ENVIROMENTAL STUDIES/SCIENCE
What can I do with this degree?

**AREAS**

**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
- Research
- Education

**SOLID WASTE MANAGEMENT**
- Chemistry
- Engineering
- Hydrology
- Logistics
- Planning
- Recycling
- Transportation
- Compliance

**EMPLOYERS**

**SOIL SCIENCE**
- Government agencies including:
  - US Environmental Protection Agency
  - Natural Resource Conservation Services
  - USDA Forest Service
  - US Department of Health and Human Services
  - State farm bureaus
  - Environmental research laboratories
  - Agricultural or environmental consultant firms
  - Privately owned farms and ranches
  - Universities

**SOLID WASTE MANAGEMENT**
- Federal, state, and local government
- Private waste management firms
- Consulting firms
- Nonprofit organizations

**STRATEGIES**

**SOIL SCIENCE**
- Maintain knowledge of current environmental issues including policy, conservation, and industry trends.
- Develop acute observational skills.
- Stay current on technology used in natural resource management including software, geographical information systems, and global positioning systems.
- 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.
- 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.
- Become familiar with the federal job application procedure for government employment.
- Obtain Ph.D. for optimal research and university teaching careers.

**SOLID WASTE MANAGEMENT**
- Develop strong communication skills, both written and oral.
- Develop decision-making and problem-solving skills, diplomacy, and the ability to work under pressure.
- Gain familiarity with current technologies, regulations, and statutes.
- Join community groups or service organizations that focus on environmental awareness; attend public meetings about waste management.
- Become flexible and learn to look at issues from various perspectives.
<table>
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<tr>
<th>AREAS</th>
<th>EMPLOYERS</th>
<th>STRATEGIES</th>
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<tbody>
<tr>
<td><strong>HAZARDOUS WASTE MANAGEMENT</strong></td>
<td>Federal, state, and local government</td>
<td>Consider a double major in hard science or engineering.</td>
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<tr>
<td>Hydrogeology</td>
<td>Private companies that generate hazardous waste in production</td>
<td>Attend public meetings on hazardous waste issues.</td>
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<tr>
<td>Quality Control</td>
<td>Hazardous waste management firms</td>
<td>Gain laboratory experience and computer expertise.</td>
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<td>Risk Assessment</td>
<td>Consulting firms</td>
<td>Complete an internship in a government office or regulatory agency.</td>
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<td>Environmental Engineering</td>
<td>Nonprofit organizations</td>
<td>Gain experience with technical writing.</td>
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<td>Public and Environmental Health</td>
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<td>Get involved with local chapters of citizen watch groups.</td>
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<td>Industrial Hygiene</td>
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<td>Become familiar with Superfund and its activities.</td>
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<td>Biology</td>
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<td>Chemistry</td>
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<td>Geology</td>
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<td>Chemical Engineering</td>
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<td>Planning</td>
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<tr>
<td><strong>AIR QUALITY MANAGEMENT</strong></td>
<td>Federal, state, and local government</td>
<td>Stay up-to-date with federal regulations and both industry and regional standards.</td>
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<tr>
<td>Engineering</td>
<td>Private industry</td>
<td>Additional training in economics and policy is desirable.</td>
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<td>Planning</td>
<td>Consulting firms</td>
<td>Develop strong oral communication and technical writing skills.</td>
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<td>Analytical Chemistry</td>
<td>Nonprofit organizations</td>
<td>Learn to work well under pressure and develop negotiation skills.</td>
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<td>Environmental Quality Analysis</td>
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<td>Seek volunteer or paid positions within area environmental groups.</td>
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<td>Meteorology</td>
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<td>Risk Assessment</td>
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<td>Safety and Health Management</td>
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<td>Toxicology</td>
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<td>Project Development</td>
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<td>Compliance</td>
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<tr>
<td><strong>WATER QUALITY MANAGEMENT</strong></td>
<td>Federal, state, and local government</td>
<td>Develop a strong chemistry background by taking additional courses.</td>
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<tr>
<td>Aquatic Ecology</td>
<td>Corporations</td>
<td>Obtain laboratory skills by assisting faculty with research projects.</td>
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<td>Aquatic Toxicology</td>
<td>Consulting firms</td>
<td>Maintain current knowledge of industry trends and regulations.</td>
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<td>Biology</td>
<td>Nonprofit organizations</td>
<td>Develop interpersonal, oral communication, and technical writing skills.</td>
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<tr>
<td>Civil/Environmental Engineering</td>
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<td>Seek an advanced degree in policy for increased marketability.</td>
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<tr>
<td>Hydrogeology and Hydrology</td>
<td>Treatment plants</td>
<td>Learn about certification programs offered by the American Institute of Hydrology.</td>
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<tr>
<td>Drinking Water Supply and Treatment</td>
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<td>Learn to use the tools and software associated with watershed modeling.</td>
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<td>Waste Water Treatment</td>
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<td>Groundwater Protection</td>
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<td>Surface Water Management</td>
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<td>Estuary Management</td>
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<td>Wetlands Protection</td>
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<td>Industrial Engineering</td>
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<tr>
<td><strong>LAND AND WATER CONSERVATION</strong></td>
<td>Biology, Ecology, Planning, Law, Geographic Information Systems, Preserve Management, Natural Resource Management, Soil Conservation, Land Acquisition</td>
<td>Federal, state, and local government, Indian nations, Utilities and timber companies, Consulting firms, Nonprofit organizations, Land trust organizations such as The Nature Conservancy or Trust for Public Land</td>
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<tr>
<td><strong>FISHERY AND WILDLIFE MANAGEMENT</strong></td>
<td>Aquaculture, Botany, Data Management, Biology, Hatchery Management, Marine Biology, Ecology, Education, Research, Planning</td>
<td>Federal, state, and local government, Marine sport fisheries, Utility companies, Developers, Timber companies, Wildlife ranges, Scientific foundations, Zoological parks, Hunting and fishing clubs, Consulting firms, Nonprofit organizations</td>
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<tr>
<td><strong>PARKS AND OUTDOOR RECREATION</strong></td>
<td>Administration and Management, Law Enforcement, Recreation Planning, Natural Resource Management, Research, Site Operations and Maintenance, Ecotourism, Direct Mail Merchandising</td>
<td>National Park Service, Federal agencies, State, county, or city parks, Resorts, Marinas, Privately owned facilities, Nonprofit organizations, Tourism agencies</td>
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</tbody>
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## AREAS

