework may be required.

*Before student teaching, teacher candidates will need to complete the Alaska Department of Education and Early Development student teaching authorization. Fingerprint cards and criminal background check necessary to work in schools.

Program Requirements

Minimum Requirements for Secondary Education M.E.D.: 36 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master of Education Degree Requirements | | |
| Complete the Master of Education degree requirements. (p. 418) | | |
| Complete the admission requirements for the graduate-level elementary postbaccalaureate licensure program. | | |
| Secondary Education Program Requirements | | |
| Complete the following: | | |
| ED F601 | Introduction to Applied Social Science Research | 3 |
| ED F687 | Alaska: Resources, People and Perspectives | 3 |
| EDSC F407 | Developing Literacy in the Content Areas | 3 |
| EDSC F415 | Foundations of Modern Educational Practice | 3 |
| EDSC F642 | Technology Applications in Education I | 1 |
| EDSC F643 | Technology Application in Education II | 2 |
| EDSC F657 | Multicultural Education and School-Community Relations | 3 |
| EDSC F658 | Classroom Organization and Management | 3 |
| EDSC F671 | Secondary Teaching: School Internship I and Seminar | 3 |
| EDSC F672 | Secondary Teaching: School Internship II and Seminar | 6-9 |
| EDSE F622 | Curriculum, Management and Strategies II: High Incidence | 3 |
| Complete one of the following: | | 3 |
| EDSC F631 | Secondary Instruction and Assessment in the Content Area | |
| EDSC F632 | English/Language Arts Secondary Instruction and Assessment | |
| EDSC F633 | Mathematics Secondary Instruction and Assessment | |
| EDSC F634 | Science Secondary Instruction and Assessment | |

| | |
|-----------|---|
| EDSC F635 | Social Studies Secondary Instruction and Assessment |
| EDSC F636 | Art Secondary Instruction and Assessment |
| EDSC F637 | World Language Secondary Instruction and Assessment |

Thesis, Project or Comprehensive Exam Option

| | |
|---|-----|
| Complete the thesis, project or comprehensive exam option | 0-9 |
|---|-----|

Options

THESIS OPTION

| Code | Title | Credits |
|-------------------------|----------------------------------|---------|
| Complete the following: | | |
| ED/CCS F603 | Field Study Research Methods | 3 |
| or ED/CCS F604 | Documenting Indigenous Knowledge | |
| ED F699 | Thesis | 6 |

PROJECT OPTION

| Code | Title | Credits |
|-------------------------|----------------------------------|---------|
| Complete the following: | | |
| ED/CCS F603 | Field Study Research Methods | 3 |
| or ED/CCS F604 | Documenting Indigenous Knowledge | |
| ED F698 | Non-thesis Research/Project | 3 |

COMPREHENSIVE EXAM OPTION

| Code | Title | Credits |
|-------------------------|---------------------------|---------|
| Complete the following: | | |
| | Comprehensive examination | 0 |

M.Ed., Special Education

The Master of Education in special education degree program prepares K-12 special educators at the graduate level with specific training in the areas of disabilities, assessment, intervention strategies, current law and the implementation of programs including the development of legally defensible documents related to the federal Individuals with Disabilities Education Act.

Graduates will have mastery of the Council for Exceptional Children Initial K-12 Preparation Standards released in 2020. (<https://exceptionalchildren.org/standards/initial-practice-based-professional-preparation-standards-special-educators/>)

The program will provide individuals who already possess, or are eligible for, a current Alaska teaching certificate or a bachelor's degree and the necessary prerequisites with specific training in the area of special education. The program prepares K-12 special education teachers who can effectively understand state and national education issues and respond appropriately. Special education candidates will progress through a series of developmentally sequenced field experiences for all ages, types and levels of abilities including collaborative opportunities.

An option is available for individuals who are already certified special education teachers or individuals who want the special education knowledge and master's degree to perform professional duties that do not include being a special education classroom instructor. These individuals will not complete special education clinical practice, and no institutional recommendation for special education teacher certification will be issued.

The M.Ed. in special education provides development in collaboration/consultation models and program development in multicultural settings. Completion of this program meets the requirements for Alaska licensure as a K-12 special education teacher. For special education teacher certification in the state of Alaska, a passing score on the Praxis II Special Education: Core Knowledge and Applications test (#5354) is required.

School of Education
907-474-7341

Admission Requirements

The School of Education offers Master of Education degrees in counseling, special education and education. Students in the education major may earn a degree in these areas of specialization: people, place and pedagogy, second language acquisition, bilingual education, and literacy, and online innovation and design. Students completing postbaccalaureate certification in elementary or secondary education may earn an M.Ed. in the respective area. For elementary education, secondary education, special education and counseling majors, refer to specific admission and program requirements listed in the respective sections.

Admission Requirements

Applications will be reviewed on March 1 and Oct. 1 for admission in the following semester. Faculty may vote to admit, not admit or admit with stipulations. Stipulations are specified when additional development in particular areas is needed before beginning a graduate degree program.

Minimum requirements for admission to the M.Ed. program are:

- 1. Bachelor's degree and a 3.0 GPA.
- 2. One year of satisfactory teaching or administrative experience. Alternative experience may be accepted.

Complete the following application procedures for the UAF Graduate School:

- 1. Submit a graduate application to the UAF Office of Admissions.
- 2. Submit scores on the general GRE if undergraduate GPA is below 3.0.
- 3. Submit a four- to five-page essay that describes your career goals and educational philosophy, and how those goals and philosophy are relevant to the School of Education's mission and education graduate degree program.
- 4. Submit official transcripts.
- 5. Submit three letters of reference.
- 6. Submit a resume.

For Certified Teachers

Complete the following admission requirements:

- Current Alaska teaching certificate or equivalent coursework towards an Alaska teaching certificate.

Prerequisite or corequisite: EDSE F482 or comparable transfer course from another institution.

For Initial Certification

Complete the following admission requirements:

- 1. Baccalaureate degree along with the following prerequisites:
 - a. Documented recent experience (minimum of 12 hours) in an educational setting with children experiencing disabilities.
 - b. UAF prerequisite or corequisite courses or comparable transfer courses. Courses may be completed prior to admission or during the program:

| Code | Title | Credits |
|--------------------------------|---|---------|
| ED F245 | Child Development | 3 |
| Select one from the following: | | 3 |
| ED F201 | Introduction to Education | |
| ED F624 | Foundations of Education in Alaska: From Segregation to Standards | |
| EDSC F205 | Introduction to Secondary Education | |
| EDSC F415 | Foundations of Modern Educational Practice | |
| EDSE F482 | Inclusive Classrooms for All Children | |

- c. Passing scores on the Praxis Academic Skills for Educators text (or Praxis I) or another test acceptable to the Alaska Department of Education and Early Development before or during the first semester of classes. Current test numbers and minimum scores can be found at the basic competency examination requirement site (<https://education.alaska.gov/teachercertification/praxis/>).
- d. Passing scores on the appropriate Praxis II Exam(s) required before entering EDSE F678. Current test numbers and minimum scores can be found at the Alaska Department of Education and Early Development content area examinations site (<https://>

education.alaska.gov/teachercertification/contentareaexams/). Candidates should consult the employing school district to determine preferred tests based on teaching assignment.

- e. Passing scores on the Special Education: Core Knowledge and Applications Praxis Exam (test #5354) or another test acceptable to the Alaska Department of Education and Early Development before or during EDSE F680. Passing scores are required to complete EDSE F680 and graduate from the Special Education K-12 Postbaccalaureate Certificate of Completion.

Recommended prior to admission or during the program, not required for the degree but for Alaska teacher certification:

- 1. An Alaska studies course approved by the Alaska Department of Education and Early Development (<http://education.alaska.gov/teachercertification/>).
- 2. A multicultural education/cross-cultural communication course approved by the Alaska Department of Education and Early Development (<http://education.alaska.gov/teachercertification/>).

All prerequisite courses must be completed with a minimum final grade of B.

Program Requirements
Certified Teachers

MINIMUM REQUIREMENTS FOR SPECIAL EDUCATION,
M.ED.: 36 CREDITS

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| M.Ed. Degree Requirements | | |
| Complete the Master of Education degree requirements. (p. 418) | | |
| Corequisite Requirements ¹ | | |
| EDSE F482 | Inclusive Classrooms for All Children | |
| Certified Teachers Special Education Program Requirements | | |
| Complete the following: | | |
| ED F601 | Introduction to Applied Social Science Research | 3 |
| EDSE F610 | Assessment of Students with Exceptionalities | 3 |
| EDSE F612 | Curriculum, Management and Strategies I: Low Incidence | 3 |
| EDSE F622 | Curriculum, Management and Strategies II: High Incidence | 3 |
| EDSE F625 | Teaching Mathematics to Special Learners | 3 |
| EDSE F632 | Special Education Law: Principles and Practices | 3 |
| EDSE F677 | English Language Arts Assessment, Curriculum and Strategies for Special Learners | 3 |
| EDSE F680 | Special Education Clinical Practice ^{2,3} | 3 |
| Complete four of the following elective courses as approved by the candidate's graduate committee: | | 12 |
| ED F603 | Field Study Research Methods | |

| | |
|-------------------|--|
| or ED/CCS F604 | Documenting Indigenous Knowledge |
| EDSE F605 | Early Childhood Special Education |
| EDSE F624 | Social/Emotional Development, Assessment and Intervention |
| EDSE F633 | Autism and Other Developmental Disabilities: Communication and Social Interventions |
| EDSE F640 | Culturally Responsive Collaboration: Working with Parents, Colleagues and Paraprofessionals |
| EDSE F642 | Autism Spectrum Disorders and Other Developmental Disabilities: Sensory and Behavioral Interventions |
| EDSE F648 | Understanding FASD: Diagnosis, Intervention and Strategies |

Complete comprehensive examination ⁴

¹ Complete the corequisite course before or during admittance to the program; or have a comparable transfer course from another university.

² Additional fee required. Charges are added to fee statements every semester.

³ Students pursuing a K-12 special education certificate must complete clinical practice in a public school setting.

⁴ Must be enrolled in 3 graduate credits the semester the comprehensive exam is completed.

Initial Certification

MINIMUM REQUIREMENTS FOR SPECIAL EDUCATION, M.ED.: 39 CREDITS

| Code | Title | Credits |
|------|-------|---------|
|------|-------|---------|

General University Requirements

Complete the general university requirements. (p. 409)

Master of Education Degree Requirements

Complete the Master of Education degree requirements.
(p. 417)

Corequisite Requirements ¹

| | |
|-----------|---------------------------------------|
| ED F245 | Child Development |
| EDSE F482 | Inclusive Classrooms for All Children |

Complete one of the following:

| | |
|-----------|--|
| ED F201 | Introduction to Education |
| ED F624 | Foundations of Education in Alaska: From Segregation to Standards |
| EDSC F205 | Introduction to Secondary Education |
| EDSC F415 | Foundations of Modern Educational Practice |

Initial Certification Special Education Program Requirements

Complete the following:

| | | |
|-----------|---|---|
| ED F601 | Introduction to Applied Social Science Research | 3 |
| EDSE F610 | Assessment of Students with Exceptionalities | 3 |
| EDSE F612 | Curriculum, Management and Strategies I: Low Incidence | 3 |

| | | |
|-----------|--|---|
| EDSE F622 | Curriculum, Management and Strategies II: High Incidence | 3 |
| EDSE F625 | Teaching Mathematics to Special Learners | 3 |
| EDSE F632 | Special Education Law: Principles and Practices | 3 |
| EDSE F677 | English Language Arts Assessment, Curriculum and Strategies for Special Learners | 3 |

| | | |
|-----------|--|---|
| EDSE F678 | Special Education Clinical Practice: Initial ² | 3 |
|-----------|--|---|

| | | |
|-----------|--|---|
| EDSE F680 | Special Education Clinical Practice ^{2,3} | 3 |
|-----------|--|---|

Complete four of the following elective courses as approved
by the candidate's graduate committee:

| | | |
|------------------------------|--|--|
| ED F603 or ED/CCS F604 | Field Study Research Methods Documenting Indigenous Knowledge | |
|------------------------------|--|--|

| | | |
|-----------|-----------------------------------|--|
| EDSE F605 | Early Childhood Special Education | |
|-----------|-----------------------------------|--|

| | | |
|-----------|--|--|
| EDSE F624 | Social/Emotional Development, Assessment and Intervention | |
|-----------|--|--|

| | | |
|-----------|---|--|
| EDSE F633 | Autism and Other Developmental Disabilities: Communication and Social Interventions | |
|-----------|---|--|

| | | |
|-----------|---|--|
| EDSE F640 | Culturally Responsive Collaboration: Working with Parents, Colleagues and Paraprofessionals | |
|-----------|---|--|

| | | |
|-----------|--|--|
| EDSE F642 | Autism Spectrum Disorders and Other Developmental Disabilities: Sensory and Behavioral Interventions | |
|-----------|--|--|

| | | |
|-----------|---|--|
| EDSE F648 | Understanding FASD: Diagnosis, Intervention and Strategies | |
|-----------|---|--|

Complete comprehensive examination ⁴

¹ Complete the corequisite courses before or during admittance to the program; or have comparable transfer courses from another university.

² Additional fee required. Charges are added to fee statements every semester.

³ Students pursuing a K-12 special education certificate must complete clinical practice in a public school setting.

⁴ Must be enrolled in 3 graduate credits the semester the comprehensive exam is completed.

M.Ed. Degree Without Certification

MINIMUM REQUIREMENTS FOR SPECIAL EDUCATION, M.ED.: 36 CREDITS

| Code | Title | Credits |
|------|-------|---------|
|------|-------|---------|

General University Requirements

Complete the general university requirements. (p. 416)

Master of Education Degree Requirements

Complete the Master of Education degree requirements.
(p. 418)

Corequisite Requirements ¹

| | |
|-----------|---------------------------------------|
| EDSE F482 | Inclusive Classrooms for All Children |
|-----------|---------------------------------------|

Special Education Without Certification Program Requirements

Complete the following:

| | | |
|--|--|----|
| ED F601 | Introduction to Applied Social Science Research | 3 |
| EDSE F610 | Assessment of Students with Exceptionalities | 3 |
| EDSE F612 | Curriculum, Management and Strategies I: Low Incidence | 3 |
| EDSE F622 | Curriculum, Management and Strategies II: High Incidence | 3 |
| EDSE F625 | Teaching Mathematics to Special Learners | 3 |
| EDSE F632 | Special Education Law: Principles and Practices | 3 |
| EDSE F677 | English Language Arts Assessment, Curriculum and Strategies for Special Learners | 3 |
| Complete five of the following elective courses as approved by the candidate's graduate committee: | | 15 |
| ED F603 or ED/CCS F604 | Field Study Research Methods Documenting Indigenous Knowledge | |
| EDSE F605 | Early Childhood Special Education | |
| EDSE F624 | Social/Emotional Development, Assessment and Intervention | |
| EDSE F633 | Autism and Other Developmental Disabilities: Communication and Social Interventions | |
| EDSE F640 | Culturally Responsive Collaboration: Working with Parents, Colleagues and Paraprofessionals | |
| EDSE F642 | Autism Spectrum Disorders and Other Developmental Disabilities: Sensory and Behavioral Interventions | |
| EDSE F648 | Understanding FASD: Diagnosis, Intervention and Strategies | |
| Complete comprehensive examination ² | | |

¹ Complete the corequisite course before or during admittance to the program; or have a comparable transfer course from another university.

² Must be enrolled in 3 graduate credits the semester the comprehensive exam is completed.

Secondary Postbaccalaureate Licensure Program toward M.Ed., Secondary Education

This program is offered across the state of Alaska.

This is an intensive, classroom-based secondary licensure program (31 credits) that prepares postbaccalaureate candidates for secondary (grades 7-12) teaching positions. The program is specifically designed to prepare candidates to teach in the varied settings of Alaska. Content that addresses multicultural issues in general, and Alaska rural issues in particular, is contained specifically in EDSC F657 and is a fundamental component of the coursework within the program. When funding is available, all secondary Fairbanks candidates participate in a rural practicum.

Student outcomes for the program are aligned with the InTASC Model Core Teaching Standards (<https://tinyurl.com/Intasc-Oct-2019/>).

Candidates may simultaneously pursue teacher licensure and the Master of Education in secondary education degree. (See requirements for M.Ed. secondary education (<https://catalog.uaf.edu/graduate/graduate-degree-programs/education/master-education-secondary-education/>).)

At the end of the program, students successfully meeting all of the program requirements are eligible to apply for an Alaska initial teaching license and will receive a certificate of completion from UAF. Students must apply to graduate with a certificate of completion through the Office of the Registrar's Graduation Services. At the end of the program, if students have successfully met all of the program requirements, they will be eligible to apply for an Alaska initial teaching license.

Candidates who enter the secondary postbaccalaureate licensure program are required to have use of/own laptop computers before they begin their internships in the fall semester of their internship year. Candidates are expected to be proficient in word processing, spreadsheet creation and use of presentation software.

Program Options: Fast-Track, Two-Year or Teaching While Training

FAST-TRACK OPTION

The fast-track option is an intensive three-semester program that allows candidates (one-year unpaid interns) to complete the secondary certificate and licensure program as full-time students in 12 months. Candidates take classes in summer, fall and spring. The academic-year-long internship is completed during the fall and spring semesters. Completion of the M. Ed. degree will take additional time.

TWO-YEAR OPTION

The two-year option allows candidates (two-year unpaid interns) to complete the secondary postbaccalaureate certificate and licensure program as part-time students over a period of 18-24 months. The last semester of the program requires full-time placement at a public school.

TEACHING WHILE TRAINING OPTION

The teaching while training option is for candidates (teacher interns) who have secured a teaching position with an Alaska school district. Generally, this option is available only to those candidates in areas of

teacher shortage. Candidates complete the secondary postbaccalaureate licensure program over a period of 24 months.

Upon Acceptance to the Program

The School of Education has a systematic procedure for monitoring the progress of education students from admission through completion of their professional education program to determine if they should continue the program, be advanced to the secondary teaching internship and eventually be recommended for a teaching license. In assessing candidate progress in knowledge, skills and disposition, faculty will review grades, observations, faculty recommendations, demonstrated academic competence and recommendations from the appropriate professionals in the schools. Systematic approaches are used to assist education candidates who are making unsatisfactory progress in their programs, but still maintain potential for successful completion.

The following are specific criteria for entry to the secondary teaching internship:

- successful completion of summer program courses;
- approval of faculty to enter the secondary education internship;
- some school districts may require candidates to pass a general physical exam and require additional shot records;
- some school districts require completion of district substitute training which may include a fee, a fingerprint card and AST background check; and
- State of Alaska certificate of student teaching authorization, fingerprint cards and money order submitted in accordance with the directions from Alaska Department of Education and Early Development by June 1 (the fee is non-refundable once submitted to the State of Alaska).

Professional Field Experiences

The secondary postbaccalaureate licensure program includes a comprehensive internship experience in an educational setting. Internship placements are arranged and supervised by university faculty in partnership with the principal and staff from the public school. University coursework and classroom practice are closely linked and communication about performance in both the course work and classroom practice is shared among the partners. Internships follow the K-12 school year calendar and not the university academic year calendar.

Performance in the internship must meet stated competencies and individual outcomes. Performance evaluations determine the candidate's progress toward meeting the InTASC Model Core Teaching Standards (<https://ccsso.org/resource-library/intasc-model-core-teaching-standards-and-learning-progressions-teachers-10/>) and the International Society for Technology in Education's Standards for Educators (<https://www.iste.org/standards/for-educators/>) for All Teachers and performance guidelines of Specialty Performance Organizations.

It is expected that candidates will demonstrate appropriate professional characteristics with respect to their actions, attitudes and performance. Teacher candidates are required to adhere to the characteristics of professionalism as published in the Secondary Postbaccalaureate Licensure Handbook, and to abide by the State of Alaska Code of Ethics of the Education Profession. Unacceptable academic performance, an unprofessional attitude, unsatisfactory field reports, violation of professional ethics or other factors that may result in removal from

the field experience and denial of the institutional recommendation for teacher certification.

Internship placements are made in partnership with participating school districts, which may request additional information and/or preparation from candidates according to the district's established policies and practices. Because cooperating districts also determine the number of placements available for candidates, placement may become competitive if the number of applicants exceeds the number of spaces. Districts also reserve the right to refuse or terminate placements when candidates do not meet a minimum standard of performance. Thus, while the University will make every effort to identify appropriate field experiences, admission to the secondary postbaccalaureate licensure program does not guarantee an internship placement.

School of Education (<https://www.uaf.edu/soe/>)
907-474-7341

Admission Requirements

Admission and Application Requirements

Application recommended due dates are March 1 (summer or fall admission) and Oct. 15 (spring admission). Applications will be reviewed on an ongoing basis thereafter.

Admission includes meeting both UAF Graduate School and School of Education admission requirements.

GRADUATE SCHOOL REQUIREMENTS

Submit the following electronically (<https://uaf.edu/admissions/apply/>) to the UAF Office of Admissions:

1. UAF graduate application and application fee.
2. Official transcript of bachelor's degree from an accredited institution, minimum GPA of 3.0. Applicants who have attended more than one university should include transcripts from all universities.
3. ACT or SAT or GRE scores.
4. Three current letters of reference that address qualifications and potential as a teacher.
5. A vitae/resume.
6. A personal statement of 1,200-1,500 words explaining your motivation for becoming a teacher leader. Describe how your academic qualifications and work experiences have prepared you for a career in teaching. Elaborate on your personal strengths, including your ability to work collaboratively with others. Describe your experiences with adolescents in instructional and supervisory capacities. Explain why you believe you can help young people of all cultures be successful in school.

SCHOOL OF EDUCATION REQUIREMENTS

Send the following scores directly to the School of Education:

1. Passing scores on an Alaska Department of Education and Early Development (EED) approved basic competency exam (<http://education.alaska.gov/TeacherCertification/praxis.html>).
2. Passing scores on the Praxis II test for each content area the applicant expects to teach. The scores must meet the score set by the State of Alaska (<https://education.alaska.gov/TeacherCertification/>). World language applicants may need an oral proficiency test as required by EED.

3. Secondary faculty will interview applicants as part of the admission process.

EDSC F637

World Language Secondary Instruction and Assessment

Additional Information:

Evidence of content competency in one of the secondary endorsement areas is necessary. Endorsement areas for teacher certification include art, biology, chemistry, Earth science, economics, English, French, German, history, mathematics, physics, political science, and Spanish. Content competency can be established by:

1. The applicant holds a degree in an approved secondary endorsement area or;
2. Applicants who do not hold a degree in the academic content area that they expect to teach must have documentation of content competency (transcript analysis). Additional coursework may be required.

* Before student teaching teacher candidates will need to complete the Alaska Department of Education and Early Development student teaching authorization. Fingerprint cards and criminal background check are necessary to work in schools.

Program Requirements

Minimum Requirements for Secondary Postbaccalaureate Licensure Program Toward M.Ed., Secondary: 31-37 credits

| Code | Title | Credits |
|---|--|---------|
| Secondary Postbaccalaureate Licensure Program requirements | | |
| EDSC F407 | Developing Literacy in the Content Areas | 3 |
| EDSC F415 | Foundations of Modern Educational Practice | 3 |
| EDSC F642 | Technology Applications in Education I | 1 |
| EDSC F643 | Technology Application in Education II | 2 |
| EDSC F657 | Multicultural Education and School-community Relations | 4 |
| EDSC F658 | Classroom Organization and Management | 3 |
| EDSC F671 | Secondary Teaching: School Internship I and Seminar | 3 |
| EDSC F672 | Secondary Teaching: School Internship II and Seminar | 6-9 |
| EDSE F622 | Curriculum, Management and Strategies II: High Incidence | 3 |
| Complete one of the following: ¹ | | 3 |
| EDSC F632 | English/Language Arts Secondary Instruction and Assessment | |
| EDSC F633 | Mathematics Secondary Instruction and Assessment | |
| EDSC F634 | Science Secondary Instruction and Assessment | |
| EDSC F635 | Social Studies Secondary Instruction and Assessment | |
| EDSC F636 | Art Secondary Instruction and Assessment | |

Total Credits**31-34**

¹ Candidates must take the section or course that corresponds with their major teaching content areas.

Special Education K-12 Postbaccalaureate Certificate of Completion

Postbaccalaureate Certificate

Prepares K-12 special educators at the graduate level with specific training in the areas of disabilities, assessment, interventions strategies, current law and the implementation of programs including development of legally defensible federal IDEA documents.

Graduates will have mastery of the Council for Exceptional Children's (CEC) 2020 Initial Practice-Based Professional Preparation Standards for Special Educators. (<https://exceptionalchildren.org/standards/initial-practice-based-professional-preparation-standards-special-educators/>)

The program will provide individuals who already possess, or are eligible for, a current Alaska teaching certificate or a bachelor's degree and the necessary prerequisites, with specific training in the area of special education. The program prepares K-12 special education teachers who can effectively understand state and national education issues and respond appropriately. Special education candidates will progress through a series of developmentally sequenced field experiences for all ages, types and levels of abilities, including collaborative opportunities.

The program provides development in collaboration/consultation models and program development in multicultural settings. Completion of this program meets requirements for Alaska licensure as a K-12 special education teacher.

Minimum Requirements for Special Education K-12 Postbaccalaureate Certificate: 39-42 credits

School of Education (<https://www.uaf.edu/educ/graduate/>)
907-474-7341

Programs Certificate

- P.B.C.T., Special Education K-12 Postbaccalaureate Certificate of Completion (p. 394)

Cybersecurity Management Graduate Certificate

The cybersecurity management graduate certificate is designed for the student who desires an in-depth overview of the important topics in providing for the cybersecurity-oriented aspects of managing cyber-related operations. The certificate provides relevant and cutting-edge education specific to the needs of individuals and their associated organizations in providing the technical capability to prevent, plan for and recover from technological incidents. Cybersecurity, a very dynamic field, requires lifelong learning. This certificate program serves as continuing professional education (CPE) for many professional certifications today. Recipients of the cybersecurity management graduate certificate are better prepared for the challenges of the cybersecurity workforce today and the future.

