

# ENVIRONMENTAL STUDIES/SCIENCE

What can I do with this degree?

## AREAS

## EMPLOYERS

## STRATEGIES

### **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

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

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.

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### **SOLID WASTE MANAGEMENT**

Chemistry  
Engineering  
Hydrology  
Logistics  
Planning  
Recycling  
Transportation  
Compliance

Federal, state, and local government  
Private waste management firms  
Consulting firms  
Nonprofit organizations

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.

**AREAS**

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**HAZARDOUS WASTE MANAGEMENT**

Hydrogeology  
Quality Control  
Risk Assessment  
Environmental Engineering  
Public and Environmental Health  
Industrial Hygiene  
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

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.

**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

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.

**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

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

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.

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### **LAND AND WATER CONSERVATION**

Biology  
Ecology  
Planning  
Law  
Geographic Information Systems  
Preserve Management  
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

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.

**AREAS**

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**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).

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**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.

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**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.

## AREAS

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## STRATEGIES

### ENVIRONMENTAL LAW

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.

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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.