Environmental Science B.S.

Major
Bachelor of Science
Earth and Environmental Sciences
Swenson College of Science and Engineering

The BS in environmental science is designed for students who want a multidisciplinary science education focusing on aspects of the environment. This environmental science program requires a broad base of knowledge in the basic sciences and mathematics, physics, chemistry, biology, Earth sciences, and statistics. In addition, prudent study of environmental science requires understanding of economic, political, and ethical considerations.

Environmental science features an intense grounding in resource issues (including courses in water, mineral, and energy resources) and builds on the strength of UMD in freshwater issues. In addition, the capstone course in environmental assessment deals with sources, distribution, and ultimate fate of air, water, and solid waste pollution.

Why UMD

• Active learning environment
• Access to state-of-the-art instrumentation
• Focus on undergraduate teaching and research

Acquired Skills

• Firm background in physical and life sciences
• Basic understanding of existing environmental policies and regulations and the legislative process of their formation
• An understanding of the major environmental issues including water, global climate, energy, pollution, and population
• Techniques of environmental monitoring and prediction
• Economics and business organization

Career Possibilities

Environmental scientists work to identify, control, or eliminate sources of pollutants or hazards affecting the environment or public health. According to the U.S. Department of Labor, Environmental Science is one of the fastest growing professions in the U.S. with an average salary of $60,000.

Their work typically involves:

• Determining data collection methods
• Collecting and analyzing air, water, and soil samples
• Analyzing environmental data gathered by others
• Looking for correlations to human activity
• Preparing reports and presentations that explain their findings

Some environmental specialists focus on environmental issues while others focus on issues relating to human health. Either way, they work on critical issues, solving some of the most important problems of our day.

Environmental scientists also:

• Develop plans to prevent, control, or fix environmental problems like air pollution
• Advise government officials that make policy
• Help businesses follow regulations or improve their practices
• Conduct environmental inspections of businesses
• Assess the potential effects of development projects to prevent the creation of new problems
Scholarships

In addition to the SCSE scholarships provided, our department offers several others including the Kenneth E. Differt Scholarship, the Barr Engineering Scholarship, the Jill and Terry Swor Scholarship, the Outstanding Senior Award (Barr Engineering) and the Outstanding Junior Award (Barr Engineering).

Student Clubs

The Environmental Science club is a club for those interested in activities involving science, environmental issues, and conservation. The club takes part in outdoor recreation events as well as restoration projects and trash pick ups.

Graduate Report

Recent UMD Graduates Job Placement Data & Employers

Here's a sampling of positions Environmental Science B.S. grads have attained six months to one year after graduation.

- Environmental Coordinator - ALLETE Minnesota Power, Duluth, MN
- Water Quality Technician - Denver Water, Denver, CO
- Ecological Restoration Technician - Stantec, St. Paul, MN
- Park Ranger - United States Army Corps of Engineers, McGregor, MN
- Environmental Scientist - Westwood Professional Services, Minnetonka, MN

For more data see the Environmental Science B.S. Graduate Follow-Up Report[1].

For ideas about Environmental Science B.S. and other majors visit Career & Internship Services [2].

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