Minimum Requirements for Cybersecurity Management Graduate Certificate: 12 credits

College of Business and Security Management
Department of Homeland Security and Emergency Management (<https://www.uaf.edu/som/degrees/certificates/>)
907-474-7461

Programs Graduate Certificate

- Graduate Certificate, Cybersecurity Management (p. 460)

Graduate Certificate, Cybersecurity Management

Admission Requirements

Complete the following admission requirements:

- Students must have a completed baccalaureate degree.
- Students must possess either prior education specific to IT, networking or cybersecurity-related work experience or a combination of both with the approval and review of the program director to enter the cybersecurity management or associated concentration within the MSDM.
- If the degree is in a non-security or non-cybersecurity-related field and the student has a 3.0 or higher cumulative GPA, students will be required to start with one 400-level course, that is an elective option for the degree.
- Students who have already obtained a graduate degree will not be required to complete an entrance exam or complete a 400-level course first.
- Students with a baccalaureate degree with a cumulative GPA of 3.0 or higher in a related field will not have any additional testing or entry course requirements.
- Students with a cumulative GPA between 3.0 and 2.75, regardless of the field of study, will be required to complete the Watson Glaser Critical Thinking Exam.
- Students with a cumulative GPA below 2.75, will be required to submit results from either the GRE or GMAT.

Program Requirements

Minimum Requirements for Cybersecurity Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Cybersecurity Program Requirements | | |
| Complete the following: | | |
| HSEM F641 | Information Assurance and Risk Assessment | 3 |
| HSEM F648 | Perspectives in Addressing Cybersecurity & Critical Infrastructure | 3 |
| HSEM F649 | Cyber Threats and Vulnerabilities | 3 |
| Complete one of the following: | | 3 |
| HSEM F415 | Cybersecurity in the 21st Century: Technology and Ethics | |
| HSEM F416 | Cybersecurity Management | |
| HSEM F417 | Cybersecurity Resiliency | |
| HSEM F418 | Cybercrime, Fraud and Law | |

Electrical Engineering M.S. Degree

The M.S. degree includes three options: a written thesis and oral defense for students interested in research and development; a project; or a coursework-only option. UAF offers an engineering Ph.D. program for students with an approved curriculum. Capable students with undergraduate degrees in physics, mathematics or related sciences, as well as in various branches of engineering, may also be admitted for graduate study. A student with an adequate background can usually complete M.S. requirements within two years and a Ph.D. in another three years.

Graduate degree programs in electrical and computer engineering are closely connected with faculty research activities. Main areas of research include communications, radar, lidar and sonar remote sensing, instrumentation and microwave circuit design, electric power and energy systems, digital and computer engineering, nanotechnology, controls, and robotics. Current research topics include high-latitude satellite communications, rocket telemetry, radio wave propagation, ultra-wide-band wireless communications, electromagnetic and acoustic wave propagation, remote biomedical and environmental instrumentation, microwave design, digital signal processing, digital and physical electronics, computer applications, remote hybrid electric power systems, electric power system design and analyses, electric power quality improvement, system identification, simulation, computer-controlled systems, control theory, robotics, and automation.

A number of on- and off-campus research facilities are available to students. Satellite, rocket and ground-based communication studies are carried out on campus and at Poker Flat Research Range, the only university-operated rocket range in the world. The Space Systems Engineering Laboratory provides students hands-on experience in all aspects of space system engineering through a design/build/launch paradigm applied to balloon and rocket payloads as well as small satellites. The Alaska Center for Unmanned Aircraft Systems Integration affords opportunities to work with drones and other UAVs. Department research laboratories include microwave, wireless communications, ultra-wide-band technology, waves, power electronics/robotics, instrumentation and digital laboratories.

Alaska's environment and remote location provide unique opportunities for research, such as the use of acoustic, light and radio wave techniques for measuring fish in Alaska rivers to the geophysical properties of the aurora. Remote sensing for biomedical (animal tracking) and environmental (groundwater and air monitoring) applications is an important research area for Alaska. Electric power systems research includes issues related to isolated rural Alaska communities, analysis of larger interconnected generation, transmission and distribution systems serving major Alaska population centers, and the use of alternative energy systems.

Graduate students in electrical and computer engineering at UAF receive the highest quality contemporary education available at the graduate level and perform research appropriate to the technical needs of Alaska, the nation and the world.

Minimum Requirements for Electrical Engineering M.S. Degree: 32 credits

College of Engineering and Mines

Department of Electrical and Computer Engineering (<https://cem.uaf.edu/ece/>)

907-474-7137

Programs Degrees

- M.S., Electrical Engineering (p. 461)

M.S., Electrical Engineering

Admission Requirements

Complete the following admission requirement:

- Submit GRE scores.

Complete one of the following admission requirements:

- Complete a bachelor's degree in electrical engineering.
- Students with bachelor's degrees in other fields should work out a program to address any background deficiencies with their graduate committee.

Program Requirements

Minimum Requirements for Electrical Engineering M.S. Degree: 32 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Electrical Engineering Program Requirements | | |
| Complete one from the following options: | | 32 |
| Thesis | | |
| Non-Thesis Project | | |
| Non-Thesis Course Work | | |

THESIS

| Code | Title | Credits |
|--------------------|--------|---------|
| EE F699 | Thesis | 6-12 |
| Additional credits | | 20-26 |

Note: At least 26 credits must be at the F600 level.

NON-THESIS PROJECT

| Code | Title | Credits |
|--------------------|--|---------|
| EE F698 | Non-thesis Research/Project ¹ | 1-6 |
| Additional credits | | 26-31 |

Note: At least 26 credits must be at the F600 level.

¹ An oral project presentation and defense is required. The project will be archived in the UAF Rasmuson Library.

NON-THESIS COURSE WORK

| Code | Title | Credits |
|--------------------|-------|---------|
| Additional credits | | 32 |

Note: At least 26 credits must be at the F600 level.

See Engineering (p. 462) for Ph.D. program.

Engineering

Ph.D. Degree

Engineers use knowledge of the mathematical and natural sciences to develop economical uses of materials and forces of nature for human benefit. The professional practice of engineering requires sophisticated skills, use of judgment and exercise of discretion. The basic education necessary for the professional practice of engineering is provided by the engineering bachelor's and master's degrees. Doctoral-level education requires independent research that generates fundamental advances in technology and discovers new knowledge for the benefit of society. Engineering Ph.D. degrees provide leadership in scientific research, academia and industrial research and development. The Ph.D. degree in engineering draws on the combined strength of the College of Engineering and Mines and offers opportunities for engineers at other UA campuses to participate.

Minimum Requirements for Engineering Doctorate Degree: 36 credits

College of Engineering and Mines (<https://cem.uaf.edu/academics/programs/>)
907-474-7241

Programs

Degree

- Ph.D., Engineering (p. 462)
- (p. 462)With concentrations in:
- Arctic
 - Civil
 - Computer
 - Electrical
 - Engineering Management
 - Environmental
 - Geological
 - Mechanical
 - Mining
 - Petroleum

Ph.D., Engineering

Admission Requirements

Complete the following admission requirements:

- Complete either a B.S. or M.S. degree in engineering.
- Complete a master's degree in engineering or a closely related field.
- Submit GRE scores.

Program Requirements

Minimum Requirements for Engineering Doctorate Degree: 36 credits

CONCENTRATIONS: ARCTIC, CIVIL, COMPUTER, ELECTRICAL, ENGINEERING MANAGEMENT, ENVIRONMENTAL, GEOLOGICAL, MECHANICAL, MINING, AND PETROLEUM

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| <i>As part of the Ph.D. degree requirements:</i> | | |
| Complete at least 18 credits of course work beyond the M.S. degree. | | |
| Complete at least three full-time semesters of residency, which may include a summer semester. ¹ | | |
| Complete and pass a written and oral comprehensive examination. | | |
| Complete and submit a written thesis proposal for approval. | | |
| Complete a research program as arranged with the graduate advisory committee. | | |
| Complete a thesis that is a substantial contribution to the body of knowledge in engineering and pass an oral defense of thesis. | | |

¹ Residency is defined as living in the Fairbanks area, working with the student's graduate advisor and graduate committee, while taking courses at UAF.

English

M.A., M.F.A., M.F.A./M.A. Degrees

The English department offers core courses in writing and literature, and upper-division courses in literature, linguistics, creative writing, technical writing and literary criticism. The department also offers a two-year M.A. degree in literature, a three-year M.F.A. degree in creative writing and an M.F.A./M.A. combined degree in creative writing and literature that can be completed in three years. Teaching assistantships are available for the three programs. The M.A. degree offers advanced study of literature and literary theory, as preparation for teaching or for entering a Ph.D. program. The M.F.A. degree is a terminal degree, culminating in the production of a publication-quality thesis manuscript of poetry, fiction, drama or creative nonfiction. The M.F.A./M.A. is a combined degree designed for qualified individuals who wish to produce a publication-quality thesis manuscript of creative writing but also would like to pursue in a systematic manner the study of literature and literary theory in preparation for college teaching or entering a Ph.D. program.

Minimum Requirements for English Degrees: M.A.: 30-36 credits; M.F.A.: 45 credits; M.F.A./M.A.: 45 credits

College of Liberal Arts
Department of English (<https://www.uaf.edu/english/>)
907-474-7193

Programs Degrees

- M.A., English (p. 463)
- M.F.A., Creative Writing (p. 464)
- M.F.A./M.A., Combined Degree, Creative Writing and Literature (p. 465)

M.A., English

Admission Requirements

Complete the following admission requirement:

- Submit an academic writing sample.

Program Requirements

Minimum Requirements for English M.A.: 30 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 409) | | |
| Master's Degree Requirements | | |
| Complete the Master of Arts - With Thesis (p. 417) | | |
| Pass a written comprehensive examination based on a standardized reading list ¹ | | |
| Students may advance to candidacy when their advisory committee deems that they have made satisfactory progress toward completion of their degree. | | |
| Pass an oral defense of the thesis. | | |
| English Program Requirements | | |
| Complete the following: | | |
| ENGL F601 | Theory, Criticism and Methods ² | 3 |
| ENGL F685 | Teaching College Composition (or ENGL F600-level elective course) ³ | 3 |
| Electives | | |
| Complete two of the following: | | |
| ENGL F603 | Studies in British Literature: Old and Middle English | |
| ENGL F604 | Studies in British Literature: Renaissance and 17th-Century | |
| ENGL F606 | Studies in British Literature: Restoration and 18th Century | |
| ENGL F607 | Studies in British Literature: 19th Century | |
| Complete two of the following: | | |
| ENGL F609 | Studies in American Literature to 1865 | |
| ENGL F611 | Studies in American Literature from 1865-1918 | |
| ENGL F612 | Studies in American Literature after 1918 | |
| ENGL F620 | Images of the North | |
| Complete one of the following: | | |
| ENGL F608 | Studies in British Literature After 1900 | |
| ENGL F614 | Studies in Comparative Literature | |
| ENGL F615 | Contemporary Literature | |
| Additional approved elective | | 3 |
| Thesis | | |
| ENGL F699 | Thesis | 6 |

¹ The examination is to be taken in the student's second year of work. The examination will be held on the Saturday ending the fourth full week of classes in the fall semester.

² Students are required to take ENGL F601 in their first year of study.
³ Required if you are a teaching assistant or planning to teach.

Note: Students may apply up to 3 credit hours of independent study toward the English M.A. degree requirements.

M.F.A., Creative Writing

Admission Requirements

Complete the following admission requirements:

- Submit creative writing sample.

Program Requirements

Minimum Requirements for Creative Writing M.F.A. Degree: 45 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Creative Writing Program Requirements | | |
| Complete and pass a written comprehensive examination ¹ | | |
| Students may advance to candidacy when their advisory committee deems that they have made satisfactory progress in both academic and writing areas. | | |
| ENGL F601 | Theory, Criticism and Methods ² | 3 |
| ENGL F671 | Writers' Workshop | 9 |
| ENGL F685 | Teaching College Composition (or ENGL F600-level elective course) ³ | 3 |
| ENGL F699 | Thesis | 6 |
| Approved electives | | 6 |
| Literature seminars ⁴ | | 12 |
| Complete two from the following: | | 6 |
| ENGL F681 | Forms of Poetry | |
| ENGL F682 | Forms of Fiction | |
| ENGL F684 | Forms of Nonfiction Prose | |
| ENGL F688 | Writing for Film and Television | |

¹ Based on a standardized reading list; examination to be taken no later than student's fourth semester of work. Examination will be held on the Saturday ending the fourth full week of classes in the spring semester.
² Students are required to take ENGL F601 in their first year of study.
³ Required if you are a teaching assistant or planning to teach.
⁴ Minimum of four to be determined by student's advisory committee. A literature class is one that does not have as its primary purpose the training of a student to be a creative writer or to teach composition. The following courses meet the literature-seminar requirement for the M.F.A. degree: ENGL F603, ENGL F604, ENGL F606, ENGL F607, ENGL F608, ENGL F609, ENGL F611, ENGL F612, ENGL F614, ENGL F615, ENGL F620 and versions of ENGL F692 and ENGL F693 that meet the above criteria.

Note: A student may petition the Thesis Advisory Committee and the department chair to take up to 6 credit hours of independent study to be applied toward the English M.F.A. electives requirement.

Note: The English Department requires that a student receive an A or B grade for all F600-level courses that the student wishes to apply toward the master's degree programs.

M.F.A./M.A. Combined Degree, Creative Writing and Literature

Program Requirements

1. A student who wishes to be awarded an M.F.A./M.A. combined degree in creative writing and literature must be admitted to both programs;
2. Fulfill all general university requirements and master's degree requirements and all course requirements within both programs (double counting allowed);
3. Pass comprehensive examinations in both programs;
4. Complete a thesis required for an M.F.A. degree and the thesis required for an M.A. degree.
5. Pass an oral examination of materials submitted from items 2-4 above.
6. Finish all requirements in order to be awarded the combined degree instead of the M.A. or M.F.A. separately (i.e., a student may not claim at any time more than one degree for the same work).

Environmental Chemistry Ph.D. Degree

Environmental chemistry focuses on the chemical processes influencing the composition and chemical speciation of natural systems (air, water and soils), the chemical fate and mobility of contaminants in the environment, chemical processes that affect the toxicity and bioavailability of contaminants, and chemical aspects of contaminant remediation and pollution prevention. The common link is a focus on the underlying chemical structure, reactivity and mechanisms that dictate the extent and rates of environmentally important chemical reactions. Environmental chemistry is a challenging field, requiring core training in physical, analytical, organic and inorganic chemistry, and an understanding of how these disciplines can be applied to complex environmental systems. It also provides a quantitative and fundamental approach to understanding the processes that influence the quality of the environment.

The Department of Chemistry and Biochemistry offers B.S. and M.S. via concentrations under the chemistry degree. The program provides education and research opportunities focused on the molecular scale aspects of environmental science. The program defines three tracks to meet a wide range of student interest:

1. atmospheric chemistry,
2. aqueous/environmental geochemistry, and
3. environmental toxicology and contaminant fate.

Students may also design a custom focus area, subject to approval by their advisory committee.

Our faculty are involved in a wide range of projects from field studies of chemical transformation and transport, to laboratory and modeling studies of the basic mechanisms of environmental reactions, to the development of novel chemistry useful in contaminant remediation. The program is centered in the Reichardt Building on the Fairbanks campus which houses state-of-the-art classrooms, laboratories and computer facilities to support education and research activities. Located in Interior Alaska, UAF is home to numerous research institutes and centers that focus on Arctic science and engineering and provide great opportunities for collaboration and cross-disciplinary studies focused on the chemistry of polar and sub-Arctic systems.

The Ph.D. program in environmental chemistry provides advanced training in the concepts and methods of molecular environmental sciences with the expectation that Ph.D. recipients will be acknowledged as experts in their particular topic of study. This is accomplished primarily through the Ph.D. dissertation, which is a body of independent research that presents new findings on forefront topics related to molecular processes in the environment. The Ph.D. in environmental chemistry prepares students for careers in academia or the public and private research sectors. Graduate students in the environmental chemistry program are typically supported through teaching and research assistantships or fellowships. Students interested in a M.S. degree focusing on environmental chemical problems should see the M.S. chemistry with concentration in environmental chemistry program.

Minimum Requirements for Environmental Chemistry Doctoral Degree: 32 credits

College of Natural Science and Mathematics
Department of Chemistry and Biochemistry (<https://www.uaf.edu/chem/>)

907-474-5510

Programs
Degree

- Ph.D., Environmental Chemistry (p. 466)

Ph.D., Environmental Chemistry

Admission Requirements

Complete the following admission requirements

- Submit GRE General Test scores
- If English is not your native language, submit scores from both the Test of Spoken English and the Test of Written English, as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.

Program Requirements
Minimum Requirements for Environmental Chemistry Ph.D.: 32 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Environmental Chemistry Program Requirements | | |
| Select three from the following: | | 9 |
| CHEM F606 | Atmospheric Chemistry | |
| CHEM F609 | Aqueous and Environmental Geochemistry | |
| CHEM F631 | Environmental Fate and Transport | |
| CHEM F655 | Environmental Toxicology | |
| Seminar Courses | | |
| CHEM F691 | Research Presentation Techniques ¹ | 2 |
| Complete approved electives ² | | 3 |
| Complete a thesis | | 18 |

¹ CHEM F691 is a single credit course that must be completed twice to fulfill the program requirements.

² Approved electives are specified by the student’s committee. The following tracks are defined as a guide. Within these tracks students will be expected to complete as part of the core and electives:

- i. Atmospheric Chemistry: CHEM F601, CHEM F606, CHEM F609 and CHEM F631
- ii. Aqueous/Environmental Geochemistry: CHEM F606 or CHEM F631; CHEM F609 and GEOS F618
- iii. Environmental Toxicology and Contaminant Fate: CHEM F606 or CHEM F609, CHEM F631 and CHEM F655

A customized focus area may be developed based on an appropriate sequence of core and elective courses, subject to approval by the student’s advisory committee.

See Biochemistry and Neuroscience (p. 428).

See Chemistry (p. 435).

Fisheries

M.S., Ph.D. Degrees

Fisheries graduate students take classes and undertake research on a diverse set of fisheries-related topics. Program strengths include quantitative fisheries science, fisheries management and human dimensions, and biology and ecology. Students are typically based in Juneau or Fairbanks, but most courses are video-delivered to locations throughout Alaska.

Students at each location are engaged in a wide variety of research topics in marine and freshwater ecosystems. All locations have excellent laboratory facilities, access to pristine environments and healthy fisheries, and strong connections to local and tribal partners, state and federal agency scientists and managers, as well as participants in commercial, sport and subsistence fisheries.

Most students are supported as research assistants for some or all of their tenure. Agencies such as the National Atmospheric and Oceanic Administration, the U.S. Fish and Wildlife Service, and the Alaska Department of Fish and Game are collaborators on research projects and employ many of our graduates.

Minimum Requirements for Degrees: M.S.: 30 credits; Ph.D.: 36 credits

College of Fisheries and Ocean Sciences (<https://www.uaf.edu/cfos/academics/>)
907-474-7289

Programs Degrees

- M.S., Fisheries (p. 467)
- Ph.D., Fisheries (p. 468)

M.S., Fisheries

Admission Requirements

Complete the following admission requirements:

- Prerequisites: calculus; elementary statistics; ichthyology, biology of fish or invertebrate zoology; and computer competency.
- An application for admission (<https://uaf.edu/admissions/apply/>) and application fee
- Official transcripts from all universities or colleges attended
 - Grades are an important part of the review process to assess academic success, particularly performance in relevant courses.
- Resume / curriculum vitae
- It is recommended that you provide evidence of communication (oral and writing) and analytical skills. This could be shown through technical writing samples, recorded presentations, poster presentations, examples of data analyses, relevant test results, etc. Please limit the evidence provided to, **two examples** and explain how this evidence is relevant in your Statement of Purpose.
- Statement of Purpose
 - Your statement provides the application review committee within the department an opportunity to learn about your background and motivation:
 - Your professional goals, including longer-term career goals and your motivations for pursuing those goals
 - Your preparation and background, including evidence of any relevant qualifications not captured elsewhere in the application
 - Your particular reasons for applying to the Department of Fisheries at the University of Alaska Fairbanks
 - Your general research interests or special emphasis that you hope to pursue
 - Any special circumstances you wish the department to consider
- Three letters of reference from individuals who understand the challenges of completing a graduate program and are able to write about your ability to successfully complete graduate courses in fisheries and conduct the research, analyses, and writing needed to complete a thesis or dissertation. Ideally, these letters of recommendation should come from faculty, research staff, professionals, or individuals who are familiar with your academic or work experience and can speak to your work ethic and potential for success in our program.
- International students: Please reference UAF's most recent requirements (<https://catalog.uaf.edu/getting-started/admission-international-students/>).

Program Requirements

Minimum Requirements for Fisheries M.S.: 30 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |

| | | |
|--|-------------------------------------|------|
| Complete the master's degree requirements. (p. 418) | | |
| Fisheries Program Requirements | | |
| Complete the following: | | |
| FISH F699 | Thesis | 6-12 |
| STAT F401 | Regression and Analysis of Variance | 4 |
| Graduate seminars | | 2 |
| Complete one course from each of the three focal areas | | 9-11 |
| Biology and Ecology of Fish and Shellfish | | |
| Quantitative Population Dynamics of Fish and Shellfish | | |
| Management and Human Dimensions of Fisheries | | |

FOCAL AREAS

| Code | Title | Credits |
|---|---|---------|
| Biology and Ecology of Fish and Shellfish | | |
| Complete one of the following: | | |
| FISH F626 | Behavioral Ecology of Fishes | |
| FISH F628 | Physiological Ecology of Fishes | |
| FISH F633 | Pacific Salmon Life Histories | |
| FISH F650 | Fish Ecology | |
| FISH F651 | Aquatic Conservation and Management Genetics | |
| FISH/MSL F676 | Aquatic Food Web Ecology | |
| MSL F615 | Physiology of Marine Organisms | |
| MSL F652 | Marine Ecosystems | |
| Quantitative Population Dynamics of Fish and Shellfish | | |
| Complete one of the following: | | |
| FISH F421 | Fisheries Population Dynamics | |
| FISH F621 | Estimation of Fish Abundance | |
| FISH F622 | Quantitative Fish Population Dynamics | |
| Management and Human Dimensions of Fisheries | | |
| Complete one of the following: | | |
| FISH F411 | Human Dimensions of Environmental Systems | |
| or FISH F611 | Human Dimensions of Environmental Systems | |
| FISH F487 | Fisheries Management | |
| or FISH F687 | Fisheries Management | |
| FISH F616 | Indigenous Fisheries of Alaska (Indigenous Fisheries of Alaska) | |
| FISH F645 | Bioeconomic Modeling and Fisheries Management | |
| FISH F670 | Quantitative Analysis for Marine Policy Decisions | |
| FISH F675 | Political Ecology | |

Note: At least 21 credits of the required 30 M.S. degree credits must be at the F600 level. All other credits must be at least at the F400 level.

Ph.D., Fisheries

Admission Requirements

Complete the following admission requirements:

- 1. Complete a master's degree in a fisheries-related field or meet the requirements as outlined below to be accepted directly into a Ph.D. program without a master's degree.

Admission to Ph.D. Program Directly from Bachelor's Program

Entering graduate students whose highest earned degree is the baccalaureate are normally admitted as Master of Science students. However, exceptionally able and accomplished students in this category are eligible for direct admission to the Ph.D. program. Criteria for direct admission to the Ph.D. program from the baccalaureate are:

- 1. Endorsement by proposed chair of graduate advisory committee AND 2 or 3 below.
- 2. At least one first-authored manuscript published or accepted for publication in a peer-reviewed scientific journal or receipt of an NSF, NIH, or similar prestigious pre-doctoral fellowship. OR
- 3. Demonstrated research proficiency (e.g. undergraduate thesis, Research Experiences for Undergraduates or other intensive research experience) documented in the application AND either
 - a. attained a GPA of at least 3.5 at the undergraduate level, or
 - b. scored at the 80% level in two of three categories in the GRE.

Students who elect this route must fulfill course requirements as outlined for both the M.S. and Ph.D. degrees. Applicants who do not meet these criteria may enter the graduate program as M.S. candidates, and in exceptional cases may petition for conversion to the Ph.D. program after advancement to candidacy (for the M.S.). Such petitions must be approved both by the student's current (M.S.) and proposed (Ph.D.) advisory committee and the department director or designee.

Program Requirements

Minimum Requirements for Fisheries Ph.D.: 36 credits

| Code | Title | Credits |
|---|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) ¹ | | |
| Fisheries Program Requirements | | |
| Complete at least 18 credits of course work. | | |
| Complete a thesis. | | |

¹ Including 18 thesis credits.

Note: At least 9 of the required 18 non-thesis Ph.D. degree credits must be at the F600 level, other courses must be at least at the F400 level.

Geological Engineering

M.S. Degree

Geological engineers apply their strong background in geology and engineering science to solve problems at the intersection of the natural and built environments. They use their knowledge and interpretation of the Earth's surface and near-subsurface to recognize and mitigate geohazards, such as landslides, floods and earthquakes; identify, develop and protect groundwater resources; locate and investigate potential sites for infrastructure and property development; and locate and harvest natural resources, such as minerals, coal, oil and gas, in an environmentally sustainable way. As part of America's Arctic University, UAF's geological engineering program provides training in recognizing and mitigating problems associated with frozen ground, such as frost heaving, thaw settlement and slope stability in a permafrost environment.

The graduate program prepares students for employment with industry, consulting companies and government agencies.

