# ENVIRONMENTAL STUDIES/SCIENCE

## What can I do with this major?

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<th>AREAS</th>
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<tr>
<td><strong>ENVIRONMENTAL REMEDIATION/COMPLIANCE</strong></td>
<td>Federal government:  &lt;br&gt; Army Corps of Engineers  &lt;br&gt; Department of Defense  &lt;br&gt; Environmental Protection Agency  &lt;br&gt; Department of Interior: Bureau of Reclamation, Office of Surface Mining, Bureau of Land Management  &lt;br&gt; Department of Agriculture  &lt;br&gt; Natural Resource Conservation Service  &lt;br&gt; Agricultural consulting firms  &lt;br&gt; Environmental consulting firms</td>
<td>Gain experience through internships, volunteer or other part-time positions with government or private remediation projects.  &lt;br&gt; Develop excellent communication skills, both oral and written, as well as the ability to work as part of a team.  &lt;br&gt; Conduct regulatory research regarding environmental issues in area of interest.  &lt;br&gt; Plan to travel to worksites.  &lt;br&gt; Seek experience with data management, analysis and tools used for remediation, i.e. GIS, CADD and regulatory/compliance software.  &lt;br&gt; OSHA HAZWOPER training may be required for some positions.</td>
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<td>Ground Water  &lt;br&gt; Surface Water  &lt;br&gt; Soils  &lt;br&gt; Air  &lt;br&gt; Sediments  &lt;br&gt; Remediation  &lt;br&gt; Liability  &lt;br&gt; Audit  &lt;br&gt; Compliance  &lt;br&gt; Sustainability</td>
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<td><strong>WASTE MANAGEMENT</strong></td>
<td>Federal, state and local government:  &lt;br&gt; Environmental Protection Agency  &lt;br&gt; Department of Energy  &lt;br&gt; City/county waste management departments  &lt;br&gt; Recycling centers  &lt;br&gt; Private waste management firms  &lt;br&gt; Consulting firms  &lt;br&gt; Nonprofit organizations</td>
<td>Pursue experience through volunteer, paid and intern positions related to waste management.  &lt;br&gt; Seek opportunities to hone communication skills, both written and oral. Take courses in technical writing.  &lt;br&gt; Develop decision-making and problem-solving skills, diplomacy and the ability to work under pressure.  &lt;br&gt; Demonstrate flexibility and willingness to look at issues from various perspectives.  &lt;br&gt; Gain familiarity with current technologies, regulations and statutes.  &lt;br&gt; Join community groups or service organizations that focus on environmental awareness; attend public meetings about waste management.  &lt;br&gt; Become familiar with Superfund and its programs.  &lt;br&gt; Learn about the activities of local chapters of citizen watch groups.</td>
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<td>Risk Assessment  &lt;br&gt; Quality Control  &lt;br&gt; Logistics  &lt;br&gt; Planning  &lt;br&gt; Recycling  &lt;br&gt; Transportation  &lt;br&gt; Compliance  &lt;br&gt; Environmental Engineering  &lt;br&gt; Public and Environmental Health  &lt;br&gt; Industrial Hygiene</td>
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### SOIL SCIENCE
- Soil and Water Conservation
- Land Use Planning
- Waste Disposal
- Environmental Compliance
- Reclamation of Contaminated Lands
- Landfill Operation and Monitoring
- Agrichemical Management
- Fertilizer Technology
- Agricultural Production: Food and Fiber
- Research
- Education

### EMPLOYERS
- Federal government:
  - Environmental Protection Agency
  - Natural Resource Conservation Service
  - Department of Agriculture
  - Department of Health and Human Services
- State farm bureaus
- Environmental research laboratories
- Agricultural or environmental consultant firms
- Privately owned farms and ranches
- Universities

### STRATEGIES
- Develop acute observational skills.
- Seek related experience through co-ops, internships or part-time jobs in area of interest.
- Gain extensive laboratory and research experience to prepare for research positions.
- Stay abreast of current environmental issues including policy, conservation and industry trends.
- Seek knowledge of technology used in natural resource management including software, geographical information systems and global positioning systems.
- Participate in related clubs, organizations and soil judging teams to build contacts and cultivate academic interests.
- Learn about certification programs offered by the Soil Science Society of America including soil science and agronomy.

### AIR/WATER QUALITY MANAGEMENT
- Testing/Analysis
- Watershed Management
- Stream Restoration
- Sustainable Infrastructure
- Risk Assessment
- Project Development
- Compliance
- Permitting
- Modeling

### EMPLOYERS
- Federal, state and local government:
  - Environmental Protection Agency
  - Geological Survey
  - Natural Resource Conservation Service
  - Fish and Wildlife Service
  - Department of Agriculture
  - Public works departments
- Consulting firms
- Private laboratories
- Nonprofit organizations
- Water treatment plants
- Consumer products manufacturers

### STRATEGIES
- Develop strong research skills through coursework with laboratory components, by assisting faculty with research projects or through related internships and jobs.
- Seek experience in student and community organizations related to the environment such as those focused on water resources, pollution or conservation.
- Stay up-to-date with local and federal regulatory agencies and laws pertaining to your specialty.
- Develop strong oral communication and technical writing skills, as well as the ability to collaborate in a team environment.
- Learn to use the tools and software associated with watershed modeling or air dispersion modeling.
- Investigate certification programs offered by the American Institute of Hydrology.
- Be willing to work and travel to various client sites.
### PLANNING AND CONSERVATION

