

CERTIFICATES and ASSOCIATE DEGREES

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Community and Technical College auto shop instructor Travis Cortez, right, works with students in the auto shop on Industrial Avenue, in Fairbanks.

How to Earn a Certificate or Associate Degree

To earn a UAF degree, you must satisfy three sets of requirements: general university requirements; certificate or degree requirements; and program (major) requirements. These requirements are all described in this section of the catalog. Requirements for your major are found in the Certificate and Associate Degree Programs section, beginning on page 101.

If your degree 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 fulfillment of the degree 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.

General University Requirements

You must earn at least 30 semester hours for a certificate and 60 semester hours for an associate degree, including transfer credits. At least 15 semester credits applicable to any certificate or associate degree must be earned at UAF. A minimum GPA of 2.0 is required in all work as well as in your major field. In addition, you must earn a minimum C grade (2.0) in courses required for your associate degree major.

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.

Once you have applied for graduation, certifying that you have met all major requirements is the responsibility of your academic advisor, who will notify the Office of Admissions and 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.

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. Non-degree 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

TABLE 18 GENERAL UNIVERSITY REQUIREMENTS FOR CERTIFICATES AND ASSOCIATE DEGREES

CERTIFICATES AND ASSOCIATE DEGREES		
	Certificate	Associate Degree
Minimum number of credits required	30 credits	60 credits
Credits that must be earned at UAF (resi- dence 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 (2.0) in courses required for major
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 require- ments		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

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.)

• Changing your Major

Undergraduate students may change majors by completing a change of major form available from the Office of Admissions and the Registrar or at www.uaf.edu/reg/. A change of major becomes effective for the following semester after it is submitted. Students who wish to change majors from one level to another level (i.e. from an associate degree to a bachelor's degree) must contact the Office of Admissions and the Registrar to apply for a level change.

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 ASSOCIATE DEGREE

To receive a second associate of applied science degree, you must earn at least 12 credit hours beyond the first associate degree as well as complete all requirements for the major.

UA is an AA/EO employer and educational instant of Earn a Certificate or Associate Degree 95 and prohibits illegal discrimination against any individual: www.alaska.edu/titlelXcompliance/nondiscrimination.

As long as you have completed the additional 12-hour requirement, you may be awarded two degrees in one semester.

DEGREE REQUIREMENTS AND TIME LIMITS

You may complete degree requirements in effect and published in the UAF catalog in any one of the previous five academic years in which you are enrolled as a degree student for a certificate or associate degree. You are considered enrolled in your degree program when you complete the appropriate degree-seeking student registration procedure. If you do not enroll for a semester or more, or if you enroll through the non-degree 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. The Undergraduate Petition Form forms is available online at www.uaf.edu/reg/forms/. Forms need to be returned to the Office of Admissions and the Registrar with required approval signatures. The Office of Admissions and the Registrar will post the petition information on Degree Works and notify you once a decision on your petition has been received. Academic petitions fall into three categories and each involve different processes:

• Core Curriculum Petitions

If your petition deals with baccalaureate core 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 Admissions and the Registrar. It will then be forwarded to the chair of the faculty senate core 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 Admissions and 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 Admissions and the Registrar. It will then be forwarded to the UAF provost for consideration.

RESIDENCE CREDIT

96

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.

GRADUATION

• Responsibility

You are responsible for meeting all requirements for graduation. You are encouraged to work with your advisor and 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 non-refundable fee must be filed with the Office of Admissions and the Registrar. We encourage you 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 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 January at the end of fall semester and in May at the end of 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 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 not to do so to the Office of Admissions and 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. Your 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 combining all college work attempted at UAF, as well as all college work attempted at any other institutions you've 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.

Types of Certificates and Associate Degrees

• Certificate Programs

Certificate programs are designed for students who are preparing for entry-level employment or upgrading in a specific occupation.

Associate of Science

The A.S. degree represents the completion of a broadbased course of study with an emphasis in the sciences. This degree may serve as a stepping-stone to a sciencerelated 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 only earn one A.A.

Associate of Applied Science

The A.A.S. is intended for students who are 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).

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 (A.A.S.) degree. For specific major requirements, refer to the degrees and programs section.

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 all course work, as well as in your major. Programs of study for which certificates are granted must contain a recognizable body of instruction in the programrelated 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 core requirements and courses designated within majors and minors. Only those courses with an X designator count toward the baccalaureate core.

Requirements

Communication

Complete one of the following:

- ENGL F111X—Introduction to Academic Writing (3)
- ABUS F170—Business English (3)
- ABUS F271—Business Communications (3)
- ENGL F211X—Academic Writing about Literature (3)
- ENGL F212—Business, Grant and Report Writing* (3)
- ENGL F213X—Academic Writing about the Social and Natural Sciences (3)
- COMM F131X—Fundamentals of Oral Communication: Group Context (3)
- COMM F141X—Fundamentals of Oral Communication: Public Context (3) or successful completion of competency test
- DEVS F104—University Communications (1 3)
- DEVS F105—Intensive Reading Development (3)
- Other program-approved discipline-based communication course or discipline-based courses with embedded communication content. (2 – 3)
- * ENGL F212 does not fulfill the second half of the written communication requirement for the bachelor's degree.

Credits

2 – 3

Computation

2 - 3

Complete one of the following:

- Any course at the F100-level or above in mathematical sciences (computer science, math or statistics). (3)
- ABUS F155—Business Math (3)
- DEVM F105—Intermediate Algebra (3)
- ECE F117—Math Skills for Early Childhood Educators (3)
- HLTH F116—Mathematics in Health Care (3)
- HUMS F117—Math Skills for Human Services (3)
- TTCH F131-Mathematics for the Trades (3)
- · Other program-approved discipline-based computation course or discipline-based courses with embedded computation content. (2-3)

Human Relations

2 – 3

30

Complete one of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture (3)
- ABUS F154—Human Relations (3)
- ANL F287—Teaching Methods for Alaska Native Languages (3)
- ECE F245—Child Development (3)
- ED/PSY F245-Child Development (3)
- HLTH F106—Human Behavior in Health Care (3)
- HUMS F120—Cultural Diversity in Human Services (3)
- RHS F110—Cross-Cultural Bridging Skills (1) AND RHS F115—Issues of Personal Development (2)
- Other program-approved discipline-based human relations or discipline-based courses with embedded human relations content. (2 - 3)

Major specialty	at least 21

Electives	to	total	

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.

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 stepping-stone to a bachelor's program. You may earn only one A.A. degree.

The curriculum of the associate of arts degree consists of all courses required to meet the University of Alaska Fairbanks baccalaureate core, with the following exceptions:

- The upper division writing and oral intensive courses are not required
- In place of the upper division ethics course a humanities or social science elective may be substituted.

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:

Baccalaureate core credits	.38 – 4	14
General electives	16 – 2	22

Requirements

Communication

cequirements	Creatis
Communication	9
• ENGL F111X—Introduction to Academic Writing (3)	
ENGL F190H may be substituted.	
Complete one of the following:	

- ENGL F211X—Academic Writing about Literature (3)
- ENGL F213X—Academic Writing about the Social and

Natural Sciences (3)

Complete one of the following:

- COMM F131X—Fundamentals of Oral Communication: Group Context (3)
- COMM F141X—Fundamentals of Oral Communication: Public Context (3) or successful completion of competency test

Perspectives on the Human Condition (humanities and social sciences)18

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Complete all of the following four courses: • ANTH F100X/SOC F100X—Individual, Society and Culture (3) • ECON F100X or PS F100X—Political Economy (3) • HIST F100X—Modern World History (3)
• ENGL/FL F200X—World Literature (3) 12
Complete one of the following three courses: • ART/MUS/THR F200X—Aesthetic Appreciation: Interrelationship of Art, Drama and Music (3) • HUM F201X—Unity in the Arts (3)
ANS F202X—Aesthetic Appreciation of Alaskan
Native Performance (3) 3
Complete one of the following six courses: • BA F323X—Business Ethics (3) • COMM F300X—Communicating Ethics (3) • JUST F300X—Ethics and Justice (3) • NRM F303X—Environmental Ethics and Actions (3) • PS F300X—Ethics and Society (3) • PHIL F322X—Ethics (3) 3 Note: Recommended for students who will earn a B.A. or B.S. degree. An ad- ditional social science elective may be substituted for the A.A. degree.
 Or complete 12 credits from the above courses plus one of the following: Two semester-length courses in a single Alaska Native language or other non-English language Three semester-length courses (9 credits) in American Sign Language taken at the university level. 6 - 9
Mathematics 3

Complete one of the following:

- MATH F103X—Concepts and Contemporary Applications of Mathematics (3)
- MATH F107X—Functions for Calculus* (4)
- MATH F161X—Algebra for Business and Economics* (3)
- STAT F200X—Elementary Probability and Statistics (3)
- * No credit may be earned for more than one of MATH F107X or F161X.

Or complete one of the following:"

- MATH F200X—Calculus I** (4)
- MATH F201X—Calculus II (4)
- MATH F202X—Calculus III (4)
- MATH F262X—Calculus for Business and Economics** (4)
- MATH F272X—Calculus for Life Sciences** (4)
- * Or any math course having one of these as a prerequisite
- ** No credit may be earned for more than one of MATH F200X, MATH F262X or MATH F272X

Natural Sciences

- Complete any two (4-credit) courses.
- ATM F101X—Weather and Climate of Alaska (4)
- BIOL F100X—Human Biology (4)
- BIOL F103X—Biology and Society (4)
- BIOL F104X—Natural History (4)
- BIOL F111X—Human Anatomy and Physiology I (4)

3 - 4

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• BIOL F112X—Human Anatomy and Physiology II (4)

- BIOL F115X—Fundamentals of Biology I (4)
- BIOL F116X—Fundamentals of Biology II (4)
- CHEM F100X—Chemistry in Complex Systems (4)
- CHEM F103X—Basic General Chemistry (4)
- CHEM F104X—Beginnings in Biochemistry (4)
- CHEM F105X—General Chemistry (4)
- CHEM F106X—General Chemistry (4)
- GEOG F111X—Earth and Environment: Elements of Physical Geography (4)
- GEOS F100X—Introduction to Earth Science (4)
- GEOS F101X—The Dynamic Earth (4)
- GEOS F106X—Life in the Age of the Dinosaurs (4)
- GEOS F112X—History of Earth and Life (4)
- GEOS F120X—Glaciers, Earthquakes and Volcanoes (4)
- GEOS F125X—Humans, Earth and Environment (4)
- MSL F111X—The Oceans (4)
- PHYS F102X—Energy and Society (4)
- PHYS F103X—College Physics (4)
- PHYS F104X—College Physics (4)
- PHYS F115X—Physical Science I (4)
- PHYS F175X—Astronomy (4)
- PHYS F211X—General Physics (4)
- PHYS F212X—General Physics (4)
- PHYS F213X—Elementary Modern Physics (4)

Library and Information Research

Successful completi	on of library skills competency test or LS F100X	K or
F101X		0 – 1

Total credits required	38 - 39
Students planning to go on to a bachelor's degree are adv	vised to select

nning to go on to a bachelor's degree are advised to select courses meeting remaining core requirements and courses designated within bachelor's degree majors and minors.

Minimum credits required for degree

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 section beginning on page 101.

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 core requirements and courses designated within majors and minors. Only courses with an X designator count towards the baccalaureate core.

All credits for the A.A.S. degree must be at the F100-level or above and be distributed as follows:

Requirements Credits

Communication 0 Written Communication 6 ENGL F111X—Introduction to Academic Writing (3)

Complete one of the following:

- ABUS F271—Business Communications (3)
- ENGL F211X—Academic Writing about Literature (3)

• ENGL F212—Business, Grant and Report Writing* (3)

- ENGL F213X—Academic Writing about the Social and Natural Sciences (3)
- * ENGL F212 does not fulfill the second half of the written communication requirement for the bachelor's degree.

Oral Communication

Complete one of the following:

- COMM F131X—Fundamentals of Oral Communication: Group Context (3)
- COMM F141X—Fundamentals of Oral Communication: Public Context (3) or successful completion of competency test

Computation

Complete one of the following:

- Any course at the F100-level or above in mathematical sciences (computer science, math or statistics. (3)
- ABUS F155-Business Math (3)
- DEVM F105—Intermediate Algebra (3)
- ECE F117—Math Skills for Early Childhood Educators (3)
- HLTH F116—Mathematics in Health Care (3)
- HUMS F117—Math Skills for Human Services (3)
- TTCH F131—Mathematics for the Trades (3)
- · other program-approved discipline-based computation course or discipline-based courses with embedded computation content. (3)

Human Relations

8

0 – 1

60

Complete one of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture (3)
- ABUS F154—Human Relations (3)
- ANL F287—Teaching Methods for Alaska Native Languages (3)
- ECE F245—Child Development (3)
- ED/PSY F245—Childhood Development (3)
- HUMS F120—Cultural Diversity in Human Services (3)
- RHS F110—Cross-Cultural Bridging Skills (1) AND RHS F115—Issues of Personal Development (2)
- HLTH F106—Human Behavior in Health Care (3)
- other program-approved discipline-based human relations course or discipline-based courses with embedded human relations content. (3)

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Electives to total

Minimum credits required for degree

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 stepping-stone to a science-related baccalaureate program. You may earn only one A.S. degree.

Requirements

Communication	
• ENGL F111X—Introduction to Academic Writing ((3)

• ENGL F213X—Academic Writing about the Social and Natural Sciences (3)

Complete one of the following:

- COMM F131X—Fundamentals of Oral Communication: Group Context (3)
- COMM F141X—Fundamentals of Oral Communication: Public Context (3) or successful completion of competency test

3

3

3

Credits

9

99

at least 30

Humanities and Social Sciences

4

Complete all of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture (3)
- ECON F100X OR PS F100X—Political Economy (3)
- HIST F100X—Modern World History (3)
- ENGL/FL F200X—World Literature (3)

Complete one of the following:

- ART/MUS/THR F200X—Aesthetic Appreciation: Interrelationship of Art, Drama and Music (3)
- HUM F201X—Unity in the Arts (3)
- ANS F202X—Aesthetic Appreciation of Alaskan Native Performance (3)
- Or complete 12 credits from the above courses plus one of the following: Two semester-length courses in a single Alaska Native language or other non-English language
- Three semester-length courses (9 credits) in American Sign Language.

Mathematics

Natural Sciences

• MATH F107X—Functions for Calculus (4)*

- Or complete one of the following:
- MATH F200X—Calculus I (4)
- MATH F272X—Calculus for Life Sciences (4)
- * No credit may be earned for more than one of MATH F107X or F161X.

16 Complete any two (4-credit) courses.

- ATM F101X—Weather and Climate of Alaska (4)
- BIOL F100X—Human Biology (4)
- BIOL F103X—Biology and Society (4)
- BIOL F104X—Natural History (4)
- BIOL F111X—Human Anatomy and Physiology I (4)
- BIOL F112X—Human Anatomy and Physiology II (4)
- BIOL F115X—Fundamentals of Biology I (4)
- BIOL F116X—Fundamentals of Biology II (4)
- CHEM F100X—Chemistry in Complex Systems (4)
- CHEM F103X—Basic General Chemistry (4)
- CHEM F104X—Beginnings in Biochemistry (4)
- CHEM F105X—General Chemistry (4)
- CHEM F106X—General Chemistry (4)
- GEOG F111X-Earth and Environment: Elements of Physical Geography (4)
- GEOS F100X—Introduction to Earth Science (4)
- GEOS F101X—The Dynamic Earth (4)
- GEOS F106X—Life in the Age of the Dinosaurs (4)
- GEOS F112X—History of Earth and Life (4)
- GEOS F120X—Glaciers, Earthquakes and Volcanoes (4)
- GEOS F125X—Humans, Earth and Environment (4)
- MSL F111X—The Oceans (4)
- PHYS F102X—Energy and Society (4)
- PHYS F103X—College Physics (4)
- PHYS F104X—College Physics (4)
- PHYS F115X—Physical Science I (4)
- PHYS F175X—Astronomy (4)
- PHYS F211X—General Physics (4)
- PHYS F212X—General Physics (4)
- PHYS F213X—Elementary Modern Physics (4)
- Complete a one-year sequence in one natural science beyond the baccalaureate core. The total courses used to satisfy this requirement shall represent at least two different natural sciences.

