

Environmental Sciences and Sustainability

College of Arts and Sciences
www.aus.edu/cas



Environmental sciences and sustainability entails studying and observing the effects of human activities on the environment and tackles problems such as land degradation, loss of biodiversity, climate change and water management. The field integrates biology, chemistry and other related sciences, and aims to enable us to understand potential environmental and sustainability-related issues and solutions. Students studying this field learn environmental monitoring, assessment, modeling, waste treatment and drinking water treatment. They gain experience in the operation of a wide array of advanced analytical equipment. They will also become able to educate others about environmental issues and help in making vital and lasting decisions concerning the environment and its future.



Possible Career Options

- Environmental Sustainability Officer
- Biochemist
- Laboratory Researcher
- Biological Restoration Specialist
- Landscape Architect
- Environmental Biologist
- Park Service Worker
- Botanist
- Park Naturalist
- Ecologist
- Risk Manager
- Environmental Consultant
- Soil Conservationist
- Wastewater Treatment Plant Operator
- Urban/Regional Planner
- Drinking Water Treatment Plant Operator
- Environmental Remediation Specialist
- Environmental Toxicologist
- Zoologist



Possible Employers

- Environmental Non-Profit Organizations
- National/Government Parks
- Environmental Protection Agencies
- Environmental Planning Agencies
- HSE and Sustainability
- Management Industries
- Research Organization
- Waste Management Agencies
- Environmental Monitoring Agencies
- Chemical Companies
- National Wildlife Federation
- Oil Companies
- Colleges and Universities
- Engineering Firms
- Governmental Organizations
- Environmental Consulting Firms and Laboratories
- Special Interest Groups



Skills Required

- Ability to communicate and work well with people
- Ability to be analytical and scientific
- Ability to gather, understand and interpret data
- Ability to solve problems
- Ability to communicate scientific concepts at a laymen level
- Ability to use logic and scientific thinking to deal with different types of problems
- Ability to think "outside the box"
- Ability to plan and develop research models
- Comprehensive knowledge of environmental issues
- Comprehensive knowledge of biological theories and practices
- Comprehensive knowledge of chemical theories and practices
- High proficiency in written and oral communication



Personal Attributes

- Achievement-oriented
- Analytical
- Creative
- Proactive
- Environmental Steward
- Patient
- Desire for precision
- Detail-oriented
- Interest in living organisms
- Interest in the environment
- Resourceful



Ways to Get Experience

- Internship opportunities
- Joining environmental organizations and societies
- Laboratory based research
- Field based research
- Industrial experience
- Working part-time or volunteering with an environmental agency, zoo, or wildlife and park associations
- Involvement in sustainability related activities
- Attending science-related lectures, workshops, exhibitions and/or conferences