Michigan Technological University
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Graduate School
www.gradschool.mtu.edu

International Programs and Services
www.ips.mtu.edu

Michigan Technological University
1400 Townsend Drive
Houghton, MI 49931-1295

Graduate School
Phone: 906-487-2327
Fax: 906-487-2284
Email: gradadms@mtu.edu
www.gradschool.mtu.edu

Department of Civil and Environmental Engineering
Director of Graduate Studies
Phone: 906-487-2520
Fax: 906-487-2943
Email: cee@mtu.edu
www.cee.mtu.edu

Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.

Graduate Programs in Civil Engineering

> Michigan Tech and the local community offer a safe and friendly environment for my family to live while I pursue my PhD. The program offers technical expertise and personal attention.
>
> —*Baron Colbert, PhD candidate, Hancock, Michigan*

Admission and Financial Aid

Applicants must submit three reference forms, as well as provide GRE scores and other application materials to the Graduate School. More information is available at www.cee.mtu.edu/grad/gradinstruct.html .

Many MS and PhD students receive financial assistance. Graduate research assistantships, fellowships, and graduate teaching assistantships are available, along with scholarships and hourly employment.

About Michigan Tech

Michigan Technological University is a leading public research university of international stature, conducting research, developing new technologies, and preparing students to create the future for a prosperous and sustainable world. Michigan Tech offers more than 120 undergraduate and graduate degree programs in engineering, forestry and environmental sciences, computer sciences, technology, business and economics, natural sciences, arts, humanities, and social sciences.

How to apply

1. Download an application form from the Graduate School webpage.

   APPLY ONLINE FOR FREE!

2. Submit the completed application online, or mail or fax it to the Graduate School.

3. Track the status of your application online.

Visit the Graduate School webpage for complete details about admissions and program requirements.

www.gradschool.mtu.edu

MichiganTech

Create the Future . . .
Change the World.

Graduate Programs in Civil Engineering

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Graduate Programs in Civil Engineering

Michigan Tech offers a full component of graduate programs in civil engineering. Students may pursue the research-intensive **PhD in Civil Engineering**, a **Master of Science in Civil Engineering (MSCE)**, or the professional **Master of Engineering (MEng)** degree. In addition, graduate students enrolled in any University curriculum may complete the certificate in sustainable engineering offered through the Department of Civil and Environmental Engineering.

The University also offers the only **Peace Corps Master's International Program in Civil Engineering** in the nation, combining master's-level graduate studies with US Peace Corps service and training.

Emphasizing Sustainability and Interdisciplinary Research

Our graduate students and faculty conduct groundbreaking, interdisciplinary work in an environment that values sustainability. Many graduates have acquired skills that enabled them to excel in careers in industry, consulting, government, research, and academia.

Students may explore their own areas of interest or focus on one of six current areas of research and education:

- construction engineering and management
- geotechnical engineering
- structural engineering
- transportation engineering
- civil engineering materials
- water resource engineering

The MS and PhD degrees in Civil Engineering are designed for the pursuit of advanced civil engineering. Any of six primary areas can be combined to meet the student's needs.

The Master of Engineering—Civil Engineering is a terminal professional degree, providing advanced course work in design and analysis. It is for students who want to expand their knowledge in a particular specialized area or to change specialty areas as they plan their careers.

- 4:1 graduate student-to-faculty ratio
- more than $4.5 million in annual research expenditures
- interdisciplinary research and education in sustainability, bridge engineering, civil engineering materials, rail transportation, transportation policy and planning, and construction management.

My experience working for a state DOT showed me the critical need for more sustainable solutions to construct, maintain, and repair the nation's transportation system. Michigan Tech's research and graduate program offers me the tools to address these needs.

—Melanie Kueber, PhD candidate, Chicago

Michigan Tech's civil engineering graduate program was flexible enough to develop my expertise in railroad engineering and education.

—Pasi Lautala, PhD graduate, Finland

Outstanding Facilities

The Department of Civil and Environmental Engineering maintains six state-of-the-art facilities for conducting research, including world-class petrography laboratories for characterizing materials. Other laboratories support structural testing, PCC concrete mixing and testing, asphalt testing, binder characterization, complex data visualization, and computational research. Through Benedict Laboratory, the largest lab on campus, Michigan Tech is one of a select few institutions that can test and evaluate ultra-high performance concrete.

Research Highlights

We research a variety of civil engineering topics in collaboration with other disciplines. Projects include the use of fly ash as a partial replacement for portland cement concrete; use of cement kiln dust as a subbase stabilizer in roads; use of ultra-high performance concrete for stronger and more efficient structures, including bridges; warm-mix asphalt processes; effects of anti-icing chemicals on pavements; rapid construction of decked prestressed concrete bridge beams; information visualization and modeling of human-resource interactions to aid complex decision-making; load-sharing and system factors for light-frame timber construction; and the impact of logging trucks on traffic safety.

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Through graduate research assistantships, students have the opportunity to work within a number of specialized centers and institutes:

- Michigan Tech Transportation Institute
- Center for Structural Durability
- University Transportation Center for Materials in Sustainable Transportation Infrastructure
- Aggregate Research Center
- HI-RISE Center for Complex Data Visualization
- Local Technical Assistance Program
- Tribal Technical Assistance Program
- Transportation Materials Research Center
- Sustainable Futures Institute