Environmental Geologist

Job Summary
An environmental geologist investigates the release or potential release of chemicals that may cause contamination of soil, groundwater, or air. They determine location and movement of contaminated media and implement solutions that meet the guidelines of regulatory agencies. They determine geologically safe locations for new landfills, hazardous waste disposal sites, and nuclear power plants. They may use geological, physics, chemistry, and mathematics knowledge in exploration of underground water, land reclamation, or other environmental problems.

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Undergraduate
Geoscience professional society conference
Clubs, student government, or geoscience professional societies
Hone skills through public speaking or science communication courses, conference presentations
Events, activities, and technical sessions at professional society conference
Geoscience internship with a non-profit, for profit organization or company, research institution, or federal agency
First Aid/ AED/CPR training
OSHA HAZWOPER training
Geologist in Training Certification (ASBOG Fundamentals Exam)
Degree in earth science, geosciences, or other natural science major
Writing course outside the discipline (business or environmental law) or technical writing course
Proficiency in using and understanding GIS
Course work in math, hydrogeology, chemistry, environmental compliance and regulations, environmental engineering, applied geology, soil science, or microbiology
Field, research and/or instrument experiences
Write a thesis
Also applicable at Graduate level

Graduate/Master’s
Departmental committee, campus club, geoscience professional society
Present research at a conference
Publish research
Geologist in Training Certification or Professional Geologist license (ASBOG Fundamentals of Geology Exam and/or the Practice of Geology Exam)
Degree in the geosciences
Coursework in advanced math
Map creation software or modeling software
Master’s research project related to an environmental problem
Public speaking or science communication courses
Also applicable at Graduate and Ph.D. level

Ph.D./Post-doc
Develop interpersonal skills
Present complex scientific concepts to nontechnical audiences
Dissertation topic(s) related to environmental issue
Take a more focused approach in a discipline related to your career aspirations. Ph.D. is required for advanced research or faculty positions or even in the environmental consulting industry
Also applicable at Ph.D. level

Also applicable at Graduate and Ph.D. level

This career compass provides options, tips, suggestions, and strategies for how a student can obtain critical skills, experiences, and competencies in order to launch their geoscience career based on their academic standing. The content herein is based on data from the U.S. Bureau of Labor Statistics, interviews with personnel in the occupation, and research on available student opportunities.