# Geophysics



College of Science, Engineering and Mathematics Department of Geology and Geophysics (907) 474-7565

www.uaf.edu/geology/ Degrees: M.S., Ph.D.

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

credits

### **GRADUATE PROGRAM**

Geophysics-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 43).
- 3. Complete the master's degree requirements (page 46).
- 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.
- Complete and submit a written thesis and pass an oral defense of thesis.
- 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 required 30

# 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 required
 30

# **Remote Sensing Geophysics**

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

# Geophysics-Ph.D. Degree

- 1. Complete the following admission requirement:
- a. Submit GRE scores.
- 2. Complete the general university requirements (page 43).
- 3. Complete the coursework requirements for the appropriate M.S. concentration.
- 4. Complete the Ph.D. degree requirements (page 48).
- 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.
- 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.



University of Alaska Fairbanks