Library and Information Research	0 – 1
• Successful completion of library skills compete OR F101X	ency test or LS F100X
Concentration specialty	at least 15
Minimum credits required for degree	60

ACCOUNTING, APPLIED

College of Rural and Community Development Department of Applied Business, Paralegal and Accounting Community and Technical College 907-455-2800

www.ctc.uaf.edu/programs/abus/accounting.html

A.A.S. Degree

Minimum Requirements for A.A.S. Degree: 60 credits

The applied accounting program prepares students for entry- and mid-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 the applied accounting program address the concerns of modern business people and provide the training necessary to enhance business success. The applied accounting program prepares a student to enter the UAF School of Management's B.B.A. program in accounting in order to earn the 150 credits required to take the CPA exam in Alaska.

Students entering the A.A.S. program are expected to have basic computer skills equivalent to CIOS F150. Classes are scheduled during the day, in the evening and online to accommodate working students. Microcomputer and office technology labs are available for hands-on training.

Major — A.A.S. Degree

1. Complete the general university requirements (page 95).

2. Complete the A.A.S. degree requirements. (See page 99. As part of the A.A.S. degree requirements, it is recommended that students complete ABUS F154 for the human relations requirement. ABUS F155 is the recommended computation course.)

3.	Complete the following program (major) requirements:*
	ABUS F101—Principles of Accounting I
	ABUS F141—Payroll Accounting
	ABUS F175—Customer Service (3)
	or ABUS F179—Fundamentals of Supervision (3)
	ABUS F201—Principles of Accounting II
	ABUS F202—Principles of Accounting III
	ABUS F203—Accounting Capstone
	ABUS F210—Income Tax
	ABUS F221—Microcomputer Accounting (3)
	or ABUS F220—Microcomputer Accounting:
	QuickBooks (3)
	ABUS F233—Financial Management
	ABUS F235—Fund Accounting for Non-Profits (3)
	or ABUS F160—Principles of Banking (3)
	BA F151—Introduction to Business
	CIOS F135—Microcomputer Spreadsheets (3)
	or CIOS F240—Microcomputer Databases (3)
	Department-recommended electives9
4. *	Minimum credits required

Minor

1.	Complete the following:	
	ABUS F101—Principles of Accounting I	3
	ABUS F201—Principles of Accounting II (3)	
	or ABUS F235—Fund Accounting for Non-Profits (3)	3
	ABUS F210—Income Tax	3
	ABUS F220—Microcomputer Accounting: QuickBooks (3)	
	or ABUS F221—Microcomputer Accounting (3)	3
	BA F151—Introduction to Business	3
	CIOS F135—Microcomputer Spreadsheets (3)	
	or CIOS F240—Microcomputer Databases (3)	3
2.	Minimum credits required	18

ACCOUNTING TECHNICIAN

College of Rural and Community Development Department of Applied Business, Paralegal and Accounting Community and Technical College 907-455-2800

www.ctc.uaf.edu/programs/abus/accounting.html

Certificate

Minimum Requirements for Certificate: 30 credits

The accounting technician program prepares students for entry-level accounting positions in payables and/or receivables, bookkeeping and payroll accounting. This program covers financial decisionmaking tools for the small business operator as well.

Courses in this program address the concerns of modern business people and provide the training necessary to enhance business success. The accounting technician certificate represents the first year of training toward the applied accounting A.A.S. degree. Students admitted into the accounting B.B.A. degree program may apply their earned certificate credits toward the state of Alaska's 150 hour requirement for a CPA license.

Students entering the certificate program are expected to have basic computer skills equivalent to CIOS F150. Classes are scheduled in the evening to accommodate working students. Microcomputer and office technology labs are available for handson training.

Certificate Program

- . Complete the general university requirements (page 95).
- 2. Complete the following certificate requirements:

a.	Complete one of the following communication courses:
	ABUS F170—Business English (3)
	or ABUS F271—Business Communications (3)
	or ENGL F111X—Introduction to Academic Writing (3)
	or ENGL F212—Business, Grant, and Report Writing (3) 3
b.	Complete one of the following computation courses: ABUS F155—Business Math (3)
	or MATH at the 100-level or above
c.	Complete the following:
	ABUS F154—Human Relations (3)
	or other approved human relations course3
3.	Complete the following program (major) requirements.
	ABUS F101—Principles of Accounting I
	ABUS F141—Payroll Accounting

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ABUS F201—Principles of Accounting II (3)		
or ABUS F235—Fund Accounting for Non-Profits (3)	3	
ABUS F203—Accounting Capstone	3	
ABUS F210—Income Tax	3	
ABUS F220—Microcomputer Accounting: QuickBooks (3)		
or ABUS F221—Microcomputer Accounting (3)	3	
BA F151—Introduction to Business	3	
Minimum credits required	30	

APPRENTICESHIP TECHNOLOGIES

College of Rural and Community Development Bristol Bay Campus 907-842-5109 Chukchi Campus 907-442-3400 Interior-Aleutians Campus 907-474-5439 Kuskokwim Campus 907-543-4500 Northwest Campus 907-443-2201 Community and Technical College 907-455-2800 www.uaf.edu/rural/

A.A.S. Degree

4

Minimum Requirements for Degree: 60 credits

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, Office of Apprenticeship and Training.

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, Bureau of Apprenticeship and Training. 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.T. degree program at UAF.

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99). As part of the A.A.S. degree requirements, complete: COMM F131X—Fundamentals of Oral Communication: Group Context (3) or COMM F141X—Fundamentals of Oral Communication: STAT F200X—Elementary Probability and Statistics (3) or DEVM F105—Intermediate Algebra (3) ABUS F154 or ANTH F100X or SOC F100X

3.	Complete 6 credits of safety, computer, business, technical, or other advisor-approved courses linked to an identified education or career pathway
4.	Approved apprenticeship program transfer of credit maximum
5.	Electives to complete 60 credits as needed.
6.	Minimum credits required60

ASSOCIATE OF ARTS

College of Rural and Community Development Bristol Bay Campus 907-842-5109 Chukchi Campus 907-442-3400 Interior-Aleutians Campus 907-474-5439 Kuskokwim Campus 907-543-4500 Northwest Campus 907-443-2201 Community and Technical College 907-455-2800 www.ctc.uaf.edu/programs/aa/

A.A. Degree

Minimum Requirements for Degree: 60 credits

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 only earn one A.A. degree.

Major — A.A. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A. degree requirements (page 98).
- 3 Minimum credits required60

ASSOCIATE OF SCIENCE

College of Rural and Community Development Interior-Aleutians Campus 907-474-5439 www.uaf.edu/iac/

A.S. Degree

Minimum Requirements for Degree: 60 credits

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 stepping-stone to a science-related baccalaureate program. You may earn only one A.S. degree.

Major — A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.S. degree requirements (page 99).
- 3. Complete concentration area of at least 15 credits from a science-focused area of study in natural sciences, mathematics, statistics, engineering, computer science or from a bachelor of science degree area as determined in coordination with your advisor*......15
- 4. 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.

AUTOMOTIVE TECHNOLOGY

College of Rural and Community Development Community and Technical College 907-455-2932 www.ctc.uaf.edu/programs/Automotive/

Certificate

Minimum Requirements for Certificate: 34 credits

The automotive technology program provides students with the education and training needed 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.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, the communication, computation and human relations content are embedded in the major required courses for this program).

3.	Complete the following program (major) requirements:*
	AUTO F102—Introduction to Automotive Technology
	AUTO F110—Basic Electrical Systems
	AUTO F122—Engine Theory and Diagnosis
	AUTO F131—Automotive Electrical II
	AUTO F150—Brake Systems
	AUTO F162—Suspension Alignment
	AUTO F190—Automotive Practicum I
	AUTO F202—Auto Fuel and Emissions Systems
	AUTO F222—Automotive Engine Performance
	AUTO F227—Automotive Electrical III
4.	Minimum credits required

* Students must earn a C grade (2.0) or better in each course.

AVIATION MAINTENANCE

College of Rural and Community Development Community and Technical College 907-455-2809 www.ctc.uaf.edu/programs/amt/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 31 – 49 credits; for Degree: 64 credits

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 (FAA) 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 are qualified 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, and 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 first of September of each year. Applicants may start at other times if they meet experience and educational qualifications that meet departmental approval.

Airframe and Powerplant — Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, the communication, computation and human relations content is embedded in the major required courses for this program.)

3.	Complete the following general requirements:
	AFPM F145—Basic Mathematics1
	AFPM F146—Basic Electricity2
	AFPM F147—Physics for Mechanics0.5
	AFPM F148—Aircraft Drawing
	AFPM F149—Fluid Lines and Fitting0.5
	AFPM F150—Materials and Processes
	AFPM F151—Cleaning and Corrosion Control1
	AFPM F152—Federal Aviation Regulations
	AFPM F153—Weight and Balance
	AFPM F154—Ground Operations and Servicing0.5
4	
4.	Complete the following airframe structures requirements:
	AFPM F261—Non Metallic Structures
	AFPM F262—Aircraft Coverings
	AFPM F263—Aircraft Finishes
	AFPM F264—Sheet Metal Structures
	AFPM F265—Aircraft Welding
	AFPM F266—Assembly and Rigging
	AFPM F267—Airframe Inspections0.5
	AFPM F270—Airframe Testing0.5
5.	Complete the following airframe systems and components re-
	quirements:
	AFPM F230—Aircraft Electrical Systems
	AFPM F253—Transport Category Aircraft1
	AFPM F254—Ice and Rain Control Systems0.5
	AFPM F256—Communications and Navigation Systems0.5
	AFPM F258—Cabin Atmosphere Control Systems1
	AFPM F259—Hydraulic and Pneumatic Systems 1.5
	AFPM F260—Aircraft Landing Gear Systems 1.5
6.	Complete the following powerplant theory and maintenance
0.	requirements:
	AFPM F235—Aircraft Reciprocating Engines
	AFPM F240—Turbine Engines
	AFPM F271—Powerplant Inspections
	AFPM F272—Powerplant Testing
_	
7.	Complete the following powerplant systems and components
	requirements:
	AFPM F231—Powerplant Electrical Systems
	AFPM F244—Lubrication Systems
	AFPM F245—Ignition Systems2

	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	
8.	Complete the following combined systems and components requirements:	
	AFPM F251—Fuel Systems	1.5
	AFPM F255—Fire Protection Systems	
	AFPM F257—Instrument Systems	0.5
9.	Minimum credits required	49

Airframe — Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, the communication, computation and human relations content is embedded in the major required courses for this program.)
- 3. Complete the following general requirements:

 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 Fitting
 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
- 4. Complete the following airframe structures requirements:

 AFPM F261—Non-Metallic 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
- Complete the following airframe systems and components requirements:

	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
).	Complete the following combined systems and components requirements:	
	AFPM F251—Fuel Systems	1.5
	AFPM F255—Fire Protection Systems	0.5
	AFPM F257—Instrument Systems	0.5

7.	Minimum credits re	quired 3	31

Powerplant — Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, the communication, computation and human relations content is embedded in the major required courses for this program.)

3.	Complete the following general requirements:
	AFPM F145—Basic Mathematics1
	AFPM F146—Basic Electricity2
	AFPM F147—Physics for Mechanics0.5
	AFPM F148—Aircraft Drawing1

	AFPM F149—Fluid Lines and Fitting	
	AFPM F150—Materials and Processes	2
	AFPM F151—Cleaning and Corrosion Control	1
	AFPM F152—Federal Aviation Regulations	1
	AFPM F153—Weight and Balance	
	AFPM F154—Ground Operations and Servicing	
4.	Complete the following powerplant theory and maintenance requirements:	2
	AFPM F235—Aircraft Reciprocating Engines	4.5
	AFPM F240—Turbine Engines	2
	AFPM F271—Powerplant Inspections	0.5
	AFPM F272—Powerplant Testing	
5.	Complete the following powerplant and systems component requirements:	S
	AFPM F231—Powerplant Electrical Systems	1.5
	AFPM F244—Lubrication Systems	
	AFPM F245—Ignition Systems	
	AFPM F246—Fuel Metering Systems	
	AFPM F248—Induction Systems	
	AFPM F249—Powerplant Cooling Systems	
	AFPM F250—Powerplant Exhaust Systems	
	AFPM F252—Propellers	
6.	Complete the following combined systems and components requirements:	
	AFPM F251—Fuel Systems	1.5
	AFPM F255—Fire Protection Systems	
	AFPM F257—Instrument Systems	
7.	Minimum credits required	31
Not	te: This is a one-year program, usually starting at the beginning of Sep ber. Entry at other times is allowed only with departmental approval	tem-

ber. Entry at other times is allowed only with departmental approval. A personal background check and drug test will be required prior to acceptance into the airframe and powerplant, airframe or powerplant certificate programs.

Aviation Maintenance — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).

BUSINESS, APPLIED

College of Rural and Community Development Community and Technical College 907-455-2800 Department of Applied Business, Paralegal and Accounting www.ctc.uaf.edu/programs/abus/

A.A.S. Degree

Minimum Requirements for Degree: 60 credits

Planning and preparation are the keys to success in business. The A.A.S. degree in applied business provides students with the skills and training needed to run a business effectively. The program covers basic knowledge and skills, emerging technologies, advanced procedures and interpersonal skills. Courses teach the principles of accounting, management, human relations, math, communications, customer service, computers, law, finance and logic. Instructors provide a practical understanding of the marketplace — not just a textbook view of business.

Potential careers for graduates include entrepreneurship and mid-level positions in business management, tourism, human resources and public administration.

Major — A.A.S. Degree

Concentrations: Administrative Management, Applied Management, Computer Applications, Entrepreneurship, Finance, Health Care Management, Human Resources, International Business, Management, Marketing, Public Management, Recreation and Guiding Management, and Tourism.

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements. (See page 99. As part of the A.A.S. degree requirements, it is recommended that students complete ABUS F154 for the human relations requirement.)

3.	Complete the following general business requirements:*	
	ABUS F101—Principles of Accounting I	3
	ABUS F161—Personal and Business Finance	3
	ABUS F175—Customer Service	3
	ABUS F179—Fundamentals of Supervision	3
	ABUS F232—Contemporary Management Issues	3
	ABUS F241—Applied Business Law (3)	
	or ABUS F242—Employment Law (3)	3
	ABUS F260—Marketing Practices (3)	
	or ABUS F263—Public Relations (3)	3
	BA F151—Introduction to Business	3

4. Complete one of the following concentrations:*

Administrative Management

Complete the following:

ABUS F102C—Keyboarding: Document Formatting	. 1
ABUS F116—Using 10-Key Calculators	
ABUS F134—Alphabetic Filing	
ABUS F170—Business English	
ABUS F182—Office Procedures	
ABUS F183—Advanced Job Readiness Skills	
ABUS F199—Practicum in Applied Business	.1
ABUS F264—Filing/Records Management	.3
CIOS electives appropriate to skill level	
ABUS, CIOS or CITS electives appropriate to skill level	

Applied Management

- Complete one of the following (21 or more credits):
- a. A university approved certificate; or
- b. A professional, technical or vocational license or certification issued by government or industry and 21 department approved electives.