Minimum Requirements for Geological Engineering M.S. Degree: 30-33 credits

College of Engineering and Mines
Department of Civil, Geological and Environmental Engineering (<https://www.uaf.edu/cem/>)
907-474-7388

Programs Degree

- M.S., Geological Engineering (p. 469)

M.S., Geological Engineering

Admission Requirements

- Submit GRE scores.
- Complete one of the following admission requirements:
 - Complete a bachelor's degree in geological engineering;
 - Complete a bachelor's degree in engineering and complete the following courses:

| Code | Title | Credits |
|--------------------------------|--|---------|
| GE F326 | Introduction to Geotechnical Engineering and Foundations | 3-4 |
| or MIN F370 | Rock Mechanics | |
| GE F405 and GE F420 | Engineering and Environmental Geophysics and Groundwater Engineering | 6 |
| Complete one of the following: | | 6-8 |
| GEOS F262 and GEOS F332 | Rocks and Minerals and Ore Deposits and Structure | |
| GEOS F322 and GEOS F314 | Stratigraphy and Sedimentation and Structural Geology | |

- Complete a bachelor's degree in geology and complete the following courses:

| Code | Title | Credits |
|-------------|--|---------|
| ES F208 | Mechanics | 4 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| GE F326 | Introduction to Geotechnical Engineering and Foundations | 3-4 |
| or MIN F370 | Rock Mechanics | |
| GE F405 | Engineering and Environmental Geophysics | 3 |
| GE F420 | Groundwater Engineering | 3 |
| MIN F390 | Geostatistics and Mineral Economics | 3 |

- Complete a bachelor's degree in the natural sciences and complete the following courses:

| Code | Title | Credits |
|--------------------------------|--|---------|
| ES F208 | Mechanics | 4 |
| ES F331 | Mechanics of Materials | 3 |
| ES F341 | Fluid Mechanics | 4 |
| GE F326 | Introduction to Geotechnical Engineering and Foundations | 3-4 |
| or MIN F370 | Rock Mechanics | |
| GE F405 | Engineering and Environmental Geophysics | 3 |
| GE F420 | Groundwater Engineering | 3 |
| MIN F390 | Geostatistics and Mineral Economics | 3 |
| Complete one of the following: | | 6-8 |
| GEOS F262 and GEOS F332 | Rocks and Minerals and Ore Deposits and Structure | |

| | |
|----------------------------|--|
| GEOS F322 and GEOS F314 | Stratigraphy and Sedimentation and Structural Geology |
|----------------------------|--|

Program Requirements

Minimum Requirements for Geological Engineering M.S. Degree (Thesis Option): 30 credits

THESIS OPTION

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Thesis Geological Engineering Program Requirements | | |
| Complete four from the following: | | 12 |
| GE F420 | Groundwater Engineering | |
| GE F430 | Geomechanical Instrumentation | |
| GE F440 | Slope Stability | |
| GE F620 | Advanced Groundwater Hydrology | |
| GE F622 | Advanced Soil Physics | |
| GE F624 | Stochastic Hydrology and Geohydrology | |
| GE F626 | Thermal Geotechnics | |
| GE F635 | Advanced Geostatistical Applications | |
| GE F665 | Advanced Geological Materials Engineering | |
| GE F666 | Advanced Engineering Geology | |
| GE F668 | Tunneling Geotechniques | |
| MIN F621 | Advanced Mineral Economics | |
| MIN F673 | Advanced Rock Mechanics | |
| Geological engineering courses and technical electives | | 11 |
| GE F692 | Graduate Seminar | 1 |
| GE F699 | Thesis | 6 |

| | | |
|--|---|----|
| GE F624 | Stochastic Hydrology and Geohydrology | |
| GE F626 | Thermal Geotechnics | |
| GE F635 | Advanced Geostatistical Applications | |
| GE F665 | Advanced Geological Materials Engineering | |
| GE F666 | Advanced Engineering Geology | |
| GE F668 | Tunneling Geotechniques | |
| MIN F621 | Advanced Mineral Economics | |
| MIN F673 | Advanced Rock Mechanics | |
| Geological engineering courses and technical electives | | 11 |
| GE F692 | Graduate Seminar | 1 |
| GE F698 | Non-thesis Research/Project | 6 |

Minimum Requirements for Geological Engineering M.S. Degree (Non-thesis Option): 33 credits

NON-THESIS OPTION

| Code | Title | Credits |
|---|--------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Non-thesis Geological Engineering Program Requirements | | |
| Complete five from the following: | | 15 |
| GE F420 | Groundwater Engineering | |
| GE F430 | Geomechanical Instrumentation | |
| GE F440 | Slope Stability | |
| GE F620 | Advanced Groundwater Hydrology | |
| GE F622 | Advanced Soil Physics | |

Geophysics

M.S., Ph.D. Degrees

The geophysics program at UAF is closely connected with the Geophysical Institute and is optimally positioned to investigate a wide array of geophysical phenomena. Students have the option to obtain a general geophysics degree or to choose one of three concentrations to focus their studies.

Upon graduation, a student is expected to be able to:

1. address geophysical problems using the principles of conservation of energy, mass and momentum using both physical and mathematical concepts, particularly with respect to mathematical techniques such as linear algebra, vector calculus and partial differential equations;
2. explain physical processes underlying the Earth's global-scale features, including plate tectonics and the gravitational and magnetic fields;
3. describe common geophysical problems and assess the advantages and disadvantages of various theoretical, modeling or observational approaches to solving them, including identifying key assumptions underlying each approach;
4. frame well-defined scientific research questions and apply modern computational methods and observational techniques necessary to conduct the research;
5. publish and present results in peer-reviewed articles, scientific reports, and at national and international scientific meetings using oral and written skills developed through regular faculty feedback.

Minimum Requirements for Geophysics Degrees: M.S.: 30 credits; Ph.D.: 18 thesis credits

College of Natural Science and Mathematics
Department of Geosciences (<https://www.uaf.edu/geosciences/>)
907-474-7565

Programs Degrees

- M.S., Geophysics (p. 471)
- Ph.D., Geophysics (p. 472)

M.S., Geophysics

Admission Requirements

Complete the following admission requirements:

- Complete a background at least to the level of a B.S. concentration in geology, geophysics or an appropriate physical science or engineering.
- Complete MATH F302
- Recommended: MATH F314, MATH F432, PHYS F220

Program Requirements

Minimum Requirements for Geophysics M.S.: 30 credits

CONCENTRATIONS: SOLID-EARTH GEOPHYSICS (P. 471); SNOW, ICE AND PERMAFROST GEOPHYSICS (P. 472); REMOTE SENSING GEOPHYSICS (P. 472)

| Code | Title | Credits |
|---|------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Complete 6-12 thesis credits | | |
| Complete any deficiencies concurrently with this degree. | | |
| Submit a written thesis proposal and pass an oral comprehensive examination centered on this proposal. | | |
| Complete and submit a written thesis and pass an oral defense of thesis. | | |
| Geophysics Core Requirements | | |
| GEOS F631 | Foundations of Geophysics | 4 |
| GEOS F682 | Geoscience Seminar (fall semester) | 1 |
| Complete 6 credits from relevant graduate-level courses agreed by the advisory committee or select one from the following concentrations: | | 6 |
| Solid-Earth Geophysics | | |
| Snow, Ice and Permafrost Geophysics | | |
| Remote Sensing | | |
| Complete 7 credits of courses approved by the advisory committee | | 7 |
| GEOS F699 | Thesis | 6 |
| Thesis credits or credits from courses that are F400-level or higher. ¹ | | 6 |

¹ The minimum credits required is 30. The required M.S. course work above represents 18 credits. The minimum number of thesis credits required is 6. The remaining 6 credits can either be thesis credits or courses that are F400-level or higher.

Concentrations

SOLID-EARTH GEOPHYSICS

| Code | Title | Credits |
|--|------------|---------|
| Complete 6 credits from the following: | | 6 |
| GEOS F604 | Seismology | |

| | |
|-----------|-------------------------------|
| GEOS F605 | Geochronology |
| GEOS F626 | Applied Seismology |
| GEOS F669 | Geodetic Methods and Modeling |
| GEOS F671 | Volcano Seismology |

SNOW, ICE AND PERMAFROST GEOPHYSICS

| Code | Title | Credits |
|--|-------------|---------|
| Complete 6 credits from the following: | | 6 |
| GEOS F615 | Sea Ice | |
| GEOS F616 | Permafrost | |
| GEOS F617 | Glaciers | |
| PHYS F614 | Ice Physics | |

REMOTE SENSING

| Code | Title | Credits |
|--|---|---------|
| Complete 6 credits from the following: | | 6 |
| ATM F613 | Atmospheric Radiation | |
| GEOS F622 | Digital Image Processing in the Geosciences | |
| GEOS F639 | InSar and Its Applications | |
| GEOS F654 | Visible and Infrared Remote Sensing | |
| GEOS F657 | Microwave Remote Sensing | |

Ph.D., Geophysics

Admission Requirements

Complete the following admission requirement:

- Complete a master's degree in geology, geophysics or an appropriate field of physical science or engineering.

ADMISSION TO PH.D. GEOPHYSICS PROGRAM DIRECTLY FROM A BACHELOR'S PROGRAM

Entering graduate students whose highest earned degree is the baccalaureate are normally admitted as Master of Science candidates. However, exceptionally able and accomplished students in this category are eligible for direct admission to the Ph.D. program. For direct admission from the baccalaureate to the Ph.D. program, a student must receive approval from the graduate admission committee and also meet one of three criteria:

1. At least one first-authored manuscript published, accepted or submitted for publication in a peer-reviewed scientific journal.
2. Receipt of an NSF, NIH or similar prestigious pre-doctoral fellowship.
3. Demonstrated research proficiency AND either
 - attained a GPA of at least 3.5 in mathematics and science courses at the undergraduate level, or
 - scored at or above the 80th percentile in two of three categories in the GRE.

The requirement of demonstrated research proficiency can be waived for exceptionally promising students. In this case, the student is required to complete a research or review paper focusing on a thesis-related topic approved by the graduate advising committee. The paper should be roughly 4,000-5,000 words and must be submitted and approved by the advising committee within the first three semesters to maintain Ph.D. status. Failure will result in changing the student's status to M.S. candidate.

After admission, M.S. candidates may, in exceptional cases, petition for conversion to the Ph.D. program if they satisfy one of the above criteria. Such petitions must be approved both by the student's current (M.S.) and proposed (Ph.D.) advisory committee and the department director or designee.

Program Requirements

Minimum Requirements for Geophysics Ph.D.: 18 thesis credits

| Code | Title | Credits |
|--|------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 409) | | |
| Master's Degree Requirements | | |
| GEOS F631 | Foundations of Geophysics | 4 |
| GEOS F682 | Geoscience Seminar (fall semester) | 1 |
| Complete 6 credits from relevant graduate-level courses agreed by the advisory committee, or select one of the following concentrations: | | 6 |
| <i>Solid-Earth Geophysics</i> | | |
| Complete 6 credits from the following: | | |
| GEOS F604 | Seismology | |

| | |
|-----------|-------------------------------|
| GEOS F605 | Geochronology |
| GEOS F626 | Applied Seismology |
| GEOS F669 | Geodetic Methods and Modeling |
| GEOS F671 | Volcano Seismology |

Snow, Ice and Permafrost Geophysics

Complete 6 credits from the following:

| | |
|-----------|-------------|
| PHYS F614 | Ice Physics |
| GEOS F615 | Sea Ice |
| GEOS F616 | Permafrost |
| GEOS F617 | Glaciers |

Remote Sensing

Complete 6 credits from the following:

| | |
|-----------|---|
| ATM F613 | Atmospheric Radiation |
| GEOS F622 | Digital Image Processing in the Geosciences |
| GEOS F639 | InSar and Its Applications |
| GEOS F654 | Visible and Infrared Remote Sensing |
| GEOS F657 | Microwave Remote Sensing |

Advanced Skills Categories

Complete 3 credits each in two of the following four categories: 6

Digital Signal Analysis and Remote Sensing

| | |
|-----------|---|
| GEOS F622 | Digital Image Processing in the Geosciences |
| GEOS F654 | Visible and Infrared Remote Sensing |
| GEOS F657 | Microwave Remote Sensing |

Statistics and Parameter Estimation

| | |
|-----------|---|
| GEOS F627 | Inverse Problems and Parameter Estimation |
| STAT F401 | Regression and Analysis of Variance |
| STAT F461 | Applied Multivariate Statistics |
| ATM F610 | Analysis Methods in Meteorology and Climate |

Mathematical Methods

| | |
|-----------|--|
| MATH F432 | Introduction to Partial Differential Equations |
| MATH F614 | Numerical Linear Algebra |
| MATH F615 | Numerical Analysis of Differential Equations |
| MATH F661 | Optimization |
| ME F601 | Finite Element Analysis in Engineering |

Skills course

One graduate-level advanced skills course approved by the student's advisory committee

Ph.D. Degree Requirements

Complete the Ph.D. degree requirements. (p. 413)

Complete and pass a written and oral comprehensive examination.

Complete and submit a written thesis proposal for approval.

Complete a research program as arranged with the graduate advisory committee.

Complete 18 credits of thesis, write a thesis and pass an oral defense of thesis. 18

Geoscience

Overview

M.S., Ph.D. Degrees

Graduates in geoscience have broad backgrounds in Earth sciences or geography. There are concentrations available in geology and geography, and requirements are flexible enough to allow students to customize the curriculum.

There are about 40 professional geoscientists in residence on campus, and graduate students normally participate in the ongoing research of these professionals. Teaching and research assistantships are available to graduate students in many of these areas.

Minimum Requirements for Geoscience Degrees: M.S.: 30 credits; Ph.D.: 18 thesis credits

College of Natural Science and Mathematics

Department of Geosciences (<https://www.uaf.edu/geosciences/>)
907-474-7565

Programs Degrees

- M.S., Geoscience (p. 474)
- Ph.D., Geoscience (p. 474)

M.S., Geoscience

Admission Requirements

Complete the following admission requirements:

- Complete a background at least to the level of a B.S. concentration in geology, geophysics or earth science.

Program Requirements

Minimum Requirements for Geoscience

M.S.: 30 credits

CONCENTRATIONS: GEOGRAPHY (P. 474), GEOLOGY (P. 474)

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Geoscience Program Requirements | | |
| Complete 6-12 thesis credits | | 6-12 |
| Complete any deficiencies concurrently with this degree. | | |
| Submit a written thesis proposal and pass a written or oral comprehensive examination. | | |
| Complete and submit a written thesis and pass an oral defense of thesis. | | |
| Complete one from the following concentrations: | | 12 |
| Geography | | |
| Geology | | |

CONCENTRATIONS

Geography

| Code | Title | Credits |
|---|-------|---------|
| Complete the following: | | |
| Complete 12 geography-related credits at the F600 level as approved by the graduate advisory committee. | | 12 |

Geology

| Code | Title | Credits |
|---|-------|---------|
| Complete the following: | | |
| Complete 12 credits at the F600 level as approved by the graduate advisory committee. | | 12 |

Ph.D., Geoscience

Program Requirements

Minimum Requirements for Geoscience

Ph.D.: 18 credits

CONCENTRATIONS: GEOGRAPHY, GEOLOGY

| Code | Title | Credits |
|---|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Complete the course work requirements for the appropriate M.S. concentration. | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Complete and pass a written and oral comprehensive examination. | | |
| Complete and submit a written thesis proposal for approval. | | |
| Complete a research program as arranged with the graduate advisory committee. | | |
| Complete 18 credits of thesis, write a thesis and pass an oral defense of thesis. | | 18 |

Note: In addition to courses listed under the geoscience program, students should check the course listings under the College of Engineering and Mines and the marine science program.

Note: In addition to the facilities available directly through the instructional program, UAF has active research laboratories in the fields of seismology, volcanology, paleomagnetism, isotope geochronology, glaciology and ice physics in the Geophysical Institute (see Geophysical Institute (p. 22) under Research). These laboratories can frequently provide topics for M.S. and Ph.D. theses. Other laboratories are also available in other divisions on campus, as listed under Research Institutes and Centers (p. 21).

Geospatial Science Graduate Certificate

This graduate certificate prepares the student to harness geospatial technologies for cutting-edge applications in natural resources, geohazard management, environmental monitoring and many more. The program teaches advanced skills in Geographic Information Systems (GIS) and remote sensing, including digital mapping, radar imaging and predictive data analytics. These skills are highly sought after in the job market. They can boost careers in start-ups, consulting firms, and government agencies across a diverse range of fields, including mining, forestry, agriculture, conservation and engineering.

This graduate certificate in geospatial science is equivalent to a year of course work done by a graduate student in this area. Its target audience consists of students and professionals seeking advanced skills and mastery of GIS and remote sensing tools and concepts. It is most suitable for students with a background in the sciences and engineering.

College of Natural Science and Mathematics
Department of Natural Resources and Environment (<https://www.uaf.edu/nre/>)
907-474-7188

Programs Degree

- Graduate Certificate, Geospatial Science (p. 475)

Graduate Certificate, Geospatial Science

Admission Requirements

Admission requirements:

- Hold a baccalaureate degree from an accredited institution
- Completion of Elementary Statistics (STAT F200X), Computer Science I (CS F201), College Algebra for Calculus (MATH F151X), Calculus II (MATH F252X), and General Physics (PHYS F211X)¹ or their equivalents;
- Completion of Introduction to GIS (NRM F338)¹ or its equivalent;

¹ Students must have earned a C or better in each course

Program Requirements

Minimum Requirements for Geospatial Science Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 409) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p.) | | |
| Geospatial Science Program Requirements | | |
| Complete one of the following: | | 3-4 |
| NRM F435 | GIS Analysis ¹ | |
| GEOS F458 | Applications of GPS and GIS in Geophysics ¹ | |
| or GEOS F658 | Applications of GPS and GIS in Geophysics | |
| Complete three of the following: | | 9 |
| GEOS F422 | Geoscience Applications of Remote Sensing ¹ | |
| GEOS F622 | Digital Image Processing in the Geosciences | |
| GEOS F639 | InSar and Its Applications | |
| GEOS F654 | Visible and Infrared Remote Sensing | |
| GEOS F657 | Microwave Remote Sensing | |
| NRM F638 | GIS Programming | |
| NRM F641 | Natural Resource Applications of Remote Sensing | |

¹ Maximum 4 credits at the 400-level.

Indigenous Studies

M.A., Ph.D. Degrees

The Indigenous studies M.A. degree program emphasizes Indigenous knowledge systems. The program is designed to provide graduate students from various fields of interest an opportunity to pursue in-depth study of the role and contributions of Indigenous knowledge in the contemporary world. Students are expected to demonstrate the ability to work effectively with Indigenous people in their studies.

Indigenous studies doctoral candidates will participate in research activities across a variety of UAF academic disciplines and applied fields. Students are encouraged to engage in comparative studies with other Indigenous peoples around the world and to focus their dissertation research on issues of relevance to Indigenous communities. Using the interdisciplinary Ph.D. model of academic assignment, the student's home base will be in the school or college of the student's major advisor, who also serves as an affiliate faculty member for the program.

The program objectives and its curriculum center around six areas of concentration: Indigenous Studies and Research, Indigenous Knowledge Systems, Indigenous Education and Pedagogy, Indigenous Languages, Indigenous Leadership, and Indigenous Sustainability. Students may focus on one of these areas or draw on multiple themes in collaboration with their graduate committee to develop their areas of knowledge and dissertation research. In collaboration with the graduate committee, each student will develop a program of coursework and research that produces a unique intellectual contribution to the applied fields associated with Indigenous studies.

Minimum Requirements for Indigenous Studies Degrees: M.A.: 36 credits; Ph.D.: 48 credits

College of Rural and Community Development
Center for (<http://www.uaf.edu/cxcs/>)Cross-Cultural Studies
907-474-1902

Programs Degree

- M.A., Indigenous Studies (p. 476)
- Ph.D., Indigenous Studies (p. 477)

M.A., Indigenous Studies

Admission Requirements

In general, applicants may be admitted to a graduate program if they have a bachelor's degree from an accredited institution with at least a 3.0 cumulative undergraduate GPA and a 3.0 GPA in their major. The undergraduate major should provide suitable preparation for continuation of studies in the field of choice. Some programs require the Graduate Record Exam or Graduate Management Admission Test and other special criteria for admission.

For the purposes of admission to graduate study, all grades, including those generated from retaking a course, are included in calculating GPA.

If an applicant meets the minimum requirements for the university, the Office of Admissions sends the completed application to the academic department. Program heads and/or committees in fields of interest will determine the adequacy of the student's preparation and whether or not departmental facilities are sufficient for their aims.

Information on specific degree programs is available from academic departments or by contacting the Graduate School (<https://www.uaf.edu/gradsch/>) at 907-474-7464 or uaf-grad-school@alaska.edu.

Program Requirements

Minimum Requirements for Indigenous Studies M.A.: 36 credits

| Code | Title | Credits |
|---|-----------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Indigenous Studies Program Requirements | | |
| Complete at least 6 credits in a field setting, including minimum of one week camp with Elders. | | |
| Complete at least 36 semester hours beyond the bachelor's degree level. | | |
| Students may transfer a maximum of 9 hours from another university into their program. | | |
| Complete at least 30 of the 36 semester hours at the F600 level. | | |
| Satisfactorily complete a comprehensive examination. | | |
| Core Courses | | |
| Complete the following: | | |
| CCS F604 | Documenting Indigenous Knowledge | 3 |
| CCS F608 | Indigenous Knowledge Systems | 3 |
| CCS F612 | Traditional Ecological Knowledge | 3 |
| CCS/ED F690 | Seminar in Cross-Cultural Studies | 3 |
| Cross-cultural Studies Specialization Courses | | |
| Complete at least one of the following: | | 3 |
| ANS/ED F461 | Native Ways of Knowing | |
| CCS/ED F610 | Education and Cultural Processes | |
| RD F425 | Cultural Resource Issues | |
| Electives | | |
| Complete a minimum of 15 credits of approved electives to provide specialization depth: | | 15 |

Examples of approved electives:

| | |
|-------------|--|
| ANS F475 | Alaska Native Social Change |
| CCS F602 | Cultural and Intellectual Property Rights |
| CCS/ED F603 | Field Study Research Methods |
| CCS/ED F611 | Culture, Cognition and Knowledge Acquisition |
| CCS/ED F613 | Alaska Standards for Culturally Responsive Schools |

Non-thesis Research/Project

Complete the following:

| | | |
|----------|-----------------------------|---|
| CCS F698 | Non-thesis Research/Project | 6 |
|----------|-----------------------------|---|

Ph.D., Indigenous Studies

Program Requirements

Minimum Requirements for Indigenous Studies Ph.D.: 48 credits

CONCENTRATIONS: INDIGENOUS SUSTAINABILITY (P. 478), INDIGENOUS STUDIES & RESEARCH (P. 478), INDIGENOUS LEADERSHIP (P. 478), INDIGENOUS LANGUAGES (P. 479), INDIGENOUS KNOWLEDGE SYSTEMS (P. 479), INDIGENOUS EDUCATION & PEDAGOGY (P. 479)

| Code | Title | Credits |
|------|-------|---------|
|------|-------|---------|

General University Requirements

Complete the general university requirements. (p. 414)

Ph.D. Degree Requirements

Complete the Ph.D. degree requirements. (p. 411)

Indigenous Studies Program Requirements

Complete the following:

| | | |
|--------------------|-----------------------------------|---|
| ANL/CCS/ED/RD F608 | Indigenous Knowledge Systems | 3 |
| ANL/CCS/ED/RD F690 | Seminar in Cross-Cultural Studies | 3 |

Core Courses

Complete two of the following: 6

| | |
|-------------------------|---|
| ANL F601 | Seminar in Language Revitalization |
| ANTH F631 | Linguistic Anthropology: Language, Thought and Action |
| ANTH F646 | Economic Anthropology |
| ANTH/BIOL/ECON/NRM F647 | Sustainability in the Changing North |
| ANTH/BIOL/ECON/NRM F649 | Integrated Assessment and Adaptive Management |
| ANTH/ACNS F610 | Northern Indigenous Peoples and Contemporary Issues |
| CCS F602 | Cultural and Intellectual Property Rights |
| CCS/ED F610 | Education and Cultural Processes |
| CCS/ED F611 | Culture, Cognition and Knowledge Acquisition |
| CCS F612 | Traditional Ecological Knowledge |
| ED/LING F621 | Cultural Aspects of Language Acquisition |
| ED F616 | Education and Socioeconomic Change |
| ED F620 | Language, Literacy and Learning |
| ED F660 | Educational Administration in Cultural Perspective |
| RD F600 | Indigenous Leadership Symposium |
| RD F601 | Political Economy of the Circumpolar North |
| RD F651 | Management Strategies for Rural Development |
| RD F652 | Indigenous Organization Management |

Research Courses

| | | |
|---|-------------------------------------|-----|
| Complete two of the following: | | 6 |
| ANTH F424 | Analytical Techniques | |
| ANTH F637 | Methods in Ethnohistorical Research | |
| CCS F604 | Documenting Indigenous Knowledge | |
| CCS/ED F603 | Field Study Research Methods | |
| RD F650 | Community-based Research Methods | |
| Doctoral Dissertation | | |
| Complete the following: | | |
| ANL/CCS/ED/RD F699 | Thesis | 1-9 |
| Concentrations | | |
| Complete one or more of the following concentrations: | | 12 |
| Indigenous Sustainability | | |
| Indigenous Studies & Research | | |
| Indigenous Leadership | | |
| Indigenous Languages | | |
| Indigenous Knowledge Systems | | |
| Indigenous Education & Pedagogy | | |

The joint Ph.D. program in Indigenous Studies draws and builds upon long-standing academic and research capabilities at UAF to offer an integrated course of advanced graduate study consisting of a common core curriculum that all students complete, coupled with six areas of concentration:

