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Environmental Engineering Technology Major

For degree requirements please review the Environmental Engineering Technology page

(http://www.uwgb.edu/engineeringtech/about/env-technology/overview.asp)

Overview

Environmental engineering technology is the application of engineering principles and interdisciplinary environmental sciences to address challenges associated with human impacts on the environment. This field characterizes the dynamic relationship between human activity and the environment to determine strategies to minimize negative impacts. Career opportunities as an environmental engineering technologist vary greatly including municipal and industrial treatment facility technologists, laboratory and environmental quality technicians, health and safety managers, environmental consultants, and sustainability managers for industry and governmental agencies.

The BS degree in Environmental Engineering Technology at UW-Green Bay is an interdisciplinary program that prepares students for careers in applied environmental engineering using critical problem solving skills needed in regional and national industries, manufacturing, governmental, and engineering services firms. The focus of the program is the application of engineering principles to the solution of practical problems. Students will develop skills in hands on applications and interdisciplinary coursework in engineering, mathematics, geoscience, chemistry, physics, and biology applied to a variety of environmental challenges. Students examine the effects of pollution on humans and ecosystems, form strategies to improve processes to prevent or minimize negative effects, and develop sustainable solutions to using available resources. Teamwork, technical writing, and project management are also emphasized throughout the curriculum. The goal of the major is to develop well rounded engineering technologists that can adapt and succeed in a highly competitive workplace.

Students will benefit from relationships with local technical colleges, UW two year campuses, and local industry to complete a BS in engineering technology in the Fox Valley and Green Bay area. Students may start earning their degree at UW-Green Bay, one of the UW System two year colleges, or local technical colleges to give maximum flexibility in degree completion. In addition, the Northeast Wisconsin Educational Resource Alliance, NEW ERA, has established advisory boards linking leaders in regional industry and participating institutions to the major. Through these relationships students will have many opportunities for internships, co-op experiences, and employment after graduation.

Intern2work

Intern2work is a regional internship program, developed by NEW ERA, to connect northeast Wisconsin employers to college students seeking internship experiences. Employers post internships at the website http://intern2work.com/invited . Students complete a profile of their skills, area of interest, and their resume to apply for internships across a wide range of regional employers including global companies, small businesses, and community organizations. Employers can then search student profiles for potential matches and directly set up interviews.

Career Outlook

Employment of environmental engineering technologist is expected to grow by over 20% through 2020. State and local governments are expected to focus efforts and resources on efficient water use, wastewater treatment, hazardous waste minimization, and environmental regulatory compliance which will support demand in this field.

Popular Career Options

- Environmental consultant
- Municipal water treatment
- Municipal/industrial wastewater treatment
- Sustainability manager
- Park naturalist
- Health and safety manager
- Environmental quality technologist
- Compliance technologist
- · Laboratory manager
- · Hazardous waste technologist

Continuing education

With work experience, graduates with a BS in environmental engineering technology often move to supervisory positions. They also may obtain certification at several levels through the National Institute for Certification in Engineering Technologies, NICET. Graduates may also pursue graduate studies in environmental engineering or environmental science.

Program learning outcomes

- 1. Program graduates will be employed as an environmental engineering technologist and perform all functions assigned to an environmental engineering technologist.
- 2. Graduates will apply multidisciplinary approaches including engineering, chemistry, mathematics, physics, geosciences, and biology to manage the unique challenges and balance the competing social, political, economic, and technical goals of environmental problems and solutions.
- 3. Graduates will exhibit a desire for life-long learning through higher education, technical training, teaching, membership in professional societies, and other developmental activities and will achieve positions of increased responsibility through these activities.
- 4. Graduates will demonstrate high levels of oral and written communication skills, critical thinking, responsibility and ethical behavior, and leadership in their careers.
- 5. Graduates will function effectively both as a leader and as a member of project teams and demonstrate an appreciation for diversity.