

Environmental Science

What can I do with this major?

| OCCUPATIONS | EMPLOYERS | SKILLS TO DEVELOP |
|---|---|--|
| <u>PLANNING</u> | | |
| 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 | <ul style="list-style-type: none"> • Get on planning boards, commissions, and committees. • Obtain internships in the field • 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. |
| <u>ENVIRONMENTAL EDUCATION AND COMMUNICATION</u> | | |
| 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 | <ul style="list-style-type: none"> • Master public speaking skills. • Learn certification/licensure requirements for teaching public K-12 schools. • Earn a graduate degree to teach in post-secondary institutions; master's degree required for two-year colleges and a doctoral degree for four-year institutions. • Gain experience as a tutor, camp counselor, church schoolteacher, etc. • 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. |
| <u>SOLID WASTE MANAGEMENT</u> | | |
| Chemistry Engineering Hydrology Logistics Planning Recycling Transportation Compliance | Federal, state, and local government Private waste management firms Consulting firms Nonprofit organizations | <ul style="list-style-type: none"> • Take some scientific or engineering courses. • Choose an unusual material and think of creative ways to recycle or reuse it. • Obtain internships in the field |

OCCUPATIONS

EMPLOYERS

SKILLS TO DEVELOP

HAZARDOUS WASTE MANAGEMENT

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

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

- Obtain internships in the field
- Attend public meetings on this issue.
- Get laboratory experience.
- Gain computer expertise.
- Work in government office or regulatory agency.
- Get experience with technical writing.
- Get involved with local chapters of citizen watch groups.
- Become familiar with Superfund and its activities.

WATER QUALITY MANAGEMENT

Aquatic Ecology
Aquatic Toxicology
Law
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

Federal, state, and local government
Corporations
Consulting firms
Nonprofit organizations
Treatment plants

- Get a strong chemistry background.
- Become familiar with high-tech tools.
- Develop computer skills.
- Focus on a specific technical field.
- Obtain laboratory skills.

AIR QUALITY MANAGEMENT

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

Federal, state, and local government
Private industry
Consulting firms
Nonprofit organizations

- Develop a specific skill in the areas of engineering, chemistry or laboratory work.
- Work at state and local agencies as a way to start an air quality career.

OCCUPATIONS

EMPLOYERS

SKILLS TO DEVELOP

LAND AND WATER CONSERVATION

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

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

- Get 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

- Get 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 into federal government positions.
- Get on government agencies' job registers.

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

- Get 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.

OCCUPATIONS

EMPLOYERS

SKILLS TO DEVELOP

ENVIRONMENTAL LAW

Private firms
Corporations
Federal and State government agencies such as
Environmental Protection Agency, Department of
Justice and Attorney General Office
Nonprofit organizations such as
Green Action and Natural Resources Defense
Council

- Obtain law degree to become an attorney.

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 an arts and science area (business, economics, political science or computer science).

Strategies For Placement In Environmental Science

- 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 in these areas or minor in one of these areas. Informally, obtain these skills through internships, co-ops, volunteer work, summer jobs or independent research projects.
- Be 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.

Internet Resources:

Environmental Careers Organization
www.eco.org/