Concentrations

INDIGENOUS SUSTAINABILITY

| Code | Title | Credits |
|--|---|---------|
| Complete four of the following: ¹ | | 12 |
| ACNS/PS F603 | Public Policy | |
| ANTH/BIOL/ ECON/NRM F647 | Sustainability in the Changing North | |
| ANTH/BIOL/ ECON/NRM F649 | Integrated Assessment and Adaptive Management | |
| CCS/ED F619 | Cultural Atlases as a Pedagogical Strategy | |
| CCS/NRM F656 | Sustainable Livelihoods and Community Well-being | |
| ED F681 | Place-based Education | |
| MBA F642 | Economics of Environmental and Business Sustainability | |
| PS/ACNS F669 | Arctic Politics and Governance | |
| RD F430 | Indigenous Economic Development and Entrepreneurship | |
| RD F671 | Corporate Social Responsibility and Accountability in Rural and Indigenous Contexts | |

¹ subject to student and committee modification

INDIGENOUS STUDIES & RESEARCH

| Code | Title | Credits |
|--|---|---------|
| Complete four of the following: ¹ | | 12 |
| ANTH/ACNS F610 | Northern Indigenous Peoples and Contemporary Issues | |

| | |
|-------------|---|
| ANTH F630 | Anthropological Field Methods |
| ANTH F637 | Methods in Ethnohistorical Research |
| ANTH F646 | Economic Anthropology |
| CCS F602 | Cultural and Intellectual Property Rights |
| CCS/ED F603 | Field Study Research Methods |
| CCS/ED F604 | Documenting Indigenous Knowledge |
| CCS/ED F616 | Education and Socioeconomic Change |
| RD F601 | Political Economy of the Circumpolar North |
| RD F650 | Community-based Research Methods |
| RD F651 | Management Strategies for Rural Development |

¹ subject to student and committee modification

INDIGENOUS LEADERSHIP

| Code | Title | Credits |
|--|---|---------|
| Complete four of the following: ¹ | | 12 |
| ACNS/HIST F600 | Perspectives on the North | |
| ACNS/ANTH F610 | Northern Indigenous Peoples and Contemporary Issues | |
| ACNS/PS F647 | U.S. Environmental Politics | |
| ACNS/PS F652 | International Relations of the North | |
| ACNS/PS F654 | International Law and the Environment | |
| ACNS F657/ PS F650 | Comparative Indigenous Rights and Policies | |
| ACNS/PS F662 | Alaska Government and Politics | |
| ACNS/PS F669 | Arctic Politics and Governance | |
| ANS F475 | Alaska Native Social Change | |
| ANTH F603 | Political Anthropology | |
| ANTH F607 | Kinship and Social Organization | |
| ANTH F652/ PS F650 | Research Design and Professional Development Seminar | |
| ANTH F653 | Current Perspectives in Cultural Resource Management | |
| BA F470 | Leadership Theory and Development | |
| ED F660 | Educational Administration in Cultural Perspective | |
| MBA/HSEM F656 | Strategic Leadership | |
| RD F600 | Indigenous Leadership Symposium | |
| RD F625 | Community Development Strategies: Principles and Practices | |
| RD F651 | Management Strategies for Rural Development | |
| RD F652 | Indigenous Organization Management | |
| RD F671 | Corporate Social Responsibility and Accountability in Rural and Indigenous Contexts | |

¹ subject to student and committee modification

INDIGENOUS LANGUAGES

| Code | Title | Credits |
|--|---|---------|
| Complete four of the following: ¹ | | 12 |
| ANL F402 | Alaska Native Language Apprenticeship II | |
| ANL F452 | Principles of Linguistic Analysis for Alaska Native Languages | |
| ANL F601 | Seminar in Language Revitalization | |
| ANL/LING F651 | Topics in Athabascan Linguistics | |
| ED F620 | Language, Literacy and Learning | |
| ED/LING F621 | Cultural Aspects of Language Acquisition | |
| LING F601 | Principles of Linguistic Analysis | |
| LING F602 | Second Language Acquisition | |
| LING F610 | Theory and Methods of Second Language Teaching | |
| LING F611 | Second Language Materials and Assessment | |
| LING F612 | Assessment for the Second Language Classroom | |
| LING F627 | Introduction to Linguistic Description and Documentation | |
| LING F631/ ANTH F632 | Field Methods in Descriptive Linguistics I | |
| LING F650/ ANTH F654 | Language Policy and Planning | |
| YUP F488 | Documenting Yup'ik Traditions/ Caliarqaq | |
| YUP F415 | Additional Topics in Advanced Yup'ik | |

¹ subject to student and committee modification**INDIGENOUS KNOWLEDGE SYSTEMS**

| Code | Title | Credits |
|--|---|---------|
| Complete four of the following: ¹ | | 12 |
| ACNS/ANTH F470 | Oral Sources: Issues in Documentation | |
| ANS/RD F401 | Cultural Knowledge of Native Elders | |
| ANS/ED F461 | Native Ways of Knowing | |
| ANS/RD F465 | Community Healing and Wellness | |
| ANTH F607 | Kinship and Social Organization | |
| ANTH F610 | Northern Indigenous Peoples and Contemporary Issues | |
| ANTH/ACNS F670 | Oral Sources: Issues in Documentation | |
| CCS/PSY F606 | Indigenous Ways of Healing | |
| CCS/ED F611 | Culture, Cognition and Knowledge Acquisition | |
| CCS F612 | Traditional Ecological Knowledge | |
| CCS/PSY F621 | Indigenous Ways of Knowing | |
| CCS F602 | Cultural and Intellectual Property Rights | |
| COJO F457 | Indigenous Dispute Resolution | |
| COJO F459 | Indigenous Dispute Systems Design | |
| FISH F611 | Human Dimensions of Environmental Systems | |

RD F462 Rural Health and Human Service Systems

RD F625 Community Development Strategies: Principles and Practices

¹ subject to student and committee modification**INDIGENOUS EDUCATION & PEDAGOGY**

| Code | Title | Credits |
|--|---|---------|
| Complete four of the following: ¹ | | 12 |
| ANS/ED F461 | Native Ways of Knowing | |
| CCS/ED F619 | Cultural Atlases as a Pedagogical Strategy | |
| CCS/ED F682 | Rethinking Multicultural Education | |
| ED F606 | Alaska Native Education | |
| ED/CCS F610 | Education and Cultural Processes | |
| ED/CCS F611 | Culture, Cognition and Knowledge Acquisition | |
| ED F612 | Foundations of Education | |
| ED/CCS F613 | Alaska Standards for Culturally Responsive Schools | |
| ED F624 | Foundations of Education in Alaska: From Segregation to Standards | |
| ED F630 | Curriculum Development | |
| ED F631 | Culture, Community and the Curriculum | |
| ED F681 | Place-based Education | |
| ENGL F686 | Teaching Writing in a Cross-cultural Context | |

¹ subject to student and committee modification

Interdisciplinary Studies

M.A., M.S., Ph.D. Degrees

The UAF graduate Interdisciplinary Studies program draws upon UAF’s strengths in interdisciplinary research and education to allow students to pursue individualized graduate degrees that draw on multiple disciplines. The Interdisciplinary Studies program draws on faculty and resources from across the university to support students and scholarship in areas where degrees are not currently offered by existing programs at UAF. Prospective students identify a specific area for study and a UAF faculty member who is willing to serve as their advisor.

The graduate Interdisciplinary Studies program is managed by the Graduate School and supported by UAF faculty, departments, and programs. Admission to the program is overseen by the Interdisciplinary Studies Council. Students are housed in the academic unit associated with their advisor. The program supports MA, MS, and PhD programs with the degrees awarded by the relevant academic unit. Prospective students should contact the graduate school to discuss their proposed program of study before submitting an application.

Minimum Requirements for Interdisciplinary Studies Degrees: M.A. and M.S.: 30 credits; Ph.D.: 36 credits

Graduate School and Interdisciplinary Programs (<https://www.uaf.edu/gradschool/interdisciplinary/>)
907-474-7464

Programs Degrees

- M.A., Interdisciplinary Studies (p. 480)
- M.S., Interdisciplinary Studies (p. 481)
- Ph.D., Interdisciplinary Studies (p. 481)

M.A., Interdisciplinary Studies

Admission Requirements

Complete the admission process including the following:

- In consultation with a UAF faculty member: prepare and submit a statement of research goals and justification for interdisciplinary approach, and a preliminary graduate study plan.
- In consultation with a UAF faculty member, prepare and submit:
 - a. Statement of Academic Goals
 - b. Research Prospectus
 - c. Proposed Graduate Study Plan
- Other materials: resume, official transcripts, two (2) academic letters of recommendation, one (1) Letter of Endorsement from one proposed MA Advisory Committee members (one from UAF committee chair).

Program Requirements

Minimum Requirements for Interdisciplinary Studies M.A.: 30 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master’s Degree Requirements | | |
| Complete the master’s degree requirements. (p. 418) | | |
| Pass a comprehensive examination. | | |

M.S., Interdisciplinary Studies

Admission Requirements

Complete the admission process including the following:

- In consultation with a UAF faculty member, prepare and submit:
 - a. Statement of academic goals
 - b. Research prospectus
 - c. Proposed graduate study plan
- Other materials: a statement of goals, a resume, official transcripts, two academic letters of recommendation (cannot be from the proposed chair), a research prospectus, a proposed graduate study plan, and one Letter of Endorsement from the proposed UAF committee chair with current CV.

Program Requirements

Minimum Requirements for Interdisciplinary Studies M.S.: 30 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Pass a comprehensive examination. | | |

Ph.D., Interdisciplinary Studies

Admission Requirements

Complete the following admission process requirements:

- Submit GRE scores (scores must be less than 5 years old).
- Complete a master's degree.
- In consultation with a UAF faculty member, prepare and submit:
 - Statement of academic goals
 - Research prospectus
 - Proposed graduate study plan
- Other materials: resume, official transcripts, two academic letters of recommendation, two letters of endorsement from two proposed Ph.D. advisory committee members (one letter of endorsement from the proposed UAF committee chair).

Program Requirements

Minimum Requirements for Interdisciplinary Studies Ph.D.: 36 credits

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Interdisciplinary Studies Program Requirements | | |
| Pass both a written and oral comprehensive exam ¹ | | |
| Thesis credits (F699) | | 18 |
| Coursework ² | | 9 |
| Additional course work or thesis credits | | 9 |

¹ The oral comprehensive exam may be an oral defense of the written research proposal.

² Complete coursework in thematic areas as determined by the advisory committee.

Justice Administration

Graduate Certificate, M.A. Degree

The justice discipline represents a melding of theoretical and applied concepts, and the M.A. degree in justice administration reflects that dichotomy. Consequently, students not only explore theoretical models associated with different aspects of the criminal justice system but also study its structure and administration.

The M.A. degree in justice administration has been designed as a web-based degree program in order to accommodate the needs of justice professionals for whom taking a two-year leave of absence from their profession is not feasible, or for whom relocating to the Fairbanks vicinity is not possible. The M.A. degree program has attracted justice professionals from throughout the country who have found the flexibility of a web-based format useful.

The graduate certificate in justice administration has been designed as a web-based degree program in order to accommodate the needs of justice professionals for whom taking a year's leave of absence from their profession is not feasible, or for whom relocating to the Fairbanks vicinity is not possible. The graduate certificate program offers candidates an opportunity to pursue graduate-level work without expending the time or resources needed for a full graduate degree.

Minimum Requirements for Justice Administration Graduate Certificate: 12 credits; M.A.: 30 credits

Learn more about the master's degree in justice administration (<https://uaf.edu/academics/programs/masters/justice-administration.php>), including an overview of the program, career opportunities and more.

College of Liberal Arts
Justice Program (<https://www.uaf.edu/justice/>)
907-474-5500

Programs

Degree

- M.A., Justice Administration (p. 483)

Graduate Certificate

- Graduate Certificate, Justice Administration (p. 482)

Graduate Certificate, Justice Administration

Admission Requirements

Complete the following admission requirements:

- Students must have a completed baccalaureate degree.
- Students must possess either prior education specific to justice, criminal justice, public administration-related work experience or a combination of both with the approval and review of the program director to enter the justice administration graduate certificate program.
- If the degree is in a non justice or public administration-related field and the student has a 3.0 or higher cumulative GPA, students will be required to start with one 400-level course, that is an elective option for the degree.
- Students who have already obtained a graduate degree will not be required to complete an entrance exam or complete a 400-level course first.
- Students with a baccalaureate degree with a cumulative GPA of 3.0 or higher in a related field will not have any additional testing or entry course requirements.
- Students with a cumulative GPA between 3.0 and 2.75, regardless of the field of study, will be required to complete the Watson Glaser Critical Thinking Exam.
- Students with a cumulative GPA below 2.75, will be required to submit results from either the GRE or GMAT.

Program Requirements

Students must earn a C- grade or better in each course.

Minimum requirements for Justice Administration Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|---|---------|
| Complete the general university requirements. | | |
| Complete the general university requirements. (p. 413) | | |
| Complete the graduate certificate requirements. | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Justice Administration Program Requirements: | | |
| Complete the following: | | |
| JUST F605 | Administration and Management of Criminal Justice Organizations | 3 |
| JUST F620 | Personnel Management in Criminal Justice | 3 |
| JUST F625 | Legal Aspect of Criminal Justice Management | 3 |
| Complete 3 credits from the following or other approved JUST course: | | 3 |
| JUST F610 | Ethics in Criminal Justice Management | |
| JUST F615 | Justice Program Planning/ Evaluation and Grant Writing | |
| JUST F640 | Community/Restorative Justice | |

Note: Students may apply 3 units (graduate-level credits) from the FBI National Academy, Command and General Staff College, Command College, Southern Police Institute (Univ. of Kentucky), or similar programs approved by the American Council on Education (e.g., graduate certificate relevant to justice from another institution).

M.A., Justice Administration

Admission Requirements

The M.A. in justice administration prepares students for increasingly responsible roles in the management of justice-related agencies and organizations.

Applications are reviewed on a continual basis.

Complete the following admission requirements:

- Completion of a bachelor's degree from an accredited institution.
- Students with a GPA above 2.75 will be required to submit a score from the Watson-Glaser Critical Thinking Exam.
- Any students with a GPA lower than 2.75 will be required to submit scores from the GRE.

Program Requirements

Minimum Requirements for Justice Administration M.A.: 30 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Justice Administration Program Requirements | | |
| Complete a minimum of 18 graduate UAF credits. | | |
| Receive a passing grade on a written comprehensive exam proctored in conjunction with completion of JUST F690. | | |
| Complete a non-research path which consists of 30 units of coursework; or | | |
| Complete a research path which consists of 30 units of coursework where 6 units are research project or thesis work. | | |
| If a student elects to complete a thesis or project, receive a passing grade on an oral defense examination of a thesis or project. | | |
| Complete the following: | | |
| JUST F605 | Administration and Management of Criminal Justice Organizations | 3 |
| JUST F610 | Ethics in Criminal Justice Management | 3 |
| JUST F615 | Justice Program Planning/ Evaluation and Grant Writing | 3 |
| JUST F620 | Personnel Management in Criminal Justice | 3 |
| JUST F625 | Legal Aspect of Criminal Justice Management | 3 |
| JUST F640 | Community/Restorative Justice | 3 |
| JUST F690 | Seminar in Critical Issues and Criminal Justice Policy | 3 |
| Complete 9 units JUST electives; or from approved areas: | | 9 |
| 6 units of JUST F698 (Project); or 6 units of JUST F699 (Thesis) | | |
| Any approved 600-level ANTH, COJO, HSEM and MBA (or other approved discipline) course; or | | |

400-level JUST, ANTH, BA, COJO, HSEM or LEAD electives (up to 6 units); or

400-level (up to six units) or graduate-level (up to nine units) credits may be used as substitutes if transferred from the FBI National Academy, Command and General Staff College, Command College, Southern Police Institute or similar programs approved by the American Council on Education (e.g., graduate certificate relevant to justice from another institution)

Linguistics, Applied

M.A. Degree

Linguistics is the study of language and covers a variety of subjects including theories of grammar and how we produce language. It has a number of applications, including language teaching, teaching of English as a second or foreign language, and documentation of endangered languages.

Graduate students in applied linguistics may pursue a general program or develop a concentration in either language documentation or second language acquisition and teacher education. Students are expected either to have or to develop proficiency in at least one language other than English, as demonstrated by a proficiency exam or a comparable measure determined by the student's graduate committee. Students pursuing certification in Second Language Acquisition and Teacher Education must demonstrate proficiency in the language they intend to teach. The general program provides students with a practical foundation in linguistics but remains broad enough to allow exploration of a variety of possible thesis topics.

Language documentation is designed to provide practical foundations in linguistics, techniques of fieldwork and documentation, with special focus on Alaska Native languages.

Second language acquisition and teacher education is designed for students interested in teaching English as a second language, a foreign or Alaska Native language. It is designed to provide theoretical and practical foundations in second language acquisition, language teaching, materials development, and language assessment. Students may earn a postcertification endorsement in second language acquisition, bilingual education and literacy (SLABEL).

SLABEL is an innovative master's degree program that combines coursework in literacy with second language acquisition. Candidates will receive an interdisciplinary education that will have immediate application for K-12 language arts, English, bilingual, ELL and content-area teachers, working in increasingly complex bilingual, multilingual and multi-modal classroom environments. Candidates simultaneously earn a master's degree and a K-12 statewide endorsement based on TESOL standards, Alaska Teacher Standards and Alaska Cultural Standards. Comprehensive exams and teacher-action research are required.

Minimum Requirements for Applied Linguistics M.A. Degree: 30 credits

College of Liberal Arts

Linguistics Program (<https://www.uaf.edu/linguist/>)

907-474-7446

Programs Degree

- M.A., Linguistics, Applied (p. 485)
- B.A., Linguistics/M.A., Linguistics, Applied - Accelerated Program (p. 404)

M.A., Linguistics, Applied

Program Requirements

Minimum Requirements for Applied Linguistics M.A.: 30 credits

CONCENTRATIONS: GENERAL (P. 485), LANGUAGE DOCUMENTATION (P. 485), SECOND LANGUAGE ACQUISITION TEACHER EDUCATION (P. 485)

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 416) | | |
| Applied Linguistics Program Requirements | | |
| Complete the following: | | |
| LING F600 | Research Methods for Applied Linguistics | 3 |
| LING F601 | Principles of Linguistic Analysis | 3 |
| LING F698 or LING F699 | Non-thesis Research/Project Thesis | 6 |
| Concentrations | | |
| Complete one of the following concentrations: | | 9 |
| General | | |
| Language Documentation | | |
| Second Language Acquisition Teacher Education | | |
| Electives | | |
| Complete three electives approved by committee. | | 9 |

Concentrations

GENERAL

| Code | Title | Credits |
|-------------------------|-----------------------------|---------|
| Complete the following: | | |
| LING F602 | Second Language Acquisition | 3 |
| LING F603 | Phonetics and Phonology | 3 |
| LING F604 | Morphology and Syntax | 3 |

LANGUAGE DOCUMENTATION

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| LING F603 | Phonetics and Phonology | 3 |
| LING F604 | Morphology and Syntax | 3 |
| LING F631 | Field Methods in Descriptive Linguistics I | 3 |

SECOND LANGUAGE ACQUISITION TEACHER EDUCATION

| Code | Title | Credits |
|-------------------------|--|---------|
| Complete the following: | | |
| LING F602 | Second Language Acquisition | 3 |
| LING F610 | Theory and Methods of Second Language Teaching | 3 |

| | | |
|------------|--|---|
| LING F611 | Second Language Materials and Assessment | 3 |
| or ED F683 | Instruction and Assessment in Literacy | |

ELECTIVE COURSES

This is a non-exhaustive list of possible electives.

| Code | Title | Credits |
|--------------|--|---------|
| ED F601 | Introduction to Applied Social Science Research ² | 3 |
| ED F670 | Developing Literacy: ECE-12 ² | 3 |
| ED F673 | Literacy in the Content Area ² | 3 |
| ED F683 | Instruction and Assessment in Literacy ² | 3 |
| LING F441 | Topics in Linguistics ¹ | 3 |
| LING/FL F451 | English Second Language Teaching Practicum ¹ | 3 |
| LING F602 | Second Language Acquisition | 3 |
| LING F603 | Phonetics and Phonology | 3 |
| LING F604 | Morphology and Syntax | 3 |
| LING F610 | Theory and Methods of Second Language Teaching | 3 |
| LING F611 | Second Language Materials and Assessment | 3 |
| LING F631 | Field Methods in Descriptive Linguistics I | 3 |
| LING F650 | Language Policy and Planning | 3 |

¹ Per Graduate School rules, up to 6 credits of committee-approved elective credit at the 400 level may be counted toward a graduate degree.

² Students pursuing postcertification endorsement in second language acquisition, bilingual education and literacy must complete ED F601, ED F670, ED F673 and ED F683.

Marine Biology

M.S., Ph.D. Degrees

The marine biology graduate program focuses on the biology, ecology, physiology and biodiversity of marine organisms. Students may pursue either an M.S. or Ph.D. degree in marine biology. Our graduate students are afforded excellent opportunities for laboratory and field research. Our faculty conduct research in Fairbanks, the Kasitsna Bay Laboratory near Homer, the Juneau College of Fisheries and Ocean Sciences at Lena Point, the Seward Marine Center and the Alaska SeaLife Center. Students may conduct fieldwork in a variety of locations, including but not limited to the Beaufort and Chukchi seas, the Aleutian Islands and other coastal areas around Alaska. Our college also operates the coastal research vessel *Nanuq* and the ice-capable *Sikuliaq*, a University-National Oceanographic Laboratory System vessel.

Students considering graduate study in marine biology should have a strong background in biology, molecular biology, biochemistry, ecology, evolution or a related field. Students are admitted on the basis of their academic qualifications, research experience and the ability of the program to provide mentorship in their particular area of research interest. The Marine Biology Department is an equal opportunity program, and we encourage students from diverse backgrounds to apply. We review requests for admission throughout the year. Students must contact potential faculty advisors before applying.

Minimum Requirements for Marine Biology Degrees: M.S.: 30 credits; Ph.D.: 18 thesis credits

College of Fisheries and Ocean Sciences (<https://www.uaf.edu/cfos/academics/>)
Graduate Program in Marine Sciences and Limnology
907-474-7289

Programs Degrees

- M.S., Marine Biology (p. 486)
- Ph.D., Marine Biology (p. 487)

M.S., Marine Biology

Admission Requirements

Complete the following admission requirement:

- Submit GRE scores.

Program Requirements

Students must earn a B- grade or better in the lecture-based core courses of the degree program before being eligible to take the comprehensive exam.

Minimum Requirements for Marine Biology M.S.: 30 credits

| Code | Title | Credits |
|---|--------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Marine Biology Program Requirements | | |
| Complete a thesis | | |
| Complete the following: | | |
| MSL F610 | Marine Biology | 3 |
| MSL F615 | Physiology of Marine Organisms | 3 |
| MSL F650 | Biological Oceanography | 3 |
| Field Course with Aquatic Science Focus ¹ | | 2 |
| Electives in Aquatic Sciences at 600-level ² | | 5 |

¹ Examples include MSL F651, MSL F656, MSL F623 or MSL F457.
² Examples include, but are not limited to MSL F601, MSL F602, MSL F604, MSL F605, MSL F612 or MSL F692.

Ph.D., Marine Biology

Admission Requirements

Complete the following admission requirement:

- Submit GRE scores.

Program Requirements

Minimum Requirements for Marine Biology Ph.D.: 18 thesis credits

Students must earn a B- grade or better in the M.S. lecture-based core courses of the degree program before being eligible to complete the qualifying exam required for this program.

| Code | Title | Credits |
|---|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Marine Biology Program Requirements | | |
| Complete coursework at least equivalent to that required for the M.S. degree. | | |

Marine Policy

M.M.P. Degree

The design and implementation of effective marine policy entail quantitative and qualitative analyses pertinent to the oversight and management of marine resources: the study of the potential and actual social, economic, legal, environmental and ecological consequences of alternative policies; an objective exploration of what is, what was, and what could be. Graduates will be equipped with the tools and background to conduct prospective analyses of the anticipated outcomes of alternative management actions and retrospective analyses of actual outcomes of management actions.

The M.M.P. degree program engages students in a curriculum that instills an integrated background in four core dimensions of marine policy, (1) living marine resources and their management, (2) analytic methods, (3) law and policy, and (4) economics, development, and sustainability. The wide selection of courses that satisfy these core and elective requirements facilitates the individualization of the curriculum to support each student's goals. Courses are drawn from the Alaska Native Studies, Anthropology, Arctic and Northern Studies, Biology, Cross-cultural Studies, Economics, Fisheries, Geography, Marine Science and Limnology, Natural Resource Management, Political Science, Public Administration, Rural Development, and Statistics programs at UAF and UAS. Because most of these courses are already offered in remote sites through video-conferencing, this degree program serves students throughout Alaska and beyond.

The M.M.P. degree is jointly offered by UAS and UAF, with UAF acting as the lead institution. Graduates will receive a diploma indicating that the degree is awarded jointly by UAF and UAS. Applications for admission to the M.M.P. program will be processed through the UAF Graduate School. Enrolled students may select from various required and elective courses offered by UAF or UAS. Most of these courses can be taken in-person or remotely via synchronous or asynchronous modalities. UAF tuition and fees apply to courses taken through UAF, while UAS tuition and fees apply to courses taken through UAS. M.M.P. program students are advised by the program coordinators.

Minimum Requirements for Marine Policy M.M.P.: 30 credits

College of Fisheries and Ocean Sciences

College of Fisheries and Ocean Sciences Academic Programs (<https://www.uaf.edu/cfos/academics/>)
907-474-7289

Programs Degrees

- M.M.P., Marine Policy (p. 488)

M.M.P., Marine Policy

Admission Requirements

Complete the following admission requirements:

- Bachelor of Arts or a Bachelor of Science with a minimum 3.0 GPA

Admission requests will be reviewed throughout the year. There is no financial support for students in this program.

