

Earth Science, Minor

The Earth Science Minor is ideal for integrating interdisciplinary concepts to address questions about Earth and planetary science, and interactions between humans, society, and the environment. The program offers flexible opportunities to engage with topics such as plate tectonics, sedimentary processes, paleontology, mineralogy, petrology, geochemistry, structures, geomorphology, (paleo)climatology, environmental science, soils, sustainability, and hydrology. The program provides knowledge and experience for a variety of physical- and Earth science-related graduate programs and careers.

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		22
Discipline Core Requirements		22 Credits
GEO 1010 or GEO 1030 or GEO 1040 or GEO 1050	Introduction to Geology PP Natural Disasters and the Environment PP The Dinosaurian World PP Geology of National Parks PP	3
GEO 1015	Introduction to Geology Laboratory	1
Complete seven credits lower division electives from the following:		7
ENVT 1110	Introduction to Environmental Management PP (3)	
ENVT 2710	Environmental Careers (1)	
ENVT 2730	Introduction to Soils (4)	
GEO 202R	Science Excursion (1)	
GEO 204R	Natural History Excursion BB (3)	
GEO 1020	(3)	
GEO 1080	Introduction to Oceanography PP (3)	
GEO 1220 & GEO 1225	Historical Geology and Historical Geology Laboratory (4)	
GEO 2070	Desert Natural History (3)	
GEO 2500	Introduction to Field Geology (3)	
GEOG 1000	Introduction to Physical Geography PP (3)	
GEOG 1800	Mapping the World with Geospatial Technology PP (undefined)	
GEOG 2000	Sustainability and Environment SS (3)	
METO 1010	Introduction to Meteorology PP (3)	
METO 1060	Fundamentals of Weather Forecasting PP (3)	
Complete eleven credits of upper division electives from the following:		11
ENVT 3790	Applied Hydrology WE (4)	
ENVT 3800	Energy Use on Earth GI (3)	
GEO 3000	Environmental Geochemistry (3)	
GEO 3070	Advanced Desert Natural History (3)	
GEO 3080 & GEO 3085	Earth Materials WE and Earth Materials Laboratory (4)	
GEO 3100	Isotope Geochemistry (3)	
GEO 3105	Isotope Geochemistry Laboratory (1)	
GEO 3200 & GEO 3205	Geologic Hazards and Geologic Hazards Laboratory (4)	
GEO 3700	Structure and Tectonics (4)	
GEO 4500	Sedimentary Geology WE (4)	
GEO 4510	Paleontology (4)	
GEO 4080 & GEO 4085	Petrology and Petrology Laboratory (4)	
GEO 4790	Hydrogeology (4)	

GEO 480R	Earth Science Seminar (0.5) <small>may be repeated once</small>
GEO 490R	Special Topics in Geology (1-4) (Special Topics, Research and Internships) <small>Up to four credits can count toward the minor</small>
or ENVT 495R	Special Projects in Environmental Management
or ENVT 482R	Geologic Environmental Internship
or GEOG 482R	GIS Internship
or GEOG 489R	Student Research in Geography
or GEOG 490R	Special Topics in Geography
or GEO 482R	Geologic Environmental Internship
or GEO 489R	Student Research
or GEO 495R	Independent Study
GEO 495R	Independent Study (1-4)
GEOG 3000	Climate Change in Science and Society (3)
GEOG 3500 & GEOG 3505	Geomorphology WE and Geomorphology Lab (4)
or GEO 3500 & GEO 3505	Geomorphology WE and Geomorphology Lab
GEOG 3600	Introduction to Geographic Information Systems (4)
GEOG 3700	Wetland Studies (3)
GEOG 3705	Wetland Studies Laboratory (1)

Graduation Requirements

Grade of C- or higher in all courses used to satisfy requirements of the minor.

Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (<http://www.uvu.edu/wolverinetrack/>).

First Year

Semester 1

	Credit Hours
Complete one of the introductory Geology classes (1010, 1030, 1040, or 1050) and the introductory lab (1015)	
GEO 1010 or GEO 1030 or GEO 1040 or GEO 1050	3
GEO 1015	1
Credit Hours	4

Semester 2

Complete 4 credits of lower division electives, such as:	4
ENVT 1110	Introduction to Environmental Management PP
ENVT 2710	Environmental Careers
GEO 202R	Science Excursion
GEO 1020	
GEO 1080	Introduction to Oceanography PP
GEO 1220 & GEO 1225	Historical Geology and Historical Geology Laboratory
GEOG 1000	Introduction to Physical Geography PP
METO 1010	Introduction to Meteorology PP
Credit Hours	4

Second Year

Semester 3

Complete 3 credits of lower division electives such as:	3
ENVT 2730	Introduction to Soils
GEO 2070	Desert Natural History
GEO 2500	Introduction to Field Geology
GEOG 2000	Sustainability and Environment SS
METO 1060	Fundamentals of Weather Forecasting PP

Upper Division Elective		3
	Credit Hours	6
Semester 4		
Upper Division Electives		8
	Credit Hours	8
	Total Credit Hours	22

Program Learning Outcomes

1. Analyze geologic concepts such as the rock cycle, plate tectonics, and deep time.
2. Synthesize geologic and interdisciplinary concepts to solve technological, scientific, and societal questions about the real world.