

BS in Environmental Geology (694030) MAP Sheet

Physical and Mathematical Sciences, Geological Sciences

For students entering the degree program during the 2022-2023 curricular year.



University Core and Graduation Requirements				Suggested Sequence of Courses			
University Core Requirements:				FRESHMAN YEAR			
Requirements	#Classes	Hours	Classes	1st Semester		JUNIOR YEAR	
Religion Cornerstones				5th Semester			
Teachings and Doctrine of The Book of Mormon	1	2.0	REL A 275	WRITG 150	3.0	WRTG 316	3.0
Jesus Christ and the Everlasting Gospel	1	2.0	REL A 250	GEOL 111	4.0	GEOL 491R	0.5
Foundations of the Restoration	1	2.0	REL C 225	CHEM 105 or CHEM 111	4.0	GEOL 435	3.0
The Eternal Family	1	2.0	REL C 200	Religion Cornerstone course	2.0	PHSCS 106	3.0
The Individual and Society				Total Hours			
American Heritage	1-2	3-6.0	from approved list		13.0	GEOL 550	3.0
Global and Cultural Awareness	1	3.0	from approved list			Religion Cornerstone course	2.0
Skills				2nd Semester			
First Year Writing	1	3.0	from approved list	American Heritage	3.0	Total Hours	14.5
Advanced Written and Oral Communications	1	3.0	from approved list	Social Science GE	3.0	6th Semester	
Quantitative Reasoning	1	4.0	from approved list	CHEM 106 & 107 or CHEM 112	3.0-4.0	GEOL 445	3.0
Languages of Learning (Math or Language)	1	4.0	from approved list	MATH 112	4.0	GEOL 491R	0.5
Arts, Letters, and Sciences				Total Hours			
Civilization 1	1	3.0	from approved list	Religion Cornerstone course	2.0	Required Environmental Elect 1 (Req 3)	3.0
Civilization 2	1	3.0	from approved list		15.0-16.0	STAT 121	3.0
Arts	1	3.0	from approved list	SOPHOMORE YEAR			
Letters	1	3.0	from approved list	3rd Semester			
Biological Science	1	3.0	from approved list	GEOL 210	3.0	Civilization II GE	3.0
Physical Science	1	3.0	from approved list	GEOL 230	3.0	Religion Cornerstone course	2.0
Social Science	1	3.0	from approved list	MATH 113	4.0	Total Hours	14.5
Core Enrichment: Electives				4th Semester			
Religion Electives	3-4	6.0	from approved list	GEOL 370	3.0	SENIOR YEAR	
Open Electives	Variable	Variable	personal choice	GEOL 375	3.0	7th Semester	
Graduation Requirements:				Total Hours			
Minimum residence hours required		30.0		PHSCS 105	3.0	Required Environmental Elect 2 (Req 3)	3.0
Minimum hours needed to graduate		120.0		Civilization 1 GE	3.0	Required Environmental Elect 3 (Req 3)	3.0
				Religion Cornerstone course	2.0	GEOL 491R	0.5
				Total Hours	14.0	Global and Cultural Awareness GE	3.0
						Letters GE	3.0
						Religion Cornerstone course	2.0
						Total Hours	14.5
						8th Semester	
						GEOL 535	3.0
						Required Environmental Elect 4 (Req 3)	3.0
						GEOL 491R	0.5
						Arts GE	3.0
						General Elect	4.0
						Total Hours	13.5

BS in Environmental Geology (694030)
2022-2023 Program Requirements (69 - 76 Credit Hours)