Program Requirements

Minimum Requirements for Marine Policy M.M.P.: 30 credits ¹

CORE AREAS: LIVING MARINE RESOURCES AND THEIR MANAGEMENT (P. 488); ANALYTIC METHODS (P. 489); LAW AND POLICY (P. 489); ECONOMICS, DEVELOPMENT AND SUSTAINABILITY (P. 489)

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Marine Policy Program Requirements | | |
| Complete the following: | | |
| FISH F671 | Foundations of Marine Policy and Ocean Governance | 3 |
| Complete one of the following internships with a federal, state, local, or tribal government, a marine-dependent industry, or marine-focused NGO: | | 2-6 |
| FISH F690 | Marine Policy Internship | |
| NRM F613/ ANTH F617/ BIOL F613 | Resilience Internship | |
| PADM S691 (https://catalog.uas.alaska.edu/search/?search=PADM+S691) | Internship | |
| Comprehensive Examination | Pass an oral or written comprehensive examination that demonstrates a master's-level ability to synthesize and apply information and experience gained through coursework and the internship to the analysis of an historic, contemporary or hypothetical marine policy issue. | |
| Electives | Approved electives to bring program credits to total 30 if needed ² | 0-9 |
| Core Area Requirements | | |
| Living Marine Resources and Their Management | Complete one course from each of the living marine resources and their management categories | 5-7 |
| Analytic Methods | Complete one course from any of the analytic methods categories | 2-4 |

| | | |
|---|--|-----|
| Law and Policy | Complete one course from any of the law and policy categories | 2-3 |
| Economics, Development and Sustainability | Complete one course from any of the economics, development and sustainability categories | 3 |
| Area of Emphasis | Complete two additional courses in one of the preceding categories as an area of concentration | 4-8 |

¹ Up to 6 of these credits may be 400-level courses.
² Electives will be selected based on student interest, relatedness to degree and approved by the MMP program co-coordinators.

CORE AREAS AND CATEGORIES

LIVING MARINE RESOURCES AND THEIR MANAGEMENT

| Living Marine Resources | | Credits |
|--|---|---------|
| Code | Title | |
| Complete one course in Living Marine Resources. | | 3-4 |
| BIOL S405 (https://catalog.uas.alaska.edu/search/?search=BIOL+S405) | Invertebrate Zoology | |
| BIOL S427 (https://catalog.uas.alaska.edu/search/?search=BIOL+S427) | Introduction to Ichthyology | |
| FISH F427 | Ichthyology | |
| BIOL S481 (https://catalog.uas.alaska.edu/search/?search=BIOL+S481) | Marine Ecology | |
| FISH F650 | Fish Ecology | |
| FISH F633 | Pacific Salmon Life Histories | |
| MSL F410 | Marine Bird Ecology and Conservation | |
| MSL F610 | Marine Biology | |
| MSL F619 | Biology of Marine Mammals | |
| MSL F667 | Ecology and Physiology of Marine Macroalgae | |

| Management of Living Marine Resources | | Credits |
|---|---|---------|
| Code | Title | |
| Complete one course in Management of Living Marine Resources. | | 2-3 |
| FISH F641 | Ecosystem-based Fisheries Management | |
| FISH F645 | Bioeconomic Modeling and Fisheries Management | |
| FISH F687 | Fisheries Management | |
| RD F612 | Traditional Ecological Knowledge | |

ANALYTIC METHODS

Complete one course in Statistics, Modeling, or Qualitative Analysis.

Statistics

| Code | Title | Credits |
|---------------|--|---------|
| FISH/MSL F604 | Modern Applied Statistics for Fisheries | |
| FISH/MSL F627 | Statistical Computing with R | |
| PADM S604 | Applied Research Methods (https://catalog.uas.alaska.edu/search/?search=PADM+S604) | |
| STAT S400 | Statistical Computing with R (https://catalog.uas.alaska.edu/search/?search=STAT+S400) | |
| STAT F401 | Regression and Analysis of Variance | |
| STAT S401 | Regression and Analysis of Variance (https://catalog.uas.alaska.edu/search/?search=STAT+S401) | |
| STAT F461 | Applied Multivariate Statistics | |
| STAT F605 | Spatial Statistics | |
| STAT F611 | Time Series | |
| STAT F621 | Nonparametric Statistics | |
| STAT F631 | Categorical Data Analysis | |

Modeling

| Code | Title | Credits |
|-----------|---|---------|
| FISH F645 | Bioeconomic Modeling and Fisheries Management | |

Qualitative Analysis

| Code | Title | Credits |
|-------------------------|---|---------|
| ACNS F601 | Research Methods and Sources in the North | |
| ANTH F412/ FISH F613 | Human-environment Research Methods | |
| PADM S604 | Applied Research Methods (https://catalog.uas.alaska.edu/search/?search=PADM+S604) | |
| RD F650 | Community-based Research Methods | |

LAW AND POLICY

Complete one course in Regulation; Law; Distributed Governance, Self-governance and Co-management; or Policy Analysis.

Regulation

| Code | Title | Credits |
|-----------|--|---------|
| FISH F681 | The North Pacific Fishery Management Council | |
| FISH F683 | The Alaska Board of Fisheries | |

Law

| Code | Title | Credits |
|--------------|--|---------|
| ACNS/PS F654 | International Law and the Environment | |
| ANS/PS F425 | Federal Indian Law and Alaska Natives | |
| FISH F672 | Law and Fisheries | |
| NRM F407 | Environmental Law | |
| PADM S618 | Law for Public Managers (https://catalog.uas.alaska.edu/search/?search=PADM+S618) | |
| RD F675 | Federal Indian Law: Land, Water and Subsistence | |

Distributed Governance, Self-governance and Co-management

| Code | Title | Credits |
|-------------|---|---------|
| ANS/RD F435 | Participatory Policy-making in Tribal, State and Federal Government | |
| RD F651 | Management Strategies for Rural Development | |

Policy Analysis

| Code | Title | Credits |
|--------------|--|---------|
| ACNS/PS F669 | Arctic Politics and Governance | |
| FISH F670 | Quantitative Analysis for Marine Policy Decisions | |
| PADM S635 | Natural Resource Policy (https://catalog.uas.alaska.edu/search/?search=PADM+S635) | |

ECONOMICS, DEVELOPMENT AND SUSTAINABILITY

Complete one course in Development, Economics, Human Environments, or Business and Public Administration.

Development

| Code | Title | Credits |
|--------------------------------|--|---------|
| Complete one of the following: | | 3 |
| FISH F674 | Economic Development for Fish-dependent Communities | |
| RD F430 | Indigenous Economic Development and Entrepreneurship | |
| RD F625 | Community Development Strategies: Principles and Practices | |

Economics

| Code | Title | Credits |
|--------------------------------|-------------------------|---------|
| Complete one of the following: | | 3 |
| ECON F434 | Environmental Economics | |

ECON S435 Natural Resource/ Environmental
Economics
([https://
catalog.uas.alaska.edu/
search/?
search=ECON
+S435](https://catalog.uas.alaska.edu/search/?search=ECON+S435))

NRM/BIOL/ANTH Sustainability in the Changing North
F647

PADM S625 Economics and Public Policy
([https://
catalog.uas.alaska.edu/
search/?
search=PADM
+S625](https://catalog.uas.alaska.edu/search/?search=PADM+S625))

PADM S628 Public Financial Management
([https://
catalog.uas.alaska
search/?
search=PADM
+S628](https://catalog.uas.alaska.edu/search/?search=PADM+S628))

RD F630 Economic Development Policy and
Entrepreneurship in Rural Alaska:
Challenges and Opportunities

Human Environments

| Code | Title | Credits |
|---|---|---------|
| Complete one of the following: | | 3 |
| FISH F611 | Human Dimensions of Environmental Systems | |
| FISH/ANTH F675 | Political Ecology | |
| PS S458 (https:// catalog.uas.alaska search/? search=PS+S458) | Environmental Politics | |
| RD/CCS F612 | Traditional Ecological Knowledge | |

Business and Public Administration

| Code | Title | Credits |
|--|--|---------|
| Complete one of the following: | | 3 |
| PADM S601 (https:// catalog.uas.alaska search/? search=PADM +S601) | Introduction to Public Administration | |
| PADM S622 (https:// catalog.uas.alaska.edu/ search/? search=PADM +S622) | Human Resources and Organizational Development | |

Marine Studies

M.M.S. Degree

The M.M.S. degree offers a broad degree program, which can include topics such as marine ecology, organismal biology, ecosystem processes and oceanography. Students will select courses offered by the graduate program in marine sciences and limnology and a variety of electives, which can also be from the fisheries program or the statistics or biology and wildlife departments. While the M.M.S. degree is primarily based on a project instead of a research-oriented thesis, M.M.S. graduate students still are afforded excellent opportunities for laboratory and field experiences through the Institute of Marine Science. Laboratory facilities are available in Fairbanks, the Seward Marine Center, the Juneau Center and at the Kasitsna Bay Laboratory.

Students considering an M.M.S. degree should have a strong background in the various fields of oceanography, ecology, biology, molecular biology or biochemistry. Students are admitted on the basis of their ability and the capability of the program to meet their particular interests and needs. Faculty review requests for admission throughout the year. There is no financial support for students in this program.

Minimum Requirements for Marine Studies Degree: 30 credits

College of Fisheries and Ocean Sciences
College of Fisheries and Ocean Sciences Academic Programs ([https://
www.uaf.edu/cfos/academics/](https://www.uaf.edu/cfos/academics/))
907-474-7289

Programs Degrees

- M.M.S., Marine Studies (p. 491)

M.M.S., Marine Studies

Admission Requirements

Complete the following admission requirement:

- Submit GRE scores.

Program Requirements

Minimum Requirements for Marine Studies M.M.S.: 30 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Marine Studies Program Requirements | | |
| Complete a project or literature review. | | |
| Complete at least 12 credits from the following: ¹ | | 12-26 |
| MSL F419 | Concepts in Physical Oceanography | |
| MSL F610 | Marine Biology | |
| MSL F615 | Physiology of Marine Organisms | |
| MSL F620 | Physical Oceanography | |
| MSL F630 | Geological Oceanography | |
| MSL F650 | Biological Oceanography | |
| MSL F660 | Chemical Oceanography | |
| Complete 2 credits from the following seminars: | | 2 |
| MSL F601 | Professional Development | |
| MSL F602 | Proposal Writing | |
| MSL F605 | Controversies in Marine Science | |
| MSL F692 | Seminar | |
| Complete 2 credits from the following: ² | | 2 |
| MSL F421/F623 | Nearshore Ecology Field Course | |
| MSL F450/F651 | Marine Biology and Ecology Field Course | |
| MSL F456/F656 | Kelp Forest Ecology | |
| MSL F625 | Subarctic Oceanography Field Course | |
| Complete 6 credits of graduate project or literature review. ³ | | 6 |
| Complete 8 credits of approved electives. ⁴ | | 8 |

¹ Students must earn a grade of B- or better in the core courses of the degree program before being eligible to take the comprehensive exam.

² Students may also complete these credits with individual studies in place of the regularly scheduled classes listed.

³ The project or literature review will be determined by the major advisor.

⁴ Electives will be selected based on student interest, relatedness to degree and approval by their major advisor.

Mathematics

Graduate Certificate, M.S., Ph.D. Degrees M.S., PH.D. DEGREES

The number of new fields in which professional mathematicians find employment grows continually. This department prepares students for careers in industry, government and education.

The M.S. in mathematics prepares students for Ph.D. work, in addition to providing a terminal degree for those planning to enter industry or education. The aim of the Ph.D. program is to provide the student with the expertise to accomplish significant research in applied or pure mathematics, as well as to provide a broad and deep professional education.

In addition to the major programs, the department provides a number of service courses in support of other programs within the university. Current and detailed information on mathematics degrees and course offerings is available from the department.

The Department of Mathematics and Statistics also offers programs in statistics (p. 515) (see separate listings).

GRADUATE CERTIFICATE

The graduate certificate in applied and computational mathematics is equivalent to most of a year of coursework done by graduate students in this area. The certificate encourages a more in-depth study into mathematics beyond the undergraduate level. The focus is on mathematics that is useful in the sciences and engineering, especially on techniques that can be applied in computer programs. Furthermore, it provides students a credential recognizing their additional mathematical expertise.

The certificate is ideal for current graduate students in disciplines other than mathematics who seek greater exposure to mathematical ideas and techniques. It is most suitable for students in the sciences and engineering. It is not suitable for students already enrolled in the M.S. in mathematics or Ph.D. in mathematics programs.

Minimum Requirements for Mathematics Degrees: M.S.: 30-35 credits; Ph.D.: 18 thesis credits; Graduate Certificate: 12 credits

College of Natural Science and Mathematics
Department of Mathematics and Statistics (<https://www.uaf.edu/dms/>)
907-474-7332

Programs Degrees

- M.S., Mathematics (p. 493)
- Ph.D., Mathematics (p. 493)
- Accelerated B.S./M.S., Mathematics (p. 405)

Graduate Certificate

- Graduate Certificate, (p. 492) Applied and Computational Mathematics

Graduate Certificate, Applied and Computational Mathematics

Overview Graduate Certificate

The graduate certificate in applied and computational mathematics is equivalent to most of a year of coursework done by graduate students in this area. The certificate encourages a more in-depth study into mathematics beyond the undergraduate level. The focus is on mathematics that is useful in the sciences and engineering, especially on techniques that can be applied in computer programs. Furthermore, it provides students a credential recognizing their additional mathematical expertise.

The certificate is ideal for current graduate students in disciplines other than mathematics who seek greater exposure to mathematical ideas and techniques. It is most suitable for students in the sciences and engineering. It is not suitable for students already enrolled in the M.S. in mathematics or Ph.D. in mathematics programs.

Minimum Requirements for Applied and Computational Mathematics
Graduate Certificate: 12 credits

College of Natural Science and Mathematics
Department of Mathematics and Statistics (<https://www.uaf.edu/dms/>)
907-474-7332

Admission Requirements

Complete the following admission requirements:

- Hold a baccalaureate degree from an accredited institution
- Complete Calculus I (MATH F251X), Calculus II (MATH F252X), Calculus III (MATH F253X), Differential Equations (MATH F302) and Computer Science I (CS F201)¹ or their equivalent;
- Complete Linear Algebra (MATH F314)¹ or its equivalent.

¹ Students must earn a C or better in each course.

Program Requirements Minimum Requirements for Applied and Computational Mathematics Graduate Certificate: 12 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 409) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Applied and Computational Mathematics Program Requirements | | |
| Complete any two of the following: | | 6 |
| MATH F614 | Numerical Linear Algebra | |
| MATH F615 | Numerical Analysis of Differential Equations | |
| MATH F660 | Advanced Mathematical Modeling | |
| MATH F661 | Optimization | |

| | | |
|---|--------------|-------|
| MATH F663 | Graph Theory | |
| Select two or more from the following electives to total 12 credits for the certificate: | | 6 - 8 |
| Any course listed above not already taken | | |
| Any of MATH F617, MATH F632, MATH F658, MATH F665 | | |
| At most one of MATH F631, MATH F641, MATH F645, MATH F651 | | |
| At most one of MATH F401, MATH F404, MATH F405, MATH F408, MATH F410, MATH F412, MATH F426, MATH F430, MATH F432, MATH F460 | | |
| At most one 3- or 4-credit 600-level statistics course, excluding STAT F698 | | |
| Or other elective courses approved by a mathematics advisor. | | |

M.S., Mathematics

Admission Requirements

Complete the following admission requirements:

- Submit three letters of recommendation addressing the applicant's educational background, mathematical ability, and research and teaching potential.
- Submit undergraduate transcripts.
- Submit a resume and written statement of goals.

Note: For admission to the graduate school, students who are non-native speakers of English are required to submit either TOEFL or IELTS scores. While not required, submission of GRE general test scores is recommended.

Program Requirements

Minimum Requirements for Mathematics M.S.: 30-35 credits

| Code | Title | Credits |
|--|----------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Complete a written comprehensive exam | | |
| Mathematics Program Requirements | | |
| Complete the following: | | |
| MATH F631 | Algebra I | 4 |
| MATH F641 | Real Analysis | 4 |
| MATH F645 | Complex Analysis | 4 |
| MATH F651 | Topology | 4 |
| MATH F692 | Seminar ¹ | 1-6 |
| Complete a project or thesis. | | |

¹ One or more credit(s) of MATH F692 during the anticipated final semester of enrollment for the degree. A graduate advisory committee may choose to waive the requirement if its purpose has been met by other experiences.

Ph.D., Mathematics

Admission Requirements

Complete the following admission requirements:

- Submit three letters of recommendation addressing the applicant's educational background, mathematical ability, and research and teaching potential.
- Submit undergraduate and, if applicable, graduate transcripts.
- Submit a resume and written statement of goals.
- Either submit transcripts indicating the completion of a master's degree in mathematics or a related area or complete all the requirements for the M.S. degree in mathematics, including a project or thesis which initiates study of the Ph.D. research area.

Note: For admission to the graduate school, students who are nonnative speakers of English are required to submit either TOEFL or IELTS scores. The GRE mathematics subject test score is not required, but we strongly recommend submitting the score as part of the application.

Program Requirements

Minimum Requirements for Mathematics Ph.D.: 36 credits

| Code | Title | Credits |
|--|----------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| MATH F692 | Seminar ¹ | 1-6 |
| Examinations | | |
| Pass the Ph.D. qualifying exam. | | |

¹ One or more credit(s) of MATH 692 during the anticipated final semester of enrollment for the degree. A graduate advisory committee may choose to waive the requirement if its purpose has been met by other experiences.

Mechanical Engineering

M.S. Degree

The mission of the Mechanical Engineering Department at UAF is to offer the highest-quality contemporary education at undergraduate and graduate levels, and to perform research as appropriate to the technical needs of the state of Alaska, the nation and the world.

Mechanical engineers conceive, plan, design and direct the manufacturing, distribution and operation of a wide variety of devices, machines and systems for energy conversion, environmental control, materials processing, transportation, materials handling and other purposes. Mechanical engineers are engaged in creative design, applied research, development and management.

The mechanical engineering program prepares its graduates for careers at the professional level; maintains, as a base, ABET accreditation of the undergraduate program; provides continuing educational opportunities for graduate engineers; is a resource of technical knowledge for the state and nation; conducts research in all areas of mechanical engineering including cold regions mechanical engineering; and offers a graduate program in mechanical engineering at the M.S. level.

The educational objectives of the department are that graduates from the mechanical engineering program must be able to apply the knowledge of mathematics, science and engineering; be able to design and conduct experiments, as well as analyze and interpret data; be able to design a system, component or process to meet desired needs; be able to function on multi-interdisciplinary teams; be able to identify, formulate and solve engineering problems; understand professional and ethical responsibility; be able to communicate effectively; have the broad education necessary to understand the impact of engineering solutions in a global and societal context; recognize the need for, and be able to engage in, life-long learning; understand contemporary issues; and be able to use the techniques, skills and modern engineering tools necessary for engineering practice. The department ensures that each course in the curriculum plays a meaningful role in satisfying one or more of these objectives.

Minimum Requirements for Mechanical Engineering M.S. Degree: 30 credits

College of Engineering and Mines
Department of Mechanical Engineering (<https://www.uaf.edu/cem/>)
907-474-7136

Programs Degree

- M.S., Mechanical Engineering (p. 494)
- B.S./M.S., Mechanical Engineering (p. 407)

M.S., Mechanical Engineering

Admission Requirements

Complete the following admission requirement:

- Submit GRE scores.
- Complete a bachelor's degree in mechanical engineering or closely related program.

Program Requirements

Minimum Requirements for Mechanical Engineering M.S.: 30 credits

| Code | Title | Credits |
|---|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Mechanical Engineering Program Requirements | | |
| Complete the requirements for one of the following options: | | 30 |
| <i>Options</i> | | |
| Thesis option | | |
| Non-thesis option | | |

OPTIONS

Thesis Option

| Code | Title | Credits |
|--------------------------------|--------|---------|
| Complete the following: | | |
| ME F699 | Thesis | 6 |
| General Electives ¹ | | 9 |
| Program Electives ² | | 15 |

¹ Mechanical engineering or other engineering, science or mathematics courses approved by the student's advisory committee

² 600-level mechanical engineering courses

Non-Thesis Option

| Code | Title | Credits |
|--------------------------------|-----------------------------|---------|
| Complete the following: | | |
| ME F698 | Non-thesis Research/Project | 6 |
| General Electives ¹ | | 9 |
| Program Electives ² | | 15 |

¹ ME or other engineering, science, or mathematics courses approved by the student's advisory committee.

² 600-level mechanical engineering (ME) courses

See Engineering (p. 462) for Ph.D. degree program.

Mining Engineering

M.S. Degree

The mining engineering program emphasizes engineering as it applies to the exploration and development of mineral resources and upon the economics of the business of mining. The program offers specialization in exploration, mining or mineral beneficiation.

Students are prepared for job opportunities with mining and construction companies, consulting and research firms, equipment manufacturers, investment and commodity firms in the private sector, as well as with state and federal agencies.

Mining engineers may aspire to, and achieve, the highest positions in the industry: operating or engineering management, government agency director or entrepreneur.

Minimum Requirements for Mining Engineering M.S. Degree: 30-36

College of Engineering and Mines
Department of Mining and Geological Engineering (<https://www.uaf.edu/cem/>)
907-474-7388

Programs Degree

- M.S., Mining Engineering (p. 495)

M.S., Mining Engineering

Program Requirements

Minimum Requirements for Mining Engineering M.S. - Thesis Option: 30 credits

| Code | Title | Credits |
|--|--------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Mining Engineering Program Requirements | | |
| Complete the following: | | |
| MIN F688 | Graduate Seminar I | 1 |
| MIN F600-level courses | | 12 |
| Technical electives | | 11 |
| MIN F699 | Thesis | 6 |

Minimum Requirements for Mining Engineering M.S. - Non-thesis Option: 36 credits

| Code | Title | Credits |
|--|-----------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Mining Engineering Program Requirements | | |
| Complete the following: | | |
| MIN F688 | Graduate Seminar I | 1 |
| MIN courses | | 12 |
| Technical electives | | 17 |
| MIN F698 | Non-thesis Research/Project | 6 |

Music Performance

M.Mu. Degree

A student’s Master of Music Performance degree program is determined by the student in coordination with the student’s graduate advisory committee. Each graduate student’s program is designed to support the student’s individual professional interests and aspirations, consistent with program requirements. The Master of Music Performance degree program emphasizes academic achievement and superior musicianship through music performance. In addition to the curriculum, recitals and concerts provide students with a variety of musical experiences and performance opportunities.

Minimum Requirements for Degree: 36 credits

College of Liberal Arts
Department of Music (<https://www.uaf.edu/music/>)
907-474-7555

Programs Degrees

- M.Mu., Music Performance (p. 496)

M.Mu., Music Performance

Admission Requirements

Complete the following admission requirements:

- Performance audition, demonstrating knowledge and ability in solo literature of various historical periods and styles. Audition may be either a live performance or a performance recorded and submitted in an unedited video format (DVD or online).
- Diagnostic examinations in music theory and history. These diagnostic exams identify strengths and deficiencies in music theory, music history and music literature. Applicants will be accepted from any accredited institution; however, before admission to a degree program, all students (including UAF or UAA baccalaureate graduates) must take these preliminary examinations.

Program Requirements

Minimum Requirements for Music Performance M.Mu.: 36 credits

| Code | Title | Credits |
|--|--------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master’s Degree Requirements | | |
| Complete the master’s degree requirements. (p. 418) ¹ | | |
| Music Performance Program Requirements | | |
| Complete the following: | | 14 |
| MUS F601 | Introduction to Graduate Study | |
| MUS F625 | Topics in Music History | |
| MUS F632 | Topics in Music Theory | |
| MUS F698 | Non-thesis Research/Project | |
| Complete at least 22 credits in a primary area of specialization, including large ensembles, small ensembles and private lessons. ² | | 22 |
| Successfully complete the performance of a graduate music recital. | | |
| Successfully complete an oral defense of an approved research project paper. | | |

¹ After completing about one semester of the program, students will meet with their advisory committee to define precisely their degree course work. Each student, with the approval of the advisory committee, will develop an appropriate final research project, write a project paper and successfully defend that paper under the supervision of the advisory committee.

² No more than 12 credits of MUS F697 are allowed.

Note: Students with specialization in vocal performance must demonstrate proficiency in languages appropriate to their area of concentration. Proficiency will be determined by the student’s graduate committee in conjunction with the Department of Foreign Languages. Graduate students studying applied music and/or presenting recitals are governed by the Music Handbook concerning recital preparation and jury examinations.

Natural Resources and Environment M.S., M.N.R.E. Degrees

The two master's degrees offered by the Department of Natural Resources and Environment are designed for students desiring careers in resources management and students planning doctoral work, as well as those wishing to be better-informed citizens. The courses and curriculum for the two degrees were developed in cooperation with groups and agencies that work professionally with resource management in Alaska. These agencies, including the Alaska Department of Natural Resources, Alaska Department of Fish and Game, Agricultural Research Service, U.S. Forest Service, Bureau of Land Management, Natural Resources Conservation Service, and U.S. Fish and Wildlife Service contribute significantly to the programs by providing guest lecturers and internship and research opportunities for students.

Because of the diversity and broad scope of the field, each degree is customized according to the student's interests and advisory committee's recommendations. Student research projects and theses have typically been in the fields of forest management, land use planning, soil management, natural resource policy, range management, parks and recreation management, horticulture, agronomy, animal science, climate change and GIS.

A Bachelor of Science or Bachelor of Arts degree in a relevant discipline is required for acceptance into either program. Candidates should have general familiarity with the major resource fields. The student's committee may require the student to take courses to remedy any deficiencies; these credits will not count toward the credits required for the degree.

Applicants must submit three letters of recommendation, official GRE scores, undergraduate transcripts and a statement of the applicant's goals. The latter should include information about why you are applying for the degree, why you chose UAF and DNRE, and how such a degree would fit into your career goals. Applications cannot be considered until all these items have been received by the Office of Admissions.