Computer Applications

Complete the following:

CIOS F130—Microcomputer Word Processing
CIOS F135—Microcomputer Spreadsheets
CIOS F240—Microcomputer Databases
CIOS F146—Using Internet Tools and Technologies (3)
or CITS F220—Implementing Internet Tools and
Technologies (3)
CIOS F233—Desktop Publishing (3)
or CIOS F255—Microcomputer Graphics
ABUS, ACCT, BA, CITS or CIOS electives

Entrepreneurship

Complete the following:	
ABUS F201—Principles of Accounting II (3)	
or ABUS F210—Income Tax (3)	
or ABUS F220—QuickBooks Accounting (3)	
or ABUS F221—Microcomputer Accounting (3)	
or ABUS F235—Fund Accounting for Non-Profits (3)	3
ABUS F233—Financial Management (3)	
or ABUS F234—Introduction to Investing (3)	3
ABUS F265—Seminar in Applied Marketing	3
ABUS F272—Small Business Planning	3
ABUS F273—Managing a Small Business	3
ABUS F274—E-commerce	3
ABUS, ACCT, BA, CITS or CIOS electives	3

Finance

Complete the following:	
ABUS F160—Principles of Banking	3
ABUS F201—Principles of Accounting II	3
ABUS F210—Income Tax	3
ABUS F220—QuickBooks Accounting (3)	
or ABUS F221—Microcomputer Accounting (3)	3
ABUS F233—Financial Management	3
ABUS F234—Introduction to Investing	3
ABUS F272—Small Business Planning	3

Health Care Management

Complete the following:	
HLTH F100-Medical Terminology	. 3
HLTH F118-Medical Law and Ethics	. 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	

Human Resources

Complete the following:	
ABUS F141—Payroll Accounting	3
ABUS F178—Professionalism	3
ABUS F231—Introduction to Personnel	3
ABUS F242—Employment Law	3
CIOS F135—Microcomputer Spreadsheets	3
CIOS F240—Microcomputer Databases	3
ABUS, ACCT, BA or CIOS electives	3

International Business

a.	Complete the following:	
	ABUS F178—Professionalism	. 3
	ABUS F233—Financial Management	
	ABUS F265—Seminar in Applied Marketing	
	ABUS F275—Applied International Business	
	Foreign language elective	
b.	Complete one of the following elective options:	
	Option 1	
	ABUS F272—Small Business Planning (3)	
	or ABUS F273—Managing a Small Business (3)	. 3
	PS F201—Comparative Politics (3)	
	or PS F321W—International Politics (3)	3
	Option 2	
	ABUS F299—Practicum in Applied Business	
	(Study Abroad)	. 6
	Management	
	Complete the following:	
	ABUS, ACCT, BA, ECON, MATH or STAT or other	
	department-approved electives	21
	Recommended courses include, but are not limited to:	
	MATH F161X MATH F262 ACCT F262 FCON F100X FCON	

MATH F161X, MATH F262, ACCT F262, ECON F100X, ECON F200, ECON F201, ECON F202, ECON F227, BA F254, STAT F200X, ABUS F201, ABUS F202, etc.

Marketing

Complete the following:	
ABUS F178—Professionalism	3
ABUS F265—Seminar in Applied Marketing	3
ABUS F274—E-commerce	3
CIOS F233-Desktop Publishing (3)	
or CIOS F255—Microcomputer Graphics	3
CIOS or CITS F200-level or above Internet or web	
design elective	3
ABUS, BA or CIOS electives	6

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Public Management

Complete the following:
ABUS F235—Fund Accounting
PS F100X—Political Economy
PS F101—Introduction to American Government and Politics3
PS F212—Introduction to Public Administration
PS F403W—Public Policy (3)
or ABUS F242—Employment Law
ABUS, ACCT, CIOS or PS electives

Recreation and Guiding Management

Complete the following:
ABUS F158—Introduction to Tourism
NRM F101—Natural Resources Conservation and Policy
NRM F161—Wilderness Leadership Education
EMS F152—Emergency Trauma Training First Responder (3)
or EMS F195—Wilderness First Responder (3)
or more advanced Emergency First Responder Training (3)3
EMS F257—Arctic Survival (3)
or NRM F361—Advanced Wilderness Leadership (3)
RECR electives

Tourism

a.	Complete the following: ABUS F158—Introduction to Tourism
b.	ABUS F275—Applied International Business
	Lodge Operations
	Management
c.	Complete one of the following elective options: <i>Option</i> 1
	ABUS, ACCT, BA, CAH or CIOS electives
	(Study Abroad)
	Minimum credits required

Minors

Applied Business — General Business

Complete the following:	
ABUS F101—Principles of Accounting I	3
ABUS F161—Personal and Business Finance	3
ABUS F175—Customer Service	3
ABUS F232—Contemporary Management Issues (3)	
or ABUS F275—Applied International Business (3)	3
ABUS F260—Marketing Practices (3)	
or ABUS F263—Public Relations (3)	3
BA F151—Introduction to Business	3
Minimum credits required e: Other courses specific to individual education and career goals may be	

substituted with program approval.

Applied Business — Recreation and Guiding Management

1. Complete the following:

Complete the following.
ABUS F158—Introduction to Tourism
ABUS F175—Customer Service
NRM F161—Wilderness Leadership Education
EMS F152—Emergency Trauma Training First Responder (3)
or EMS F195—Wilderness First Responder (3)
or more advanced Emergency First Responder
Training (3)

2.	Complete six credits from the following electives:
	RECR electives $(1-6)$
	or NRM F361—Advanced Wilderness Leadership (3)
	or ABUS/NRM/RECR approved practicum (1 – 6)

BUSINESS MANAGEMENT, APPLIED

College of Rural and Community Development Department of Applied Business, Paralegal and Accounting Community and Technical College 907-455-2800 www.ctc.uaf.edu/programs/abus/

Certificate

Minimum Requirements for Certificate: 30 credits

Planning and preparation are keys to success in business. The applied business management certificate provides students with the basic principles necessary to run a business effectively. Graduates of the program will have the foundation of contemporary management skills needed 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. Course work 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.

Certificate Program

Concentrations: Computer Applications, Finance, General Business, Human Resources, International Business, Marketing, Office Administration, Public Management, Recreational Guiding and Tourism.

- 1. Complete the general university requirements (page 95).
- 2. Complete the following certificate requirements:

a.	Complete 3 credits from the following communication courses: ABUS F170—Business English (3)
	or ABUS F271—Business Communications (3)
	or ENGL F111X—Introduction to Academic Writing (3)
	or ENGL F212—Business, Grant and Report Writing (3)3
b.	Complete one of the following computation requirements: ABUS F155—Business Math (3)
	or any MATH course at the F100-level or above (3)
c.	Complete the following: ABUS F154—Human Relations (3)
	or other approved human relations course
3.	Complete the following general business courses:
	ABUS F101—Principles of Accounting I
	ABUS F161—Personal and Business Finance
	BA F151—Introduction to Business
ł.	Complete one of the following concentrations:
	Computer Applications
	CIOS F130—Microcomputer Word Processing
	CIOS F135—Microcomputer Spreadsheets

CIOS F240—Microcomputer Databases
Finance
ABUS F160—Principles of Banking
ABUS F210—Income Tax
ABUS F233—Financial Management
ABUS F234—Introduction to Investing

General Business

ABUS F201—Principles of Accounting II (3)	
or ABUS F210—Income Tax (3)	
or ABUS F220—QuickBooks Accounting (3)	
or ABUS F221—Microcomputer Accounting (3)	
or ABUS F235—Fund Accounting for Non-Profits (3)	3
ABUS F179—Fundamentals of Supervision	3
ABUS F232—Contemporary Management Issues (3)	
or ABUS F275—Applied International Business (3)	3
ABUS F260—Marketing Practices (3)	
or ABUS F263—Public Relations (3)	3

Human Resources

ABUS F141—Payroll Accounting	3
ABUS F179—Fundamentals of Supervision	
ABUS F231—Introduction to Personnel	3
ABUS F242—Employment Law	3

International Business

ABUS F178—Professionalism
ABUS F275—Applied International Business (3)
or ABUS F232—Contemporary Management Issues (3)
PS F201—Comparative Politics
Foreign language elective

Marketing

ABUS F175—Customer Service	3
ABUS F178—Professionalism	3
ABUS F260—Marketing Practices (3)	
or ABUS F263—Public Relations (3)	3
CIOS F200-level graphics or web design elective	3

Office Administration

ABUS F170—Business English	. 3
ABUS F182—Office Procedures	
ABUS F199—Practicum in Applied Business	
CIOS Elective appropriate to skill level	. 3
Advisor approved ABUS or CIOS electives	. 2

Public Management

ABUS F235—Fund Accounting)
PS F100X—Political Economy	5
PS F101—Introduction to American Government and	
Politics (3)	
or ABUS F232—Contemporary Management Issues (3)	5
PS F212—Introduction to Public Administration	5

Recreational Guiding

ABUS F175—Customer Service	. 3
NRM F161—Wilderness Leadership Education	
EMS F152—Emergency Trauma Training First Responder (3)	
or EMS F195—Wilderness First Responder (3)	
or more advanced Emergency First Responder Training (3)	. 3
RECR electives	.3

Tourism

Tourisin	
ABUS F158—Introduction to Tourism	
ABUS F175—Customer Service	
ABUS F199—Practicum in Applied Business	
ABUS F256—Small Hotel, Bed and Breakfast, and Lodge	
Operations $(1 - 3)$	
or ABUS F267—Transportation and Logistics	
Management $(1 - 3)$	
or ABUS F268—Rural Tourism: Planning and	
Principles $(1 - 3)$	
or ABUS F269—Food and Beverage Management (1 – 3)	
5. Minimum credits required	

substituted with program approval.

COMMUNITY HEALTH

College of Rural and Community Development Bristol Bay Campus 907-842-5109 Chukchi Campus 907-442-3400 Interior-Aleutians Campus 907-474-5439 Kuskokwim Campus 907-543-4500 Northwest Campus 907-443-2201 Community Health Aide/Practitioner Training Centers: Anchorage CHA Training Program, ANTHC 907-729-2427; Norton Sound Health Corp., Nome 907-443-3404; Southeast Alaska Regional Health Corp., Sitka 907-966-8758; Yukon-Kuskokwim Health Corp., Bethel 907-543-6120.

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 34 credits; for Degree: 60 credits

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 CHA'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 CHP statewide examination.

Upon successful completion of all certification requirements, students are awarded a community health practitioner (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 dean of the College of Rural and Community Development.

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 907-455-2050 or 866-955-2050.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. 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.)
- 3. Complete the following:

CHP F131—Community Health Aide, Session I	.8
CHP F132—Community Health Aide, Session II	.8
CHP F133—Community Health Aide, Session III	.8
CHP F134—Community Health Aide, Session IV	.8
CHP F135—Community Health Aide, Preceptorship	. 2

regionally available. Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete the following program (major) requirements:*
- a. Complete the following:

CHP F	F131—Community Health Aide, Session I	8
CHP F	F132—Community Health Aide, Session II	8
CHP F	F133—Community Health Aide, Session III	8
CHP F	F134—Community Health Aide, Session IV	8
CHP F	F135—Community Health Aide, Preceptorship	2

CONSTRUCTION MANAGEMENT

College of Rural and Community Development Community and Technical College 907-455-2846 www.ctc.uaf.edu/programs/cm/

A.A.S. Degree

Minimum Requirements for Degree: 65 credits

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; on small multi-family projects to the largest of skyscrapers and industrial projects; and on 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 provides students with a broad knowledge of building systems and construction techniques. CM 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 CM 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.

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- Complete the A.A.S. degree requirements. (See page 99. As part of the A.A.S. degree requirement complete ENGL F111X, ENGL F212 and COMM F131X or COMM F141X for the communications requirement, and MATH F107X for the computation requirement. The human relations content is embedded in some of the major required courses for this program).

Complete the following program (major) requirements:*	
ABUS F101—Principles of Accounting I	3
CM F102—Methods of Building Construction	3
CM F142—Mechanical and Electrical Technology	4
CM F163—Building Construction Cost Estimating	3
CM F201—Construction Project Management	3
CM F202—Project Planning and Scheduling	3
PHYS F103X—College Physics	4
Minimum credits required	
	ABUS F101—Principles of Accounting I ABUS F201—Principles of Accounting II CM F102—Methods of Building Construction CM F123—Codes and Standards CM F142—Mechanical and Electrical Technology CM F163—Building Construction Cost Estimating CM F201—Construction Project Management CM F202—Project Planning and Scheduling CM F205—Construction Safety CM F213—Civil Technology CM F213—Civil Technology CM F231—Structural Technology CM F263—Civil Construction Cost Estimating CM F299—Construction Management Internship DRT F170—Beginning AutoCAD MATH F108—Trigonometry PHYS F103X—College Physics Minimum credits required

* Students must earn a C grade (2.0) or better in each course.

CONSTRUCTION TRADES TECHNOLOGY

College of Rural and Community Development Interior-Aleutians Campus 907-474-5439 www.uaf.edu/iac/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 36.5 credits; for Degree: 70 – 73 credits

The construction trades technology program is designed to prepare students to work in the construction industry. The program

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prepares students for employment in areas where there is a projected shortage of skilled workers

This program provides students with fundamental knowledge of construction industry expectations as well as hands-on training. It responds to the skills targeted by Alaskan employers. Students completing the certificate program will have completed the first year of the A.A.S. degree program. Graduates of the A.A.S. degree program may pursue opportunities with employers as they acquire a higher level of residential construction trade and/or residential construction management skills.

A strong desire to work in the construction industry is important. Students must be willing to work collaboratively with industry employees in their local communities in order to fulfill the practicum components of courses.

Certificate Program

- Complete the general university requirements (page 95). 1.
- Complete the certificate requirements. (See page 97. As part of 2. the certificate requirement, complete 3 credits each in the communication and human relations requirements.)
- 3. Complete 3 credits from one of the following computation courses. CTT F106—Construction Mathematics (3) or TTCH F131—Mathematics for the Trades (3)......3
- 4. Complete the following program (major) requirements: CTT F100—Construction Technology Core (3) or CTT F101-Basic Construction Safety (1) and CTT F102—Introduction to Hand and Power Tools (1) and CTT F103—Introduction to Blueprint Reading (1) CTT F110—Residential Carpentry — Level One (8.5) or CTT F111—Materials and Tools Used in the Trade (2.5) and CTT F112—Floor Systems, Wall and Ceiling Framing (2) and CTT F113-Roof Framing, Windows and Exterior Doors (2)
 - and CTT F114—Introduction to Concrete Materials
- CTT F115—Residential Carpentry Level Two (12) or CTT F116—Reading Plans and Site Layout — Level One (2) and CTT F117—Exterior Finish and Moisture Protection (2) and CTT F118-Roofing, Stairs and Metal Studs Applications (3) and CTT F119—Drywall and Interior Finish HLTH F122—First Aid and CPR.....1 5.

Major — A.A.S. Degree

- Complete the general university requirements (page 95). 1.
- Complete the A.A.S. degree requirements. (See page 99. As part 2 of the degree requirements, complete CTT F106 or TTCH F131 for the computation requirement.)
- Complete the construction trades technology program (major) 3. requirements.
- Complete one the following concentrations:* 4.

Residential Construction

CTT F150—Plumbing — Level One	4
CTT F155—Plumbing — Level Two	8
CTT F170—Residential Electrical — Level One	9
CTT F175—Residential Electrical — Level Two	8
CTT F299—Student Practicum II	1.5

Residential Construction Project Management

CIOS F150—Computer Business Applications	
CM F205—Construction Safety	
CTT F104—Basic Communication and Employment Skills2	

CTT F240—Introduction to Project Development for Rural	
Residential Construction	3
CTT F241—Introduction to Estimating, Cost Control,	
Quality Controls and Residential Construction	3
CTT F299—Student Practicum II1	.5
TM F105—Introduction to Tribal Finance Applications	3
Complete 3 credits of tribal management approved electives from the following courses:	n

the following courses.
TM F101—Introduction to Tribal Management (3)
or TM F201—Advanced Tribal Management (3)
or TM F205—Advanced Tribal Finance (3)
or other CTT advisor approved TM course (3)3
Complete 6 additional credits of CTT elective courses not taken

- 6
- Minimum credits required 70 73 7. Students must earn a C grade (2.0) or better in each course.

CULINARY ARTS AND HOSPITALITY

College of Rural and Community Development Community and Technical College 907-455-2800 www.ctc.uaf.edu/programs/culinary/

Certificate; A.A.S. Degree

5.

Minimum Requirements for Certificates: 30 credits; for Degree: 60 credits

The Culinary Arts and Hospitality Department prepares students for careers in this ever-expanding field. Graduates can seek employment in various food service operations or in 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.

Certificate Program — Culinary Arts

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. 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.)
- Complete the following: 3. CAH F101—Introduction to the Culinary Field1 CAH F146—Introduction to Baking and Pastry4 CAH F150—Food Service Sanitation2 4. Complete 10 – 13 credits from the following: CAH F154—Food and Beverage Service2 CAH F170—Gourmet Cooking......2 CAH F172—Gourmet Asian Cooking2 CAH F174—Vegetarian Cooking2 CAH F175—Protein Fabrication......3 CAH F176—Heart Healthy and Diabetic Cooking......2 CAH F230—Menu Planning.....1 CAH F242—Culinary III — Vegetables and Starch2 CAH F243—Culinary IV — À la Carte Cookery 4 CAH F250—Garde-Manger4

Certificate Program — Baking and Pastry Arts

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. 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.)

