

# ENVIRONMENTAL ENGINEERING







# ENVIRONMENTAL ENGINEERING

The **DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING** offers highly acclaimed undergraduate and graduate programs of study. Our bachelor of science degree programs are accredited by the Engineering Accreditation Commission of ABET ([www.ABET.org](http://www.ABET.org)).

The department's faculty includes internationally renowned scholars and researchers as well as clinical professors and adjunct faculty who bring extensive professional practice experience to the classroom. **State-of-the-art facilities, small class sizes, faculty-student interaction, high job placement rates,** and the **success of our graduates all attest to the excellence of our programs.** The department also offers opportunities for scholarships, research assistantships, internships, and design project experience.

## UNDERGRADUATE STUDY

### PROGRAMS OF STUDY

- \ Bachelor of science in environmental engineering
- \ Minor in environmental engineering
- \ Certificate in Architectural Engineering and Design
- \ Combined BS/MS in environmental engineering science

### EXAMPLE COURSES

- CIV\_ENV 260 *Fundamentals of Environmental Engineering*
- CIV\_ENV 303 *Environmental Law and Policy*
- CIV\_ENV 361-1 *Environmental Microbiology*
- CIV\_ENV 363 & 364  
*Environmental Engineering Applications: Air, Land, and Water*
- CIV\_ENV 398 *Community Based Design*

### OUTSIDE THE CLASSROOM

#### INDEPENDENT UNDERGRADUATE RESEARCH \

Students conduct research under the guidance of a faculty member or participate in a research project with graduate students.

#### DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING CAREER FAIR \

This annual event attracts companies from wide-ranging industries interested in recruiting students for internships and permanent positions.

#### ENVIRONMENTAL ENGINEERING UNDERGRADUATE SOCIETY (ENVEUS) \

The Northwestern chapter of this national society promotes community and collaboration, assists in networking, and provides career information.

## GRADUATE STUDY

### PROGRAMS OF STUDY

- \ Master of science in environmental engineering
- \ Global and Ecological Health Engineering Certificate
- \ PhD in environmental engineering

### RESEARCH AREAS

- Solar and biofuels \ Resource recovery \ Carbon storage \
- Urban sustainable design \ Nutrient dynamics in nature \
- Bioaccumulation and biosensing of pollutants \
- Microbial ecology of biofilms



“I’VE ALWAYS BEEN FASCINATED BY SPACE EXPLORATION; I WAS EVEN A TOUR GUIDE AT NASA. BUT ONCE I GOT TO MCCORMICK, I FOUND OUT WHAT REALLY INTERESTS ME ARE ISSUES LIKE SUSTAINABILITY AND WATER CLEANLINESS.”

ELIZABETH CONGER \ ENVIRONMENTAL ENGINEERING

## CAREERS IN ENVIRONMENTAL ENGINEERING

### WHAT’S NEXT?

The US Bureau of Labor Statistics projects employment of environmental engineers to grow 15 percent through 2022, faster than the average for all occupations, with the largest increase in professional, scientific, and technical consulting services. **Promising areas include:**

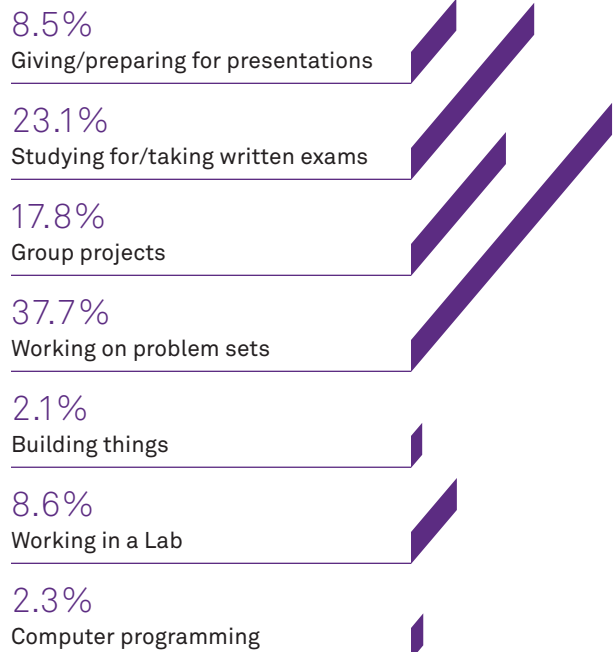
Environmental engineering consulting \ Government administration (US Environmental Protection Agency) \ Strategy and analytics \ Sustainability consulting \ Project and data services \ Energy

### RECENT GRADUATE PLACEMENTS

Water resources engineer at **Arcadis** \  
 Environmental project manager at **ECS** \  
 Energy analyst at **Siemens** \ Environmental engineer at **Environmental Protection Agency** \ Analyst at **Accenture** \  
 Water engineer at **CH2M Hill** \ Principal environmental specialist at **Abbott** \ Green infrastructure intern at **DC Water** \  
 Sustainability services consultant at **Accenture** \  
 Environmental engineer at **US Army Corps of Engineers**

## HOW YOU SPEND YOUR TIME IN THIS PROGRAM

BASED ON A SURVEY OF CURRENT STUDENTS.



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# ENVISION WHAT'S POSSIBLE

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NORTHWESTERN ENGINEERING STUDENTS  
CONSTANTLY EXPLORE NEW PATHWAYS IN  
ENVIRONMENTAL ENGINEERING. IMAGINE YOURSELF:



- \\ Protecting human and ecological health by integrating scientific and engineering principles
- \\ Managing water resources to meet society's diverse needs and in response to a changing climate
- \\ Recovering energy and resources from water, food, and material waste streams
- \\ Restoring ecosystems and remediating contaminated sites to allow for urban redevelopment
- \\ Generating renewable energy and designing resilient and adaptive cities
- \\ Mediating the impact of human activity on ecosystems and sensitive earth systems such as climate, coastal and marsh systems, rivers and lakes, and microbial communities
- \\ Analyzing the impacts of technology on the environment and integrating social, political, and economic considerations



## FIND YOUR DIRECTION HERE

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Northwestern | McCORMICK SCHOOL OF  
**ENGINEERING**

[www.cee.northwestern.edu](http://www.cee.northwestern.edu)