The M.S. degree in natural resources and environment is designed for those intending to pursue a career conducting research in management problems and/or to proceed on to a doctoral program. Thesis research in natural resources and environment is directed toward resource problems and based on hypothesis testing.

The master's degree in natural resources and environment is designed to prepare students for a management career in natural resources planning and administration; communication and public information; and/or operational innovation, improvement and impact assessment. While not requiring scientific research, the work is expected to involve critical reflection, empirical inquiry and intellectual honesty. A written product and an oral presentation demonstrating sound scholarship will be required. Final acceptance of the project will be by the student's committee and the chair of DNRE.

Minimum Requirements for Natural Resources and Environment Degrees:
M.S.: 30 credits; M.N.R.E.: 35 credits

College of Natural Science and Mathematics
Department of Natural Resources and Environment (<https://www.uaf.edu/nre/>)
907-474-7188

Programs Degrees

- M.S., Natural Resources and Environment (p. 498)
- M.N.R.E., Natural Resources and Environment (p. 498)

M.N.R.E., Natural Resources and Environment

Program Requirements

Minimum Requirements for Master of Natural Resources and Environment M.N.R.E.: 35 credits

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 417) | | |
| Master of Natural Resources and Environment Program Requirements | | |
| Complete the following: | | |
| NRM F601 | Research Methods in Natural Resources Management (or an approved research methods course) ¹ | 2 |
| NRM F698 | Non-thesis Research/Project | 6 |
| | Statistics course at the F400 level or above ² | 3 |
| | Complete any combination of the following, or other graduate seminars approved by your advisory committee, to total 3 credits | 3 |
| NRM F667 | Resilience Seminar I | |
| NRM F668 | Interdisciplinary Research Methods-Resilience Seminar II | |
| NRM F692 | Graduate Seminar | |
| Additional approved courses as needed to total 35 credits ³ | | 21 |
| Complete and successfully defend the project. | | |

¹ Requirement may be met with a research methods course in a discipline related to natural resources management.

² Requirement may be met with a statistics course in mathematical sciences or in a discipline related to natural resources management.

³ These courses will be approved by the student's committee and the DNRE chair. Up to 9 of these credits may be F400-level courses.

M.S., Natural Resources and Environment

Program Requirements

Minimum Requirements for Natural Resources and Environment M.S.: 30 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Natural Resources and Environment Program Requirements | | |
| Complete the following: | | |
| NRM F601 | Research Methods in Natural Resources Management (or an approved research methods course) ¹ | 2 |
| NRM F699 | Thesis | 6-12 |
| | Complete any combination of the following, or other graduate seminars approved by your advisory committee, to total 3 credits | 3 |
| NRM F667 | Resilience Seminar I | |
| NRM F668 | Interdisciplinary Research Methods-Resilience Seminar II | |
| NRM F692 | Graduate Seminar | |
| | Statistics course at the F400 level or above ² | 3 |
| Additional approved courses as needed to total 30 credits ³ | | |
| Complete and successfully defend the thesis. | | |

¹ Requirement may be met with a research methods course in a discipline related to natural resources management.

² Requirement may be met with a statistics course in mathematical sciences or in a discipline related to natural resources management.

³ These courses will be approved by the student's committee. Up to 6 of these credits may be F400-level courses.

Natural Resources and Sustainability Ph.D. Degree

The joint Ph.D. program in natural resources and sustainability prepares future leaders as academic researchers, agency professionals and analysts of nongovernmental organizations and communities for careers at the frontiers of the science of sustainability and natural resources management.

Exploring and understanding natural resource management systems require a well-defined skill set and a clear understanding of how specific problems are linked to broader cultural, ecological and geopolitical contexts. Thus, the study of natural resources and sustainability encompasses a spectrum of topics. The Ph.D. builds on the existing strengths of the Department of Natural Resources and Environment and College of Business and Security Management faculty members to educate students in specific areas while training them to be conversant in the broader range of relevant topic areas.

The program objectives and its curriculum center around three thematic areas of study:

1. resource economics,
2. resource policy and sustainability science, and
3. forest and agricultural sciences.

Each student draws on a common set of core courses, and, with his/her graduate committee, develops a program of course work and research that produces a unique intellectual contribution to the applied field of natural resources and sustainability. Students elect to focus on one of the three thematic areas or they choose to integrate foci to develop their areas of knowledge and dissertation research.

Additional application requirement: Students are required to have a faculty sponsor upon entering the program. A letter of support from a DNRE or CBSM faculty member in addition to three letters of recommendation must be submitted with the graduate application.

Minimum Requirements for Natural Resources and Sustainability
Doctorate Degree: 26 credits

College of Natural Science and Mathematics
Department of Natural Resources and Environment (<https://www.uaf.edu/nre/>)
College of Business and Security Management
907-474-7188

Programs Degree

- Ph.D., Natural Resources and Sustainability (p. 499)

Ph.D., Natural Resources and Sustainability

Program Requirements

Minimum Requirements for Natural Resources and Sustainability Ph.D.: 26 credits (18 thesis credits)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Natural Resources and Sustainability Program Requirements | | |
| Complete course work in thematic area(s) as determined by the advisory committee. | | |
| Required and Elective Elements | | |
| Complete the following: | | |
| NRM F647 | Sustainability in the Changing North | 3 |
| NRM F649 | Integrated Assessment and Adaptive Management | 3 |
| NRM F692 | Graduate Seminar (Complete two semesters) | 2 |
| Outreach activity of one annual public presentation | | |
| Written and oral comprehensive exams ¹ | | |
| Dissertation defense seminar | | |
| Dissertation defense examination | | |
| Doctoral dissertation | | |

¹ Advancement to candidacy occurs when the student demonstrates mastery in understanding sustainability and in-depth knowledge of the student's dissertation research topic area. Requirements for advancement to candidacy are determined by the academic committee of the student, and shall be consistent with the candidacy requirements for Ph.D. studies at UAF. The basis of the evaluation will be written and oral comprehensive exams.

Oceanography

M.S., Ph.D. Degrees

The M.S. and Ph.D. degrees are offered in several concentration areas of oceanography: physical, chemical, biological, geological and fisheries oceanography.

Oceanography is both interdisciplinary and multidisciplinary. The M.S. and Ph.D. degrees emphasize processes that influence the ocean as a system, including its circulation, composition, biological productivity and geology. Students considering graduate study in oceanography should have a strong background in physics, chemistry, biology, geology or mathematics and a working familiarity with the other subjects.

Opportunities for laboratory and fieldwork are available through the Institute of Marine Science, the research unit of the College of Fisheries and Ocean Sciences. Research facilities are located in Fairbanks, the Seward Marine Center, the Kasitsna Bay Laboratory and Juneau. Facilities include the Ocean Acidification Research Center, the Alaska Stable Isotope Facility, seaside laboratories with running seawater systems, small boats, autonomous undersea vehicles and a variety of instrumentation for research in water circulation, marine particle dynamics, nutrient and trace metal chemistry, genomics, zooplankton ecology and other fields. The College operates the R/V *Sikuliaq*, a 261-foot ice capable oceanographic research ship owned by the National Science Foundation. Oceanography faculty and students are regular users of *Sikuliaq* and other ships for high-latitude research, not only in the Alaska region and the Arctic but also in the Antarctic/Southern Ocean, Greenland, the North Pacific and elsewhere.

Minimum Requirements for Oceanography Degrees: M.S.: 30 credits; Ph.D.: 18 thesis credits

College of Fisheries and Ocean Sciences
Oceanography Department (<https://www.uaf.edu/cfos/academics/>)
907-474-7289

Programs Degrees

- M.S., Oceanography (p. 500)
- Ph.D., Oceanography (p. 501)

M.S., Oceanography

Admission Requirements

Complete the following admission requirement:

- Submit GRE scores.

Note: Students are admitted to the graduate program in marine sciences and limnology on the basis of their ability and the capability of the program to meet their particular interests and needs. Applications are considered throughout the year but students should apply by March 1 to have the best chance for admission and financial support for the subsequent fall semester. Assistantship stipends are awarded competitively and limited fellowship support is available. Most students are supported on research projects that relate directly to their degree research.

Program Requirements

Students must earn a B- grade or better in the core courses of the degree program before being eligible to take the comprehensive exam.

Minimum Requirements for Oceanography M.S.: 30 credits

CONCENTRATIONS: BIOLOGICAL (P. 500), CHEMICAL (P. 500), FISHERIES (P. 501), GEOLOGICAL (P. 500), PHYSICAL (P. 500)

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Oceanography Program Requirements | | |
| Complete one from the following concentrations: | | |
| Concentrations | | |
| Biological, Chemical, Geological, Physical | | |
| Fisheries | | |

Note: Oceanography majors must demonstrate field experience aboard an oceanographic vessel.

Concentrations

BIOLOGICAL, CHEMICAL, GEOLOGICAL, PHYSICAL

| Code | Title | Credits |
|-------------------------|-------------------------|---------|
| Complete the following: | | |
| MSL F620 | Physical Oceanography | 4 |
| MSL F630 | Geological Oceanography | 3 |
| MSL F650 | Biological Oceanography | 3 |
| MSL F660 | Chemical Oceanography | 3 |
| MSL F692 | Seminar | 3 |
| MSL F699 | Thesis ¹ | open |
| Electives | | open |

¹ Appropriate to area of concentration

FISHERIES

| Code | Title | Credits |
|-------------------------|-------------------------|---------|
| Complete the following: | | |
| MSL F620 | Physical Oceanography | 4 |
| MSL F630 | Geological Oceanography | 3 |
| MSL F643 | Fisheries Oceanography | 4 |
| MSL F650 | Biological Oceanography | 3 |
| MSL F660 | Chemical Oceanography | 3 |
| MSL F692 | Seminar | 3 |
| MSL F699 | Thesis | open |
| Electives | | open |

Ph.D., Oceanography**Admission Requirements**

Complete the following admission requirement:

- Submit GRE scores.

Note: Students are admitted to the graduate program in oceanography on the basis of their ability and the capability of the program to meet their particular interests and needs. Applications are considered throughout the year but students should apply by March 1 to have the best chance for admission and financial support for the subsequent fall semester. Assistantship stipends are awarded competitively and limited fellowship support is available. Most students are supported on research projects that relate directly to their degree research.

Program Requirements**Minimum Requirements for Oceanography
Ph.D. Degree: 18 credits**

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) | | |
| Complete course work equivalent to M.S. degree. ¹ | | |

¹ There are no fixed course requirements, nor is an M.S. degree required to earn the Ph.D. degree. However, a candidate for the Ph.D. degree in oceanography (biological, chemical, fisheries, geological and physical oceanography) will be expected to have completed course work at least equivalent to that required for the corresponding M.S. degree.

Note: Oceanography majors must demonstrate field experience aboard an oceanographic vessel.

One Health

O.H.M. Degree

One Health encompasses the relationship between human health, animal health and the health of the environment, holding that these entities are inextricably linked to the extent that none can be optimal unless they are all optimal. One Health is interdisciplinary and inclusive; it invites the full participation of community members working together with scientists, health practitioners, tribal leaders, and government agency personnel to identify problems and create realistic, sustainable solutions to those problems.

The One Health Master’s degree program educates students to use a constructionist approach to address issues in the circumpolar North that are at the intersection of human, animal and environmental health. By concentrating in either community advocacy or biomedical sciences, graduates of the program will be able to engage key stakeholders to develop and implement realistic management plans that can then be implemented in communities across the circumpolar North.

Minimum Requirements for One Health Master’s Degree: 30 credits

Learn more about the master’s degree in one health (<https://uaf.edu/academics/programs/masters/one-health.php>), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Veterinary Medicine
Center for One Health Research (<https://www.uaf.edu/onehealth/>)
907-474-6610

Programs Degrees

- O.H.M., One Health (p. 502)

O.H.M., One Health

Admission Requirements

One Health is an inherently interdisciplinary field, and there is no preferred background to succeed in the program. UAF welcomes applications from individuals who have backgrounds in natural or social science, health care, education, and a broad array of work and life experiences. Because the One Health Master’s focused on challenges in the circumpolar North, the degree will be of particular interest to individuals throughout that area; however, the concepts, tools and techniques that will be learned and practiced within the program can be applied to One Health challenges in any location.

Applications will close on June 1 each year and newly admitted students will enter the program in the fall semester. The OHM review committee will make final decisions on admissions. The OHM review committee will consist of representatives from both the social and natural sciences.

In addition to meeting the admission requirements for the master’s degree at UAF, students should also meet the following criteria when applying for admission to the One Health Master’s.

1. Applicants must have earned a baccalaureate degree from a regionally accredited University in the United States or a foreign equivalent.
2. Applicants must have a cumulative undergraduate GPA of 3.25 or higher (on a 4.0 scale).
3. Applicants must submit a letter of interest explaining their understanding of One Health and how they envision incorporating the One Health Master’s education in their future careers.
4. Applicants must submit names and contact information for three individuals who can address their preparedness for the One Health Master’s.
5. Applicants must submit a current resume or curriculum vitae.
6. Additional requirements for the community advocate concentration: Undergraduate transcripts must include a minimum of 8 credits of natural science with labs, at least one of which must be general biology (BIOL F116X or equivalent), and one semester of basic statistics (STAT F200X or equivalent).
7. Additional requirements for the biomedical sciences concentration: Undergraduate transcripts must include a minimum of 8 credits of biological sciences with labs (BIOL F115X and BIOL F116X or equivalent), 8 credits of general chemistry with labs (CHEM F105X and CHEM F106X or equivalent), and a semester-long course in basic statistics (STAT F200X or equivalent).
8. If you have any concerns about your preparedness or qualification for admission to this degree, please contact the degree program prior to application.

Program Requirements

Minimum Requirements for One Health O.H.M.: 30 credits

CONCENTRATIONS: BIOMEDICAL (P. 503), COMMUNITY ADVOCACY (P. 503)

| Code | Title | Credits |
|--|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Complete the Master’s Degree Requirements | | |

Complete the master's degree requirements. (p. 418)

One Health Program Requirements

Complete the following:

| | | |
|-----------|--|---|
| DVM F615 | One Health Concepts | 2 |
| DVM F620 | One Health Challenges in the Circumpolar North | 3 |
| DVM F621 | One Health Colloquium | 4 |
| ACNS F600 | Perspectives on the North | 3 |
| DVM F714 | Preventative Veterinary Medicine | 4 |

Complete one of the following:

| | |
|-----------|---|
| COJO F441 | Persuasion |
| COJO F451 | Cross-cultural Conflict Analysis and Intervention |
| COJO F680 | Communication and Diversity in the Professional World |

Complete one of the following concentrations: 11-12

| |
|----------------------------------|
| Biomedical Concentration |
| Community Advocacy Concentration |

Concentrations

BIOMEDICAL

| Code | Title | Credits |
|---|---|---------|
| Complete 11-12 credits from the following: ¹ | | 11-12 |
| BIOL F455 | Environmental Toxicology | |
| BIOL F617 | Neurobiology | |
| BIOL F635 | Introduction to Biology of Cancer | |
| DVM F606 | Veterinary Immunology | |
| DVM F637/ BIOL F632 | Veterinary Bacteriology and Mycology | |
| DVM/BIOL F640 | Veterinary Pathology/Biology of Disease I | |
| DVM F639 | Veterinary Virology | |
| ECON F434 | Environmental Economics | |

¹ Other courses may be substituted with approval of OHM Faculty.

COMMUNITY ADVOCACY

| Code | Title | Credits |
|---|---|---------|
| Complete 11-12 credits from the following: ¹ | | 11-12 |
| ACNS F610 | Northern Indigenous Peoples and Contemporary Issues | |
| ACNS F652 | International Relations of the North | |
| ACNS F655 | Political Economy of the Global Environment | |
| ACNS/HIST F683 | 20th-century Circumpolar History | |
| ECON F434 | Environmental Economics | |
| RD F465 | Community Healing and Wellness | |
| RD F601 | Political Economy of the Circumpolar North | |

¹ Other courses may be substituted with approval of OHM Faculty.

Petroleum Engineering

M.S. Degree

Petroleum engineering offers a unique look at the challenging problems confronting the petroleum industry. This program requires an understanding of many disciplines including mathematics, physics, chemistry, geology and engineering science. Courses in petroleum engineering deal with drilling, formation evaluation, production, reservoir engineering, computer simulation and enhanced oil recovery.

The curriculum prepares graduates to meet the demands of modern technology while emphasizing, whenever possible, the special problems encountered in Alaska. Located in one of the largest oil-producing states in the nation, the UAF petroleum engineering department offers modern and challenging degree programs.

The M.S. program is intended to provide students with an advanced treatment of petroleum engineering concepts. Students may choose either a thesis or non-thesis option. Research and teaching assistantships are available.

A doctoral degree program is offered with a concentration in petroleum engineering for qualified students (see Engineering (p. 462)). Contact the graduate program coordinator or the petroleum engineering department for more information.

Minimum Requirements for Petroleum Engineering M.S. Degree: 30-36 credits

College of Engineering and Mines

Department of Petroleum Engineering (<https://www.uaf.edu/cem/>)
907-474-7734

Programs

Degree

- M.S., Petroleum Engineering (p. 504)

M.S., Petroleum Engineering

Admission Requirements

Complete the following admission requirement:

- Submit GRE scores.
- Complete a B.S. degree in engineering or the natural sciences.

Program Requirements

Minimum Requirements for Petroleum Engineering M.S.: 30-36 credits

| Code | Title | Credits |
|---|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Petroleum Engineering Program Requirements | | |
| Complete four of the following: | | 12 |
| PETE F607 | Advanced Production Engineering | |
| PETE F608 | Flow Assurance in the Petroleum Industry | |
| PETE F610 | Advanced Reservoir Engineering | |
| PETE F621 | Applied Reservoir Characterization | |
| PETE F630 | Waterflooding | |
| PETE F656 | Advanced Petroleum Economic Analysis | |
| PETE F661 | Applied Well Testing | |
| PETE F662 | Enhanced Oil Recovery | |
| PETE F663 | Applied Reservoir Simulation | |
| PETE F665 | Advanced Phase Behavior | |
| PETE F666 | Drilling Optimization | |
| PETE F670 | Fluid Flow Through Porous Media | |
| PETE F680 | Horizontal Well Technology | |
| PETE F683 | Natural Gas Processing and Engineering | |
| PETE F685 | Non-Newtonian Fluid Mechanics | |
| PETE F689 | Multiphase Fluid Flow in Pipes | |
| Options | | |
| Complete the requirements for one of the following options: | | 18-24 |
| Thesis Option | | |
| Non-thesis Option | | |

Options

THESIS OPTION

Minimum Requirements for Petroleum Engineering M.S. Degree Thesis Option: 30 credits

| Code | Title | Credits |
|-------------------------------|--------|---------|
| Complete the following: | | |
| PETE F699 | Thesis | 6 |
| Elective courses ¹ | | 12 |

¹ Electives are chosen with approval of graduate advisory committee.

NON-THESIS OPTION

Minimum Requirements for Petroleum Engineering M.S. Degree Non-thesis Option: 36 credits

| Code | Title | Credits |
|-------------------------|-----------------------------|---------|
| Complete the following: | | |
| PETE F698 | Non-thesis Research/Project | 6 |
| Electives ² | | 18 |

² Electives are chosen with approval of graduate advisory committee.

Physics

M.S., Ph.D. Degrees

Advanced study at the graduate level is offered in various areas of physics and applied physics, including many of the research specialties found at the UAF's Geophysical Institute. Faculty and student research programs currently emphasize space physics, infrasonics, complex dynamics of nonlinear systems, ice physics and condensed matter physics.

The M.S. degree with computational physics concentration provides expertise in advanced computing environments, in the relevant mathematical foundations and in the specific physics discipline. It is directed toward students with undergraduate academic backgrounds in physics or other closely associated fields, such as engineering, that have the appropriate physics coursework. This degree is relevant for students seeking careers in any areas that require expertise in computational modeling and simulation of physical systems.

The M.S. degree with space physics concentration focuses on the physics of upper atmospheres, ionospheres, magnetospheres and the interplanetary medium. It includes core physics courses and specialty courses in space physics, aeronomy, magnetospheric and auroral physics, and advanced plasma physics. The specialty courses support graduate research with faculty members at UAF's Geophysical Institute and include areas such as numerical simulations and time-series analysis. Additional courses such as radiative transfer and physics of fluids provide added breadth.

Minimum Requirements for Physics Degrees: M.S.: 30-33 credits; Ph.D.: 18 thesis credits

College of Natural Science and Mathematics
Department of Physics (<https://www.uaf.edu/physics/>)
907-474-7339

Programs

Master's Degrees

- M.S., Physics (p. 505)
- M.S., Physics with Computational Physics Concentration (p. 506)
- M.S., Physics with Space Physics Concentration (p. 506)

Ph.D. Degree

- Ph.D., Physics (p. 507)

M.S., Physics

Program Requirements

Minimum Requirements for Physics M.S.: 30-33 credits

| Code | Title | Credits |
|--|-------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Physics Program Requirements | | |
| Complete four of the following: | | 12 |
| PHYS F611 | Mathematical Physics I | |
| PHYS F612 | Mathematical Physics II | |
| PHYS F621 | Classical Mechanics | |
| PHYS F622 | Statistical Mechanics | |
| PHYS F631 | Electromagnetic Theory | |
| PHYS F632 | Electromagnetic Theory | |
| PHYS F651 | Quantum Mechanics | |
| PHYS F652 | Quantum Mechanics | |
| Thesis or Non-thesis Requirements | | |
| Complete the thesis or non-thesis option | | 18-24 |

Options

THESIS OPTION

Minimum Requirements for Physics M.S. Degree with Thesis

Option: 30 credits¹

| Code | Title | Credits |
|---|--------|---------|
| Thesis Requirements | | |
| Complete the following: | | |
| PHYS F699 | Thesis | 6-12 |
| Complete 12 credits from the following: | | 12 |
| Approved PHYS F600-level courses | | |
| Approved ATM F600-level courses | | |

¹ At least 24 credits must be regular coursework.

NON-THESIS OPTION

Minimum Requirements for Physics M.S. Degree with Non-thesis

Option: 33 credits²

| Code | Title | Credits |
|---|-----------------------------|---------|
| Non-thesis Requirements | | |
| Complete the following: | | |
| PHYS F698 | Non-thesis Research/Project | 3-6 |
| Complete 18 credits from approved courses | | 18 |

² At least 30 credits must be regular course work.

M.S., Physics with Computational Physics Concentration

Program Requirements

Minimum Requirements for Physics with Computational Concentration M.S.: 30-33 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Physics with Computational Concentration Program Requirements | | |
| Complete the following: | | |
| PHYS F611 | Mathematical Physics I | 3 |
| PHYS F612 | Mathematical Physics II | 3 |
| PHYS F629 | Methods of Numerical Simulation in Fluids and Plasma | 3 |
| Complete at least 3 credits from the following: | | 3 |
| Approved MATH F600-level courses (excluding PHYS F611 and PHYS F612) | | |
| Approved CS F600-level courses | | |
| Complete 6 credits of approved PHYS F600-level courses | | 6 |
| Thesis or Non-thesis Option | | |
| Complete the thesis or non-thesis option | | 12-18 |

THESIS OPTION - MINIMUM REQUIREMENTS: 30 CREDITS TOTAL

| Code | Title | Credits |
|--|--------|---------|
| Complete the following: | | |
| PHYS F699 | Thesis | 6-12 |
| Complete 6 credits from approved PHYS F600-level courses | | 6 |

NON-THESIS OPTION - MINIMUM REQUIREMENTS: 33 CREDITS TOTAL ¹

| Code | Title | Credits |
|--|-----------------------------|---------|
| Complete the following: | | |
| PHYS F698 | Non-thesis Research/Project | 3-6 |
| Complete 9 credits from approved PHYS F600-level courses | | 9 |

¹ At least 30 credits must be regular course work.

M.S., Physics with Space Physics Concentration

Program Requirements

Minimum Requirements for Physics with Space Physics Concentration M.S. Degree: 30-33 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Physics with Space Physics Concentration Program Requirements | | |
| Complete four from the following: | | 12 |
| PHYS F626 | Fundamentals of Plasma Physics | |
| PHYS F627 | Advanced Plasma Physics | |
| PHYS F629 | Methods of Numerical Simulation in Fluids and Plasma | |
| PHYS F672 | Magnetospheric Physics | |
| PHYS F673 | Space Physics | |
| Thesis or Non-thesis Requirements | | |
| Complete the thesis or non-thesis option | | 18-24 |

THESIS OPTION

Minimum Requirements for Physics with Space Physics Concentration Degree Thesis option: 30 credits

| Code | Title | Credits |
|---|--------|---------|
| Thesis Requirements | | |
| Complete the following: | | |
| PHYS F699 | Thesis | 6-12 |
| Complete 12 credits from the approved PHYS F600-level courses | | 12 |

NON-THESIS OPTION

Minimum Requirements for Physics with Space Physics Concentration Degree with Non-thesis option: 33 credits ¹

| Code | Title | Credits |
|---|-----------------------------|---------|
| Non-thesis Requirements | | |
| Complete the following: | | |
| PHYS F698 | Non-thesis Research/Project | 3-6 |
| Complete 18 hours from approved PHYS F600-level courses | | 18 |

¹ At least 30 credits must be regular course work.

Ph.D., Physics

Program Requirements

Minimum Requirements for Physics Ph.D.: 18 credits

| Code | Title | Credits |
|---|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) ¹ | | |
| Examinations | | |
| Complete and pass a written and oral comprehensive examination. | | |

¹ Complete in accordance with the Physics Department's policies and procedures manual for graduate students.

Physics, Space

Ph.D. Degree

Space physics focuses on the physics of upper atmospheres, ionospheres, magnetospheres and the interplanetary medium. It includes core physics courses and specialty courses in space physics, aeronomy, magnetospheric and auroral physics, and advanced plasma physics. The specialty courses support graduate research with faculty members at UAF's Geophysical Institute, and include areas such as numerical simulations and time-series analysis. Additional courses such as radiative transfer and physics of fluids provide added breadth.

