ENVIRONMENTAL SCIENCE

What is Environmental Science? (from http://www.albright.edu/catalog/enviro.html#es)

“The interdisciplinary nature of the environmental science major allows students to address a wide range of contemporary questions through the natural sciences of biology, ecology, earth sciences, chemistry, the social sciences including political science, sociology, economics, and psychology and the humanities of history and philosophy. The major is designed for science students wishing to pursue careers in environmental research/technology and resource management or pursue graduate study in an environmental field.”

What is this career like? (from http://www.bls.gov/ooh)

“Environmental scientists and specialists analyze environmental problems and develop solutions. For example, many environmental scientists and specialists work to reclaim lands and waters that have been contaminated by pollution. Others assess the risks that new construction projects pose to the environment and make recommendations to governments and businesses on how to minimize the environmental impact of these projects. Environmental scientists and specialists may do research and provide advice on manufacturing practices, such as advising against the use of chemicals that are known to harm the environment.

The federal government and many state and local governments have regulations to ensure that there is clean air to breathe, safe water to drink, and no hazardous materials in the soil. The regulations also place limits on development, particularly near sensitive ecosystems such as wetlands. Many environmental scientists and specialists work for the government to ensure that these regulations are followed. Other environmental scientists and specialists work for consulting firms that help companies comply with regulations and policies.

Some environmental scientists and specialists focus on environmental regulations that are designed to protect people’s health, while others focus on regulations designed to minimize society’s impact on the ecosystem.”

Related Career Titles (from http://uncw.edu/career/environmentalscience.html)

<table>
<thead>
<tr>
<th>Agricultural Scientist</th>
<th>Ecologist</th>
<th>Forest Ranger</th>
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</thead>
<tbody>
<tr>
<td>Agricultural Technician</td>
<td>Engineering Technician</td>
<td>Forester</td>
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<tr>
<td>Air/Water Quality Mgr.</td>
<td>Environmental Analyst</td>
<td>Fund Raiser</td>
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<tr>
<td>Air Pollution Analyst</td>
<td>Environmental Consultant</td>
<td>Geographer</td>
</tr>
<tr>
<td>Architect</td>
<td>Environmental Educator</td>
<td>Geologist</td>
</tr>
<tr>
<td>Biochemist</td>
<td>Environmental Engineer</td>
<td>Geophysicist</td>
</tr>
<tr>
<td>Biologist</td>
<td>Environmental Engineering</td>
<td>Hazardous Waste Mgr</td>
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<tr>
<td>Biomedical Engineer</td>
<td>Environmental Health Spec.</td>
<td>Hydrologist</td>
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<tr>
<td>Biotechnologist</td>
<td>Environmental Lawyer</td>
<td>Industrial Hygienist</td>
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<tr>
<td>Chemical Technician</td>
<td>Environmental Lobbyist</td>
<td>Journalist/Author</td>
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<tr>
<td>Chemist</td>
<td>Environmental Nurse</td>
<td>Management Consultant</td>
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<tr>
<td>City Planner</td>
<td>Environmental Physician</td>
<td>Meteorologist</td>
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<tr>
<td>Civil Engineer</td>
<td>Environmental Planner</td>
<td>Microbiologist</td>
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<tr>
<td>Conservation Agent</td>
<td>Environmental Scientist</td>
<td>Natural Resource Spec.</td>
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<tr>
<td>Conservation Analyst</td>
<td>EPA Inspector</td>
<td>Conservationist</td>
</tr>
<tr>
<td>Earth Scientist</td>
<td>Fisheries Conservationist</td>
<td>Ocean Technician</td>
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<tr>
<td>Oceanographer</td>
<td>Pharmacy Technician</td>
<td>Range Manager</td>
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<tr>
<td>Outdoor Trip Leader</td>
<td>Project Manager</td>
<td>Resource Economist</td>
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<tr>
<td>Park Ranger</td>
<td>Public Health Veterinarian</td>
<td>Seismologist</td>
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<tr>
<td>Soil Conservation Tech.</td>
<td>Urban and Regional Planner</td>
<td>Wildlife Manager</td>
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<tr>
<td>Teacher</td>
<td>Photographer</td>
<td>Zoologist</td>
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<td></td>
<td>Water/Wastewater Plant</td>
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<tr>
<td></td>
<td>Operator</td>
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</tbody>
</table>

**How can you get ready?** (from http://career.utk.edu/students/majors.asp)

- Environmental studies and environmental science differ from each other in the amount of science coursework needed.
- Environmental studies provides a broad base of hard sciences as well as liberal arts or social science coursework.
- Environmental science incorporates hard sciences and environmental sciences.
- Choice depends upon career focus. For example, administration or policy-making versus technical areas or research.
- Combine liberal arts skills with analytical skills to increase employability.
- Obtain these skills through internships, co-ops, volunteer work, summer jobs or independent research projects.
- Become familiar with current environmental laws and regulations. Stay up to date with changing environmental legislation.
- Join related professional associations; read related literature and journals to keep up with new developments.
- Attend seminars, conferences and workshops sponsored by professional associations or public interest groups.
- Network and get to know people who are working in your area of interest.
- Research agencies/organizations of interest before applying for a position.
- Learn local, state and federal government job application procedures.
- Obtain graduate degree for job security/advancement.
**Related Major Skills** (from [http://uncw.edu/career/environmentalscience.html](http://uncw.edu/career/environmentalscience.html))

