MICHIGAN TECH:
Your Future Begins Here.
Choosing a graduate school isn’t easy.

Let’s look at the facts:

#1
SAFEST PUBLIC UNIVERSITY IN THE NATION (College Magazine)

6th
HIGHEST STARTING SALARIES IN THE US AMONG PUBLIC UNIVERSITIES (Money Magazine)

$5.6M
EXTERNAL SPONSORED FUNDING

100%
CAREER PLACEMENT

75%
OF OUR RESEARCH-BASED GRAD STUDENTS ARE SUPPORTED FOR THEIR TUITION AND LIVING EXPENSES WITH INTERNAL FUNDS

“As a PhD student studying transportation engineering, I spend most of my time focused on research. Communication from faculty is key in helping broaden my knowledge, while getting guidance from lab assistants is critical when facing technical issues in the research phase.”

SIYU JACK CHEN, PhD
TRANSPORTATION ENGINEERING
Tackle challenges facing our society through an education created with a balance of theory and practice at a program ranked by US News & World Report. Students enrolled in our graduate program make significant contributions through research while learning in a four-to-one student-to-faculty setting.

**CIVIL ENGINEERS ADVANCE & EXPERIENCE**

**MASTER’S DEGREE**
The master’s degree offers many paths, including course work or research based, as well as an online option focused on structures. All pathways require a minimum of 30 credits with varying course work, research, and report credits based on the selected path.

- **MTU.EDU/CEE/GRADUATE/CIVIL/MS**

  **$71,000**
  **MS AVERAGE SALARY.**

**PHD DEGREE**
Work with renowned faculty members changing the environment around us. Think about long-term sustainability through project designs that are cost effective and adaptive in one of our eight state-of-the-art research facilities, including our petrography laboratory for material characterization. Additional Department lab space supports structural testing, concrete mixing and testing, asphalt testing, binder characterization, hydrodynamic and scour studies, complex data visualization, and rail planning.

- **MTU.EDU/CEE/GRADUATE/CIVIL/PHD**

  **$107,000**
  **PHD AVERAGE SALARY.**
ENVIRONMENTAL ENGINEERS
DIVERSIFY & FACILITATE

Develop a deeper understanding of how we impact the natural environment and learn how to engineer systems to sustainably protect human health and ecosystems. Work with faculty across departments and in research institutions through interdisciplinary research projects. The Department boasts more than $5.6 million in research funds each year from state and federal agencies, foundations, and industry.

$69,000
MS AVERAGE SALARY

$83,000
PHD AVERAGE SALARY

M A S T E R ’ S D E G R E E
In the pursuit of advanced environmental engineering and engineering science studies, the master’s degree offers many paths, including course work or research based options. All pathways require a minimum of 30 credits with varying course work, research, and report credits based on the selected path.

MTU.EDU/CEE/GRADUATE/ENVIRONMENTAL/MS

PHD DEGREE
Work alongside expert faculty in environmental engineering, solving today’s problems to prepare to solve tomorrow’s. Investigate challenges with our faculty, while collaborating with departments across campus to build a complete picture and experience the problems firsthand, tackling research problems from Florida to Alaska and from Central America to Greenland.

MTU.EDU/CEE/GRADUATE/ENVIRONMENTAL/PHD

RESEARCH-INTENSIVE INTERDISCIPLINARY STUDIES
Through access to world-class facilities, including the Great Lakes Research Center and the research vessel, the Agassiz, students work in more than 43,000 square feet of research and teaching laboratories and can learn from the largest freshwater laboratory in the world—Lake Superior.

Graduate students use top-of-the-line facilities for research related to drinking water and wastewater treatment, organic and inorganic contaminant characterization, air and water quality monitoring, and sediment analysis.

