Environmental Earth Science - Bachelor of Science

The Bachelor of Science in Environmental Earth Science is designed for students who are interested in Earth systems and processes, and applying geoscience pursuits to environmental issues, problems and solutions. The degree program provides in-depth study of environmental geoscience concepts and approaches, including field-based, laboratory-based, and computational-based endeavors that focus on real-world problems. The Bachelor of Science in Environmental Earth Science will prepare students for employment in the environmental industry including federal, state and private sectors. Students will also be well-positioned to pursue graduate programs in environmental science. Students may not declare more than one major within the Department of Geology and Environmental Earth Science.

Program Requirements

(63 credit hours minimum)

Code	Title	Credit Hours
Strongly Recommended for First Year Students:		
GLG 147	Introductory Seminar - Geology & Environmental Earth Science	
Core Requirements (29 credit hours)		
Select one of the following:		3
GLG 111	The Dynamic Earth	
GLG 121	Environmental Geology	
GLG 141	Geology Of U.S. National Parks	
Select one of the following:		3
GEO 271	Human Dimensions of Natural Resource Conservation	
IES 274	Introduction to Environment and Sustainability	
IES 275	Principles of Environmental Science	
Select all of the following:		
GLG 115L	Understanding the Earth	1
GLG 204	Survival on an Evolving Planet	4
GLG 301	Sedimentology and Stratigraphy	4
GLG 354	Geomorphology	4
GLG 408	Introduction to Hydrogeology	4
GLG 497	Trends and Topics in the Geosciences	3
Field Experience - select one of the following or approved alternative: [1]		3
GLG 311	Geoenvironmental Field Methods	
GLG 412	Tropical Ecosystems of Costa Rica	
GLG 419	Geology of Streams	
Electives (24 credit hours)		**24**
Select from the following - no more than one at the 200 or 300 level:		
GLG 244	Oceanography	
GLG 307	Water and Society	
GLG 342	Geoarchaeology	
GLG 356	Mineralogy	
GLG 402	Geomicrobiology	
GLG 417	Forensic Isotope Geochemistry	
GLG 427	Isotope Geochemistry	
GLG 428	Hydrogeological Modeling: Groundwater Flow and Contaminant Transport and Fate	
GLG 432	X-ray Powder Diffraction and Clay Analysis	
GLG 435	Soils and Paleosols	
GLG 436	Paleoclimatology	
GLG 437	Paleontology in Conservation	
GLG 450	Sedimentary Basin Analysis	
GLG 461	Geophysics	
GLG 467	Seismology	
GLG 492	Global Tectonics	
GLG 496	Isotopes in Environmental Processes	
GLG 498	Senior Thesis In Geology	
*Public presentation of research required for departmental honors		
Related Hours (10 credit hours)		
Select one of the following:		4
GLG 211	Chemistry of Earth Systems	
CHM 141 & CHM 144	College Chemistry and College Chemistry Laboratory (and)	
Select one of the following:		3
MTH 151	Calculus I	
STA 261	Statistics	
STA 301	Applied Statistics	
Select one of the following:		3
GLG 261	Geohazards and the Solid Earth	
PHY 161	Physics for the Life Sciences with Laboratory I	
PHY 191	General Physics with Laboratory I	
Total Credit Hours		**63**

[1] Minimum of 3 semester hours of a field-based course. Courses that can fulfill the Field Experience are listed above. May be fulfilled by other 3 credit hour workshops if pre-approved by GLG CDA.