3. 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 Fl50—Food Service Sanitation	. 2
CAH F248—Intermediate Baking and Pastry	.4

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements. (See page 99. As part of the degree requirement, CAH F255 is recommended to complete the human relations requirement.)
- 3. Complete the following program (major) requirements:* CAH F101—Introduction to the Culinary Field1 CAH F140—Culinary I — Principles and Techniques......4 CAH F141-Culinary II - Stocks, Soups and Sauces4 CAH F146—Introduction to Bakery and Pastry4 CAH F150—Food Service Sanitation2 CAH F154—Food and Beverage Service2 CAH F199—Culinary Arts Externship2 CAH F230—Menu Planning.....1 CAH F248—Intermediate Baking and Pastry4 CAH F250—Garde-Manger4 CAH F253—Storeroom Purchasing and Receiving2 CAH F256—Restaurant and Hospitality Cost Management2 Minimum credits required60
- * Students must earn a C grade (2.0) or better in each course.

DENTAL HYGIENE

College of Rural and Community Development Community and Technical College 907-455-2834 www.ctc.uaf.edu/programs/health/dh/

A.A.S. Degree

Minimum Requirements for A.A.S. Degree: 69 credits

The registered dental hygienist is a licensed oral health educator and clinical operator who uses preventive, educational and therapeutic methods to help individuals and groups attain and maintain optimum oral health. The dental hygiene A.A.S. degree is a threeyear program with one year of prerequisite science and general education courses and two years of course work in dental hygiene. The program prepares graduates clinically and academically to take the National and Western Regional Examining Boards for licensure. Once enrolled as a dental hygiene student, the student can anticipate a four-semester, 40-hour-per-week intensive program. Some evening classes and clinics are scheduled.

The dental hygiene program has received initial accreditation from the Commission on Dental Accreditation of the American Dental Association.

Admission Requirements

Admission to the dental hygiene program is competitive. Six students per year are accepted, based on the following criteria:

- 1. Complete UAF application.
- 2. Complete dental hygiene program application.
- 3. Proof of immunity to rubella, rubeola, varicella, hepatitis A, hepatitis B, tetanus, diphtheria and pertussis.
- 4. Evidence of freedom from tuberculosis by PPD or chest X-ray within the previous six months.
- 5. Current CPR certification for health care providers.
- 6. Complete the required prerequisite with a C* (2.0) or better in each course, and an overall GPA of at least 2.5. GPA is considered in the admission criteria.
- 7. Scores on the Health Occupational Basic Entrance Test (HOBET).
- 8. Personal interview for top-tier candidates.
- 9. Complete prerequisite courses**:

	BIOL F111X—Human Anatomy and Physiology I	4
	BIOL F112X—Human Anatomy and Physiology II	4
	BIOL F240—Beginnings in Microbiology	4
	CHEM F103X—Basic General Chemistry	4
	CHEM F104X—Beginnings in Biochemistry: A Survey of	
	Organic Chemistry and Biochemistry	4
	HLTH F203—Science of Nutrition	3
	PSY F101—Introduction to Psychology	3
*	Courses with equivalent content transferred from another university ma	ay
	be substituted for the above UAF courses	

Note: Additional information and a complete application packet are available at 907-455-2834 or 907-455-2805, fydh@uaf.edu, or www.ctc.uaf.edu/programs/health/dh/. It is strongly recommended that interested students work with the dental hygiene advisor while preparing to apply to the program.

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements. (See page 99. As part of the degree requirements, complete SOC F100X for the human relations requirement.)

3.	Complete the following program (major) requirements:*	
	DA F150—Dental Radiography	4
	DH F111—Dental Anatomy Embryology and Histology	2
	DH F112—Techniques I for Dental Hygienists	7
	DH F114—Anatomy of the Orofacial Structures	2
	DH F121—Periodontics I	2
	DH F122—Techniques II for Dental Hygienists	4
	DH F165—Introduction to Dental Pharmacology	2
	DH F181—Clinical Practicum I	4
	DH F182—Clinical Seminar I	1
	DH F211—Periodontics II	2
	DH F212—Techniques III for Dental Hygienists	3
	DH F214—Pathology of Oral Tissues	2
	DH F224—Principles of Dental Health	3
	DH F283—Clinical Practicum II for Dental Hygienists	5
	DH F284—Clinical Seminar II	1
	DH F285—Clinical Practicum III for Dental Hygienists	6
	DH F286—Clinical Seminar III	1
	DH F310—Oral Pain Control for Dental Hygienists	3
4	Minimum credits required	69

* Students must earn a C grade (2.0) or better in each course.

DIESEL/HEAVY EQUIPMENT

College of Rural and Community Development Community and Technical College 907-455-2809 www.ctc.uaf.edu/programs/diesel/

Certificate

Minimum Requirements for Certificate: 36 credits

The diesel and heavy equipment mechanics program offers the student 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 tuneups 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 department coordinator for details.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, the communication, human relations, and computation content is embedded in the major required courses for this program.)

3.	Complete the following program (major) requirements:
	DSLT F101—Safety Including Rigging and Lifting1
	DSLT F103—Basic Equipment and Truck Operation1
	DSLT F105—Preventive Maintenance
	DSLT F107—Basic Electrical Systems and Electrical Fuel
	Injection
	DSLT F123—Heavy Duty Braking Systems
	DSLT F154—Diesel Fuel Injection
	DSLT F201—Manual Transmissions and Differentials
	DSLT F202—Heavy Duty Automatic Transmissions
	DSLT F254—Engine
	MECN F103—Starting and Charging Systems
	MECN F210—Hydraulics
	WMT F103—Welding I
	WMT F105—Welding II
4.	Minimum credits required

DRAFTING TECHNOLOGY

College of Rural and Community Development Community and Technical College 907-455-2845 www.ctc.uaf.edu/programs/drafting/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 33 – 34 credits; for Degree: 60 – 63 credits

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 multi-functional 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.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97).

3.	Complete the following certificate requirements:	
	DRT F101—Introduction to Drafting	3
	DRT F121—Construction Documents and Drawings	
	DRT F170—Beginning CAD	3
	DRT F210—Intermediate CAD	3
	DRT F270—Advanced CAD	3
4.	Complete one of the following concentrations:	

a. Architectural Drafting

CM F102—Method	s of Building Construction	3
CM F123—Codes a	nd Standards	3
DRT F140—Archite	ectural Drafting	3

b. Civil Drafting

).		
	CM F102—Methods of Building Construction	.3
	CM F213—Civil Technology	.4
	DRT F150—Civil Drafting	.3
	0	

c. Information Technology

CITS F203—Information Technology Support	
Fundamentals	4
CITS F204—Introduction to Network Support and	
Administration	3
CITS F261—Computer and Network Security	

${\rm d.}$ Mechanical and Electrical Drafting

CM F102—Methods of Building Construction
CM F142—Mechanical and Electrical Technology
DRT F155—Mechanical and Electrical Drafting

e. Process Technology

	PRT F101—Introduction to Process Technology	
	PRT F110—Introduction to Occupational Safety, Health and	
	Environmental Awareness	
	PRT F117—Drafting for Technicians	
f.	Structural Drafting	
	CM F102—Methods of Building Construction	
	CM F231—Structural Technology	
	DRT F145—Structural Drafting	
5	Minimum credits required 33 – 34	

Major – A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete the following program (major) requirements:*

 DRT F101—Introduction to Drafting
 3

 DRT F140—Architectural Drafting
 3

 DRT F150—Civil Drafting
 3

 DRT F170—Beginning CAD
 3

 DRT F210—Intermediate CAD
 3

 DRT F145—Structural Drafting
 3

 DRT F155—Mechanical and Electrical Drafting
 3

 CM F102—Means and Methods of Building Construction
 3

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CM F123—Codes and Standards	3
CM F142—Mechanical and Electrical Technology	
CM F213—Civil Technology	
CM F231—Structural Technology	
Complete 3 – 6 credits from the following electives:	
DRT F121—Construction Documents and Drawings	3
DRT F260—Drafting Internship	- 6
CM F201—Construction Project Management	3

- 5.
- Students must earn a C grade (2.0) or better in each course This elective requires additional math prerequisites.

EARLY CHILDHOOD EDUCATION

4

College of Rural and Community Development Bristol Bay Campus 907-842-5109 Chukchi Campus 907-442-3400 Interior-Aleutians Campus 907-474-5207 Kuskokwim Campus 907-543-4500 Northwest Campus 907-443-2201 Community and Technical College 907-455-2883 www.ctc.uaf.edu/programs/e-childhood/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 34 credits; for Degree: 60 credits

This program prepares students for employment as early childhood and child care providers and improves the skills of those already employed in the field. Graduates pursue opportunities with child care centers, head start programs, early childhood education programs, child welfare service agencies, scouting services, staff training, program licensing and public school teacher aide programs. This program meets standards specified by the National Association for the Education of Young Children and leads to state certification as an Early Childhood Education Associate II.

The certification program in early childhood is for students enrolling in college for the first time as well as for those who are educated in other subject areas but desire retraining for employment in this field. Through course work, students gain the knowledge and skills they need to pursue the field-based Child Development Associate Credential and to meet state of Alaska requirements for employment as directors or teachers in licensed centers. Course work also fulfills minor or concentration requirements for degrees in other disciplines.

Students entering either the A.A.S. degree or certificate program should meet with an early childhood advisor to discuss a specific course of study. The required early childhood courses offered by any of the UAF campus sites may be used to meet graduation requirements for the certificate or degree.

An agreement between the UAF College of Rural and Community Development and the University of Alaska Southeast allows students in rural locations to take courses in early childhood education and obtain an A.A.S. degree via distance delivery. Students should contact their advisor for assistance with the selection of general education courses and electives that meet the degree requirements of their campus. The courses for the certificate and A.A.S. degree lay the foundation for the B.A. in Child Development and Family Studies.

Certificate Program

- 1. Complete the general university requirements (page 95).
- Complete the following certificate requirements: 2.
- a. Complete the following communication courses:

b.	Complete one of the following computation courses: ECE F117—Math Skills for Early Childhood Educators (3) or any math course at the F100-level or above
c.	Complete the following human relations course:* ECE F107—Child Development II: The Preschool and
	Primary Years
	Complete the following program (major) requirements:* ECE F101—Introduction to Early Childhood Profession
	Toddlers
	ECE F110—Safe, Healthy, Learning Environments
	ECE F119—Curriculum I: Principles and Practices
	ECE F213—Curriculum II: Thinking, Reasoning and
	Discovering (3)
	or ECE F214—Curriculum III: Infants and Toddlers (3)
	ECE F229—Foundations in Nutrition and
	Physical Wellness
	ECE F132—Young Child and the Family1
	ECE F140—Positive Social Development (3)
	ECE F170—Practicum I (3)
	or ECE F115—Responsive and Reflective Teaching (3)
	or ECE F299—Practicum for CDAs (3)
	Minimum credits required

Major — A.A.S. Degree

3

- 1. Complete the general university requirements (page 95).
- Complete the A.A.S. degree requirements. (See page 99. As 2. part of the A.A.S. degree requirement, complete ECE F117 or any course at the F100-level or above in mathematical sciences for the computation requirement, and ECE F107 for the human relations requirement.)

Complete the following.*

J.	Complete the following.	
	ECE F101—Introduction to Early Childhood Profession	3
	ECE F104—Child Development I: Prenatal, Infants and	
	Toddlers	3
	ECE F110—Safe, Healthy, Learning Environments	3
	ECE F119—Curriculum I: Principles and Practices	3
	ECE F213—Curriculum II: Thinking, Reasoning and	
	Discovering (3)	
	or ECE F214—Curriculum III: Infants and Toddlers (3)	3
	ECE F229—Foundations in Nutrition and	
	Physical Wellness	3
	ECE F140—Positive Social and Emotional Development	3
	ECE F170—Practicum I (3)	
	or ECE F115—Responsive and Reflective Teaching (3)	
	or ECE F299—Practicum for CDAs (3)	3
	ECE F210—Child Guidance	3
	ECE F235—Screening, Assessment and Recording	2
	ECE F230—Introduction to Children with Special Needs (3)	
	or ECE F240—Inclusion of Children with Special Needs	3
	ECE F242—Child and Family Ecology (3)	
	or ECE F342—Family Relationships (3)	
	or other advisor approved family class	3
	ECE F270—Practicum II	3
4.	Complete 7 credits as designated by an ECE	
	advisor/coordinator	7
~		
5. *	Minimum credits required	60
	Students must earn a C grade (2.0) or better in each course.	

Minor

1.	Complete the following: ECE F101—Introduction to Early Childhood Profession
2.	Complete 15 ECE credits, including a minimum of 6 upper- division ECE credits and excluding special topics (ECE X93) and current issue (ECE F249) courses
3.	Minimum credits required

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EDUCATOR: PARA-PROFESSIONAL

College of Rural and Community Development Interior-Aleutians Campus 907-474-5439 www.uaf.edu/iac/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 30 credits; for Degree: 60 credits

The educator: para-professional (EDPA) program is designed to prepare students to work in classrooms assisting the classroom teacher. The EDPA curriculum emphasizes school protocols, classroom methods, management and assessment. This program prepares students for employment as a para-professional educator and will improve the skills of those currently employed in various educational settings.

The certificate provides students with fundamental knowledge of how a school system "works" as well as hands-on training in content, methodology, classroom management and student assessment. The curriculum leads into the educator: para-professional associate of applied science degree. Graduates of the A.A.S. degree program may pursue many opportunities with school districts and local education agencies. The program meets mandates established by the No Child Left Behind Act of 2002 for teacher aides as well as the competencies developed by the state of Alaska. Students entering either the certificate or the A.A.S. degree program must meet with a program advisor to discuss a program of studies and to develop an individual learning plan. Students may receive credit for prior learning through work-based experience after evaluation of their learning experiences.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97).

3.	Complete the following core requirements: CIOS F100—Intro to Personal Computers
	EDPA F190—Integrating Local Knowledge into the
	Curriculum
	EDPA F210—Technology in the Classroom
	ECE/PSY F245—Child Development
4.	Complete the following program requirements:
	EDPA F110—Intro to Para-Professional Education
	EDPA F120—Classroom Management
	EDPA F130—Differentiating Instruction
	EDPA F140—Developing Children as Writers1
	EDPA F150—Developing Children as Readers1
	EDPA F160—Primary Math Methods (1)
	or EDPA F170—Upper Elementary Math Methods (1)1 EDPA F250—Current Topics for Educators1
	-
5.	Minimum credits required

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).

