

# Earth Science



College of Science, Engineering and Mathematics  
Department of Geology and Geophysics  
(907) 474-7565  
[www.uaf.edu/geology/](http://www.uaf.edu/geology/)  
Degree: B.A.  
Minimum Requirements for Degree: 130 credits

This program provides broad training in various aspects of earth science. It is especially applicable to those wishing to teach earth science or who are entering a field such as resource management where broad training in earth science is important.

Basic coursework is designed to meet the National Science Teachers Association requirements for teaching secondary school earth science. Additional required coursework (specialization emphasis) is arranged in consultation with the student's undergraduate advisor and a faculty member from the appropriate department. Students wishing to enroll in this degree program should contact the head of the geology and geophysics department.

## UNDERGRADUATE PROGRAM

### MAJOR

#### Earth Science—B.A. Degree

- Complete the general university requirements (page 28). (As part of the core curriculum requirements, complete: NRM 303X\*, CHEM 103X and 104X or CHEM 105X and 106X or PHYS 103X and 104X).
  - Complete the B.A. degree requirements (page 33). (As part of the B.A. degree requirements, complete: PHIL 380 or 382 or 481 for the humanities requirement.)
  - Complete the following program (major) requirements:\*
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|--|-----|
| GEOG 339—Maps and Landscape Analysis (4)         |     |
| or GEOS 408—Photogeology (2)                     | 2-4 |
| GEOG 401—Weather and Climate                     | 3   |
| GEOG 402—Resources and Environment               | 3   |
| GEOS 101X—The Dynamic Earth                      | 4   |
| GEOS 112X—The History of Earth and Life          | 4   |
| GEOS 225—Field and Computer Methods In Geology   | 3   |
| GEOS 262—Rocks and Minerals                      | 3   |
| GEOS 304—Geomorphology                           | 3   |
| GEOS 315W—Paleobiology and Paleontology (4)      |     |
| or BIOL 3280—Biology of Marine Organisms (3)     | 3-4 |
| GEOS 422—Remote Sensing (3)                      |     |
| or NRM 338—Introduction to GIS (3)               | 3   |
| MSL 111X—The Oceans                              | 4   |
| NRM 101—Natural Resource Conservation and Policy | 3   |
| PHYS 175X—Introduction to Astronomy              | 3   |

- Complete a specialization emphasis requirement:\*
- Complete an additional approved 9 credits\* at the 300-level or above with emphasis in geology, geography, biology, natural resources management, or other earth science-related field as approved by the undergraduate advisor.
- Complete any UAF minor except geology. Courses used to satisfy the specialization emphasis requirement can also be applied towards the requirements for a minor.
- Minimum credits required ..... 130

\* Student must earn a C grade or better in each course.

Note: The following courses are recommended to fulfill the upper division writing and oral intensive requirements (2 "W" courses and 1 "O" course): GEOS 475WO, GEOS 463O, GEOS 315W, GEOG 482WO, NRM 304O, or NRM 380W.

Note: Geography courses taken to meet the B.A. social science requirement may also be used to fulfill the Specialization Emphasis and (or) minor requirements. GEOG 402, a major requirement, also satisfies the B.A. social science requirement.

Note: In consultation with an undergraduate advisor, students should prepare an undergraduate study plan that includes specific courses to satisfy the major and minor complexes. This should be completed by the end of the sophomore year.



University of Alaska Fairbanks

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