# **ENVIRONMENTAL STUDIES/SCIENCE**

What can I do with this major?

#### **AREAS**

## **EMPLOYERS**

## **STRATEGIES**

Gain experience through internships, volunteer or

private remediation projects.

issues in area of interest.

other part-time positions with government or

Develop excellent communication skills, both oral and

Conduct regulatory research regarding environmental

written, as well as the ability to work as part of a

#### **ENVIRONMENTAL REMEDIATION/COMPLIANCE**

Ground water

Surface water

Soils Air

Sediments:

Remediation

Liability

Audit

Compliance

Sustainability

Federal government:

Army Corps of Engineers

Department of Defense

**Environmental Protection Agency** 

Department of Interior: Bureau of Reclamation,

Office of Surface Mining, Bureau of Land

Management

Department of Agriculture

Natural Resource Conservation Service

Agricultural consulting firms
Environmental consulting firms

Plan to travel to worksites.

team.

Seek experience with data management, analysis and tools used for remediation (e.g., GIS, CADD and regulatory/compliance software).

OSHA HAZWOPER training may be required for some positions.

#### **WASTE MANAGEMENT**

Risk assessment

Quality control

Logistics

**Planning** 

Recycling

Transportation

Compliance

Environmental engineering

Public and environmental health

Industrial hygiene

Federal, state and local government:

**Environmental Protection Agency** 

Department of Energy

City/county waste management departments

Recycling centers

Private waste management firms

Consulting firms

Nonprofit organizations

Pursue experience through volunteer, paid and intern positions related to waste management.

Seek opportunities to hone communication skills, both written and oral. Take courses in technical writing.

Develop decision-making and problem-solving skills, diplomacy and the ability to work under pressure.

Demonstrate flexibility and willingness to look at issues from various perspectives.

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 familiar with Superfund and its programs. Learn about the activities of local chapters of citizen watch groups.

#### **SOIL SCIENCE**

Research

Education

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

## **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

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

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.

# **EMPLOYERS**

# **STRATEGIES**

#### **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

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

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.

# ENVIRONMENTAL EDUCATION AND COMMUNICATION

Teaching:

Elementary

Secondary

Post-Secondary

Non-classroom education

Technical writing

**Editing** 

Illustrating

Photography

Public relations

Tourism

# **EMPLOYERS**

Public and private schools, K-12

Two-year community colleges/technical institutes

Four-year colleges and universities

Museums

Newspapers

Zoos

Nature centers and parks

Publishing companies: Scientific magazines, professional journals, periodicals, textbooks,

online publishers

Educational and scientific software companies

**Environmental organizations** 

Government agencies

Nonprofit organizations

# **STRATEGIES**

Gain experience working with students through tutoring, part-time employment or volunteering.

Learn to work well with people of varying backgrounds and skills.

Develop excellent interpersonal, communication and content area knowledge.

Complete a teacher preparation program for K-12 positions, which varies by state. Learn about the endorsements for environmental science.

Master's degrees may be sufficient for teaching at community or two-year institutions.

Seek Ph.D. for teaching opportunities at colleges and universities.

Join professional associations and environmental groups as way to learn about the field and network.

Acquire thorough knowledge of photographic procedures and technology.

Take advanced courses in technical writing or journalism classes or consider a minor in either.

Join professional associations like the National Association of Science Writers or the Public Relations Student Society of America.

Seek related volunteer or paid experiences with student/local publications to increase marketability.

Consider earning an advanced degree in a communications field to specialize (e.g., scientific journalism or public relations).

## **EMPLOYERS**

# **STRATEGIES**

#### **ENVIRONMENTAL LAW**

Political action/Lobbying Regulatory affairs Science policy Patent law Nonprofit or public interest Environmental Law Mediation Law firms
Large corporations
Federal and state government:
 Environmental Protection Agency
 Department of Justice
 Attorney General Offices
Political Action Committees
Nonprofit organizations (e.g., Green Action and Natural Resources Defense Council).

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 (e.g., conservation, regulation compliance).

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 (e.g., environmental law and policy, conservation, sustainable development).

#### **GENERAL INFORMATION**

- Environmental studies and environmental science differ from each other in the amount of science course work required.
- Environmental studies provides 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 participating 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 degree allows 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.