GROUNDWATER & SUBSURFACE REMEDIATION

HYDROLOGY & WATER RESOURCES

SURFACE WATER QUALITY

DRINKING & WASTEWATER TREATMENT

ATMOSPHERIC SCIENCES

ENV MICROBIOLOGY & CHEMISTRY

GROUNDWATER & SUBSURFACE REMEDIATION

HYDROLOGY & WATER RESOURCES

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DRINKING & WASTEWATER TREATMENT

ATMOSPHERIC SCIENCES

ENV MICROBIOLOGY & CHEMISTRY

ENV MICROBIOLOGY

& CHEMISTRY

POLLUTION
PREVENTION

PHYSIOLOGY

& MOLLUSC BIOLOGY

AIR QUALITY

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Training Future Engineers for Connected & Autonomous Vehicles

PI: Kuilin Zhang
Sponsor: National Science Foundation

Smart traffic is more than self-driving cars. The research from Zhang’s team focuses on improving automated driving decisions using predictive, real-time feedback within and between vehicles.

“Here at Michigan Tech, we’re training future transportation engineers and, to prepare them for our roads, we need a new approach to studying traffic.”

KUILIN ZHANG

$500,000 OVER 5 YEARS

Dissolved Organic Matter Interferes with Water Treatment

PI: Daisuke Minakata
Sponsor: National Science Foundation

Daisuke Minakata’s research team has developed an Ultrahigh Resolution Hybrid Ion Trap Orbitrap Mass Spectrometer (Orbitrap Elite) to analyze and identify chemical species in a sample. The presence of dissolved organic matter interferes with the water treatment process, ultimately contributing to water pollution.

“Dissolved organic matter has never been used much in chip seals and the products that are being used for this project are being used for the first time in the U.S.”

DAISUKE MINAKATA

$347,808 OVER 3 YEARS

Using New Rubber Technology to Construct High Volume Road

PI: Zhanping You
Sponsor: Road Commission of Kalamazoo County & DEQ

The presence of ground tire rubber in asphalt limits the number of tires that go to a landfill. Researchers at Michigan Tech have found an additional use in a chip seal application that has been found to increase durability, reduce reflective cracking, increase skid resistance, and reduce ride noise. Graduate students on You’s research team traveled to Kalamazoo to watch the installation process.

“Ground tire rubber (GTR) has generally not been used much in chip seals and the products that are being used for this project are being used for the first time in the U.S.”

ZHANPING YOU

$443,928

DEPARTMENTAL
Many of our graduate students are funded through positions as Graduate Teaching Assistants or Graduate Research Assistants through grants, contracts, or internally funded research projects. There is not a formal application for graduate support; all graduate students are considered for Departmental funding in the form of Graduate Teaching Assistantships (GTA) based on their application and/or research and academic record. Students selected for these types of funding opportunities will be notified in the early spring for the upcoming academic year. Graduate Research Assistantships (GRA) are awarded by individual faculty members. It is recommended that students seeking this type of support contact faculty in their area of interest to see if there are any funding opportunities available.

EXTERNAL
If additional funding or support is needed, the Graduate School maintains a list of internal and external fellowship options. Support amounts, requirements, and application deadlines are available here:

FELLOWSHIP | MTU.EDU/GRADSSCHOOL/FINANCIAL/FELLOWSHIP

QUESTIONS?
Reach out to the Graduate Program Assistant:
906-487-2474 | amkerane@mtu.edu

LEARN MORE | MTU.EDU/ENGINEERING/GRADUATE/FUNDING
The first step toward your degree is by completing a (free!) application online.

**HOW TO APPLY**

In addition to the application, you must submit (online) a statement of purpose and a personal statement, as well as certified copies of your college transcripts. You will also need to submit your GRE score. International applicants must provide proof of English proficiency through TOEFL scores. The official scores should be sent directly to the Graduate School using the code: 1464. We also require two letters of recommendation.

**APPLICATION DEADLINES**

Recommended deadlines for completing your application are as follows:

- Fall Semester: January 15 (for full financial aid consideration)
- Spring Semester: October 1
- Summer Semester: February 15

Application to the graduate program automatically results in consideration for graduate teaching and research assistantships. We also encourage students to apply for outside scholarships, fellowships, need-based loans, and grants. It will take approximately four weeks for us to process your application once all required materials are received.

