B.S., Geography

Concentrations: Environmental Studies, Landscape Analysis and Climate Change Studies, and Geospatial Sciences

Minimum Requirements for Degree: 120 credits

Students must earn a C grade or better in each course.

General University Requirements
Complete the general university requirements. (http://catalog.uaf.edu/bachelors)

General Education Requirements
Complete the general education requirements. (http://catalog.uaf.edu/bachelors/general-education-requirements)

As part of the general education requirements, complete:
- STAT F200X Elementary Probability and Statistics

B.S. Degree Requirements
Complete the B.S. degree requirements. (http://catalog.uaf.edu/bachelors/summary-of-bachelors-degree-reqs/#bachelorofsciencetext)

As part of the B.S. degree requirements, complete:
- NRM F303X Environmental Ethics and Actions
- MATH F230X Calculus Essentials with Applications
  or MATH F251X Calculus I

Program Requirements
- GEOG F101X Expedition Earth: Introduction to Geography 3
- GEOG F111X Earth and Environment: Elements of Physical Geography 4
- GEOG F312 People, Places, and Environment: Principles of Human Geography 3
- GEOG F483 Research Design, Writing and Presentation Methods 3
- GEOG F490 Geography Seminar 3
- GEOS F488 Undergraduate Research 1-3
  or GEOG F300 Internship in Geography
- NRM F338 Introduction to Geographic Information Systems 3

Concentrations
Select one from the following concentrations: 30-56
- Environmental Studies
- Landscape Analysis and Climate Change Studies
- Geospatial Sciences

Total Credits 50-78

^ Completion of these three courses will fulfill the baccalaureate capstone requirement.

Concentrations
ENVIRONMENTAL STUDIES

As part of the general education requirements, complete:
- CHEM F105X General Chemistry I

As part of the B.S. degree requirements, complete:
- BIOL F115X Fundamentals of Biology I

LANDSCAPE ANALYSIS AND CLIMATE CHANGE STUDIES

As part of the general education requirements, complete:
- ATM F101X Weather and Climate of Alaska
- PHYS F103X College Physics I

Program Requirements
- GEOG F412 Geography of Climate and Environmental Change 3
  or ATM F456 Climate and Climate Change
- GEOS F304 Geomorphology 3

Select three from the following: 9
- BIOL F371 Principles of Ecology
- GEOG F418 Biogeography
- GEOG F460 The Dynamic Alaska Coastline
- GEOS F304 Geomorphology
- NRM F403 Environmental Decision-Making
- NRM F407 Environmental Law

Total Credits 33-34
B.S., Geography

GEOG F339  Maps and Landscape Analysis
GEOG F418  Biogeography
GEOG F427  Polar Geography
GEOG F460  The Dynamic Alaska Coastline

Select two from the following:  6
GEOG F302  Geography of Alaska
GEOG F307  Weather and Climate
GEOG F478  Ice Age Alaska
GEOS F477  Ice in the Climate System

Select two from the following:  6-12
GEOG F207  Research Methods and Statistics in Geography
GEOG F309  Digital Cartography and Geo-Visualization
GEOS F422  Geoscience Applications of Remote Sensing
GEOS F458  Applications of GPS and GIS in Geophysics
NRM F435  GIS Analysis

Total Credits  27-33

GEOSPATIAL SCIENCES

Program Requirements
Select four from the following:  12-13
CS F103  Introduction to Computer Programming
GEOG F207  Research Methods and Statistics in Geography
GEOG F339  Maps and Landscape Analysis
GEOS F422  Geoscience Applications of Remote Sensing
NRM F435  GIS Analysis

Select three from the following:  6-7
GE F371  Remote Sensing for Engineering
GE F376  GIS Applications in Geological and Environmental Engineering
GEOG F309  Digital Cartography and Geo-Visualization
GEOS F436  Beyond the Mouse: Computer Programming and Automation for Geoscientists
GEOS F458  Applications of GPS and GIS in Geophysics
NRM F369  GIS and Remote Sensing for Natural Resources
NRM F638  GIS Programming
NRM F641  Natural Resource Applications of Remote Sensing

Select two from the following:  6
GEOG F427  Polar Geography
GEOG F460  The Dynamic Alaska Coastline
GEOG F478  Ice Age Alaska
GEOS F304  Geomorphology

Total Credits  24-26

¹ Graduate-level credit used to complete this undergraduate degree program may NOT be applied towards future graduate degree programs.

Note: Students and faculty advisors should carefully review prerequisites for courses outlined in each required and/or optional area. Some courses require successful completion of up to three prerequisite courses. Therefore, while students and faculty should note minimum degree credit hours are 120, the actual number of required course credits may exceed that number.