3.	Complete the following program requirements:*	
	CIOS F100—Intro to Personal Computers	1
	PSY F101—Intro to Psychology	3
	ED F110—Becoming a Teacher in the 21st Century	1
	EDPA F110—Intro to Para-Professional Education	2
	EDPA F120—Classroom Management	2
	EDPA F130—Differentiating Instruction	2

	EDPA F140—Developing Children as Writers
	or EDPA F170—Upper Elementary Math Methods (1) 1 EDPA F190—Integrating Local Knowledge into the
	Curriculum
	EDPA F250—Current Topics for Educators
	EDPA F299—Practicum II
	ECE/PSY F245—Child Development
4.	Complete 12 credits from one of the following concentration ar-
	eas or combine no more than 2 concentration areas with 6 credits
	of course work in each of the two concentration areas*:
	Alaska Native Languages
	ANL F199—Practicum in Native Language Education
	ANL F251—Introduction to Athabascan Linguistics
	ANL F255—Introduction to Alaska Native Languages: Eskimo- Aleut (3) or ANL F256—Introduction to Alaska Native Languages:
	Indian Languages (3)
	ANL F288—Curriculum and Materials Development for Alaska Native Languages
	ANL Elective
	Elementary Education
	ECE F105—Developmentally Appropriate Practice
	ED F102—Orientation to Alaska Native Education2
	ED F201—Introduction to Education
	ED Elective
	Special Education
	ED F201—Introduction to Education
	ECE F105—Developmentally Appropriate Practice1 ECE F230—Introduction to Children with Special Needs3
	ECE F240—Inclusion of Children with Special Needs
	ECE Elective
	Counseling/Social Work
	HUMS F120—Cultural Diversity in Human Services
	HUMS F125—Introduction to the Addictive Process
	HUMS F205—Basic Principles of Group Counseling
	HUMS Elective
	Early Childhood Education
	ECE F105—Developing Appropriate Practice1 ECE F120—Curriculum and Activities for Young Children4
	or
	ECE F121—Physical Activities for Young Children1
	ECE F122—Cognitive Activities for Young Children 1
	ECE F123—Communicative Activities1
	ECE F124—Creative Activities for Young Children 1
	ECE F130—Culture, Learning and the Young Child1 ECE F140—Positive Social Development
	or
	ECE F141—Class Management1
	ECE F142—Social Development of the Young Child1
	ECE F143—Developing Positive Self-Concepts
	in Young Children
	ECE F210—Child Guidance
	ECE Fl255—streening, Assessment and Recording
	Information Technology Specialist
	CIOS F150—Computer Business Applications
	CIOS F110—Microcomputer Operating Systems1 – 3
	CIOS F146—Using Internet Tools and Technologies 1 – 3
	CIOS F233—Desktop Publishing 1 – 3
	CIOS F255—Microcomputer Graphics 1 – 3 CIOS Elective 1 – 3

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Rural Development

ANTH F230—The Oral Tradition: Folklore and Oral History3
HIST F250—Alaska History for Local Historians
RD F255—Rural Alaska Land Issues
RD F265—Perspectives on Subsistence in Alaska (3)
or RD F280—Resource Management Research
Techniques (3)
or WLF F201—Wildlife Management Principles (3)3
Elective
Other Concentration
Any advisor-approved discipline-based concentration area 12

Students must earn a C grade (2.0) or better in each course.

EMERGENCY SERVICES

College of Rural and Community Development Community and Technical College 907-455-2853 www.ctc.uaf.edu/programs/emergency/

A.A.S. Degree

Minimum Requirements for Degree: 68 - 69 credits

The UAF emergency services program provides classroom education, hands-on training and practical vocational experience through 10 local fire and rescue organizations. The program offers students a fundamental working knowledge of the various aspects of municipal fire, wildland fire, and hazardous materials control.

Instructors provide a high level of technical expertise on a variety of specialty emergency 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.

Associate degrees in municipal fire control, wildlands fire control, hazardous materials and public safety are offered.

Major — A.A.S. Degree

Concentrations: Hazardous Materials Control, Municipal Fire Control, Public Safety and Wildland Fire Control

Hazardous Materials Control

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete the following program (major) requirements:*

a.	Complete the following:
	EMS F170—EMT: Emergency Medical Technician I
	FIRE F110—Introduction to Hazardous Waste Operations
	and Emergency Response
	FIRE F121—Fire Behavior and Combustion
	FIRE F131—Fire Fighter I Series I
	FIRE F133—Fire Fighter I Series II
	FIRE F135—Fire Fighter I Series III
	FIRE F137—Fire Fighter I Series IV
	FIRE F203—Hazardous Materials Chemistry I3
	FIRE F205—Hazardous Materials Chemistry II3
	FIRE F207—Hazardous Materials Technician
	FIRE F209—Hazardous Materials Command/Safety Officer3
	FIRE F210—Fire Administration I
b.	Complete 9 credits from the following major elective courses:
	FIRE F212—Building and Fire Codes
	FIRE F215—Advanced Hazardous Materials Technician
	FIRE F216—Methods of Instruction for Emergency
	Services Training
	FIRE F231—Hazardous Materials Tactical Operations
	L

FIRE F249—Computer Aided Management of Emergency	
Operations	3
FIRE F293—Special Topics	3
General electives	6

Note: Major electives and general electives must be approved by the student's advisor.

Municipal Fire Control

1 6 11

4.

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete the following program (major) requirements:*

a.	Complete the following:	
	EMS F170—EMT: Emergency Medical Technician I	
	FIRE F101—Principles of Emergency Services	3
	FIRE F105—Fire Prevention	
	FIRE F107—Strategy and Tactics	3
	FIRE F117—Rescue Practices	3
	FIRE F121—Fire Behavior and Combustion	
	FIRE F131—Fire Fighter I Series I	3
	FIRE F133—Fire Fighter I Series II	3
	FIRE F135—Fire Fighter I Series III	3
	FIRE F137—Fire Fighter I Series IV	3
	FIRE F202—Fire Protection Hydraulics and Water Supply	3
	FIRE F203—Hazardous Materials Chemistry I	3
	FIRE F206—Building Construction for Fire Protection	3
	FIRE F210—Fire Administration I	.3
	FIRE F214—Fire Protection Systems	3
b.	Complete 6 credits from the following major specialty electives:	
	FIRE F115—Fire Apparatus and Equipment	
	FIRE F123—Fire Investigations I	3
	FIRE F151—Wildland Fire Control I	3
	FIRE F205—Hazardous Materials Chemistry II	3
	FIRE F207—Hazardous Materials Technician	3
	FIRE F212—Building and Fire Codes	3
	FIRE F216—Methods of Instruction for Emergency	
	Services Training	
	FIRE F218—Advanced Rescue Practices	
	FIRE F232—Fire Fighter II	
	EMS F261—EMT: Emergency Medical Technician II	

- * Students must earn a *C* grade (2.0) or better in each course. Note: Major electives must be approved by the student's advisor.

Public Safety

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete the following program (major) requirements:*

a.	Complete the following:	
	AVTY F231/EMS F257—Arctic Survival	3
	EMS F170—EMT: Emergency Medical Technician I	6
	EMS F176—Aeromedical Evacuations in Alaska	1
	FIRE F101—Principles of Emergency Services	3
	FIRE F105—Fire Prevention	3
	FIRE F117—Rescue Practices	3
	FIRE F127—Vessel Safety: Emergency Equipment	
	and Procedures	1
	FIRE F131—Firefighter I, Series I	3
	FIRE F133—Firefighter I, Series II	
	FIRE F135—Firefighter I, Series III	3
	FIRE F137—Firefighter I, Series IV	
	FIRE F218—Advanced Rescue Practices	3
	JUST F110—Introduction to Justice	3
	JUST F340—Rural Justice in Alaska	3
	JUST F358—Juvenile Delinquency	

b.	Complete 9 credits from the following major electives:	
	EMS F261-EMT: Emergency Medical Technician II	3
	FIRE F123—Fire Investigations I	3
	FIRE F151-Wildland Fire Control I	3
	FIRE F212—Building and Fire Codes	3
	FIRE F216—Methods of Instruction for Emergency	
	Services Training	3
	JUST F345W—Police Problems	3
	JUST F352—Criminal Law	3
	JUST F354—Procedural Law	3
		60

Wildland Fire Control

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete the following program (major) requirements:*

a. Complete the following:

•	Complete the following:	
	EMS F170—EMT: Emergency Medical Technician I	
	FIRE F131—Firefighter I, Series I	
	FIRE F133—Firefighter I, Series II	
	FIRE F135—Firefighter I, Series III	
	FIRE F137—Firefighter I, Series IV	
	FIRE F151—Wildland Fire Control I	
	FIRE F153—Advanced Wildland Firefighter	
	FIRE F155—Wildland Fire Behavior3	
	FIRE F157—Wildland Air Operations and Safety	
	FIRE F159—Wildland Fire Operations Function	
	FIRE F252—Wildland Fire Prevention	
	FIRE F254—Wildland Fire Finance Function	
	FIRE F262—Wildland Fire Control II	
١.	Complete 12 credits from the following major elective courses:	
	FIRE F161—Wildland Fire Logistics Function	
	FIRE F165—Wildland Fire Planning Function	
	FIRE F216—Methods of Instruction for Emergency	
	Services Training	
	FIRE F256—Wildland Fire Planning and Multiple Use	
	Management	
	FIRE F258—Wildland Fuels Management	

Minor

b.

1.	Complete the following:	
	FIRE F131—Firefighter I, Series I	3
	FIRE F133—Firefighter I, Series II	3
	FIRE F135—Firefighter I, Series III	
	FIRE F137—Firefighter I, Series IV	
	EMS F170—Emergency Medical Technician I	
2.	Minimum credits required	18

ENVIRONMENTAL STUDIES

College of Rural and Community Development Bristol Bay Campus 907-842-5109 www.uaf.edu/bbc/

Certificate

Minimum Requirements for Certificate: 34 - 39 credits

This program addresses many of the environmental issues influencing Alaska communities and provides basic academic preparation for entry-level vocational environmental careers. The program serves as a stepping-stone into science-related associate or baccalaureate programs.

This program may be especially of interest to individuals employed by, and/or interested in employment with state, federal or tribal agencies or other groups providing natural resource management services. It is recommended that students have completed a high school lab-based science, biology or chemistry course as well as algebra due to the science focus of this program.

Certificate Program

 Complete the general university requirements (page 9) 	liversity requirements (page 95	general	implete the	I. (
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- 2. Complete the certificate requirements (page 97).*
- 3. Complete the following:

a.	Complete one of the following communication courses: ENGL F111X—Introduction to Academic Writing (3) or ABUS F170—Business English (3)
	Complete the following: DEVM F105—Intermediate Algebra (3) or MATH/CS/STAT at the 100 level or higher
c.	Complete one of the following human relations courses: ANTH F100X/SOC F100X—Individual, Society and Culture (3) or ABUS F154—Human Relations (3) or other program-approved discipline-based human relations course
4.	Complete the following program requirements:*
a.	Complete two science foundation courses: BIOL F103X—Biology and Society (4) or BIOL F104X—Natural History of Alaska (4)
	or BIOL F115X—Fundamentals of Biology I (4)4 CHEM F103X—Basic General Chemistry (4)
	or CHEM F105X—General Chemistry I (4)4
b.	Complete the following: ENVI F101—Introduction to Environmental Science
5.	Complete 3 – 4 credits from the following electives:BIOL F104X—Natural History of Alaska4BIOL F115X—Fundamentals of Biology I4CHEM F104X—Beginnings in Biochemistry4CHEM F105X—General Chemistry I4DEVS F100—Introduction to Science.4FISH F101—Introduction to Fisheries.3HLRM F130—Research Field Logistics.2NRM F101—Natural Resources Conservation and Policy.3STAT F200X—Elementary Probability and Statistics**3Advisor approved elective***1 – 3
6. *	Minimum credits required

- ** Cannot be used for elective credit if used as computational credit.
- *** Similar level and subject matter.

ETHNOBOTANY

College of Rural and Community Development Community and Technical College Kuskokwim Campus 907-543-4500 Toll-free: 800-478-5822 www.bethel.uaf.edu

Certificate

Minimum Requirements for Certificate: 30 - 32 credits

The ethnobotany certificate program involves interdisciplinary study of the role of native plants in indigenous cultures. Students will learn about native plants and their uses and ecology in the context of their cultural, social and economic importance by combining scientific and anthropological concepts and methods. The program emphasizes culturally relevant, place-based courses that highlight the ways this information contributes to other fields of study, such as cultural and natural resource management, community development, adaptive resilience, and human health. It is also designed to serve as a bridge to a variety of associate and baccalaureate programs in natural sciences and liberal arts.

This program may be especially of interest to individuals employed by or interested in employment with state, federal or tribal agencies or other local entities in rural Alaska which provide natural resource management services.

Admission requires a high school diploma or GED and interest in science-related fields. It is highly recommended that students have completed two high school lab-based science courses, preferably in biology, chemistry or physics.

Students whose ACT/SAT scores are not sufficient for placement into college level courses will be required to take the ASSET or ACCUPLACER test and will be placed into the appropriate developmental level course.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97).*
- 3. Complete the following:

J.	complete the following.
a.	Complete one of the following communication courses: ENGL F111X—Introduction to Academic Writing (3) or ABUS F170—Business English (3)
b.	Complete one of the following computation courses: DEVM F105—Intermediate Algebra (3) or MATH F103X—Concepts and Contemporary Applications of Mathematics (3) or MATH F107X—Functions of Calculus (4)
c.	Complete the following human relations courses: ANTH/SOC F100X—Individual, Society and Culture
4. a.	Complete the following program requirements:* Complete two science foundation courses: BIOL F103X—Biology and Society (4) or BIOL F104X—Natural History of Alaska (4) or BIOL F116X—Fundamentals of Biology II (4)
b.	CHEM F103X—Basic General Chemistry (4) or CHEM F105X—General Chemistry I (4) Gomplete the following: EBOT F100—Introduction to Ethnobotany BBOT F200—Seminar in Ethnobotany 1 EBOT F210—Ethical Wildcrafting 1 EBOT F220—Ethnobotanical Techniques 2 EBOT F230—Ethnobotanical Chemistry
	*

C.	. Complete 3 – 4 credits of approved electives:
	ENGL F212—Business, Grant and Report Writing (3)
	or ENGL F213X—Academic Writing About the Social and
	Natural Sciences (3)
	or
	100 – 200-level advisor-approved electives from the following
	subject areas: Alaska Native Languages, Alaska Native Studies,
	Applied Art, Anthropology, Economics, Education, Eskimo,
	Biology or Natural Resource Management
5. *	Minimum credits required

HEALTH, ALLIED

College of Rural and Community Development Community and Technical College 907-455-2887 www.ctc.uaf.edu/programs/health/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 30 – 42 credits; for Degree: 60 – 61 credits

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. Course work in phlebotomy is available, as are occupational endorsements in medical billing, medical coding, and medical office reception. Certificates offered include medical assistant, dental assistant, health care reimbursement and medical/dental reception. A.A.S. degrees offered 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 are eligible to take the Dental Assisting National Board (DANB) examination components for radiology and infection control. After 600 hours or six months employment in a dental office, they will be eligible to take the general chairside component of the examination and become Certified Dental Assistants. 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 both 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, 353 East Wacker Drive, Chicago, IL 60601, 312-553-9355. The medical assistant certificate incorporates both the medical office reception occupational endorsement and the medical/dental reception certificate.

Phlebotomist

Training is also available in phlebotomy. A student who completes the two-course sequence in phlebotomy 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 document current immunizations for measles, mumps, rubella, tetanus and hepatitis A, show a positive antibody titer for chickenpox and hepatitis B, and have received a negative PPD for tuberculosis within the past year.

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 associate of applied science in nursing. The certificate includes all of the prerequisite and co-requisite courses for the A.A.S. in nursing in addition to a clinical course. Admission to this certificate program requires a high school diploma or GED and test scores sufficient for placement into ENGL F111X and DEVM F060.

Admission to the UAA nursing program is competitive. While this certificate prepares the student to be highly qualified, it does not guarantee admission to the UAA nursing program. Before applying to the UAA A.A.S. program in nursing, students must complete the Nurse Entrance Test and are strongly encouraged to work in a clinical practice. Students should work closely with an advisor while completing this certificate and preparing an application for admission to the nursing program.

Students who have not completed high school chemistry will need to complete either CHEM F100X or CHEM F103X. Students who have not completed high school algebra must take DEVM F105 or MATH at the 100-level or higher. Students who have completed high school algebra may take HLTH F116 to review computation skills used in the medical field.

Registered Nurse

The A.A.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 students with a closely related mix of theory and clinical practice; students gain experience in hospitals, nursing homes, clinics and community agencies. Graduates of this A.A.S. degree are eligible to take the NCLEX examination that grants professional licensure to practice nursing as a Registered Nurse. Additional information is available online at http://nursing.uaa.alaska.edu.

Radiologic Technologist

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. Course work 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 (ARRT) for national certification. Additional information is available online at www.uaa.alaska.edu/ctc/programs/alliedhealth/radtech/.

Information on any of the Allied Health programs is available from the Allied Health Division at Community and Technical College, PO Box 758040, Fairbanks, AK 99775; by calling 907-455-2822; by email at fyhealth@uaf.edu; or at www.ctc.uaf.edu/health/.

Dental Assistant — Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, the communication, computation and human relations content is embedded in the major required courses for this program.)

3.	Complete the following program (major) requirements:*	
	DA F132—Administrative Procedures for the Dental Assistant.	2
	DA F150—Dental Radiography	4
	DA F151—Dental Infection Control	2
	DA F152—Dental Materials and Applications	4
	DA F153—Anatomy for Dental Assistants	3
	DA F251—Clinical Chairside I for Dental Assistants	6
	DA F252—Clinical Chairside II for Dental Assistants	6
	DA F254—Dental Assistant Practicum	4
	HLTH F110—Professional Skills for the Workplace	2
	HLTH F122—First Aid and CPR	1
4.	Minimum credits required	.34

* Students must earn a C grade (2.0) or better in each course.

