# **ENVIRONMENTAL STUDIES/SCIENCE**

What can I do with this major?

# AREAS

### **EMPLOYERS**

## **STRATEGIES**

various perspectives.

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	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	<ul> <li>Maintain knowledge of current environmental issues including policy, conservation, and industry trends.</li> <li>Develop acute observational skills.</li> <li>Stay current on technology used in natural resource management including software, geographical information systems, and global positioning systems.</li> <li>Seek related experience through co-ops, internships, or part-time jobs in area of interest.</li> <li>Gain extensive laboratory and research experience to prepare for research positions.</li> <li>Participate in related clubs, organizations, and soil judging teams to build contacts and cultivate academic interests.</li> <li>Learn about certification programs offered by the Soil Science Society of America including soil science and agronomy.</li> <li>Become familiar with the federal job application procedure for government employment.</li> <li>Obtain Ph.D. for optimal research and university teaching careers.</li> </ul>
SOLID WASTE MANAGEMENT Chemistry Engineering Hydrology Logistics Planning Recycling Transportation Compliance	Federal, state, and local government Private waste management firms Consulting firms Nonprofit organizations	<ul> <li>Develop strong communication skills, both written and oral.</li> <li>Develop decision-making and problem-solving skills, diplomacy, and the ability to work under pressure.</li> <li>Gain familiarity with current technologies, regulations, and statutes.</li> <li>Join community groups or service organizations that focus on environmental awareness; attend public meetings about waste management.</li> <li>Become flexible and learn to look at issues from</li> </ul>

#### HAZARDOUS WASTE MANAGEMENT

Hydrogeology Quality Control Risk Assessment Environmental Engineering Public and Environmental Health Industrial Hygiene Biology Chemistry Geology Chemical Engineering Planning Compliance

#### **AIR QUALITY MANAGEMENT**

Engineering Planning Analytical Chemistry Environmental Quality Analysis Meteorology Risk Assessment Safety and Health Management Toxicology Project Development Compliance

#### WATER QUALITY MANAGEMENT

Aquatic Ecology Aquatic Toxicology Biology Civil/Environmental Engineering Hydrogeology and Hydrology Drinking Water Supply and Treatment Waste Water Treatment Groundwater Protection Surface Water Management Estuary Management Wetlands Protection Compliance Industrial Engineering

# **EMPLOYERS**

Federal, state, and local government Private companies that generate hazardous waste in production Hazardous waste management firms Consulting firms Nonprofit organizations STRATEGIES

Consider a double major in hard science or engineering.
Attend public meetings on hazardous waste issues.
Gain laboratory experience and computer expertise.
Complete an internship in a government office or regulatory agency.
Gain experience with technical writing.
Get involved with local chapters of citizen watch groups.
Become familiar with Superfund and its activities.

Federal, state, and local government Private industry Consulting firms Nonprofit organizations Stay up-to-date with federal regulations and both industry and regional standards.
Additional training in economics and policy is desirable.
Develop strong oral communication and technical writing skills.
Learn to work well under pressure and develop negotiation skills.
Seek volunteer or paid positions within area environmental groups.

Develop a strong chemistry background by taking additional courses.
Obtain laboratory skills by assisting faculty with research projects.
Maintain current knowledge of industry trends and regulations.
Develop interpersonal, oral communication, and technical writing skills.
Seek an advanced degree in policy for increased marketability.
Learn about certification programs offered by the American Institute of Hydrology.
Learn to use the tools and software associated with watershed modeling.

#### LAND AND WATER CONSERVATION

Biology Ecology Planning Law Geographic Information Systems Preserve Management Natural Resource Management Soil Conservation Land Acquisition

# **EMPLOYERS**

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

# STRATEGIES

Gain a solid background in the basic sciences while obtaining a broad-based education.
Obtain legal, real estate, and financial skills through coursework, internships or part-time jobs.
Volunteer through the Student Conservation Association (SCA) and hold an office.
Keep up with new funding sources.
Consider law school for careers as counsel to environmental organizations.

#### FISHERY AND WILDLIFE MANAGEMENT

Aquaculture Botany Data Management Biology Hatchery Management Marine Biology Ecology Education Research Planning 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

Develop a broad scientific education.
Obtain skills in areas such as planning, administration, communications, and negotiation through coursework, internships, or part-time jobs.
Get experience and skills in computers, statistics and computer modeling.
Join the Peace Corps as a segue way into federal government positions.
Learn about the federal job application process.

#### PARKS AND OUTDOOR RECREATION

Administration and Management Law Enforcement Recreation Planning Natural Resource Management Research Site Operations and Maintenance Ecotourism Direct Mail Merchandising National Park Service Federal agencies State, county, or city parks Resorts Marinas Privately owned facilities Nonprofit organizations Tourism agencies Develop a broad-based education that will develop both technical and interpersonal skills.
Gain expertise in additional areas such as communications, writing, fund-raising, negotiation, and computer applications.
Obtain working knowledge of a foreign language such as Spanish.
Learn to work well with and communicate with all types of people.
Participate in travel and recreation programs.
Join related organizations and seek leadership roles to gain experience planning trips and other programs.

# **EMPLOYERS**

# STRATEGIES

#### FORESTRY

Consulting Entomology Hydrology Natural Resource Management Planning Research International Forestry Urban Forestry

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

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

Teaching Journalism Tourism Law Regulation Compliance Political Action/Lobbying

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 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.
Learn environmental laws and regulations.
Join professional associations and environmental groups as ways to network.
Become active in environmental political organizations.

#### **PLANNING**

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

#### **ENVIRONMENTAL LAW**

**EMPLOYERS** 

# **STRATEGIES**

Law firms

Large corporations Federal and State government agencies including: US Environmental Protection Agency Department of Justice Attorney General Office Nonprofit organizations, e.g. Green Action and

Natural Resources Defense Council

Earn a law degree. Prepare for law school by maintaining a high g.p.a. and studying for the LSAT.

Build strong recommendations from faculty. Work a part-time or summer job in a law firm. Develop strong written and oral communication skills. Participate in pre-law honor societies, debate teams, or moot court.

#### **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.

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