

ENVIRONMENTAL GEOLOGY

CONCENTRATION

OVERVIEW

Environmental Geology students develop expertise in surface and shallow-subsurface processes that shape Earth and provide important soil and water resources and services. Graduates will be prepared for employment opportunities that address environmental implications of geological processes and human impacts on Earth.

The curriculum emphasizes coursework in the fundamentals of geology, surface and shallow-subsurface processes, field-based research methodologies, and environmental geology.

The curriculum allows students to pursue positions with public, private, and nonprofit organizations that address environmental/natural resource management issues, regulatory agency compliance, inform natural resource policy and decision making, promote good stewardship of Earth, and resource availability. The curriculum also provides a strong foundation for those planning to continue on to graduate studies.



CAREERS

- Consulting Companies (environmental, engineering, or groundwater focused)
- State and federal agencies
- Non-profit agencies
- Environmental consulting companies
- State Department of Natural Resources
- National Park Service
- K-12 Education
- Local water boards

MORE ABOUT ENVIRONMENTAL GEOLOGY

"In Environmental Geology, you will apply geologic concepts to study human interactions with Earth's varied environments, contemporary environmental resource issues and natural resource management, geologic hazards and the local and global ramifications of natural events, as well as to interpret and predict environmental change. This concentration will provide skills needed for employment with environmental consulting and management firms, governmental agencies and non-governmental organizations, as well as for graduate school."

-Professor Sara Rathburn



FRESHMAN YEAR

Fall Semester

CO 150: College Composition	3
GEOL 150: Physical Geology for Scientists	4
MATH 160: Calculus for Physical Scientists I	4
AUCC 3B: Arts and Humanities	3

Spring Semester

GEOL 154: Historical and Analytical Geology	4
CHEM 111: General Chemistry I	4
CHEM 112: General Chemistry I Lab	1
AUCC 3D: Historical Perspectives	3
AUCC 3E: Global and Cultural Awareness	3

JUNIOR YEAR

Fall Semester

GEOL 366: Sedimentary Petrology and Geochemistry	4
PH 142 or PH 122 or SOCR 470	3-5
SOCR 240: Introductory Soil Science	4
STAT 301 or STAT 315 or MATH 340	3-4

Spring Semester

GEOL 372: Structural Geology	4
GEOL 376: Geologic Field Methods	3
NR 319 or NR 322: Geospatial Applications	4
AUCC 3B: Arts and Humanities	3

Summer Semester

GEOL 436: Summer Field Course	6
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SOPHOMORE YEAR

Fall Semester

GEOL 232: Mineralogy	3
CHEM 113: General Chemistry II	3
CHEM 114: General Chemistry II Lab	1
GEOL 344: Sedimentation and Stratigraphy	4
MATH 161: Calculus for Physical Scientists II	4

Spring Semester

GEOL 364: Igneous and Metamorphic Petrology	4
PH 141: Physics for Scientists I or PH 121: General Physics I	5
CO 300 or JTC 300 or CO 301B	3
AUCC 3C: Social/Behavioral Sciences	3

SENIOR YEAR

Fall Semester

GEOL 452: Hydrogeology	4
Elective	3
WR 416: Land Use Hydrology	3
Directed Technical Elective	3-4

Spring Semester

GEOL 446: Environmental Geology	3
GEOL 454: Geomorphology	4
Directed Technical Elective	3-4
Electives	2-4

**Additional courses may be required to fulfill prerequisite requirements*

Program Total

120 Credits