Health Care Reimbursement — Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, the communication and human relations content are embedded in the major required courses for this program.)
- * Students must earn a C grade (2.0) or better in each course.

Medical Assistant — Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97).
- a. Complete ENGL F111X for the communications requirement.

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c.	Complete 3 credits from one of the following human relations
	courses: HLTH F106—Human Behavior in Health Care
	ABUS F154—Human Relations
	SOC F100X—Individual, Society and Culture
3.	Complete the following program (major) requirements:*
	HLTH F100—Medical Terminology
	HLTH F114—Fundamentals of Anatomy and Physiology (4)
	or BIOL F100X—Human Biology (4)
	HLTH F118—Medical Law and Ethics
	or current First Aid/CPR card
	HLTH F132—Administrative Procedures I2 HLTH F142—Clinical Procedures I4
	HLTH F142—Clinical Procedures 1
	HLTH F236— Outpatient Health Care Reimbursement
	HLTH F244—Clinical Procedures II
	HLTH F268—Medical Assisting Practicum (4) or HLTH F261—Medical/Dental Office Reception
	Practicum (2)
	and HLTH F267—Medical Assisting Externship Completion (2 – 4)
4	Minimum credits required
4. *	Students must earn a C grade (2.0) or better in each course.
Me	dical/Dental Reception — Certificate Program
1.	Complete the general university requirements (page 95).
2.	Complete the following certificate requirements:*
a	Complete 3 credits from one of the following communication
	courses: ABUS F271—Business Communications (3)
	or ENGL F111X—Introduction to Academic Writing (3)
b	Complete 3 credits from one of the following computation
	courses: MATH at the F100-level or above (3)
	or HLTH F116—Mathematics in Health Care (3)
C.	Complete the following human relations course:
_	HLTH F106—Human Behavior in Health Care
3.	Complete the following:* CIOS F150—Computer Business Applications (3)
	or CIOS elective at the F200-level (3)
	HLTH F100—Medical Terminology
	HLTH F110—Professional Skills for the Workplace
	HLTH F122—First Aid and CPR
	HLTH F132—Administrative Procedures I
	HLTH F234—Administrative Procedures II
	HLTH F261—Medical/Dental Office Reception Practicum
	Approved HLTH, CIOS, ABUS, HUMS, DEVS or COMM elective
4.	Minimum credits required
*	Students must earn a C grade (2.0) or better in each course.
Nu	rsing Qualifications, Pre- — Certificate Program
1.	Complete the general university requirements (page 95).
2.	Complete the certificate requirements (page 97). As part of the
	certificate requirements, complete: Communications
	ENGL F111X—Introduction to Academic Writing
	Computation
	DEVM F105—Intermediate Algebra (3) or HLTH F116—Mathematics in Health Care (3)

	Human Relations
	PSY F101—Introduction to Psychology
3.	Complete the following program requirements:* ENGL F211X—Academic Writing about Literature (3) or ENGL F213X (preferred)—Academic Writing About the Social and Natural Sciences (3)
4.	Complete one of the following clinical courses (4 – 9 credits) HLTH F107—Nurse Aide Training
5. *	Minimum credits required
De	ntal Assistant — A.A.S. Degree
1.	Complete the general university requirements (page 95).
2.	Complete the A.A.S. degree requirements (page 99).
3.	Complete the following program (major) requirements:* DA F132—Administrative Procedures for the Dental Assistant2 DA F150—Dental Radiography

 HLTH F203—Science of Nutrition
 3

 HLTH F247—Introduction to Pharmacology
 2

 Minimum credits required
 61

1.	Complete the general	university	requirements	(page 95)
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Students must earn a C grade (2.0) or better in each course.

2. Complete the A.A.S. degree requirements* (page 99).

or first aid/CPR card

Medical Assistant — A.A.S. Degree

4.

3.	Complete the following program (major) requirements:*	
	CIOS F150—Computer Business Applications (3)	
	or appropriate CIOS elective (3)	3
	HLTH F100—Medical Terminology	3
	HLTH F110—Professional Skills for the Workplace	
	HLTH F114—Fundamentals of Anatomy and Physiology (4)	
	or BIOL F100X—Human Biology (4)	4
	HLTH F118—Medical Law and Ethics	2
	HLTH F122—First Aid and CPR	1
	or current First Aid/CPR card	
	HLTH F132—Administrative Procedures I	2
	HLTH F142—Clinical Procedures I	4
	HLTH F208—Human Diseases	3
	HLTH F234—Administrative Procedures II	4
	HLTH F236— Outpatient Health Care Reimbursement	3
	HLTH F244—Clinical Procedures II	4
	HLTH F247—Introduction to Pharmacology	2

	HLTH F268—Medical Assisting Practicum (4)		
	or HLTH F261—Medical/Dental Office Reception		
	Practicum (2)		
	and HLTH F267—Medical Assisting		
	Externship Completion (2 – 4)	4	
	Approved HLTH, CIOS, ABUS, HUMS, DEVS or		
	COMM elective	3 – 7	
4. *	Minimum credits required Students must earn a C grade (2,0) or better in each course.	60	

HIGH LATITUDE RANGE MANAGEMENT

College of Rural and Community Development Northwest Campus 907-443-2201 www.nwc.uaf.edu

Certificate

Minimum Requirements for Certificate: 31 credits

A HLRM program certificate represents the completion of at least 31 credits in the conventional field-based techniques to inventory and monitor northern animal and plant populations combining traditional knowledge with contemporary studies necessary for entry-level natural resource jobs statewide. The certificate also emphasizes place-based domesticated ungulate husbandry and health, applicable regionally and statewide. This certificate may also serve as a bridge to a variety of natural science associate and baccalaureate programs

Admission is open to all individuals, especially those employed by or interested in employment with state, federal or tribal agencies or other local entities in rural Alaska which provide natural resources 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.

Students whose ACT/SAT scores are not high enough to place them into regular college level classes will be required to take the ASSET or COMPASS test and will be placed into the appropriate developmental level course.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97)*.
- 3. Complete the following:

HLRM F170—Health Issues in Domesticated Ungulates
HLRM F201—Field Techniques for Range Management
HLRM F205—Report Writing in Range Management2
Minimum credits required

HUMAN SERVICES

5.

College of Rural and Community Development Bristol Bay Campus 907-842-5109 Chukchi Campus 907-442-3400 Interior-Aleutians Campus 907-474-5439 Kuskokwim Campus 907-543-4500 Northwest Campus 907-443-2201 Community and Technical College, Human Services Program 907-455-2842 www.ctc.uaf.edu/programs/hums/

A.A.S. Degree

Minimum Requirements for Degree: 63 credits

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 mankind 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. 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. The B.A. degree student must complete the concentration and three HUMS elective credits. Concentrations provide students with skills needed for employment. See minor requirements.

This degree program is delivered collaboratively within the UA system.

Major — A.A.S. Degree

Concentrations: Addictions Counseling, Behavioral Health and Interdisciplinary Concentration

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).

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4.	Complete one of the following family courses for AddictionsCounseling and Interdisciplinary concentration:*ECE F3420—Family Relationships
5.	Complete one of the following courses for Addictions Counseling and Interdisciplinary concentration:* HUMS F205—Basic Principles of Group Counseling
6.	Complete the following for the Behavioral Health concentration:* HUMS F205—Basic Principles of Group Counseling
7.	Complete one of the following concentrations*:
	Addictions Counseling
a.	Complete the following:HUMS F105—Personal Awareness and GrowthHUMS F205—Basic Principles of Group Counseling
	Behavioral Health
	Complete the following: HUMS F280—Foundations of Community Development and Prevention Practices for the Human Service Professional
	Program Coordinator)
C.	If the student is a social work or justice major, then choose one of the following in place of an elective: Social Work Majors: SWK F103—Introduction to Social Work

Interdisciplinary Concentration

- a. 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.
- b. 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.
 - Example of possible interdisciplinary concentration of human services in restorative justice:

HUMS F210—Crisis and Grief Counseling
HUMS F290—Case Management
0

JUST F110—Introduction to Justice	3
JUST F251—Criminology	3
SOC F201—Social Problems	3
Minimum credits required63	3

* Students must earn a C grade (2.0) or better in each course.

For students with the Rural Human Services Certificate (up to 21 credits accepted as a block of courses):*

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).

3.	Complete the following:*	
	HUMS F101—Introduction to Human Services	3
	HUMS F102—Standards of Practice	2
	HUMS F202—Standards of Practice II	1
	HUMS F233—Human Service Practicum II	3
	HUMS F301—Ethics in Human Service	3
	PSY F101—Introduction to Psychology	3
	PSY F240—Lifespan Developmental Psychology	
4.	Complete three of the following courses:*	
	HUMS F280—Foundations of Community Development and	
	Prevention Practices for the Human Services Professional	3
	HUMS F290—Case Management	3
	HUMS F305—Substance Abuse Counseling	3
	HUMS F250—Current Issues in Human Services	
	or other approved course	3
5.	Optional (for B.A. seeking students):	
	Social Work Majors: SWK F103—Introduction to	
	Social Work	3
	or other Social Work approved course	3
	Justice Majors: JUST F110—Introduction to Justice	
6. *	Minimum credits required Students must earn a C grade (2.0) or better in each course.	. 63

Minor

8.

Option 1

1.	Complete one concentration in human services
2.	Complete HUMS elective credits
3.	Minimum credits required*

Option 2

- * Students must earn a C grade (2.0) or better in each course.
- ** Electives for Option 2 must be approved by the human services program coordinator.

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.

	HUMS F125—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
r .		

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 coordinator at 907-455-2842 for more information.

120 Certificate and Associate Degree Argenane/EO employer and educational institution and prohibits illegal discrimination against any individual: www.alaska.edu/titlelXcompliance/nondiscrimination.

INFORMATION TECHNOLOGY SPECIALIST

College of Rural and Community Development Community and Technical College 907-455-2800 Department of Computer and Information Technology Systems www.ctc.uaf.edu/its/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 30 credits; for A.A.S. Degree: 60 – 61 credits

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 computer technology support, network and system administration, and web development and administration are offered.

Students entering either the certificate or A.A.S. degree program should meet with a faculty advisor to discuss program content 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.

Certificate Program

- 1. Complete the general university requirements (page 95).
- Complete the certificate requirements. (See page 97. As part of the certificate requirements, complete ABUS F154 or ANTH F100X/SOC F100X for the human relations requirement.)
- 3. Complete the following program (major) requirements*:
- a. Complete the following IT support foundation courses: CITS F201—Microcomputer Operating Systems Support (3) and CITS F202-Microcomputer Hardware Support (3) or CITS F203—Information Technology Support CITS F204—Introduction to Network Support and
- b. Complete 9 credits from the following or program coordinator approved:
 - CIOS F128—Using and Configuring PC Operating Systems (3) CIOS F130—Microcomputer Word Processing (3) CIOS F133— Microcomputer Presentation Software (3) CIOS F135—Microcomputer Spreadsheets (3) CIOS F146—Using Internet Tools and Technologies (3) CIOS F150—Computer Business Applications (3) CIOS F189—Microcomputer Applications: Topics (3)** CIOS F233—Desktop Publishing (3) CIOS F240-Microcomputer Databases (3) CIOS F255—Microcomputer Graphics (3) CIOS F258—Digital Photography (3) CITS F219—Microcomputer Operating Systems: Topics (3)** CITS F220—Implementing Internet Tools and Technologies (3) CITS F221—Graphics and Multimedia for the Web (3)
 - CITS F222—Internet Authoring and Design (3)
 - CITS F240—System and Network Services Administration (3)

CITS F265—Directory Services Administration (3) CITS F282—IT Troubleshooting Skills (3) CITS F289—Information Technology: Topics (1 – 3)......9

- Pass a certification review requiring students to demonstrate pro-4 ficiency in the following skill areas: operating systems, hardware, and network support and troubleshooting.**
- 5.

Major — A.A.S. Degree

Concentrations: Computer Technology Support, Network and System Administration, Web Development and Administration

Computer Technology Support

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements. (See page 99. As part of the A.A.S. degree requirements, complete DEVM F105 or any course at the F100-level or above in mathematical sciences (computer science, math or statistics) for the computation requirement, and ABUS F154, ANTH F100X/SOC F100X for the human relations requirement.)
- 3. Complete the following program (major) requirements:*

a.	Complete the following computer technology support courses: CITS F201—Microcomputer Operating Systems Support (3) and CITS F202—Microcomputer Hardware Support (3) or CITS F203—Information Technology Support Fundamentals (4)
	or CS F201—Computer Science I (3)
	CITS F261—Computer and Network Security
	Complete 15 – 16 credits from the following or program coordi- nator approved: CITS F219—Microcomputer Operating Systems: Topics ** (3) CITS F220—Implementing Internet Tools and Technologies (3) CITS F221—Graphics and Multimedia for the Web (3) CITS F222—Internet Authoring and Design (3) CITS F224—Web Scripting (3) CITS F225—Web Databases and Programming (3) CITS F228—Advanced Website Design and Development (3) CITS F240—System and Network Services Administration (3) CITS F242—Routers and Routing Concepts (4) CITS F243—Intermediate Networking and LAN Infrastructure (4) CITS F244—Advanced Networking Infrastructure Services (4) CITS F249—Networking and Communications: Topics** (3) CITS F282—IT Troubleshooting Skills (3) CITS F289—Information Technology: Topics (1 – 3) ** 15 – 16 Complete the following IT professional courses: CITS F284—Independent Project (3) or CITS F285—Cooperative Work Experience (3)
4.	Complete CIOS, CITS or CS electives
5.	Complete general electives0-3
6.	Pass a certification review requiring students to demonstrate proficiency in the following skill areas: operating systems and hardware support and troubleshooting; network support and troubleshooting; independent thinking; human relations and sup- port; and professional practices.***
7.	Minimum credits required

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Network and System Administration

- Complete the general university requirements (page 95). 1.
- Complete the A.A.S. degree requirements. (See page 99. As part 2. of the A.A.S. degree requirements, complete DEVM F105 or any course at the F100-level or above in mathematical sciences (computer science, math or statistics) for the computation requirement, and ABUS F154, ANTH F100X/SOC F100X for the human relations requirement.)
- Complete the following program (major) requirements.*

3.	Complete the following program (major) requirements:"	
a.	Complete the following system administration courses:****	
	CITS F204—Introduction to Network Support and	
	Administration	3
	CITS F205—Introduction to Microcomputer Programming (3)	
	or CS F103—Introduction to Computer Programming (3)	
	or CS F201—Computer Science I	3
	CITS F212—Server Operating Systems (3)	3
	CITS F240—System and Network Services Administration	3
	CITS F261—Computer and Network Security	3
	CITS F265—Directory Services Administration	
b.	Complete the following network infrastructure courses:	
	CITS F241—Networking and LAN Infrastructure Basics	4
	CITS F242—Routers and Routing Concepts	
	CITS F243—Intermediate Networking and	
	LAN Infrastructure	4
	CITS F244—Advanced Network Infrastructure Services	
C	Complete the following IT Professional courses:	
с.	CITS F281—Professional Practice in IT	3
	CITS F284—Independent Project (3)	
	or CITS F285—Cooperative Work Experience	3
	of CI101205 Cooperative Work Experience	5

- Pass a certification review requiring students to demonstrate pro-4. ficiency in the following skill areas: network infrastructure and system administration skills, independent thinking skills, human relations and support skills, and professional practices.***
- 5.