#### Natural Resource Management: Land, Soil, Water, Plants, Animals
- Sustainability Management
- Water Resources
- Aviation Planning
- Transportation Planning
- Building/Zoning
- Land Acquisition
- Land Use
- Recreation Management
- Park/Preserve Management
- Mining
- Construction

#### EMPLOYERS
- Federal, state and local government:
  - Environmental Protection Agency
  - Natural Resource Conservation Service
  - National Oceanic and Atmospheric Administration (NOAA)
  - Fish and Wildlife Service
  - National Park Service
  - Department of Agriculture
  - Department of Transportation
  - Public works departments
  - Planning departments
- Utilities companies
- Forestry companies
- Indian nations
- Mining companies: petroleum, mineral
- Consulting firms
- Real estate development companies
- Market research companies
- Colleges and universities
- Nonprofit organizations
- Land trust organizations: The Nature Conservancy or Trust for Public Land
- Zoological parks
- Hunting and fishing clubs
- Wildlife ranges

#### STRATEGIES
- Obtain experience through volunteer positions such as Student Conservation Association, and seek leadership positions.
- Seek research experience with professors, through coursework or through internships in the industry.
- Develop knowledge of land and water policies, ecology and conservation history. Real estate experience may be beneficial for some positions.
- Participate on planning boards, commissions and committees to stay abreast of local planning and conservation initiatives.
- Hone communication and negotiation skills for interacting with various stakeholders including land owners, elected officials and conservation and community representatives.
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<tr>
<td>ENVIRONMENTAL EDUCATION AND COMMUNICATION</td>
<td>Public and private schools, K-12</td>
<td>Gain experience working with students through tutoring, part-time employment or volunteering.</td>
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<td>Teaching:</td>
<td>Two-year community colleges/technical institutes</td>
<td>Learn to work well with people of varying backgrounds and skills.</td>
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<td>Elementary</td>
<td>Four-year institutions</td>
<td>Develop excellent interpersonal, communication and content area knowledge.</td>
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<td>Secondary</td>
<td>Museums</td>
<td>Complete a teacher preparation program for K-12 positions, which varies by state. Learn about the endorsements for environmental science.</td>
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<td>Post-Secondary</td>
<td>Zoos</td>
<td>Master’s degrees may be sufficient for teaching at community or two-year institutions.</td>
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<td>Non-classroom Education</td>
<td>Nature centers and parks</td>
<td>Seek Ph.D. for teaching opportunities at colleges and universities.</td>
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<td>Technical Writing</td>
<td>Publishing companies: scientific magazines, professional journals, periodicals, textbooks, online publishers</td>
<td>Join professional associations and environmental groups as way to learn about the field and network.</td>
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<td>Editing</td>
<td>Newspapers</td>
<td>Acquire thorough knowledge of photographic procedures and technology.</td>
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<td>Illustrating</td>
<td>Educational and scientific software companies</td>
<td>Take advanced courses in technical writing or journalism classes or consider a minor in either.</td>
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<td>Photography</td>
<td>Environmental organizations</td>
<td>Join professional associations like the National Association of Science Writers or the Public Relations Student Society of America.</td>
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<td>Public Relations</td>
<td>Government agencies</td>
<td>Seek related volunteer or paid experiences with student/local publications to increase marketability.</td>
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<td>Nonprofit organizations</td>
<td>Consider earning an advanced degree in a communications field to specialize, i.e. scientific journalism or public relations.</td>
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### AREAS
- Environmental Law
  - Political Action/Lobbying
  - Regulatory Affairs
  - Science Policy
  - Patent Law
  - Non-profit or Public Interest
  - Environmental Law
  - Mediation

### EMPLOYERS
- Law firms
- Large corporations
- Federal and state government:
  - Environmental Protection Agency
  - Department of Justice
  - Attorney General Offices
- Political Action Committees
- Nonprofit organizations, i.e., Green Action and Natural Resources Defense Council

### STRATEGIES
- Develop strong research and writing skills. Hone communication skills through public speaking courses, debate team or Toast Masters, a public speaking organization.
- Participate in pre-law honor societies and seek guidance from campus pre-law advisors.
- Maintain current knowledge of industry trends, laws and policies specific to area of interest, i.e., conservation, regulation compliance, etc.
- Take courses in history, political science and/or legal studies to supplement science curriculum.
- Learn about the law school admissions process, maintain a high GPA and plan to perform well on the LSAT. Research schools with concentrations of interest, i.e., environmental law and policy, conservation, sustainable development, etc.

### GENERAL INFORMATION
- Environmental studies and environmental science differ from each other in the amount of science coursework required.
- Environmental studies provide a broad base of hard sciences as well as 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.
- Pursue volunteer or internship experience to test fields of interest and gain valuable experience. Take independent research classes if possible.
- Stay up-to-date with changing environmental legislation by reading related literature and journals and through participation in professional associations.
- Attend seminars, conferences and workshops sponsored by professional associations or public interest groups and utilize networking opportunities.
- Learn local, state and federal government job application procedures. Utilize your campus career center staff for assistance.
- A bachelor’s degree will qualify one for work as a laboratory assistant, technician, technologist or research assistant in education, industry and government.
- A bachelor’s degree is also sufficient for nontechnical work in writing, illustration, sales, photography and legislation.
- A master’s degrees allow for greater specialization in a field and more opportunities in research and administration. Some community colleges will hire Master’s level teachers.
- Doctoral degrees are necessary for advanced research and administrative positions, university teaching and independent research.