

Geophysics

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

M.S., Ph.D. Degrees

Minimum Requirements for Degrees: M.S.: 30 credits;
Ph.D.: 18 thesis credits

Graduate Program—M.S. Degree

Concentrations: Solid-Earth Geophysics; Snow, Ice and Permafrost Geophysics; Remote Sensing Geophysics

1. Complete the following admission requirements:
 - a. Submit GRE scores.
 - b. Complete a background at least to the level of a B.S. concentration in geology, geophysics or an appropriate physical science or engineering.
 - c. Complete MATH 421 and 422; or equivalent.
2. Complete the general university requirements (page 168).
3. Complete the master's degree requirements (page 172).
 - a. Complete 6-12 thesis credits.
 - b. Complete any deficiencies concurrently with this degree.
4. Submit a written thesis proposal and pass an oral comprehensive examination centered on this proposal.
5. Complete and submit a written thesis and pass an oral defense of thesis.
6. Complete 6 credits of the following geophysics core requirements:

GEOS 602—Geophysical Fields.....	3
GEOS 620—Geodynamics	3
GEOS 623—Advanced Remote Sensing.....	3
7. Complete 1 of the following concentrations:

Solid-Earth Geophysics

- a. Complete 6 credits from the following:

GEOS 604—Intermediate Seismology.....	3
GEOS 605—Geochronology	3
GEOS 613—Global Tectonics	3
GEOS 671—Volcano Seismology	3
- b. Minimum credits required30

Snow, Ice and Permafrost Geophysics

- a. Complete 6 credits from the following:

GEOS 614—Ice Physics	3
GEOS 615—Sea Ice	3
GEOS 616—Permafrost.....	3
GEOS 617—Glaciers	3
- b. Minimum credits required30

Remote Sensing Geophysics

- a. Complete 6 credits from relevant remote sensing, geophysics or physics courses as agreed on by the advisory committee.
- b. Minimum credits required30

Graduate Program—Ph.D. Degree

1. Complete the following admission requirement:
 - a. Submit GRE scores.
2. Complete the general university requirements (page 168).
3. Complete the course work requirements for the appropriate M.S. concentration.
4. Complete the Ph.D. degree requirements (page 172).
5. As part of the Ph.D. degree requirements, complete the following:
 - a. Complete and pass a written and oral comprehensive examination.
 - b. Complete and submit a written thesis proposal for approval.
 - c. Complete a research program as arranged with the graduate advisory committee.
 - d. Complete 18 credits of thesis, write a thesis and pass an oral defense of thesis.
6. Minimum credits required18

Note: Page numbers refer to the UAF 2005-2006 academic catalog, which can be viewed online at www.uaf.edu/catalog/.