Web Development and Administration

- Complete the general university requirements (page 95). 1.
- Complete the A.A.S. degree requirements. (See page 99. As part of the A.A.S. degree requirements, complete DEVM F105 or any course at the F100-level or above in mathematical sciences (computer science, math or statistics) for the computation requirement, and ABUS F154, ANTH F100X/SOC F100X for the human relations requirement.)
- Complete the following program (major) requirements:*

a.	Complete the following system administration courses:**** CITS F204—Introduction to Network Support and Administration
	CITS F205—Introduction to Microcomputer Programming (3) or CS F103—Introduction to Computer Programming (3)
	or CS F201—Computer Science I
	CITS F212—Server Operating Systems
	CITS F240—System and Network Services Administration3
	CITS F261—Computer and Network Security
	CITS F265—Directory Services Administration
b.	Complete the following web development courses:
	CITS F220—Implementing Internet Tools and Technologies3
	CITS F221—Graphics and Multimedia for the Web
	CITS F222—Website Design
	CITS F224—Web Scripting
	CITS F225—Web Databases and Programming
	CITS F228—Advanced Website Design and Development
~	Complete the following IT Professional sources

c. Complete the following IT Professional courses: CITS F284—Independent Project (3)

- 4. Pass a certification review requiring students to demonstrate proficiency in the following skill areas: web development and system administration skills, independent thinking skills, human relations and support skills, and professional practices.
- 5. Minimum credits required60
- Students must earn a \dot{C} grade (2.0) or better in each course.
- ** May be repeated for different topics.
- *** 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.
- **** Students are expected to have completed CITS F201 and F202 or CITS F203 or possess equivalent skills prior to beginning course work in this area.
- Note: Upon admission to the certificate or degree program, each student will be assigned a mentor/committee chairperson 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.

INSTRUMENTATION TECHNOLOGY

College of Rural and Community Development Community and Technical College 907-479-2436 www.ctc.uaf.edu/programs/inst/

Certificate

Minimum Requirements for Certificate: 32 credits

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 skills 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.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97).
- 3. Complete the following program requirements: ELT F101—Basic Electronics: DC Physics......4 ELT F102—Basic Electronics: AC Physics......4

INTERDISCIPLINARY STUDIES

Office of Interdisciplinary Programs 907-474-7716 fyinds@uaf.edu www.uaf.edu/gradsch/classes/interdisciplinary-program/

A.A.S. Degree

Minimum Requirements for Degree: 60 credits

The interdisciplinary program provides flexibility to undergraduate and graduate students who have well-defined goals that do not fit into one of the established majors offered by the university. Interdisciplinary Studies, both graduate and undergraduate programs, is located in the Graduate School office. Help with the application process, contact information for faculty advisors and assistance for interdisciplinary students is available at 907-474-7716 or see www.uaf.edu/gradsch/classes/interdisciplinary-program/.

Major — A.A.S. Degree

- 1. Contact the UAF Office of the Graduate School and Interdisciplinary Programs for materials and procedures.
- 2. Contact three faculty members to serve as the interdisciplinary studies committee.
- 3. Prepare rationale/justification letter.
- 4. Conduct committee meeting to finalize degree proposal, title of degree and assessment plan.
- 5. Submit proposal to appropriate dean for approval.
- 6. Submit to the vice provost for final approval.

MINING APPLICATIONS AND TECHNOLOGIES

College of Rural and Community Development Community and Technical College 907-479-2436 www.ctc.uaf.edu/programs/protech/

Certificate

Minimum Requirements for Certificate: 31 or 37 credits

This program prepares students for employment in the mining technology industry and provides career development and personal enrichment for experienced miners and workers within the mineral industry. Possible career paths for certificate graduates include entry-level positions with exploration, mining, environmental and consulting companies.

Holders of this certificate will be trained to meet the anticipated demand for workers in open pit mining, surface coal mining, underground metal mining, sand and gravel, and placer mining. Two options are available: surface and underground mining techniques is intended for the miner, and mineral processing operations is intended for mineral process operators. After completing AMIT F109 and/or AMIT F129, students will receive the Mine Safety Health Association certificate. Contact the process technology department at 907-455-2868 for information on the MSHA certificate.

Certificate Program

Options: Surface and Underground Mining Techniques or Mineral Processing Operations

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97).

3. Complete the following requirements for Option A or Option B:

Option A: Surface and Underground Mining TechniquesAMIT F101—Introduction to Mining3AMIT F109—Underground Mine Safety1AMIT F110—Underground Mining I3AMIT F120—Explosives I3AMIT F129—Surface Mine Safety1AMIT F130—Surface Mining Operations3AMIT F155—Drilling Technology3AMIT F220—Explosives II3AMIT F230—Explosives II3AMIT F230—Field Methods2

Option B: Mineral Processing Operations

· · · · · · · · · · · · · · · · · · ·	
AMIT F101—Introduction to Mining	3
AMIT F129—Surface Mine Safety	1
AMIT F130—Surface Mining Operations	
AMIT F135—Introduction to Mining Systems and	
Equipment	4
AMIT F140—Environmental Permitting	1
AMIT F145—Introduction to Mineral Beneficiation	3
AMIT F154—Water Quality and Flocculants	3
AMIT F162—Geochemical Sampling	1
AMIT F230—Field Methods	
AMIT F231—Heap Leaching	
PRT F101—Introduction to Process Technology	3
PRT F110—Introduction to Occupational Safety,	
Health and Environmental Awareness	3
PRT F140—Industrial Process Instrumentation I	
Minimum credits required	31 or 37

NATIVE LANGUAGE EDUCATION

College of Liberal Arts Department of Alaska Native Languages 907-474-7874 www.uaf.edu/anlc/classes/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 30 credits; for Degree: 60 credits

The Native language education program trains teachers of Native language and culture, providing course work 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.

Certificate Program

Concentrations: Athabascan, Inupiaq Eskimo, Central Yup'ik Eskimo

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. 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.)
- 3. Complete one of the following concentrations:*

Athabascan

- a. Candidates must demonstrate proficiency or complete a twosemester sequence in the language of the degree.

ANL F208—Advanced Athabascan Literacy
ANL F251—Introduction to Athabascan Linguistics
ANL F256—Alaska Native Languages: History, Status and
Maintenance
ANL F287—Teaching Methods for Alaska Native Languages3
ANL F288—Curriculum and Materials Development for
Alaska Native Languages
ED F299—Practicum in Education

Inupiaq Eskimo

a. Candidates must demonstrate proficiency or complete a twosemester sequence in the language of the degree.

b.	Complete the following program (major) requirements:	
	ANL F199—Practicum in Native Language Education	6
	ANL F256—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
	ESK F118—Inupiaq Orthography	3
	ESK F218—Inupiaq Composition	3
	Eskimo linguistics elective	

Central Yup'ik Eskimo

a. Demonstrate advanced oral/aural proficiency in Yup'ik.

b	. Complete the following program (major) requirements:	
	ESK F109—Central Yup'ik Orthography	3
	ESK F130—Beginning Yup'ik Grammar	3
	ESK F208—Yup'ik Composition	
	ESK F250—Yup'ik Literature for Children	
	ESK F251—Teaching Beginning Yup'ik Reading and Writing	3
	ANL F199—Practicum in Native Language Education	
	ANL F256—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
4.	Minimum credits required	30

Major — A.A.S. Degree

Concentrations: Athabascan, Inupiaq Eskimo, Central Yup'ik Eskimo

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete one of the following concentrations:*

Athabascan

a. Candidates must demonstrate proficiency or complete a twosemester sequence in the language of the degree.

э.	Complete the following program (major) requirements:	
	ANL F108—Beginning Athabascan Literacy	3
	ANL F199—Practicum in Native Language Education	6
	ANL F208—Advanced Athabascan Literacy	3
	ANL F251—Introduction to Athabascan Linguistics	3
	ANL F256—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

Inupiaq Eskimo

a. Candidates must demonstrate proficiency or complete a twosemester sequence in the language of the degree.

b. Complete the following program (major) requirements:	
ANL F199—Practicum in Native Language Education	.6
ANL F256—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
ESK F118—Inupiaq Orthography	.3
ESK F218—Inupiaq Composition	. 3
Eskimo linguistics elective	3

Central Yup'ik Eskimo

a.	Demonstrate advanced	oral/aural	proficiency	in Yup'ik	ζ.
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b.	Complete the following program (major) requirements:	
	ESK F109—Central Yup'ik Orthography	3
	ESK F208—Yup'ik Composition	3
	ESK F250—Yup'ik Literature for Children	
	ESK F251—Teaching Beginning Yup'ik Reading and Writing	3
	ANL F199—Practicum in Native Language Education	3
	ANL F256—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
	Minimum credits required	60
	Students must earn a C grade (2.0) or better in each course.	
	See Alaska Native Languages	

PARALEGAL STUDIES

College of Rural and Community Development Community and Technical College 907-455-2835 www.ctc.uaf.edu/programs/paralegal/

A.A.S. Degree

4

Minimum Requirements for Degree: 61 credits

The paralegal studies program trains students for employment as paralegals to assist in the delivery of legal services under the supervision of a practicing lawyer, and provides continuing education and upgrading of skills for paralegals already employed. In addition, the program offers practical law-related topics for UAF students whose main focus is in other areas of study such as political science and justice.

Paralegals and legal assistants are not authorized to provide direct legal services to the public. However, they are qualified to perform rudimentary legal research and produce drafts of letters, office memoranda, pleadings, contracts, wills and similar documents. Paralegals conduct client and witness interviews, engage in basic fact-finding and investigation, and assist in trial preparation and discovery. At all times they remain cognizant of the ethical responsibilities owed by the supervising lawyer to clients, other lawyers and the court system.

The UAF paralegal studies program does not train lawyers or legal administrators. The associate (A.A.S.) degree is approved by the American Bar Association. The minor is not designed to prepare students to work as paralegals and is not approved by the American Bar Association.

Major — A.A.S. Degree

- 1. Complete ENGL F111X with a grade of C or better prior to admission to the program.
- 2. Complete the general university requirements (page 95).

4.	Complete the following:* PLS F102—Introduction to Paralegal Studies
5.	Complete either: PS F303—Politics and the Judicial Process (3) or PS F300X—Ethics and Society (3) or JUST F300X—Ethics and Justice (3)
6.	Complete either: PS F435W—Constitutional Law I: Institutions and Government Powers (3) or PS F436—Constitutional Law II: Civil Rights and Civil Liberties (3) or JRN F413—Mass Media Law (3)
7.	Complete five of the following:*PLS F203—Torts

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.

Minor

1.	Complete the following:
	PLS F102—Introduction to Paralegal Studies
	PLS electives
2.	Minimum credits required

PARAMEDICINE

College of Rural and Community Development Community and Technical College 907-455-2853 www.ctc.uaf.edu/programs/emergency/

A.A.S. Degree

Minimum Requirements for Degree: 69 - 73 credits

The UAF Community and Technical College paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs upon recommendation of the Committee on Accreditation of Education Programs for EMS Professions, 1361 Park Street, Clearwater, FL 33756, 727-210-2350.

The UAF emergency medical services 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—Emergency Medical Technician I), and have completed HLTH F114—Fundamentals of Anatomy and Physiology.

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).

3.	Complete the following:*
	EMS F170—EMT: Emergency Medical Technician I
	EMS F181—Clinical Rotation I4
	EMS F183—Clinical Rotation II
	EMS F280—Paramedicine I12
	EMS F282—Paramedicine II12
	EMS F283—Paramedic Internship12
	HLTH F114—Fundamentals of Anatomy and Physiology (4)
	or BIOL F111X—Human Anatomy and Physiology I (4)
	and BIOL F112X—Human Anatomy and
	Physiology II (4)
4. *	Minimum credits required

PILOTING, PROFESSIONAL

College of Rural and Community Development Community and Technical College 907-455-2851 www.ctc.uaf.edu/programs/pilot/

A.A.S. Degree

Minimum Requirements for Degree: 60 credits

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.

A minor in aviation technology will give students an opportunity to become familiar with the field of aviation, with particular emphasis on the use of aviation as a tool and economic process within the Alaska environment.

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete the following program (major) requirements:*

- b. Complete 15 credits of program approved major specialty electives* (see web page or contact department for suggested list of courses, many of which the applicant may obtain credit for based upon experience or ratings).
- 4. Complete general electives 10
- Minimum credits required60
 * Students must earn a C grade (2.0) or better in each course.

Minor

Aviation Technology

1.	Complete the following foundation courses: AVTY F100—Private Pilot Ground School4
2.	Complete the following core courses: AVTY F155—Preventive Maintenance for Pilots
3.	Complete 3 credits from the following electives: AVTY Elective (3) or AFPM advisor approved elective (3)
4.	Minimum credits required

POWER GENERATION

College of Rural and Community Development Community and Technical College 907-479-2436 www.ctc.uaf.edu/programs/pgen/

Certificate

Minimum Requirements for Certificate: 37 credits

The power generation program will help students develop entrylevel skills needed in industrial and commercial electrical power generation and maintenance. Courses combine the technical know-how and hands-on experience necessary to develop entry level workers in a variety of power generation and industrial fields. Students will become familiar with the operation and maintenance of the standard equipment encountered in the power generation industry.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97).

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* Students must earn a C grade (2.0) or better in each course.

PROCESS TECHNOLOGY

College of Rural and Community Development Community and Technical College 907-479-2436 www.ctc.uaf.edu/programs/protech/

A.A.S. Degree

Minimum Requirements for Degree: 63 credits

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.

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).

Demonstrate competence in computer technology skills (thr the Process Technology program assessment) or complete or the following:*	
DRT F110—Computer Literacy for Technicians (3)	
or CIOS F150—Computer Business Applications (3)	
or a program advisor-approved computer applications	
course (3)	3
Complete the following program (major) requirements*: PHYS F115X—Physical Science I (4)	
	0
PRT F144—Industrial Process Instrumentation II	3
PRT F230—Process Technology II: Systems	4
PRT F231—Process Technology III: Operations	4
Major elective credits**	
Students must earn a C grade (2,0) or better in each course	63
	the Process Technology program assessment) or complete or the following:* DRT F110—Computer Literacy for Technicians (3) or CIOS F150—Computer Business Applications (3) or a program advisor-approved computer applications course (3) Complete the following program (major) requirements*: PHYS F115X—Physical Science I (4) and CHEM F100X—Chemistry in Complex Systems (4) or 8 credits of program advisor-approved natural science courses PRT F101—Introduction to Process Technology PRT F110—Introduction to Occupational Safety, Health and Environmental Awareness PRT F130—Process Technology I: Equipment PRT F140—Industrial Process Instrumentation I PRT F144—Industrial Process Instrumentation I PRT F230—Process Technology II: Systems PRT F231—Process Technology III: Operations PRT F255—Process Technology Quality Major elective credits**

** Electives must be approved by the Process Technology Program advisor.

3

RENEWABLE RESOURCES

College of Rural and Community Development Rural and Economic Development Division Bristol Bay Campus 800-478-5109 or 907-842-5109 Chukchi Campus 907-442-3400 Interior-Aleutians Campus 907-474-5439 Kuskokwim Campus 907-543-4500 Northwest Campus 907-443-2201 www.uaf.edu/rural/

A.A.S. Degree

Minimum Requirements for Degree: 60 credits

The renewable resources degree program is offered by the College of Rural and Community Development on the Fairbanks campus and through rural campuses. Students interested in the degree should first contact a faculty advisor at the Bristol Bay Campus (toll free number above) to discuss program content, requirements and expectations. This two-year A.A.S. degree program helps students gain employment with state, federal or tribal resource management agencies, Alaska Native Claims Settlement Act (ANCSA) corporations or other entities. For those already employed in this field, this program provides an opportunity to improve job skills.