**STATUS CHECK**

[MYMICHIGANTECH.MTU.EDU](http://www.mymichigantech.mtu.edu)

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“...The Department has provided me with numerous opportunities to excel in my personal and professional life. Having been in the Department for close to ten years, obtaining my bachelor's and master's and now seeking a doctorate, I have found the faculty truly cares about the students. I have been lucky to develop strong relationships with professors from across departments, which has provided me with a solid resource base to ask questions related to my research and coursework. In addition, these faculty connections have enabled me to secure funding both for my education and for professional growth opportunities. Beyond that, I also enjoy Michigan Tech for the pep band and endless outdoor activities.”

CHRISTA MEINGAST, PHD STUDENT, ENVIRONMENTAL ENGINEERING
Combine education and service with program offerings to gain field and research experience to share skills and talents across the country.

**VISTA & AMERICORPS**

Civil & Environmental Engineering graduate students have the opportunity to work with teams across the country to support government agencies and private sector businesses, serving others and gaining valuable career experiences in the field. Through the VISTA and AmeriCorps programs, students serve six month or one year assignments in the field, followed by a semester or two on campus to complete their master's degree. When on campus, students pay a reduced tuition rate and while serving on the ground with VISTA or AmeriCorps, the practicum credits are fully funded by the Graduate School.

**LEARN MORE** ➔ MTU.EDU/GRADECHOOL/PROGRAMS/DEGREES/AMERICORPS

**PEACE CORPS COVERDELL FELLOWS PROGRAM**

We find that many returning Peace Corp Volunteers want to both further their educational experiences and serve their communities. Through the Peace Corps Coverdell Fellows Program, students can do just that, by completing their master's degree and helping under-served communities across the United States. By working as a Peace Corps Coverdell Fellow, our students receive a tuition scholarship of 33 percent and have the opportunity to develop and manage projects, adapt new cultures, understand how to work with limited resources, and breakdown communication barriers due to language.

**LEARN MORE** ➔ MTU.EDU/GRADECHOOL/PROGRAMS/DEGREES/COVERDELL

“Michigan Tech and the Civil & Engineering Department have been great. The faculty members are knowledgeable and the students are all committed. Working with my advisor, Alex Mayer, on my PhD in water resources engineering has been valuable and has served as an opportunity for me to continue my research, while also spending time in my home country to watch my daughter grow.”

SERGIO MIGUEL LOPEZ RAMIREZ, PHD STUDENT, WATER RESOURCES ENGINEERING
Housing

Michigan Tech maintains three residence halls and several apartment facilities. For specific room layouts in each hall, as well as the amenities in each, visit mtu.edu/housing

Many graduate students choose to live in Daniell Heights Apartments, which offer one, two, or three-bedroom options. These units all include cable, internet, heat, and electricity with common laundry spaces in each building: mtu.edu/housing/options/graduate/daniell-heights

Students living in Daniell Heights Apartments are not required to have a meal plan, but it is an available option should you be interested: mtu.edu/dining

All vehicles parked on campus are required to have a parking permit. These can be purchased through transportation services: mtu.edu/transportation/registration

QUESTIONS ➔ HOUSING@MTU.EDU OR 906-487-2682
FAQS ➔ MTU.EDU/HOUSING/FAQS
OFF-CAMPUS HOUSING ➔ USG.MTU.EDU/USG/HOUSING

Kiran Udayakumar (MS Environmental Engineering) was selected as the Braun Intertec 2017 Co-op of the Year.

Udayakumar completed a six-month field testing co-op internship in the Braun Intertec Williston, North Dakota office. Operations Supervisor Jeremiah Gibson says, “Kiran’s performance exceeded all expectations and he exemplifies a well-educated engineer on his way to a successful career.”

Kiran added: “I couldn’t have done this without my advisor and mentor, Martin Auer, as well as mentors Sarah Bird and Darnisha Slade, who gave me constant support and motivation throughout the co-op.”

“I am where I am today solely because of my experiences at Michigan Tech. I am grateful for my experiences in obtaining my master’s, which has led me to a career as a water quality engineer.”

KIRAN UDAYAKUMAR