

GEOPHYSICS M.S.

Admission Requirements

Complete the following admission requirements:

- Complete a background at least to the level of a B.S. concentration in geology, geophysics or an appropriate physical science or engineering.
- Complete MATH F302
- Recommended: MATH F314, MATH F432, PHYS F220

Program Requirements

< Back to Department (<https://catalog.uaf.edu/academic-departments/geoscience/>)

Minimum Requirements for Geophysics M.S.: 30 credits

CONCENTRATIONS: SOLID-EARTH GEOPHYSICS (P. 1), SNOW, ICE AND PERMAFROST GEOPHYSICS (P. 1), REMOTE SENSING GEOPHYSICS (P. 1)

Code	Title	Credits
General University Requirements		
Complete the graduate general university requirements. (https://catalog.uaf.edu/masters/#gurmastersdegreestext)		
Master's Degree Requirements		
Complete the master's degree requirements. (https://catalog.uaf.edu/masters/#masterofsciencethesis)		
As part of the master's degree requirements, complete the following:		
GEOS F699	Thesis	6
Complete any deficiencies concurrently with this degree.		
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.		
Geophysics Program Requirements		
Complete the following:		
GEOS F631	Foundations of Geophysics	4
GEOS F682	Geoscience Seminar (fall semester)	1
Complete 6 credits from relevant graduate-level courses agreed by the advisory committee or select one from the following concentrations:		
Solid-Earth Geophysics		
Snow, Ice and Permafrost Geophysics		
Remote Sensing		
Complete 7 credits of courses approved by the advisory committee		
Thesis credits or credits from courses that are F400 level or higher. ¹		
Total Credits		30

thesis credits required is 6. The remaining 6 credits can either be thesis credits or courses that are F400 level or higher.

Concentrations

SOLID-EARTH GEOPHYSICS

Code	Title	Credits
Solid-Earth Geophysics Concentration Requirements		
Complete 6 credits from the following:		6
GEOS F604	Seismology	
GEOS F605	Geochronology	
GEOS F626	Applied Seismology	
GEOS F669	Geodetic Methods and Modeling	
GEOS F671	Volcano Seismology	
Total Credits		6

SNOW, ICE AND PERMAFROST GEOPHYSICS

Code	Title	Credits
Snow, Ice and Permafrost Geophysics Concentration Requirements		
Complete 6 credits from the following:		6
GEOS F615	Sea Ice	
GEOS F616	Permafrost	
GEOS F617	Glaciers	
PHYS F614	Ice Physics	
Total Credits		6

REMOTE SENSING

Code	Title	Credits
Remote Sensing Concentration Requirements		
Complete 6 credits from the following:		6
ATM F613	Atmospheric Radiation	
GEOS F622	Digital Image Processing in the Geosciences	
GEOS F639	InSar and Its Applications	
GEOS F654	Visible and Infrared Remote Sensing	
GEOS F657	Microwave Remote Sensing	
Total Credits		6

¹ The minimum number of credits required is 30. The required M.S. coursework above represents 18 credits. The minimum number of