See Physics. (p. 505)

Minimum Requirements for Space Physics Doctorate Degree: 18 thesis credits

College of Natural Science and Mathematics
Department of Physics (<https://www.uaf.edu/physics/>)
907-474-7339

Programs Degree

- Ph.D., Physics, Space (p. 508)

Ph.D., Physics, Space

Program Requirements

Minimum Requirements for Space Physics

Ph.D.: 18 thesis credits

| Code | Title | Credits |
|---|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 414) | | |
| Ph.D. Degree Requirements | | |
| Complete the Ph.D. degree requirements. (p. 411) ¹ | | |
| Examinations | | |
| Complete and pass a written and oral comprehensive examination. | | |

¹ Complete in accordance with the Physics Department’s policies and procedures manual for graduate students.

Resilience and Adaptation

Graduate Certificate

The graduate certificate in resilience and adaptation studies is ideal for current graduate students in many disciplines. The graduate certificate encourages a more in-depth study of resilience, adaptation and sustainability, and provides students a credential that recognizes their knowledge of resilience theory and its application to sustainable systems. The certificate prepares students for a career in academia, industry, government and nongovernmental organizations by exposing them to the interdisciplinarity of complex systems. It is a defined series of courses that expose the students to the concepts of resilience and adaptation. Courses will advance knowledge and promote social-ecological research in sustainability and resilience. Students working on degrees in the STEM sciences and social sciences will broaden their disciplinary perspective through exposure to economics, ecology, sociology and anthropology to gain practical knowledge, training and integrative skills development. This certificate embodies a holistic perspective that recognizes the importance of both the social and biological dimensions of environmental sustainability and resilience. This certificate is offered by the Department of Natural Resources and Environment and will meet the needs of students and professionals.

Minimum Requirements for Resilience and Adaptation Graduate Certificate: 12 credits

College of Natural Science and Mathematics
Department of Natural Resources and Environment (<https://www.uaf.edu/nre/>)
907-474-7188

Programs

Degree

- Graduate Certificate, Resilience and Adaptation (p. 509)

Graduate Certificate, Resilience and Adaptation

Admission Requirements

Complete the following admission requirements:

- Hold a baccalaureate degree with a minimum 3.0 GPA from an accredited institution.

Program Requirements

Students must earn a B or Pass grade (or better) in each course.

Minimum Requirements for Resilience and Adaptation Studies Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Resilience and Adaptation Program Requirements | | |
| Complete the following: | | |
| ANTH F616 | Anthropologic Background for Resilience and Adaptation | 1 |
| BIOL F616 | Ecological Background for Resilience and Adaptation | 1 |
| ECON F616 | Economics Background for Resilience and Adaptation | 1 |
| NRM F667 | Resilience Seminar I | 1 |
| NRM F668 | Interdisciplinary Research Methods- Resilience Seminar II | 1 |
| Electives | | 7 |

Rural Development

Graduate Certificate, M.A. Degree

The Department of Alaska Native Studies and Rural Development M.A. program is designed to educate leaders who understand the dynamic relationship of rural Alaska with the global economy and who have professional skills in areas of leadership, business development, administration and conflict management. Graduates typically take positions with tribal and municipal governments, fisheries, tourism, Native corporations, regional health corporations or non-profits, state/federal agencies, or other private businesses.

Graduate degree students gain a broader theoretical understanding of development processes in Alaska and the circumpolar North. Graduate students complete a thesis or applied community development project, and have opportunities for international study and research.

Students can earn the M.A. degree either on the Fairbanks campus or through distance delivery. Special application requirements and deadlines apply for distance M.A. degree programs. For more information contact the Department of Alaska Native Studies and Rural Development (<https://www.uaf.edu/dansrd/>) toll-free 1-866-478-2721.

Minimum Requirements for Rural Development M.A. Degree: 30 credits

College of Rural and Community Development
Department of Alaska Native Studies and Rural Development (<https://www.uaf.edu/dansrd/>)
907-474-6528 | Toll-free 1-866-478-2721

Programs Degree

- M.A., Rural Development (p. 511)

Graduate Certificate

- Graduate Certificate, Rural Development (p. 510)

Graduate Certificate, Rural Development

Graduate Certificate

The graduate certificate in rural development is intended for community development practitioners, agency and industry professionals, and current graduate students working with tribal and municipal governments, Native corporations, regional health corporations or nonprofits, state and federal agencies, or private businesses conducting work in rural areas who wish to obtain a foundation in the theory and practice of development processes in Alaska and the circumpolar North. The certificate will prepare students to conduct work related to human and economic development with rural communities with a particular focus on sustainable development strategies, community-based development, and Indigenous perspectives on development.

College of Rural and Community Development
Department of Alaska Native Studies and Rural Development (<https://www.uaf.edu/dansrd/>)
907-474-6528
Toll-free 1-866-478-2721

Admission Requirements

Complete the following admission requirements:

- Hold a baccalaureate degree from an accredited institution.

Program Requirements

Minimum Requirements for Rural Development Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Rural Development Program Requirements | | |
| Complete the following: | | |
| RD F625 | Community Development Strategies: Principles and Practices | 3 |
| RD F651 | Management Strategies for Rural Development | 3 |
| Complete two of the following: ^{1,2} | | 6 |
| RD F600 | Indigenous Leadership Symposium | |
| RD F601 | Political Economy of the Circumpolar North | |
| RD F608 | Indigenous Knowledge Systems | |
| RD F612 | Traditional Ecological Knowledge | |
| RD F630 | Economic Development Policy and Entrepreneurship in Rural Alaska: Challenges and Opportunities | |
| RD F650 | Community-based Research Methods | |
| RD F652 | Indigenous Organization Management | |
| RD F655 | Circumpolar Health Issues | |

| | |
|---------|--|
| RD F667 | Tribal Responses to Violence: Safety, Justice and Advocacy |
| RD F670 | The Alaska Native Claims Settlement Act: Pre-1971 to Present |
| RD F671 | Corporate Social Responsibility and Accountability in Rural and Indigenous Contexts |
| RD F675 | Federal Indian Law: Land, Water and Subsistence |
| RD F676 | Federal Indian Law in Alaska: Tribal Self-governance - Business, Public Safety Protection of Family, |

¹ At most one 3-credit rural development or Alaska Native studies course at the 400 level.

² or other elective course approved by a rural development advisor.

M.A., Rural Development

Program Requirements

Minimum Requirements for Rural Development M.A.: 30 credits

| Code | Title | Credits |
|--|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 416) | | |
| Rural Development Program Requirements | | |
| Complete the following: | | |
| RD F600 | Indigenous Leadership Symposium | 3 |
| RD F601 | Political Economy of the Circumpolar North | 3 |
| RD F625 | Community Development Strategies: Principles and Practices | 3 |
| RD F650 | Community-based Research Methods | 3 |
| RD F651 | Management Strategies for Rural Development | 3 |
| RD F691 | Seminar in Rural, Community and Indigenous Development Issues | 3 |
| Complete one of the following paths: | | 12 |
| Non-research Path | | |
| Research Path | | |

PATHS

Non-research Path

| Code | Title | Credits |
|--|-------|---------|
| Complete the following: | | |
| 12 units RD Electives; or other courses approved by the department ^{1,3} | | 12 |
| Receive a passing grade on a written comprehensive exam in conjunction with completion of RD F691. | | |

Research Path

| Code | Title | Credits |
|---|---------------------------------------|---------|
| Complete the following: | | |
| RD F698 or RD F699 | Non-thesis Research/Project Thesis | 6 |
| 6 units RD electives; or other courses approved by the advisory committee. ^{2,3} | | 6 |
| Receive a passing grade on a written comprehensive exam in conjunction with completion of RD F691 | | |
| Complete and submit written thesis or project and pass an oral defense of thesis or project. | | |

¹ Up to 6 credits may be at the F400 level with approval from the graduate advisor.

² Up to 6 credits may be at the F400 level with approval from the graduate advisory committee.

³ Any 600-level RD course may be used as an elective.

Science Teaching and Outreach

Graduate Certificate

The certificate in science teaching and outreach is a voluntary program that prepares science graduate students for science careers that include teaching and/or communicating science to the public. It does NOT meet the requirements for earning a state teaching certificate and will not allow graduates to apply for certified positions in the K-12 school system. The science teaching and outreach certificate will enhance readiness for college-level teaching by providing hands-on training and familiarity with pedagogical theory. The certificate is expected to increase competitive ability in the higher-education job market.

Minimum Requirements for Science Teaching and Outreach Graduate Certificate: 12 credits

College of Natural Science and Mathematics
Department of Biology and Wildlife (<https://www.bw.uaf.edu>)
907-474-7671

Programs

Graduate Certificate

- Graduate Certificate, Science Teaching and Outreach (p. 512)

Graduate Certificate, Science Teaching and Outreach

Program Requirements

Minimum Requirements for Science and Teaching Outreach Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Science and Teaching Outreach Program Requirements | | |
| Have a bachelor's degree from an accredited institution. | | |
| Admission to a graduate science or engineering degree program at UAF (CEM, CFOS, CNSM), or prior completion of a graduate degree in the sciences or engineering. | | |
| Complete the following: | | |
| STO F601 | Communicating Science | 2 |
| STO F602 | Mentoring in the Sciences | 2 |
| STO F603 | Instructional Design | 1 |
| STO F604 | Science Teaching and Outreach Internship | 4 |
| STO F666 | Scientific Teaching | 2 |
| Complete one of the following: | | |
| MATH F600 | Teaching Seminar | 1 |
| PHYS F605 | Physics Teaching Seminar/Practicum | |
| STO F692 | Current Topics in Scientific Teaching | |

Security and Disaster Management

Overview

M.S.D.M. Degree

The online master of security and disaster management program serves both aspiring and existing homeland defense/security and emergency management practitioners. The program builds upon the experience and education of those within this highly interdisciplinary enterprise, providing graduate-level education that focuses on supporting the operational and strategic needs of those leading and managing in today's highly complex world. Leveraging the education provided in the bachelor of security and emergency management degree, the master's degree requires a greater synthesis and integration of the critical thinking and analysis skills required for managers and leaders in homeland defense/security and emergency management and associated fields.

The primary objectives of the program are to: prepare students for leadership and management roles in homeland security and emergency management; identify best practices for integrating community planning, security and aspects of prevention and mitigation when preparing communities and regions for a disaster; underscore the need to adopt and manage an "all hazards" approach to preparing for and managing disasters at the tactical, operational and strategic levels of the HSEM enterprise; and develop critical thinking skills, analytical abilities and leadership/management capacity to serve at the executive level in public and private sector organizations.

Applications are reviewed on a continual basis.

Minimum Requirements for Security and Disaster Management Master's Degree: 30 credits

Learn more about the online master's degree in disaster management (<https://uaf.edu/academics/programs/masters/security-disaster-management.php>), including an overview of the program, career opportunities and more.

College of Business and Security Management
Department of Homeland Security and Emergency Management
Master of Security and Disaster Management (<https://www.uaf.edu/som/degrees/graduate/msdm/>)
907-474-7461

Programs Degree

- M.S.D.M., Security and Disaster Management (p. 513)

M.S.D.M., Security and Disaster Management

Admission Requirements

Complete the following admission requirements:

- Students with a GPA above 2.75 will be required to submit a score from the Watson-Glaser Critical Thinking Exam.
- Any students with a GPA lower than 2.75 will be required to submit scores from either the GRE or the GMAT.
- Students without a background in Homeland Security and Emergency Management will be required to take HSEM F301: Principles of Emergency Management and Homeland Security. This course will not count toward the M.S.D.M. program requirements.

Program Requirements

Minimum Requirements for Security and Disaster Management M.S.D.M.: 30 credits

CONCENTRATIONS: ARCTIC SECURITY (P. 513), BUSINESS CONTINUITY (P. 513), CLIMATE SECURITY (P. 513), CYBERSECURITY (P. 513), DISASTER MANAGEMENT (P. 513), STEM (P. 514), STRATEGIC LEADERSHIP (P. 514)

| Code | Title | Credits |
|---|---|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Security and Disaster Management Program Requirements ¹ | | |
| HSEM F601 | Legal Aspects of Homeland Security and Emergency Management | 3 |
| HSEM F603 | Disaster Management Policy | 3 |
| HSEM F607 | Vulnerability and Protection | 3 |
| HSEM F609 | Human Security | 3 |
| HSEM F690 | Security and Disaster Management | 3 |
| Concentrations | | |
| Complete one of the following concentrations: | | 15 |
| Arctic Security | | |
| Business Continuity | | |
| Climate Security | | |
| Cybersecurity | | |
| Disaster Management | | |
| Strategic Leadership | | |
| STEM | | |

¹ Students with two C's, one D or one F in courses that are part of the HSEM program will not be in good standing even if their cumulative GPA is at or above 3.0. HSEM students who are not in good standing will be subject to review and may be dismissed by the HSEM committee. Students may not use more than two F600-level courses with C grades on the advancement-to-candidacy application.

Concentrations

ARCTIC SECURITY

| Code | Title | Credits |
|---|--|---------|
| Complete the following: | | |
| HSEM F621 | Circumpolar Competition-Arctic Diplomacy and Defense | 3 |
| HSEM F622 | Arctic Strategies and Operations | 3 |
| HSEM F692 | Security and Disaster Management Seminar | 3 |
| or ACNS F652 | International Relations of the North | |
| Complete two approved electives at the F400 or F600 level | | 6 |

BUSINESS CONTINUITY

| Code | Title | Credits |
|---|---|---------|
| Complete three of the following: | | |
| HSEM F632 | Project Management | |
| HSEM F645 | Crisis Management | |
| HSEM F646 | Business Continuity and Risk Assessment | |
| HSEM F647 | Business Continuity Audit | |
| Complete two approved electives at the F400 or F600 level | | 6 |

CLIMATE SECURITY

| Code | Title | Credits |
|---|--|---------|
| Complete the following: | | |
| HSEM F670 | Environmental Security | 3 |
| HSEM F672 | Climate Catastrophes: A Case Study Approach | 3 |
| HSEM F673 | Models and Scenarios for Disaster Risk Reduction | 3 |
| Complete two approved electives at the F400 or F600 level | | 6 |

CYBERSECURITY

| Code | Title | Credits |
|---|--|---------|
| Complete the following: | | |
| HSEM F641 | Information Assurance and Risk Assessment | 3 |
| HSEM F648 | Perspectives in Addressing Cybersecurity & Critical Infrastructure | 3 |
| HSEM F649 | Cyber Threats and Vulnerabilities | 3 |
| Complete two approved electives at the F400 or F600 level | | 6 |

DISASTER MANAGEMENT

| Code | Title | Credits |
|---|--|---------|
| Complete three of the following: | | |
| HSEM F605 | Community Planning in Emergency Management | |
| HSEM F613 | International Disaster Management | |
| HSEM F632 | Project Management | |
| HSEM F665 | Strategic Collaboration | |
| Complete two approved electives at the F400 or F600 level | | 6 |

STEM

This concentration may require some courses to be taken in residence.

| Code | Title | Credits |
|---|-------|---------|
| Students will take three graduate-level courses in their approved STEM field. These courses must be approved by the MSDM advisor. | | 9 |
| Complete two approved CBSM electives at the F400 or F600 level. | | 6 |

STRATEGIC LEADERSHIP

| Code | Title | Credits |
|---|-------------------------|---------|
| Complete the following: | | |
| HSEM F632 | Project Management | 3 |
| HSEM F656 | Strategic Leadership | 3 |
| HSEM F665 | Strategic Collaboration | 3 |
| Complete two approved electives at the F400 or F600 level | | 6 |

Special Education

Students may earn a graduate-level, postbaccalaureate certificate and Master of Education degree in special education. See Education (p. 446) for information.

School of Education (<https://www.uaf.edu/educ/>)
907-474-7341

Statistics

Graduate Certificate

Statistics is a collection of methods and theories used to make decisions or estimate unknown quantities from incomplete information. Statistical techniques are useful, for example, in estimating plant, animal and mineral abundances; forecasting social, political and economic trends; planning field plot experiments in agriculture; performing clinical trials in medical research; and maintaining quality control in industry. Employment opportunities are excellent for statisticians in many of these areas.

As a postbaccalaureate program, the certificate in statistics is equivalent to a full year of graduate statistics courses and is ideal for current graduate students in disciplines other than statistics (especially the sciences). The graduate certificate in statistics encourages a more in-depth study of statistics and provides students a credential recognizing their quantitative expertise.

Graduates of this program could be labeled quantitative biologists, biometricians, quantitative geologists, geostatisticians, or mathematical statisticians depending upon their specific course work. In addition, this program prepares individuals for Ph.D.-level work in statistics or their area of application.

The statistics program is administered by the Department of Mathematics and Statistics.

Minimum Requirements for Statistics Graduate Certificate: 12 credits.

College of Natural Science and Mathematics
Department of Mathematics and Statistics (<https://www.uaf.edu/dms/>)
907-474-7332

Programs Degree

- M.S., Statistics and Data Science (p. 517)
- Accelerated B.S., Mathematics/M.S., Statistics and Data Science (p. 406)

Graduate Certificate

- Graduate Certificate, Statistics (p. 515)

Graduate Certificate, Statistics

Admission Requirements

Complete the following admission requirements:

- Hold a baccalaureate degree from an accredited institution
- Complete Calculus I (MATH F251X), Calculus II (MATH F252X) and Calculus III (MATH F253X)¹
- Complete Regression and Analysis of Variance (STAT F401) or equivalent.¹ Students without this requirement may be admitted into the program with a deficiency but will be required to complete STAT F401 as part of the requirements of the certificate.

¹ Students must earn a C or better in each course.

Program Requirements

Minimum Requirements for Statistics Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Statistics Program Requirements | | |
| Complete the following: | | |
| STAT F651 | Statistical Theory I ¹ | 3 |
| or MATH F408 | Mathematical Statistics | |
| Complete two of the following: ¹ | | 6-8 |
| STAT F461 | Applied Multivariate Statistics | |
| STAT F602 | Experimental Design | |
| STAT F605 | Spatial Statistics | |
| STAT F611 | Time Series | |
| STAT F621 | Nonparametric Statistics | |
| STAT F631 | Categorical Data Analysis | |
| STAT F641 | Bayesian Statistics | |
| STAT F642 | Bayesian Decision Theory for Resource Management | |
| STAT F651 | Statistical Theory I ¹ | |
| STAT F652 | Statistical Theory II ¹ | |
| STAT F653 | Statistical Theory III: Linear Models | |
| STAT F661 | Sampling Theory | |
| Complete one or more from the following electives to total 12 credits for the certificate: | | 3-6 |
| ECON F626 | Econometrics | |
| ECON F627 | Advanced Econometrics | |
| FISH F604 | Modern Applied Statistics for Fisheries | |
| FISH/WLF F625 | Population Dynamics of Vertebrates | |
| FISH F627 | Statistical Computing with R | |
| FISH F631 | Data Analysis in Community Ecology | |
| MATH F614 | Numerical Linear Algebra | |
| or MATH F641 | Real Analysis | |
| or MATH F660 | Advanced Mathematical Modeling | |
| or MATH F661 | Optimization | |

| | |
|--|---|
| MIN/GE F635 | Advanced Geostatistical Applications |
| PETE F687 | Experimental and Data Analytics Methods in Petroleum Engineering |
| PHYS F628 | Digital Time Series Analysis |
| Or other elective courses approved by a statistics faculty member. | |

¹ No more than two of the following courses can be used towards the certificate: MATH F408, STAT F651 or STAT F652.

Statistics and Data Science

M.S. Degree

Statistics is a collection of methods and theories used to make decisions or estimate unknown quantities from incomplete information. Statistical techniques are useful, for example, in estimating plant, animal and mineral abundances; forecasting social, political and economic trends; planning field plot experiments in agriculture; performing clinical trials in medical research; and maintaining quality control in industry. Employment opportunities are excellent for statisticians in many of these areas.

The M.S. degree program in statistics builds upon UAF's strength in the sciences and our setting in Alaska by introducing a strong quantitative alternative or supplement to existing programs. The curriculum is built around four statistics core courses and flexibility in selection of elective courses. The core courses are designed to blend mathematical statistics coursework typical of most M.S. programs in statistics with real applications. We believe this blending provides a substantial improvement in the graduate's skills.

Graduates of this program could be labeled quantitative biologists, biometricians, quantitative geologists, geostatisticians, or mathematical statisticians depending upon their specific course work. In addition, this program prepares individuals for Ph.D.-level work in statistics or their area of application.

The statistics program is administered by the Department of Mathematics and Statistics.

Minimum Requirements for Statistics and Data Science M.S.: 30 credits

College of Natural Science and Mathematics
Department of Mathematics and Statistics (<https://www.uaf.edu/dms/>)
907-474-7332

Programs Degree

- M.S., Statistics and Data Science (p. 517)
- Accelerated B.S., Mathematics/M.S., Statistics and Data Science (p. 406)

Graduate Certificate

- Graduate Certificate, Statistics (p. 515)

M.S., Statistics and Data Science

Admission Requirements

Complete the following admission requirements:

- Submit three letters of recommendation concerning the applicant's educational background and quantitative training.
- Submit complete transcripts for all college-level work.
- Submit a resume.
- Submit a written statement of goals.
- The applicant must have completed a bachelor's degree from an accredited institution with a GPA of at least 3.0.
- Must have completed the following courses or their equivalent with a B grade or better: full calculus sequence (Calculus I (MATH F251X), Calculus II (MATH F252X), Calculus III (MATH F253X)); note that students substituting Essential Calculus with Applications (MATH F230X) for Calculus I must take MATH F252X and MATH F253X before acceptance; a course in linear algebra (MATH F314); at least one introductory statistics or probability course (STAT F200X, STAT F300 or MATH F371, MATH F408); and Regression and Analysis of Variance (STAT F401). Students lacking MATH F314 or STAT F401 may be accepted on probation.

¹ Students working in subject areas involving significant non-English literature will be expected to read the appropriate foreign language.

Note: Each student must take and pass a two-part comprehensive exam. The first part, written by the statistics faculty, is a written exam (not a take-home exam) covering the material in the core statistics courses. The second part is an oral exam covering follow-up questions from the written exam as well as any material from courses the student has taken along with their project.

Program Requirements

Minimum Requirements for Statistics and Data Science M.S.: 30 credits

| Code | Title | Credits |
|--|---------------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master's Degree Requirements | | |
| Complete the master's degree requirements. (p. 418) | | |
| Statistics and Data Science Program Requirements | | |
| Complete the following: | | |
| STAT F651 | Statistical Theory I | 3 |
| STAT F652 | Statistical Theory II | 4 |
| STAT F653 | Statistical Theory III: Linear Models | 3 |
| STAT F654 | Statistical Consulting Seminar | 1 |
| STAT F698 | Non-thesis Research/Project | 3 |
| Complete two of the following: | | 6 |
| STAT F461 | Applied Multivariate Statistics | |
| STAT F671 | Statistical Computing | |
| STAT F602 | Experimental Design | |
| STAT F605 | Spatial Statistics | |
| STAT F621 | Nonparametric Statistics | |
| STAT F631 | Categorical Data Analysis | |
| STAT F641 | Bayesian Statistics | |
| STAT F661 | Sampling Theory | |
| STAT F611 | Time Series | |
| Complete at least 6 credits of approved courses from an application area or courses with substantial statistical and/or mathematical content. ¹ | | 6 |

Strategic Leadership

Graduate Certificate

The strategic leadership certificate program focuses on those leadership skills essential to effective strategic executive leadership. In an age of increasing complexity where greater demands are placed on executives to provide vision and pathways to the future, the ability to collaborate effectively, integrate technology, and adapt to an ever-changing environment are essential. Effective strategic leaders today must understand how to create a positive vision that constructively influences both the organization and those within it.

This certificate specifically targets those who wish to either transition into or currently serve at the senior or executive level in the public or private sectors or within nonprofits and who need to better understand the context in which they will be required to develop, collaborate on and consider strategic-level decisions.

Minimum Requirements for Strategic Leadership Graduate Certificate: 12 credits

College of Business and Security Management
Department of Homeland Security and Emergency Management (<https://www.uaf.edu/som/programs/hsem/>)
907-474-7461

Programs

Degree

- Graduate Certificate, Strategic Leadership (p. 518)

Graduate Certificate, Strategic Leadership

Admission Requirements

Complete the following admission requirements:

- Student must have a completed baccalaureate degree.
- Students that have already obtained a graduate degree will not be required to complete an entrance exam.
- Students with a baccalaureate degree with a cumulative GPA of 3.0 or higher will not have any additional testing or entry course requirements.
- If the student has a cumulative GPA between 3.0 and 2.75, regardless of the field of study, they will be required to complete the Watson Glaser Critical Thinking Exam.
- If a student has a cumulative GPA below 2.75, they will be required to submit results from either the GRE or GMAT.

Program Requirements

Minimum Requirements for Strategic Leadership Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|-----------------------------------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Strategic Leadership Program Requirements | | |
| Complete the following: | | |
| HSEM F456 | Leaderships in Dangerous Contexts | 3 |
| HSEM F632 | Project Management | 3 |
| HSEM F656 | Strategic Leadership | 3 |
| HSEM F665 | Strategic Collaboration | 3 |

Systems Engineering/Program Management

Graduate Certificate

This program provides graduate students the opportunity to focus a portion of their studies toward the discipline of systems engineering/program management (SE/PM) and to highlight this specialization on their academic transcripts.

Minimum Requirements for Systems Engineering/Program Management Graduate Certificate: 12 credits

College of Engineering and Mines
Department of Electrical and Computer Engineering (<https://cem.uaf.edu/ece/>)
907-474-7137

Programs

Graduate Certificate

- Graduate Certificate, Systems Engineering/Program Management (p. 519)

Graduate Certificate, Systems Engineering/Program Management

Admission Requirements

Complete the following admission requirements:

- Admission into a master's degree program within the College of Engineering and Mines or approval by the program administrator.

