

The Master of Science Program in Environmental Engineering



Department of Civil and Environmental Engineering

Newark College of Engineering

New Jersey Institute of Technology

WHY PURSUE AN MS DEGREE IN ENVIRONMENTAL ENGINEERING?

Environmental engineers develop sustainable solutions to environmental problems. Environmental engineers protect the environment, improve water quality, and are essential in planning, designing and constructing water and wastewater treatment plants, solid waste disposal systems, site remediation approaches and emission control measures. In addition, new environmental challenges provide new opportunities for environmental engineers to solve global problems. Successful response to the impacts of global climate change, fast-moving introduction of sustainable development practices in industry, and greener operations will require the skills of environmental engineers. Major corporations, government agencies, private consulting and construction firms, and universities are just some of the organizations that employ environmental engineers. Employment of environmental engineers is expected to increase by more than 25 percent through 2014. More environmental engineers will be needed to comply with environmental regulations, to develop methods of fixing existing problems, and preventing future ecological difficulties. A shift in emphasis toward preventing problems rather than controlling those that already exist, as well as increasing public health concerns, also will spur demand for environmental engineers.

WHY STUDY ENVIRONMENTAL ENGINEERING AT NJIT?

NJIT's Department of Civil and Environmental Engineering has been providing quality education for nearly 90 years. Its graduates are leaders in industry, government and military enterprises throughout New Jersey and across the nation. The teaching program is enriched by advanced research programs in environmental engineering, science, and policy, building sciences and materials, and transportation. The department collaborates closely with NJIT's New Jersey School of Architecture, and a dual degree program that combines the Master's in Architecture with the MS in Civil Engineering is a popular option.

WHAT DOES THE PROGRAM COVER?

The program is designed to provide students with a broad understanding of environmental issues, including:

- Interconnected natural and industrial ecosystems in which we live, as well as tools to measure and understand them.
- Values assigned by people and society to the environment and the policies and laws established to preserve, protect, manage and restore it.
- Roles played by biological organisms in ecological processes, as well as their contributions to environmental technology in practice.
- Key value of the water medium and the chemical movements and transformations that occur as an academic vehicle for illustrating environmental processes and their control and management.

WHAT AREAS OF SPECIALIZATION ARE AVAILABLE?

Specialty tracks in the master's program have been identified to address current and future environmental issues facing society. The Master's program has been developed in close consultation with the New Jersey environmental industry—the employers of many of the NJIT graduates—to assure that the components of the program are relevant and useful. Each area incorporates an environmental biology perspective in balance with other aspects of environmental technology and science.

- Water quality, treatment, and infrastructure
- Integrated site remediation
- Multidisciplinary environmental engineering

IS PART-TIME STUDY AVAILABLE?

The program can be pursued on a full- or part-time basis. Evening and late afternoon classes accommodate working professionals.

WHO TEACHES THE COURSES?

Courses are taught by full-time faculty with a range of academic

and professional experience as well as by adjunct instructors who are experts in their fields. Students interested in research at the master's level or continuing their education at the doctoral level have the opportunity to work with faculty involved in one of the university's research centers.

Courses will be provided both in a face-to-face classroom format along with many in an electronic format so that when absences are required for job or other reasons, the students can continue to participate in the course.

WHAT JOB OPPORTUNITIES ARE THERE IN ENVIRONMENTAL ENGINEERING?

The US Bureau of Labor Statistics identified the 30 fastest growing jobs ranking environmental engineering 5th among the nation's fastest growing professions. Graduates of the program will be employed in consulting firms, state government, federal government, not for profit agencies, utilities, and chemical and pharmaceutical companies, among many others. For this part of the country and globally for that matter, the opportunities are huge.

IS FINANCIAL AID AVAILABLE?

Financial support for full-time students in the MS program is extremely limited. Full-time domestic and international students may be eligible to receive the Provost Fellowship. For further information on financial aid, visit www.njit.edu/financialaid/graduate/index.php

NJIT students can also offset educational costs by participating in the Cooperative Education Program, which provides an opportunity to gain practical work experience in a professional environment. A co-op student works on a fulltime or part-time basis for a company that has agreed to hire, train, and pay the student during a specific co-op work cycle.

www.njit.edu/CDS/studentservices/coop.htm

FOR FURTHER INFORMATION:

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TO APPLY:

Graduate Admissions
800-925-NJIT
www.njit.edu/admissions/graduate/howtoapply/