REQUIREMENT 1 Complete 12 courses		PWS 306 - Watershed Ecology Laboratory	1.0	in geosciences and hydrology are expected to continue to grow over the coming decade. Most environmental geology graduates are employed in the environmental industry, state, or federal governments.
GEOL 111 - Physical Geology	4.0	PWS 365 - Biogeochemistry	3.0	
GEOL 210 - Field Studies	3.0	PWS 366 - Biogeochemistry Laboratory	1.0	
GEOL 230 - Earth Data Vis		PWS 375 - Policies and Laws of Aquatic Systems	3.0	
GEOL 370 - Sedimentology and Stratigraphy	3.0	REQUIREMENT 4 Complete 1 option		
GEOL 375 - Structural Geology	3.0	OPTION 4.1 Complete 3 courses		
GEOL 420 - Geological Field Methods	2.0	CHEM 105 - General College Chemistry 1 with Lab (Integrated)	4.0	
GEOL 421 - Geological Mapping	2.0	CHEM 106 - General College Chemistry 2	3.0	
GEOL 422 - Geologic Writing	2.0	CHEM 107 - General College Chemistry Laboratory	1.0	
GEOL 435 - Groundwater		OPTION 4.2 Complete 2 courses		
GEOL 445 - Geochemistry	3.0	CHEM 111 - Principles of Chemistry 1	4.0	MAP DISCLAIMER While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.
GEOL 535 - Contaminant Hydrogeology	3.0	CHEM 112 - Principles of Chemistry 2	3.0	
GEOL 550 - Environmental Soil Chemistry	3.0	REQUIREMENT 5 Complete 6 courses		
REQUIREMENT 2 Complete 2.0 hours from the following course(s)		MATH 112 - Calculus 1	4.0	
GEOL 491R - Geology Seminar	0.5	MATH 113 - Calculus 2	4.0	
<i>You may take this course up to 4 times.</i>		PHSCS 105 - General Physics 1	3.0	
REQUIREMENT 3 Complete 4 courses		PHSCS 106 - General Physics 2	3.0	
NOTE: PWS LECTURES AND LABS (PWS 282 & 283; PWS 305 & 306; PWS 365 & 366) REQUIRE SEPARATE REGISTRATION AND CAN BE TAKEN SEPARATELY.		STAT 121 - Principles of Statistics	3.0	
CE 341 - Soil Mechanics		WRTG 316 - Technical Communication	3.0	
CE 414 - Engineering Applications of GIS	3.0	REQUIREMENT 6		
CE 431 - Hydrology	3.0	Complete a practice version of the American State Board of Geologists fundamentals of geology exam.		
CE 451 - Environmental Engineering Processes	3.0	THE DISCIPLINE		
CE 514 - Geospatial Environmental Engineering	3.0	Environmental geology deals with the protection and management of groundwater, surface water, and soil systems. Over 22% of the water supply in the United States comes from groundwater. As population grows and climate change proceeds, water resources will be under increased pressure. No less important than water is the understanding of the Critical Zone, the shallow soils with which surface and ground waters interact and upon which most life depends. Study of the Critical Zone is, to a large degree, an undertaking of environmental geology. Understanding the science of environmental geology will enhance students' sense of stewardship for the Earth.		
CE 531 - Principles of Hydrologic Modeling	3.0	CAREER OPPORTUNITIES		
CE 540 - Geo-Environmental Engineering	3.0	Environmental geology graduates are prepared for employment in industry, environmental consulting firms, government, education, or academia. The program provides training and skills for employment with a bachelor's degree or for continued education in graduate programs to study environmental geology, business, or law. Jobs		
CE 547 - Groundwater Modeling	3.0			
CE 551 - Water Treatment Facilities Design	3.0			
CE 555 - Environmental Chemistry	3.0			
GEOG 313 - Remote Sensing 1	3.0			
GEOG 413 - Remote Sensing 2	3.0			
GEOL 330 - Engineering Geology				
GEOL 351 - Mineralogy	4.0			
GEOL 352 - Petrology	3.0			
GEOL 405 - Applied Mathematics in the Geological Sciences	3.0			
GEOL 411 - Geomorphology and Remote Sensing	3.0			
PWS 282 - Soil Science	3.0			
PWS 283 - Soil Science Laboratory	1.0			
PWS 305 - Watershed Ecology	3.0			