### FORESTRY
- Consulting
- Entomology
- Hydrology
- Natural Resource Management
- Planning
- Research
- International Forestry
- Urban Forestry

### ENVIRONMENTAL EDUCATION AND COMMUNICATION
- Teaching
- Journalism
- Tourism
- Law Regulation
- Compliance
- Political Action/Lobbying

### PLANNING
- Air Quality
- Aviation
- Building/Zoning
- Land-Use
- Consulting
- Recreation
- Transportation
- Water Resources

## EMPLOYERS

### FORESTRY
- Federal, state, and local government
- Consulting firms
- Timber companies
- Nonprofit organizations

### ENVIRONMENTAL EDUCATION AND COMMUNICATION
- Federal, state, and local government
- Public and private elementary, middle, and high schools
- Two-year community colleges
- Four-year institutions
- Corporations
- Consulting firms
- Media
- Nonprofit organizations
- Political Action Committees

### PLANNING
- Federal, state, regional, and local government
- Corporations
- Consulting firms
- Banks
- Real estate development companies
- Law firms
- Architectural firms
- Market research companies
- Colleges and universities
- Nonprofit groups

## STRATEGIES

### FORESTRY
- Obtain skills with computers, statistics, and accounting through coursework, internships or part-time jobs.
- Develop good communication and public relations skills.
- Get a minor or double major in a technical area (soil science, wildlife or surveying) or in an arts and science area (business, economics, political science or computer science).

### ENVIRONMENTAL EDUCATION AND COMMUNICATION
- Master public speaking skills.
- Learn certification/licensure requirements for teaching public K-12 schools.
- Develop creative hands-on strategies for teaching/learning.
- Publish articles in newsletters or newspapers.
- Join professional associations and environmental groups as ways to network.
- Become active in environmental political organizations.

### PLANNING
- Get on planning boards, commissions, and committees.
- Have a planning specialty (transportation, water resources, air quality, etc.).
- Master communication, mediation and writing skills.
- Network in the community and get to know "who's who" in your specialty area.
- Develop a strong scientific or technical background.
- Diversify your knowledge base. For example, in areas of law, economics, politics, historical preservation, or architecture.
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<td><strong>ENVIRONMENTAL LAW</strong></td>
<td>Law firms</td>
<td>Earn a law degree. Prepare for law school by maintaining a high g.p.a. and studying for the LSAT.</td>
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<td>Large corporations</td>
<td>Build strong recommendations from faculty.</td>
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<td>Federal and State government agencies including:</td>
<td>Work a part-time or summer job in a law firm.</td>
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<td>US Environmental Protection Agency</td>
<td>Develop strong written and oral communication skills.</td>
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<td>Department of Justice</td>
<td>Participate in pre-law honor societies, debate teams, or moot court.</td>
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<td>Attorney General Office</td>
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<td>Nonprofit organizations, e.g. Green Action and Natural Resources Defense Council</td>
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**GENERAL INFORMATION**

- Environmental studies and environmental science differ from each other in the amount of science course work 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. Formally, obtain a double major or minor in one of these areas. Informally, 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 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.

Prepared by the Career Planning staff of Career Services at The University of Tennessee, Knoxville. (1996, Revised 2002, 2006) UTK is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA Employer