

Geology

College of Natural Science and Mathematics
Department of Geology and Geophysics
907-474-7565
www.uaf.edu/geology/

B.S. Degree

Minimum Requirements for Degree: 130 credits

Graduates in geology have broad backgrounds in the earth sciences and firm foundations in mathematics, physics and chemistry. There are many concentrations available in the geological sciences, and the suggested curricula are intended to be flexible enough to allow students to pursue their own emphasis in the junior and senior years. The bachelor's degree prepares students for positions with industry or government or for graduate studies.

Major — B.S. Degree

1. Complete the general university requirements. (See page 131. As part of the core curriculum requirements, complete MATH F200X, CHEM F105X and F106X.)
2. Complete the B.S. degree requirements. (See page 136. As part of the B.S. degree, complete: STAT F200X or F300; PHYS F103X and F104X, or PHYS F211X and F212X.)
3. Complete the following program (major) requirements:
 - GEOS F101X—The Dynamic Earth4
 - GEOS F112X—The History of Earth and Life.....4
 - GEOS F213—Mineralogy4
 - GEOS F214—Petrology and Petrography.....4
 - GEOS F225—Field and Computer Methods in Geology2
 - GEOS F304—Geomorphology3
 - GEOS F314—Structural Geology4
 - GEOS F315W—Paleobiology and Paleontology4
 - GEOS F322—Stratigraphy and Sedimentation.....4
 - GEOS F351W—Field Geology**8
 - GEOS F430—Statistics and Data Analysis in Geology3
 - MATH F201X—Calculus II4
 - Electivesopen

4. Complete 15 credits of upper-division GEOS courses or upper-division courses as approved by the undergraduate advisor.*
5. Minimum credits required130

* Student must earn a C grade or better in each GEOS course and in all courses that fulfill requirement 4.

** GEOS F351 is offered at UAF when there is sufficient demand. In years when GEOS F351 is not offered (decision made early in fall semester), students are required to take a 6-credit field geology class at another institution. The geology and geophysics undergraduate advisor will assist students in placement in a field geology class.

Studies in geophysics: Students interested in pursuing a program in geophysics are encouraged to pursue a major in geology which includes GEOS F418 and F416 with a minor in physics. Students should consult with the geology department regarding constructing a plan of study.

Minor

1. Complete the following:
 - GEOS F101X—The Dynamic Earth4
 - Approved GEOS electives12
2. Minimum credits required16

All degrees (e.g. B.A., B.S., etc.) require additional courses. Refer to specific degree and program requirements.

Baccalaureate Core Requirements

COMMUNICATION (9)

Complete the following:

ENGL F111X(3) _____
ENGL F190H may be substituted.

Complete one of the following:

ENGL F211X **OR** ENGL F213X(3) _____

Complete one of the following:

COMM F131X **OR** COMM F141X(3) _____

PERSPECTIVES ON THE HUMAN CONDITION (18)

Complete all of the following four courses:

ANTH F100X/SOC F100X(3) _____
 ECON F100X **OR** PS F100X(3) _____
 HIST F100X(3) _____
 ENGL/FL F200X(3) _____

Complete one of the following three courses:

ART/MUS/THR F200X, HUM F201X **OR** ANS F202X (3) _____

Complete one of the following six courses:

BA F323X, COMM F300X, JUST F300X, NRM F303X,
 PS F300X **OR** PHIL F322X(3) _____

OR complete 12 credits from the above courses PLUS

- two semester-length courses in a single Alaska Native language or other non-English language **OR**
- three semester-length courses (9 credits) in American Sign Language taken at the university level.

MATHEMATICS (3)

Complete one of the following:

MATH F103X, MATH F107X, MATH F161X **OR**
 STAT F200X(3 - 4) _____

** No credit may be earned for more than one of MATH F107X or F161X.*

OR complete one of the following:*

MATH F200X, MATH F201X, MATH F202X,
 MATH F262X **OR** MATH F272X(4) _____

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

NATURAL SCIENCES (8)

Complete any two (4-credit) courses:

ATM F101X(4) _____
 BIOL F100X(4) _____
 BIOL F103X(4) _____
 BIOL F104X(4) _____
 BIOL F111X(4) _____
 BIOL F112X(4) _____
 BIOL F115X(4) _____
 BIOL F116X(4) _____
 CHEM F100X(4) _____
 CHEM F103X(4) _____
 CHEM F104X(4) _____
 CHEM F105X(4) _____
 CHEM F106X(4) _____
 GEOG F111X(4) _____
 GEOS F100X(4) _____
 GEOS F101X(4) _____
 GEOS F112X(4) _____
 GEOS F120X(4) _____
 GEOS F125X(4) _____
 MSL F111X(4) _____
 PHYS F102X(4) _____
 PHYS F103X(4) _____
 PHYS F104X(4) _____
 PHYS F115X(4) _____
 PHYS F116X(4) _____
 PHYS F175X(4) _____
 PHYS F211X(4) _____
 PHYS F212X(4) _____
 PHYS F213X(4) _____

LIBRARY AND INFORMATION RESEARCH (0 - 1)

Successful completion of library skills competency test **OR**
 LS F100X or F101X prior to junior standing.....(0 - 1) _____

UPPER-DIVISION WRITING AND ORAL COMMUNICATION (0)

Complete the following:

Two writing intensive courses designated (W)(0) _____
 and one oral communication intensive course
 designated (O).....(0) _____

OR two oral communication intensive courses designated
 (O/2), at the upper-division level (see degree and/or major
 requirements).....(0) _____

CORE CREDITS REQUIRED 38 - 39

Minimum credits required for degree 120