Civil Engineering

Civil engineering has a long and notable history. Civil engineers have been responsible for great feats such as the Hoover Dam, Panama Canal, and the Statue of Liberty. Civil engineers design, construct, and maintain the very framework on which society depends – roads, bridges, waterways, dams, and harbors. They are involved in homeland security, safety, land and infrastructure development, risk assessment, private and public environmental systems, structural design and assessment, and waste management systems.

As the nation’s infrastructure ages and the demand for green technology increases, the role of the civil engineer remains crucial. From the roads and bridges that connect us to the buildings that shape our horizons, the future of civil engineering will require not only finding new and innovative solutions to age-old problems, but also a commitment to creating a more sustainable world.

Furthering your studies in civil engineering can be critical to your advancement and success in the field. Lawrence Technological University’s comprehensive master’s programs in civil engineering are designed to provide you with a broad, high-quality, and contemporary educational experience. The programs, which focus on fundamental engineering theories while implementing new technologies, allow you to gain the skills needed to become a master at solving complex, real-life engineering problems.

Whether you choose to pursue the Master of Science in Civil Engineering, which requires 30 credit hours, or the 33-credit Master of Civil Engineering, you will be exposed to Lawrence Tech’s signature “theory and practice” approach to learning, offering you both technical and practical expertise. The MS in Civil Engineering includes a three-credit graduate project or a six-credit thesis project, while the Master of Civil Engineering is based entirely on course work. Both degrees provide you a thorough understanding of the design process, while preparing you to approach complex problem solving from a multidisciplinary perspective.

“Our experience with Lawrence Tech grads has been excellent. They are extremely well prepared, energetic, and professional – really top notch.”

George Hubbell, vice president, Hubbell, Roth & Clark, Inc.

CURRICULUM
Your program requires 30 to 33 credit hours, depending on the option chosen, and consists of:

**MS in Civil Engineering**
- Project Option
  - Technical Electives 27
  - Project 3
  - **Total Credit Hours** 30
- Thesis Option
  - Technical Electives 24
  - Thesis 6
  - **Total Credit Hours** 30

**Master of Civil Engineering**
- Course Work Option
  - Technical Electives 33
  - **Total Credit Hours** 33
**Why Civil Engineering at Lawrence Tech?**

Designed for busy students and practicing professionals, Lawrence Tech’s graduate programs in civil engineering are offered late afternoons and evenings, and you can complete either degree in as few as three semesters. Throughout your studies, you will have the opportunity to participate in cutting-edge applied research projects that offer you exceptional hands-on experience. You also will have access to advanced industry software packages as well as Lawrence Tech’s state-of-the-art structural testing facilities.

You will learn from dedicated faculty, all of whom have professional experience. Many are involved in developing engineering design codes and experimental testing standards, as well as publishing in professional journals and attracting research grants from private foundations and public entities, such as the National Science Foundation and numerous state transportation departments.

As a graduate student in the civil engineering program, you can choose to specialize in a specific technical area or distribute your course work among five concentrations: structural, geotechnical, hydraulics/water resources, environmental, and transportation/highway engineering.

**Getting Started**

Admission to the Master of Civil Engineering and the Master of Science in Civil Engineering programs requires:

- A bachelor of science in civil engineering (or equivalent) from an ABET-accredited undergraduate program.
- A minimum undergraduate GPA of 3.0.
- Demonstration of high potential for success based on the following documents:
  - Application for graduate admission
  - Three letters of recommendation, preferably from employers and professors
  - Official transcripts of all college work
  - Professional resume

If you do not meet all the conditions for regular admission you may be considered for provisional admission upon review by the Engineering Graduate Admission Committee.

For more information, contact Lawrence Tech’s Office of Admissions at 800.CALL.LTU or admissions@ltu.edu. For specific questions about the Master of Civil Engineering or the Master of Science in Civil Engineering, visit ltu.edu/engineering/civil/graduate1.asp or contact Lawrence Tech’s College of Engineering at 248.204.2500 or engrdean@ltu.edu.