Program Requirements

Minimum requirements for Systems Engineering/Program Management Graduate Certificate: 12 credits

| Code | Title | Credits |
|--|--|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 413) | | |
| Graduate Certificate Requirements | | |
| Complete the graduate certificate requirements. (p. 413) | | |
| Systems Engineering/Program Management Program Requirements | | |
| Complete the following: | | |
| AERO F656 | Aerospace Systems Engineering | 3 |
| HSEM F632 | Project Management | 3 |
| Complete two of the following: | | 6 |
| COJO F600 | Introduction to Professional Communication | |
| COJO F622 | Interpersonal Interaction | |
| COJO F625 | Communication Theory | |
| COJO F631 | Teambuilding | |

Wildlife Biology and Conservation

M.S. Degree

The geographic location of the university is particularly advantageous for the study of wildlife biology. Spruce forest, aspen-birch forest, alpine tundra, bogs and several types of aquatic habitats are within easy reach. Studies can be made in many other habitats ranging from the dense forests of southeastern Alaska to Arctic tundra.

Adequate study collections of plants and animals are available, and a 2,000-acre study area is near the campus. Wildlife biology students have ample opportunity for close association with the personnel of the Alaska Cooperative Fish and Wildlife Research Unit, Institute of Arctic Biology and several local offices of federal and state conservation agencies. These agencies often provide support for graduate student projects, and program faculty usually hire a number of students for summer fieldwork. Exceptional opportunities are available for students to gain experience and make job connections.

The Department of Biology and Wildlife, the Institute of Arctic Biology and the Alaska Cooperative Fish and Wildlife Research Unit cooperate in offering graduate work leading to the M.S. degree. Detailed information on the graduate program in wildlife biology and management is available from the chair of the wildlife program.

The Alaska Cooperative Fish and Wildlife Research Unit and Institute of Arctic Biology offer a limited number of research assistantships. Teaching assistantships are available in the Department of Biology and Wildlife.

Minimum Requirements for Wildlife Biology and Conservation Master's Degree: 30 credits

College of Natural Science and Mathematics
Department of Biology and Wildlife (<https://www.uaf.edu/bw/>)
907-474-7671

Programs

Degree

- M.S., Wildlife Biology and Conservation (p. 520)

M.S., Wildlife Biology and Conservation

Admission Requirements

Complete the following admission requirements:

- Application for admission (<https://uaf.edu/admissions/apply/>) and application fee
- Official transcripts from all universities or colleges attended. Grades are considered as part of the review process to assess academic success
- Curriculum vitae
- Statement of Purpose
 - The statement of purpose tells the admissions committee who you are and why you are applying
 - It should include relevant aspects of your background, research interests and experience, and professional aspirations. Explain why you wish to study in the UAF Department of Biology & Wildlife. Provide the names of faculty you have corresponded with and who might be appropriate mentors
 - The statement is also a good place to elaborate on aspects of your application that might be misinterpreted or overlooked
 - Excellent statements of interest are specific, informative, focused and concise
- Three letters of reference from individuals who can address your potential to succeed in graduate school. Ideally, letters of reference should come from university faculty, research staff, or professionals familiar with your academic or relevant work (including service, e.g., Peace Corps or AmeriCorps) experience and the expectations of graduate school
- Optional: scores from the GRE General Test will be considered if submitted
- International students: please consult UAF's most recent requirements (p. 36)

Note - Students are typically not admitted to the program unless a faculty advisor has agreed to serve as the mentor. Applicants should contact potential advisors before applying.

Program Requirements

Minimum Requirements for Wildlife Biology and Conservation M.S.: 30 credits

| Code | Title | Credits |
|---|-------|---------|
| General University Requirements | | |
| Complete the general university requirements. (p. 416) | | |
| Master of Science with Thesis Degree Requirements | | |
| Complete the M.S. with Thesis degree requirements. (p. 418) | | |
| Wildlife Biology and Conservation Program Requirements | | |
| Complete two courses in BIOL or WLF at the graduate level including one of the following: | | 6-7 |

BIOL/WLF F602 Research Design

BIOL/WLF F604 Scientific Writing, Editing and Revising
in the Biological Sciences

BIOL/WLF F680 Data Analysis in Biology

Complete and pass the departmental written and oral
master's comprehensive examination.

See Biological Sciences (p. 429).

UAF ADMINISTRATION, FACULTY AND EMERITI

Board of Regents

Dale Anderson, Secretary, 2012-2029

Sheri Buretta, Chair, 2015-2023

John Davies 2015-2023

Darroll R. Hargraves 2019-2027

Mary K. Hughes 2002-2025

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Karen Perdue, Vice Chair, 2017-2025

Ralph Seekins 2021-2029

Kali Spencer, Student Regent, 2021-2023

UA BOR on the web (<https://www.alaska.edu/bor/>)

Administration

UAF Administration

| | |
|--|--|
| Chancellor | Daniel M. White |
| Provost | Anupma Prakash, Executive Vice Chancellor |
| Administrative Services | Julie Queen, Vice Chancellor |
| Agricultural and Forestry Experiment Station | Pete Pinney, Interim Director |
| Alaska Center for Energy and Power | Jeremy Kasper, Interim Director |
| Arctic Biology, Institute of | Diane O'Brien, Interim Director |
| College of Business and Security Management | Mark Herrmann, Dean |
| Community and Technical College | Michele Stalder, Dean |
| Cooperative Extension Service | Pete Pinney, Acting Director |
| Education, School of | Amy Vinlove, Director |
| eCampus | Jen Pedersen, Interim Executive Director |
| Engineering and Mines, College of | William Schnabel, Dean |
| Equity and Compliance | Margo Griffith, Director |
| Executive Officer | Nickole Conley |
| Facilities Services | Kellie Fritze, Associate Vice Chancellor |
| Fisheries and Ocean Sciences, College of | S. Bradley Moran, Dean |
| General Studies | Alex Fitts, Dean, Vice Provost and Accreditation Liaison Officer |
| Geophysical Institute | Robert McCoy, Director |
| Graduate School | Rich Collins, Director |
| Information Technology | John Boucher, Interim Chief Information Technology Officer |
| International Arctic Research Center | Hajo Eicken, Director |
| International Programs and Initiatives | Joanna Cruzan, Lead |
| Liberal Arts, College of | Ellen Lopez, Dean |
| Libraries | Karen Jensen, Director |
| Marine Science, Institute of | Jennifer Reynolds, Interim Director |
| Museum of the North, University of Alaska | Patrick Druckenmiller, Director |
| Natural Science and Mathematics, College of | Karsten Huffer, Interim Dean |
| Northern Engineering, Institute of | David Barnes, Interim Director |
| One Health Research, Center for | Arleigh Reynolds, Director |
| Research | Nettie La Belle-Hamer, Vice Chancellor |
| Rural, Community and Native Education | Charlene Stern, Vice Chancellor |
| Rural and Community Development, College of | Brian Uher, Dean |
| –Bristol Bay Campus | Wanda Wahl, Interim Director |
| –Chukchi Campus | Stacey Glaser, Director |

| | |
|---|----------------------------------|
| –Interior Alaska Campus | Julie Biddle, Director |
| –Kuskokwim Campus | Carolyn Goolsby, Director |
| –Northwest Campus | Barbara Amarok, Director |
| Student Affairs and Enrollment Management | Owen Guthrie, Vice Chancellor |
| Summer Sessions and Lifelong Learning | Michelle Bartlett, Director |
| University Advancement | Samara Taber, Executive Director |

Governance

Governance

| | |
|----------------|--|
| ASUAF | Ashlyn Espinosa, President (2022-2023) |
| Faculty Senate | Ataur Chowdhury, President (2022-2023) |
| Staff Council | Ronnie Houchin, President (2022-2023) |

Faculty

The abbreviation that follows the person's title indicates the University of Alaska Fairbanks unit in which the employee works.

The abbreviations are:

ACEP Alaska Center for Energy and Power

AFES Agricultural and Forestry Experiment Station

AKCFWRU Alaska Cooperative Fish and Wildlife Research Unit

ANLC Alaska Native Language Center

BBC Bristol Bay Campus

CANHR Center for Alaska Native Health Research

CBSM College of Business and Security Management

CC Chukchi Campus

CEM College of Engineering and Mines

CES Cooperative Extension Service

CFOS College of Fisheries and Ocean Sciences

CHANC Chancellor's Office

CLA College of Liberal Arts

CNSM College of Natural Science and Mathematics

CTC Community and Technical College

CRCD College of Rural and Community Development

CRS Center for Research Services

DANSRD Department of Alaska Native Studies and Rural Development

EDE eCampus

GI Geophysical Institute

GRAD Graduate School

IAB Institute of Arctic Biology

IAC Interior Alaska Campus

IARC International Arctic Research Center

INE Institute of Northern Engineering

KUC Kuskokwim Campus

LIB Elmer E. Rasmuson Library

MUSEUM University of Alaska Museum of the North

NWC Northwest Campus

PROV Provost's Office

SA Student Affairs

SOE School of Education

VCAS Vice Chancellor for Administrative Services

VCR Vice Chancellor for Research

WERC Water and Environmental Research Center

A

Abramowicz, Kenneth F. Associate Professor of Accounting and Finance, CBSM. University of Tulsa '82 BA; '83 MS; University of Missouri–Columbia '91 PhD.

Aggarwal, Srijan Associate Professor of Civil and Environmental Engineering, CEM. Indian Institute of Technology Delhi '07 BS; University of Minnesota - Twin Cities '09 MS; '11 PhD.

Aguilar–Islas, Ana Maria Associate Professor of Oceanography, CFOS. University of California, Santa Cruz '07 PhD.

Ahmadi, Mohabbat Associate Professor of Petroleum Engineering, CEM. Petroleum University of Technology, Ahwaz, Iran '00 BS; '03 MS; University of Texas at Austin '10 PhD.

Ahn, Il Sang Associate Professor of Civil and Environmental Engineering, CEM. Seoul National University '91 BS; '93 MS; State University of New York at Buffalo '05 PhD.

Al-Badri, Maher Assistant Professor of Electrical and Computer Engineering, CEM. University of Baghdad '84 BS; University of Malaya '09 MEng; Concordia University '15 PhD.

Albertson, Leif E. Professor of Extension, CES. Youth, Family and Community Development Agent, Yukon–Kuskokwim District, CES. University of California, Berkeley '01 BA; Harvard University '06 MS.

Aldrich, BJ Term Assistant Professor of Allied Health, CTC. University of Alaska Fairbanks '83 BBA; University of Washington School of Medicine '96 MD.

Alexander, Kevin Wayne Associate Professor of Aviation Maintenance Technology, CTC. University of Alaska Fairbanks '96 Certificate; '05 AAS.

Alexeev, Vladimir Research Professor, IARC. Moscow Institute for Physics and Technology '84 MS; '88 PhD.

Allman, Elizabeth S. Professor of Mathematics, CNSM. Yale University '87 BS; University of California, Los Angeles '92 MA; '95 PhD.

Alu, Kelechukwu I. Associate Professor of Developmental Mathematics, KUC/CRC. Federal University of Technology Owerri, Nigeria '98 BTech; East Tennessee State University '11 MS.

Anahita, Sine Associate Professor of Sociology, CLA. Iowa State University '97 BS; '00 MS; '03 PhD.

Anger, Andreas Paul Wilhelm Professor of Applied Business and Accounting, CTC. University of Nebraska '90 MBA; University of Bayreuth, Germany '91 Diplom–Kaufmann.

Aoki, Miho Associate Professor of Art, CLA. Aichi University, Japan '91 Bed; Ohio State University '98 MFA.

Arndt, Katherine Louise Associate Professor of Library Science, LIB. University of Wisconsin–Madison '74 BA; University of Alaska Fairbanks '77 MA; '96 PhD.

Arp, Christopher Douglas Research Associate Professor, WERC/INE. Utah State University '06 PhD.

Arya, Sampurna Assistant Professor of Mining and Mineral Engineering, CEM. Indian School of Mines '06 BS; University of Kentucky '13 MS; '18 PhD.

Aschwanden, Andreas Research Professor, GI. ETH Zurich '04 MSc; '08 PhD.

Atkinson, Judith Ann Professor of Developmental Mathematics, CTC. Eastern Kentucky University '88 BS; University of Alaska Fairbanks '93 MS; '02 PhD.

Atkinson, Shannon Professor of Fisheries, CFOS. University of Hawaii '78 BS; University of Hawaii at Manoa '81 MS; Murdoch University '85 PhD.

Avdonin, Sergei Anatolievich Professor of Mathematics, CNSM. St. Petersburg State University '72 BS; '77 PhD.

Awoleke, Obadare Associate Professor of Petroleum Engineering, CEM. University of Ibadan, Nigeria '01 BS; Texas AM University '09 MS; '13 PhD.

B

Bacsujlaky, Mara C. Term Assistant Professor of Extension, CES. Youth, Family and Community Development Agent, CES. University of Pennsylvania '86 BA.

Baek, Jungho Professor, CBSM. Hanyang University '91 BA; Korea University '93 MA; Michigan State University '04 MA; '04 PhD.

Baker, Carrie Crosby Professor of Film and Performing Arts, CLA. Middlebury College '96 BA; University of California, Irvine '02 MFA.

Baker, Victoria Nan Associate Professor, CFOS. University of Washington '81 BA; University of Alaska Anchorage '02 MEd.

Barnes, Brian M. Professor, CNSM. University of California, Riverside '77 BS; University of Washington '83 PhD.

Barnes, David L. Professor of Civil and Environmental Engineering, CEM. New Mexico State University '85 BS; '87 MS; Colorado State University '97 PhD.

Barry, Ronald P. Professor of Statistics, CNSM. University of Alaska Anchorage '84 AA; University of Alaska Fairbanks '85 BS; '87 MS; University of California, Irvine '91 PhD.

Beaudreau, Anne Associate Professor, CFOS. Harvard University '01 AB; University of Washington '09 PhD.

Bell, Scott Votaw Associate Vice Chancellor for Facilities Services, VCAS. University of Alaska Fairbanks '82 BS.

Belz, Nathan P. Associate Professor of Civil Engineering, CEM. University of Maine '06 BS; '08 MS; University of Vermont '13 PhD.

Bennett, Alec Instructor of Homeland Security and Emergency Management, CBSM. University of Alaska Southeast '05 BS; University of Alaska Fairbanks '18 MSDM.

Benowitz, Jeffrey Apple Research Associate Professor, GI. University of Alaska Fairbanks '92 BS; '04 MFA; '12 PhD.

Berge, Anna Mary Sophia Professor of Linguistics, CLA. University of Wisconsin–Madison '88 BA; University of California, Berkeley '91 MA; '92 MLIS; '97 PhD.

Berman, Leah Wrenn Professor of Mathematics, CNSM. Lewis and Clark College '97 BA; University of Washington '01 MS; University of Washington '02 PhD.

Berndt, Kenneth (Richie) Assistant Professor of Emergency Services, CTC. Montana State University '19 BA.

Bersamin, Andrea Professor of Nutrition, CNSM/IAB. University of California, Berkeley '99 BA; University of California, Davis '06 PhD.

Bhatt, Uma S. Professor, CNSM/GI. University of Pittsburgh '83 BA; '83 BSE; University of Wisconsin '89 MS; '96 PhD.

Black, Jessica C. Associate Professor, DANSRD/CRC. University of Alaska Fairbanks '01 BSW; Washington University in St. Louis '04 MSW; '17 PhD.

Blake, John E. Associate Vice Chancellor for Research, CRS. Director of Research Integrity, CRS. University of Saskatchewan '80 DVM; '87 MVetSc.

Blanchard, Arny L. Professor, CFOS. University of Alaska Fairbanks '89 BS; '99 MS; '06 PhD.

Bluehorse, Byron Assistant Professor of Tribal Management, IAC/CRCO. .

Boldt, Frank Term Associate Professor of Justice, CLA. University of Colorado '14 BA; University of Alaska Fairbanks '16 MA.

Bolton, William R. Research Associate Professor, IARC. California Lutheran University '91 BA; University of Alaska Fairbanks '96 MS; '06 PhD.

Bouffard, Troy Instructor of Homeland Security and Emergency Management, CBSM. University of Alaska Fairbanks '13 BA; '16 MA.

Bowman, Latrice Nichelle Term Assistant Professor of Mathematics, CNSM. University of Alaska Fairbanks '99 AA; '99 BS; '02 MS; Northcentral University '19 PhD.

Boylan, Brandon M. Professor, CLA. Mercyhurst College '03 BA; University of Limerick '04 MA; University of Pittsburgh '13 PhD.

Brashear, James J. Professor of Art, CLA. Indiana University of Pennsylvania '87 BFA; Louisiana State University '90 MFA.

Breed, Greg A. Associate Professor of Quantitative Ecology, CNSM/IAB. University of Minnesota '98 BS; Texas AM University '02 MS; Dalhousie University '09 PhD.

Breen, Amy Lynn Assistant Research Professor, IARC. College of the Atlantic '94 BA; University of Missouri–Columbia '00 MS; University of Alaska Fairbanks '10 PhD.

Bret–Harte, Marion Sydonia Professor of Plant Biology, CNSM/IAB. Reed College '83 BA; Stanford University '90 PhD.

Brigham, Lawson W. Distinguished Professor of Geography and Arctic Policy, SNRE. U.S. Coast Guard Academy '70 BS; Rensselaer Polytechnic Institute '79 MS; United States Naval War College '82 Diploma; University of Cambridge '96 MPhil; '00 PhD.

Brightwell, Geraldine Anne Professor of English, CLA. Bristol Polytechnic '87 BA; University of East Anglia '89 MA; University of Alaska Fairbanks '94 MFA; University of Minnesota '04 PhD.

Brinkman, Todd Jared Associate Professor, CNSM/IAB. Minnesota State University '00 BS; South Dakota State University '03 MSc; University of Alaska Fairbanks '09 PhD.

Brooks, Catherine Ann Associate Professor, DANSRD/CRCO. Pennsylvania State University '90 BS; '92 MS.

Brower Sr, Ronald Hopson Instructor of Inupiaq Eskimo, ANLC. Sorbonne University (France) '76 AA; University of Alaska Fairbanks '14 BA.

Brown, Stephen Castlebury Professor of Extension, Agriculture and Horticulture Agent, Copper River/Matanuska–Susitna District, CES. Texas AM University '87 BS; University of Texas at San Antonio '92 MS; State University of New York at Syracuse '99 PhD.

Brown, Leah Term Professor of Secondary Education, SOE. University of Texas Austin '94 BA; Texas AM University '04 MEd.

Bueler, Ed Professor of Mathematics (Applied), CNSM. California State University, Chico '91 BS; Cornell University '94 MS; '97 PhD.

Bult–Ito, Abel Professor of Biology, CNSM. University of Groningen '85 BS; '88 MS; Wesleyan University '94 PhD.

C

Cahill, Catherine Frances Professor of Chemistry, CNSM. Director, Alaska Center for Unmanned Aircraft Systems Integration. University of California, Davis '90 BS; University of Washington '94 MS; University of Nevada, Reno '96 PhD.

Calhoun, Kendra Louise Term Instructor, Youth, Family and Community Development Agent, CES. University of California, Santa Cruz '95 BA; University of Alaska Fairbanks '10 MS.

Cannon, Chris Assistant Professor of Indigenous Studies, CRCO. University of Alaska Fairbanks '07 BS; '14 MA; '21 PhD.

Carlson, Cameron D. Associate Professor of Homeland Security and Emergency Management, CBSM. Director, Center for the Study of Security, Cyber, Hazards, Response and Preparedness, CBSM. Monmouth University '86 BS; Webster University '95 MA; University of Alaska Fairbanks '17 PhD.

Carlson, Mary Term Assistant Professor of Elementary Education, SOE. University of Alaska Fairbanks '92 BA; University of Alaska Anchorage '00 MEd.

Carothers, Courtney L. Professor of Fisheries, CFOS. Cornell University '00 BA; University of Washington '04 MA; '08 PhD.

Carr, Richard S. Professor of English, CLA. Director, Writing Center, CLA. Department Chair, English, CLA. University of Wisconsin '72 BA; University of Iowa '75 MA; University of Minnesota '94 PhD.

Carroll, Jennifer Lee Linkous Associate Professor, DANSRD/CRCO. Harvard University '90 BA; University of Alaska Fairbanks '95 MA; '10 PhD.

Cascio, Julie Marie Professor of Extension, Youth, Family and Community Development Agent, Copper River/Matanuska–Susitna District, CES. University of Wisconsin–Stout '83 BS; Oregon State University '94 MEd.

Celaire, Jaunelle Roberta Professor of Music Voice, CLA. Anderson University '88 BA; Bowling Green State University '00 MM; University of Michigan '03 DMA.

Chappell, Glenn Gilford Associate Professor of Computer Science, CEM. University of Kansas '88 BS; '90 MA; University of Illinois '96 PhD.

Charles, Stephen Walkie Associate Professor of Yup'ik Language, CLA. Director, Alaska Native Language Center, CLA. University of Alaska Fairbanks '88 BEd; University of Massachusetts, Amherst '93 MEd; University of Alaska Fairbanks '11 PhD.

Chen, Cheng–fu Professor of Mechanical Engineering, CEM. National Taiwan University, Taipei '88 BS; '90 MS; University of Wisconsin–Madison '00 PhD.

Chen, Haiwei Associate Professor of Accounting and Finance, CBSM. Jilin University '88 BA; University of West Georgia '91 MBA; Emory University '98 PhD.

Chen, Jiguo Professor of Virology, CNSM/IAB. Nanchang University '83 BS; Chinese Academy of Sciences '90 MS; Osaka University Medical School '00 PhD.

Cherry, Jessica E. Research Assistant Professor, IARC/INE. Columbia University '99 BS; '02 MA; '03 MS; '06 PhD.

Child, Robin L. Term Assistant Professor of Elementary Education, SOE. Wheaton College '08 BA; University of Alaska Fairbanks '17 MEd.

Chowdhury, Ataur R. Associate Professor of Physics, CNSM. Dhaka University '77 BS; Clark University '85 PhD.

Clark, Jamie L. Associate Professor of Anthropology, CLA. Northwestern University '02 BA; University of Michigan '04 MA; '09 PhD.

Coakley, Bernard James Professor, CNSM. University of Michigan '81 BS; Louisiana State University '88 MS; Columbia University '89 MPhil; '91 PhD.

Coen, Ross Assistant Professor of History, CLA. University of Alaska Fairbanks '99 BA; '05 MA.

Coffman, Christine Elisabeth Professor of English, CLA. Cornell University '94 AB; University of Southern California '97 MA; '01 PhD.

Coker, Robert H. Professor of Biology, CNSM/IAB. North Georgia College '86 BS; '89 MEd; University of Mississippi '95 PhD.

Collins, Richard L. Professor of Atmospheric Sciences, CNSM/GI. Director, GRAD. National University of Ireland '86 BE; Case Western Reserve University '88 MS; University of Illinois '94 PhD.

Collins, Roy Eric Assistant Professor of Marine Science, CFOS. Washington State University '02 BS; University of Washington '06 MS; '09 PhD.

Conde, Mark G. Professor of Physics, CNSM/GI. University of Tasmania '82 BS; University of Adelaide '91 PhD.

Conell, Shawn Associate Professor of Automotive Technology, CTC. Front Range Community College '91 Certificate.

Conner, Laura Diane Research Professor, GI. University of Colorado at Boulder '95 BA; Montana State University '98 MS; University of Washington '01 MS; University of Arizona '07 PhD.

Cooper, Amy Blye Kellum Instructor of Accounting and Finance, CBSM. Birmingham–Southern College '00 BS; University of Washington '01 MPAcc.

Cost, Douglas Scott Associate Professor of Secondary Education, SOE. University of Southern California '95 BA; California State University, Northridge '05 MA; University of Alaska Fairbanks '13 MFA; '17 PhD.

Cranor, Clayton Term Instructor of Aviation Maintenance Technology, CTC. Baylor University '79 BS; University of Alaska Fairbanks '90 MS; '11 Cert.

Criddle, Keith Richard Ted Stevens Distinguished Professor of Marine Policy, CFOS. Professor of Fisheries, CFOS. California State University, Sacramento '82 BS; University of California, Davis '84 MS; '89 PhD.

Cronin, Matthew Anthony Research Professor of Animal Genetics, SNRE. State University of New York '76 BS; Montana State University '86 MS; Yale University '89 PhD.

Croskrey, Wendy E. Professor of Art, CLA. University of Minnesota '85 BFA; Ohio State University '90 MFA.

Cunningham, Keith Wayne Research Associate Professor, IARC. .

Curda, Linda R. Associate Professor of Community Health, CRCO. University of Maryland '71 BS; Johns Hopkins University '77 MPH.

Cuzovic-Severn, Marina Assistant Professor, CLA. University of Belgrade, Serbia '07 BA; Michigan State University '10 MA; '14 PhD.

D

Daku, Michael J. Term Clinical Associate Professor, CLA. University of Alaska Fairbanks '81 BA; '84 MEd.

Dandekar, Abhijit Y. Professor of Petroleum Engineering, CEM. Nagpur University, India '87 Btech; Heriot–Waitt University, UK '94 PhD.

Danielson, Seth Research Associate Professor of Physical Oceanography, CFOS. Lehigh University '90 BS; University of Alaska Fairbanks '96 MS; '12 PhD.

Darrow, Daniel J. Instructor of Spanish, CLA. California State University - Fresno '92 BA; University of Alaska Fairbanks '10 BA; '12 MA.

Darrow, Margaret M. Professor of Geological Engineering, CEM. University of Washington '93 BS; University of Alaska Fairbanks '95 MS; '02 BS; '07 PhD.

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Pierce, Richard A., Professor of History, Emeritus. University of California, Berkeley '40, BA; '52, MA; '56, PhD. (1986-1998). Deceased.

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