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
University Core Requirements:
Requirements#ClassesHoursClasses
Religion Cornerstones
Teachings and Doctrine of The Book of Mormon12.0REL A 275
Jesus Christ and the Everlasting Gospel12.0REL A 250
Foundations of the Restoration12.0REL C 225
The Eternal Family12.0REL C 200
The Individual and Society
American Heritage1-23-6.0from approved list
Global and Cultural Awareness13.0from approved list
Skills
First Year Writing13.0from approved list
Advanced Written and Oral Communications13.0from approved list
Quantitative Reasoning14.0from approved list
Languages of Learning (Math or Language)14.0from approved list
Arts, Letters, and Sciences
Civilization 113.0from approved list
Civilization 213.0from approved list
Arts13.0from approved list
Letters13.0from approved list
Biological Science13.0from approved list
Physical Science13.0from approved list
Social Science13.0from approved list
Core Enrichment: Electives
Religion Electives3-46.0from approved list
Open ElectivesVariableVariablepersonal choice
Graduation Requirements:
Minimum residence hours required30.0
Minimum hours needed to graduate120.0
Suggested Sequence of Courses
Freshman Year
1st Semester
WRTG 1503.0
CHEM 105 or CHEM 1114.0
GEOG 101 4.0
Religion Cornerstone course2.0
Total Hours13.0
2nd Semester
American Heritage3.0
Social Science GE3.0
CHEM 106 & 107 or CHEM 1123.0-4.0
MATH 1124.0
Religion Cornerstone course2.0
Total Hours15.0-16.0
Sophomore Year
3rd Semester
GEOL 2103.0
GEOL 2303.0
MATH 1134.0
Biological Science GE 3.0
Religion Cornerstone course 2.0
Total Hours 15.0

4th Semester
GEOL 3703.0
GEOL 3753.0
PHSCS 1053.0
Civilization 1 GE 3.0
Religion Cornerstone course 2.0
Total Hours 14.0

Junior Year
5th Semester
WRTG 3163.0
GEOL 491R0.5
GEOL 4353.0
PHSCS 1063.0
Required Environmental Elect 1 (Req 3) 3.0
Religion Cornerstone course 2.0
Total Hours 14.5

6th Semester
GEOL 4453.0
GEOL 491R0.5
Required Environmental Elect 2 (Req 3) 3.0
STAT 1213.0
Civilization II GE 3.0
Religion Cornerstone course 2.0
Total Hours 14.5

Spring/Summer
GEOL 4202.0
GEOL 4212.0
GEOL 4222.0
Total Hours

Senior Year
7th Semester
Required Environmental Elect 3 (Req 3) 3.0
Required Environmental Elect 4 (Req 3) 3.0
GEOL 491R0.5
Global and Cultural Awareness GE 3.0
Letters GE 3.0
Religion Cornerstone course 2.0
Total Hours 14.5

8th Semester
GEOL 5353.0
Required Environmental Elect 5 (Req 3) 3.0
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOL 111</td>
<td>Physical Geology 4.0</td>
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<tr>
<td>GEOL 210</td>
<td>Field Studies 3.0</td>
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<td>GEOL 230</td>
<td>Earth Data Visualization 3.0</td>
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<td>GEOL 370</td>
<td>Sedimentology and Stratigraphy 3.0</td>
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<td>GEOL 375</td>
<td>Structural Geology 3.0</td>
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<tr>
<td>GEOL 420</td>
<td>Geological Field Methods 2.0</td>
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<td>GEOL 421</td>
<td>Geological Mapping 2.0</td>
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<td>GEOL 422</td>
<td>Geologic Writing 2.0</td>
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<td>GEOL 435</td>
<td>Groundwater 3.0</td>
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<td>GEOL 445</td>
<td>Geochemistry 3.0</td>
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<td>GEOL 535</td>
<td>Contaminant Hydrogeology 3.0</td>
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<tr>
<td>GEOL 550</td>
<td>Environmental Soil Chemistry 3.0</td>
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**requirement 2** Complete 2.0 hours from the following course(s)

- GEOL 491R - Geology Seminar 0.5
  You may take this course up to 4 times.

**requirement 3** Complete 4 courses

- CE 341 - Elementary Soil Mechanics 3.0
- CE 414 - Engineering Applications of GIS 3.0
- CE 431 - Hydrology 3.0
- CE 451 - Environmental Engineering Processes 3.0
- CE 514 - Geospatial Environmental Engineering 3.0
- CE 531 - Principles of Hydrologic Modeling 3.0
- CE 540 - Geo-Environmental Engineering 3.0
- 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 3.0
- 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
- PWS 306 - Watershed Ecology Laboratory 1.0
- PWS 365 - Biogeochemistry 3.0
- PWS 366 - Biogeochemistry Laboratory 1.0
- PWS 375 - Policies and Laws of Aquatic Systems 3.0

**requirement 4** Complete 1 option

**option 4.1** Complete 3 courses
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.

Career Opportunities
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 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.

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.