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- Complete the A.A.S. degree requirements. (See page 99. As part of the A.A.S. degree requirements, complete MATH F103X or MATH F107X, CHEM F103X or CHEM F105X.)
- 3. Complete the following program (major) requirements:*

a. Complete the following:

	Group 1	
э.	Complete one course from each of the following groups:	
	RD F280—Resource Management Research Techniques	3
	RD F255—Rural Alaska Land Issues	3
	NRM F204—Public Lands Law and Policy	3
	NRM F101-Natural Resources Conservation and Policy	3
	ECON F235—Introduction to Natural Resource Economics	3

Group 1	
BIOL F104—Natural History of Alaska	. 3
BIOL F104X—Natural History of Alaska	.4
BIOL F115X—Fundamentals of Biology I	.4

Group 2

1

GEOG F111—Elements of Physical Geography
GEOG F111X—Earth and Environment: Elements
of Physical Geography4
GEOS F100X—Introduction to Earth Science
NRM F380W—Soils and the Environment

Group 3

NRM F102—Practicum in Natural Resources
Management1 – 2
WLF F304—Wildlife Internships1 – 3
c. Complete the following:
CIOS F100—Introduction to Personal Computers (1)
and CIOS F111—Computer Software for Beginners (2)
or CIOS F150—Computer Business Applications (3)
FISH F101—Introduction to Fisheries (3)
and WLF F101—Survey of Wildlife Science (1)
or ABUS F223—Real Estate Law (3)
and RD F256—Co-Management of Renewable Resources (3)
or BIOL F271—Principles of Ecology (4)
and WLF F322W— Principles and Techniques of
Wildlife Management (3)

d.	Complete 9 – 14 credits from the following courses:	
	ANS F310-The Alaska Native Lands Settlement	3
	ANTH F242—Native Cultures of Alaska	3
	BIOL F116X—Fundamentals of Biology II	4
	BIOL F150—Introduction to Marine Biology	
	BIOL F239—Introduction to Plant Biology	4
	BIOL F271—Principles of Ecology	
	CE F112—Elementary Surveying	
	EMS F152—Emergency Trauma Training First Responder	
	ENGL F314W,O/2—Technical Writing	3
	FISH F101—Introduction to Fisheries	3
	MIN F101-Minerals, Man and the Environment	3
	NRM F251—Silvics and Dendrology	4
	NRM F304O—Perspectives in Natural Resources	
	Management	3
	NRM F340—Natural Resources Measurement and	
	Inventory	3
	RD F265—Perspectives on Subsistence in Alaska	
	RD F492—Rural Development Leadership Seminar	3
	STAT F200X—Elementary Probability and Statistics	3
	WLF F101—Survey of Wildlife Science	1
	WLF F322W— Principles and Techniques of Wildlife	
	Management	3
	Or other advisor approved renewable resource related	
	electives	- 14
	Minimum credits required	60
	Students must earn a C grade (2.0) or better in each course.	

Note: Prerequisites required for many courses.

RURAL HUMAN SERVICES

College of Rural and Community Development Statewide Programs 907-474-5440 Chukchi Campus 907-442-3400 Interior-Aleutians Campus 907-474-5440 Kuskokwim Campus 907-543-4500 Northwest Campus 907-443-2201 www.uaf.edu/rhs/

Certificate

4

Minimum Requirements for Certificate: 32 credits

The rural human services programs are designed to develop strong and healthy rural Alaska Native individuals, families and communities. They provide 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 on resource people from the Native community and reflects a strong multicultural orientation that validates, incorporates and builds on Native 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 are currently developing and defining competencies and credentials for Alaska behavioral health care workers.

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. Courses are presented as a series of four intensive three-week training sessions at selected delivery sites. A practicum and electives round out the program.

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.

Certificate Program

- Complete the general university requirements (page 95). 1.
- 2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, complete RHS F110 and F115 for the human relations requirement. The communication and computation courses must be completed from the certificate requirements.)

3.	Complete the following:	
	RHS F120—Family Systems I*	2
	RHS F130—Processes of Community Change	
	RHS F140—Alaska Native Values and Principles	1
	RHS F150—Introduction to Rural Counseling*	2
	RHS F220—Family Systems II*	2
	RHS F250—Rural Counseling II*	2
	RHS F260—Addictions: Intervention and Treatment*	2
	RHS F265—Interpersonal Violence*	2
	RHS F275—Introduction to Mental Health Recovery	2
	RHS F285—Case Management*	2
	RHS F287—Rural Human Services Practicum	4
	RHS F290—Grief and Healing*	2
	_	

Minimum credits required 32 4. 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.

SAFETY, HEALTH AND ENVIRONMENTAL **AWARENESS TECHNOLOGY**

College of Rural and Community Development Community and Technical College 907-479-2436 www.ctc.uaf.edu/osh/

Certificate

Minimum Requirements for Certificate: 37 credits

This program develops entry-level skills in industrial safety, health and environmental awareness. Courses combine the technical know-how, use of state-of-the-art equipment and hands-on experience necessary for students to obtain work in a variety of safetyrelated industrial fields.

Students are taught the necessary objectives and skills required to take an entry-level Occupational Health and Safety Technologist exam when coupled with other requirements as set forth by the Council on Certification of Health, Environmental and Safety Technologists.

As the process industries expand and automate, the need for qualified safety technicians increases. The Community and Technical College and the Process Technology Program are active members of the American Society of Safety Engineers.

Certificate Program

- Complete the general university requirements (page 95). 1.
- Complete the certificate requirements (page 97). 2.

3.	Complete the following program requirements:	
	PRT F101—Introduction to Process Technology	3
	PRT F110—Introduction to Occupational Safety,	
	Health and Environmental Awareness	3
	OSH F108—Injury Prevention and Risk Management	4
	OSH F110—Program Assessment, Development, and	
	Implementation	4
	OSH F120—Safety Program Management and	
	Record keeping	3
	OSH F180—Introduction to Industrial Hygiene	4
	OSH F201—Workplace Injury and Incident Evaluations	4
	OSH F250—Hazardous Material Operation	
4.	Minimum credits required	. 37

TRIBAL MANAGEMENT

College of Rural and Community Development Division of Rural and Economic Development Interior-Aleutians Campus 907-474-5439 www.uaf.edu/iac/programs/tribal-management/

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 30 credits; for Degree: 60 credits

The tribal management program teaches the job-related skills and knowledge needed for entry-level management positions in tribal institutions, local government and other organizations in rural Alaska. Students perform specific tasks, learn basic management rationale and explore issues in tribal government. Each student has an individual educational plan, which is a critical means of tracking progress and a key part of the process of education in a rural-based learning environment. A student career portfolio demonstrates individual accomplishments and the achievement of specific goalrelated skills and competencies. The student career portfolio is developed to meet program standards. A copy of the standards is available on request.

Students entering any tribal management course should be familiar with word processing, spreadsheets, databases and the Internet. Each student, with the help of a faculty advisor, is required to organize a personal support team to include a tribal leader or community mentor. Students entering either the A.A.S. degree or certificate program should meet with a faculty advisor to discuss program content, requirements and planning.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements (page 97).
- 3. Complete the following:

a.	Complete 3 credits from one of the following computation
	courses:
	ABUS F155—Business Math (3)
	or approved computation course at the 100-level or above (3)
b.	Complete 3 credits from one of the following communication
	courses:
	ABUS F170—Business English (3)
	or approved communications course at the 100-level
	or above (3)
c.	Complete 3 credits from the following human relations courses:
	ABUS F154—Human Relations (3)
	or approved human relations course at the 100-level
	or above (3)

	Complete the following program requirements:		Pu
	TM F101—Introduction to Tribal Management		AI
	TM F105—Introduction to Tribal Finance Applications		AI
	TM F199—Tribal Management Practicum I3		AI
	Complete 12 credits from any of the following categories:		HI RI
	Environmental and Natural Resources		RI
	BIOL F104X—Natural History of Alaska		Tri
	FISH F101—Introduction to Fisheries		AI
	Advisor approved environmental technology elective		AI
	Health and Social/Human Services		AI
	HLTH F105—Introduction to Health Careers		BA
	HUMS F105—Personal Awareness and Growth		EC
	HUMS F120—Cultural Diversity in Human Services		EC EC
	PSY F101—Introduction to Psychology		Tri
	Education and Employment		RI
	ED F102—Orientation to Alaska Native Education2		Ac
	Public Administration and Policy	5.	С
	ABUS F179—Fundamentals of Supervision		ac
	Tribal Business	6.	M
	ABUS F151—Village Based Entrepreneurship	*	S
	ABUS F158—Introduction to Tourism		
	BA F151—Introduction to Business		
	Economics	VE	TE
	ECON F100X—Political Economy	Со	olleg
	ECON F111—Economics of Rural Alaska		teri
	Tribal Planning		nuko
	RD F250—Grant Writing for Community Development		NW.
	Minimum credits required		rti nin
a,	jor — A.A.S. Degree		
	Complete the general university requirements (page 95).		aini
	Complete the A.A.S. degree requirements (page 99).		cai alth
			ry t
	Complete the following program (major) requirements:* TM F101—Introduction to Tribal Management		vete
	TM F105—Introduction to Tribal Finance Applications	sm	all
	TM F199—Tribal Management Practicum I	are	e in
	TM F201—Advanced Tribal Management	-	red
	TM F205—Advanced Tribal Finance Applications	-	blic
	Complete 18 credits from any of the following categories:*		terii
	Environmental and Natural Resources		rtifi
	BIOL F104X—Natural History of Alaska	1.	Сс
	BIOL F271—Principles of Ecology	2.	Co
	FISH F101—Introduction to Fisheries		EN M
	NRM F101—Natural Resources Conservation and Policy		111
	RD F255—Rural Alaska Land Issues		Al
	WLF F222—Wildlife Management Principles		
	Advisor-approved environmental technology elective	3.	С
	Health and Social/Human Services		CI
	HLTH F105—Introduction to Health Careers2		ית
	HUMS F105—Personal Awareness and Growth		BI
	HUMS F120—Cultural Diversity in Human Services		V
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Education and Employment

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ED F102—Orientation	n to Alaska Native Education2

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Public Administration and Policy	
ABUS F179—Fundamentals of Supervision	
ABUS F231—Introduction to Personnel	3
ABUS F232—Contemporary Management Issues	3
HIST F110—History of Alaska Natives	
RD F200—Community Development in the North	
RD F250—Grant Writing for Community Developme	
Tribal Business	
ABUS F151—Village Based Entrepreneurship	
ABUS F158—Introduction to Tourism	
ABUS F264—Filing/Records Management	
BA F151—Introduction to Business	
Economics	
Economics ECON F100X—Political Economy ECON F111—Economics of Rural Alaska	
ECON F100X—Political Economy	
ECON F100X—Political Economy ECON F111—Economics of Rural Alaska Tribal Planning	3
ECON F100X—Political Economy ECON F111—Economics of Rural Alaska	
ECON F100X—Political Economy ECON F111—Economics of Rural Alaska Tribal Planning RD F250—Grant Writing for Community Developme Advisor-approved electives	nt 3
ECON F100X—Political Economy ECON F111—Economics of Rural Alaska Tribal Planning RD F250—Grant Writing for Community Developme	nt 3
ECON F100X—Political Economy ECON F111—Economics of Rural Alaska Tribal Planning RD F250—Grant Writing for Community Developme Advisor-approved electives Complete credits in F100-level or higher in consultati	nt

RINARY SCIENCE

ge of Rural and Community Development or-Aleutians Campus 907-474-5439 chi Campus 907-442-3400 .uaf.edu/drumbeats/veterinary-science/

ficate

num Requirements for Certificate: 37 – 38 credits

ing in veterinary science and medicine provides a strong base reers in farming, dog mushing, wildlife management, public n, tribal resource management, environmental health, veteritechnology and for additional education leading to a career as rrinarian. Information and training for work with domestic animals, domestic farm animals, reindeer, bison and muskox corporated into the program. Certificate graduates are preto continue on in learning tracks for veterinary technology, health, wildlife management, veterinary medical illustration, nary medicine and other science-related fields.

icate Program

omplete the general university requirements (page 95).

2.	Complete the following certificate requirements:	
	ENGL F111X—Introduction to Academic Writing	3
	MATH F107X—Functions for Calculus** (4)	
	or DEVM F105—Intermediate Algebra (3)3	- 4
	ANTH/SOC F100X—Individuals, Society, and Culture (3)	
	or ABUS F154—Human Relations (3)	3
3.	Complete the following program (major) requirements:*	
	CHEM F103X—Basic General Chemistry (4)	
	or CHEM F105X—General Chemistry** (4)	4
	BIOL F103X—Biology and Society (4)	
	or BIOL F116X—Fundamentals of Biology II** (4)	4
	VTS F101—Introduction to Veterinary Science	2
	VTS F110—Medical Terminology for Veterinary Sciences	3
	VTS F130—Animal Anatomy and Physiology for Veterinary	
	Sciences	4
	VTS F140—Basic Animal Husbandry for Veterinary	
	Sciences	3

VTS F150—Basic Animal Nutrition and Feeding for

Veterinary Sciences	3
VTS F160—Animal Diseases for Veterinary Sciences	3
VTS F199-Veterinary Sciences Certificate Practicum I	2

- * Students must earn a C grade (2.0) or better in each course.
- ** Students should take the higher level courses if additional degrees will be sought.

WELDING AND MATERIALS TECHNOLOGY

College of Rural and Community Development Community and Technical College 907-455-2932 www.ctc.uaf.edu/programs/weld/

Welding is an important industrial skill with applications in agriculture, mining, transportation, aviation, oil and gas, and construction. Training ranges from welding basics to advanced pipe and metal plate fabrication.

Classes are small to offer hands-on training and maximum interaction between the student and instructor. Students may request credit by examination for any WMT class. Advanced students may work toward American Welding Society certification or pursue advanced projects. Contact the department for details.

The following courses are part of the welding and materials technology program:

WMT F101—Introduction to Welding	3
WMT F102—Intermediate Welding	3
WMT F103—Welding I	3
WMT F105—Welding II	3
WMT F106—Heat Treating/Metal Finishing/Knife Making I	3
WMT F117—Oxy-Acetylene Welding and Cutting	3
WMT F130—Shielded Metal Arc Welding (SMAW)1 -	- 3
WMT F150—Gas Tungsten Arc Welding (GTAW)1 -	- 3
WMT F160—Gas Metal Arc Weld Alum (GMAW) 1 -	- 3
WMT F170—Military Training Welding I	3
WMT F206—Heat Treating/Metal Finishing/	
Knife Making II	3
WMT F210—Uphill Pipe Welding	3
WMT F241—Gas Tungsten Arc and Gas Metal Arc Welding	
WMT F270—Military Training Welding II	3
WMT F280—Military Training Welding III	3
WMT F290—Welding Proficiency Maintenance	

YUP'IK LANGUAGE PROFICIENCY

College of Liberal Arts Department of Alaska Native Languages 907-474-7874 www.uaf.edu/anlc/classes/ Program available at Kuskokwim Campus only

Certificate; A.A.S. Degree

Minimum Requirements for Certificate: 30 credits; for Degree: 60 credits

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.

Certificate Program

- 1. Complete the general university requirements (page 95).
- 2. Complete the certificate requirements. (See page 97. 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.)
- 3. Complete the following:

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a.	ESK F208—Yup'ik Composition	.3
	ESK F130—Beginning Yup'ik Grammar	. 3
	ESK F240—Introduction to Reading Yup'ik	. 3
b.	Complete one of the following sequences:	
	ESK F121-Elementary Central Yup'ik Apprenticeship I	.4
	ESK F122-Elementary Central Yup'ik Apprenticeship II	.4
	ESK F123—Elementary Central Yup'ik Apprenticeship III	.4
	or	
	ESK F103—Conversational Central Yup'ik	. 3
	ESK F104—Conversational Central Yup'ik	.3
	ESK F203—Intermediate Central Yup'ik	.3
	ESK F204—Intermediate Central Yup'ik	
c.	Complete one of the following sequences:	
	ESK F221—Intermediate Central Yup'ik Apprenticeship I	.3
	ESK F222—Intermediate Central Yup'ik Apprenticeship II	.3
	ESK F223—Intermediate Central Yup'ik Apprenticeship III	. 3
	or	
	ESK F205—Regaining Fluency in Yup'ik	.3
	ESK F206—Regaining Fluency in Yup'ik	.3
	ESK F223—Intermediate Central Yup'ik Apprenticeship III	.3
4.	Minimum credits required	30

Major — A.A.S. Degree

- 1. Complete the general university requirements (page 95).
- 2. Complete the A.A.S. degree requirements (page 99).
- 3. Complete the following program (major) requirements:*
- a. Complete the following: b. Complete one of the following sequences: ESK F121-Elementary Central Yup'ik Apprenticeship I......4 ESK F122-Elementary Central Yup'ik Apprenticeship II4 ESK F123-Elementary Central Yup'ik Apprenticeship III.......4 or ESK F203—Intermediate Central Yup'ik......3 c. Complete one of the following sequences: ESK F221—Intermediate Central Yup'ik Apprenticeship I......3 ESK F222—Intermediate Central Yup'ik Apprenticeship II3 ESK F223—Intermediate Central Yup'ik Apprenticeship III......3 or

4. Minimum credits required60
 * Students must earn a C grade (2.0) or better in each course.