



# Geological/Geotechnical Engineering

## Master of Science in Civil and Environmental Engineering

The Geological/Geotechnical Engineering master's program at the University of Wisconsin-Madison teaches you apply geological knowledge and engineering principles to solving technical problems while protecting the environment.

### IS THIS PROGRAM RIGHT FOR YOU?

The Geological/Geotechnical Engineering master's program from UW-Madison is interdisciplinary, taught by faculty from the College of Engineering and the College of Letters and Science. Our program integrates expertise from geology and engineering, so you acquire a deep understanding of the interrelation between nature and the built environment.

In just one year, you will learn to solve a variety of practical problems associated with rock and soils using principles of sustainable engineering. Combine your knowledge of geology with your engineering expertise to build structures, manage groundwater and surface water resources, construct subsurface repositories for waste disposal, and design systems to help extract mineral resources.

Engineering and geoscience professors, visiting professors, academic staff members, and a cadre of research graduate and undergraduate students provide context for your studies. Choose your electives based on your specific career or research needs. Research topics include geoenvironmental engineering, water resources, hydrology, hydrogeology, soil dynamics, and many more.

As a graduate of the UW-Madison Geological/Geotechnical master's program, you will be ready to excel in your career field, whether it be consulting, petroleum and gas industries, mining, federal and state laboratories, or research.

### WHAT YOU LEARN

- Strong skills in geoenvironmental engineering, groundwater technology, hydrogeology, rock and soil mechanics, geophysics, and geology
- How to synthesize information and integrate expertise to better understand the interrelation of nature and the built environment
- Creative, independent problem-solving and decision-making skills

### TIME FRAME

1 year

### MODE OF INSTRUCTION

Face-to-face on campus

### REQUIREMENTS

Coursework only, no thesis. At least 30 credits required for Master of Science degree.

### TUITION

Resident: \$6,090/semester  
+ \$3,002 for 6 summer credits  
Non-Resident: \$12,753/semester  
+ \$6,334 for 6 summer credits

*Tuition rates as of fall 2019. Additional fees may apply.*

### APPLICATION DEADLINE

December 15 for fall 2020 program

### TYPICAL CURRICULUM

- Rock Mechanics
- Seepage and Slopes
- Foundations
- Introduction to Applied Geophysics
- Remediation Geotechnics
- Groundwater Flow Modeling
- Engineering Properties of Soils
- Unsaturated Soil Geoengineering
- Physicochemical Basis of Soil Behavior
- Soil Dynamics

### LEARN MORE

[go.wisc.edu/geological-geotechnical-engineering](http://go.wisc.edu/geological-geotechnical-engineering)

### QUESTIONS?

Contact [cee.gradadmissions@engr.wisc.edu](mailto:cee.gradadmissions@engr.wisc.edu).