<table>
<thead>
<tr>
<th>Skill</th>
<th>Related Major Skills</th>
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<th>Major Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summarize research findings</td>
<td>Attention to detail</td>
<td>Analyze data</td>
<td>Perceive patterns &amp; structures</td>
<td>Applying logic to problems</td>
</tr>
<tr>
<td>Perceive patterns &amp; structures</td>
<td>Applying logic to problems</td>
<td>Evaluate data and results</td>
<td>Apply concepts</td>
<td>Utilizing formulas</td>
</tr>
<tr>
<td>Apply concepts</td>
<td>Utilizing formulas</td>
<td>Gather information</td>
<td>Apply knowledge creatively</td>
<td>Define problems</td>
</tr>
<tr>
<td>Apply knowledge creatively</td>
<td>Define problems</td>
<td>Assess risks</td>
<td>Use laboratory equipment</td>
<td>Precision and accuracy</td>
</tr>
<tr>
<td>Use laboratory equipment</td>
<td>Precision and accuracy</td>
<td>Computer literacy</td>
<td>Technical writing</td>
<td>Organize and report data</td>
</tr>
<tr>
<td>Technical writing</td>
<td>Organize and report data</td>
<td>Inform and explain</td>
<td>Written &amp; oral reporting</td>
<td>Inform and explain</td>
</tr>
</tbody>
</table>

**What about the future?**

“Employment of environmental scientists and specialists is projected to grow 15 percent from 2012 to 2022, faster than the average for all occupations. Heightened public interest in the hazards facing the environment, as well as the increasing demands placed on the environment by population growth, is projected to spur demand for environmental scientists and specialists. Most employment growth for environmental scientists and specialists is projected to be in private consulting firms that help clients monitor and manage environmental concerns and comply with regulations. However, most jobs will remain concentrated in the various levels of government and closely related industries, such as publicly funded universities, hospitals, and national research facilities.”

More detailed job outlook information can be found at [http://www.bls.gov/ooh](http://www.bls.gov/ooh)

**Available at Albright College Career Development’s Resource Library**

- Great Jobs for Environmental Studies Majors, Julie DeGalan and Bryon Middlekauff
- Career Opportunities in Politics, Government, and Activism, by Joan Axelrod-Contrada
- Career Opportunities in Science, by Susan Echaore-McDavid
- Careers for Animal Lovers and Other Zoological Types, Louise Miller
- Careers for Environmental Types and Others Who Respect the Earth, by Jane Kinney and Michael Fasulo
- Careers for Nature Lovers and Other Outdoor Types, by Louise Miller
- Careers for Plant Lovers and Other Green Thumb Types, by Blythe Camenson
- Careers for Scholars and Other Deep Thinkers, Blythe Camenson
- Careers for Scientific Types and Other Inquiring Minds, Jan Goldberg
- Great Jobs for Biology Majors, by Blythe Camenson
- Great Jobs for Political Science Majors, by Mark Rowh
- Opportunities in Animal and Pet Care, by Mary Price Lee and Richard S. Lee
- Opportunities in Energy Careers, by John H. Woodburn
- Opportunities in Environmental Careers, by Odom Fanning
• Opportunities in Government Careers, by Neale Baxter
• Opportunities in Horticultural Careers, by Jan Goldberg
• Opportunities in Landscape Architecture, Botanical Gardens and Arboreta, Blythe Camenson
• Opportunities in Nonprofit Organization Careers, by Adrian A. Paradis
• Opportunities in Zoo Careers, by Blythe Camenson

Disclaimer
Links to Internet sites are provided for your convenience and do not constitute an endorsement by Albright College Experiential Learning and Career Development Center.

Job and Internship Search Links

• Environmental Internships/Jobs http://www.ecojobs.com/
• Sierra Club http://www.sierraclub.org/sierra/internships
• EcoEmploy: http://www.ecoemploy.com/
• EH&S Careers http://www.ehscareers.com/
• Green Dream Jobs http://www.sustainablebusiness.com
• Greenbiz.com Joblink http://jobs.greenbiz.com/
• The Student Conservation Association http://www.thesca.org
• Pollution Online http://www.pollutiononline.com
• The Environment Directory http://www.webdirectory.com
• Environmental Protection Agency http://www.epa.gov/careers/
• Cyber-Sierra’s Natural Resources Job Search http://www.cybersierra.com/nrjobs/read.html
• Environmental Career Center http://environmentalcareer.com/
• National Association of Environment Professionals http://www.naep.org
• Society of Wetland Scientists http://www.sws.org/Resources/the-sws-wetland-jobs-board.html
• SERC, http://www.serc.si.edu/pro_training/internships/internships.aspx
• NOAA, http://coast.noaa.gov/about/employment/
• Nature Job Search Site http://www.nature.com/naturejobs/index.html
• Environmental Standards, Inc http://www.envstd.com/

Career Planning Links

• The Environmental News Network http://www.enn.com
• Careers That Care http://wwf.panda.org/who_we_are/jobs/
• Envirolink http://www.envirolink.org/
Professional Associations Links

- Association for the Advancement of Sustainability in Higher Education http://www.aashe.org
- National Environmental Health Association http://www.neha.org
- Environmental Protection Agency http://www.epa.gov/
- Ecological Society of America http://www.esa.org/
- Local Government Environmental Assistance Network http://www.lgean.org/
- American Water Works Association http://www.awwa.org/
- Society for Conservation Biology http://conbio.net