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.

SOLID WASTE MANAGEMENT

Chemistry

Engineering

Hydrology Logistics

Planning

Recyclina

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.

EMPLOYERS

STRATEGIES

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.

 $\label{thm:computer} \textbf{Gain laboratory experience and computer expertise.}$

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.

EMPLOYERS

STRATEGIES

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.

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.

<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

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.

EMPLOYERS

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

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,

maintaining a high g.p.a. and studying for the

Earn a law degree. Prepare for law school by

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.

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

Environmental Studies/Science Links:

Ecological Society of America

National Institute of Environmental Health Sciences

National Council for Science and the Environment

Environment Web Directory

Environmental Education Directory

Environmental Careers Organization

The Ecological Society of America

Cyber-Sierra Natural Resources Job Search

Environmental Careers Resource Guide

Enviro Link

Environmental Career Center

Environmental Jobs and Careers

The Student Conservation Association

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

EMPLOYERS

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

STRATEGIES

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.

AREAS

SOLID WASTE MANAGEMENT

Chemistry

Engineering

Hydrology

Logistics

Planning

Recycling

Transportation

Compliance

EMPLOYERS

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

STRATEGIES

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

HAZARDOUS WASTE MANAGEMENT

Hydrogeology

Quality Control

Risk Assessment

Environmental Engineering

Public and Environmental Health

Industrial Hygiene

Law

Biology

Chemistry

Geology

Chemical Engineering

Planning

Compliance

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.

AREAS

AIR QUALITY MANAGEMENT

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

EMPLOYERS

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

STRATEGIES

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.

AREAS

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

EMPLOYERS

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

STRATEGIES

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.

AREAS

LAND AND WATER CONSERVATION

Biology

Ecology

Planning

Geographic Information Systems

Preserve Management

Law

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.

AREAS

FISHERY AND WILDLIFE MANAGEMENT

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

EMPLOYERS

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

STRATEGIES

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.

AREAS

PARKS AND OUTDOOR RECREATION

Administration and Management Law Enforcement Recreation Planning Natural Resource Management Research Site Operations and Maintenance Ecotourism Direct Mail Merchandising

EMPLOYERS

National Park Service
Federal agencies
State, county or city parks
Resorts
Marinas
Privately owned facilities
Nonprofit organizations

STRATEGIES

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

FORESTRY

Consulting

Entomology

Hydrology

Natural Resource Management

Planning

Research

International Forestry

Urban Forestry

EMPLOYERS

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

STRATEGIES

Obtain skills with computers, statistics, and accounting through coursework, internships or parttime 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).

AREAS

ENVIRONMENTAL EDUCATION AND COMMUNICATION

Teaching

Journalism

Tourism

Law Regulation

Compliance

Political Action/Lobbying

EMPLOYERS

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

STRATEGIES

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

EMPLOYERS

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

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

ENVIRONMENTAL LAW

EMPLOYERS

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

STRATEGIES

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 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.

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