The Department of Engineering provides the opportunity to gain in-depth knowledge in a professional field that offers challenging careers in a wide range of disciplines. Our ABET-accredited general engineering program is taught by faculty who have practiced as engineers.

The program emphasizes the fundamentals of engineering design, with a focus on both the theoretical foundations as well as practical applications, which are reinforced by hands-on laboratory experiences, state-of-the-art computer software, and real-world projects. Students focus on civil, electrical, industrial, or mechanical engineering, and participate in internships and capstone design projects. Students must pass the Fundamentals of Engineering Examination, the first step toward becoming a Licensed Professional Engineer.

Degree Concentrations

- **Civil Engineering**
  Civil engineers are involved in the areas of structural, environmental, transportation, water resources, and geotechnical engineering. These engineers design bridges, buildings, dams, foundations, water and sewage treatment plants, drainage systems, residential and commercial water supply systems, freeways, traffic control systems, airports, and residential and commercial subdivision site plans. Our graduates work for government, state, or local municipal agencies or for private engineering firms.

- **Electrical Engineering**
  Electrical engineers are primarily involved with power systems, communications and control, or high-speed digital systems including computers, embedded systems, and digital signal processing. These engineers design power stations, transmission lines, satellite systems, avionics, computers, cell phones, and systems that process all forms of digital information. Our graduates work for local and regional power companies, defense contractors, electronic design firms or in manufacturing-related companies.

- **Industrial Engineering**
  Industrial engineers are involved with the manufacturing processes that bring products from raw materials to the consumer. They often help to optimize the manufacturing process, taking into account inventory, speed, safety, ergonomics, and cost. Our graduates work for manufacturing companies at both the regional and national levels.

- **Mechanical Engineering**
  Mechanical engineers are involved with machine design, fluid and gas propulsion systems, robotics and controls, material development, and manufacturing. These engineers design products and/or systems such as new materials, automobiles, airplanes, jet engines, heating and air conditioning systems, and aerospace systems. Our graduates work for defense contractors, manufacturing firms, automobile designers and suppliers, and private engineering firms.

www.utm.edu/departments/cens/engineering
731-881-7571
Faculty with Real-World Experience
Our faculty combined have more than 80 years of professional engineering practice prior to entering academia.

Professional Student Chapters
- American Society of Civil Engineers
- Institute of Electrical and Electronic Engineers
- National Society of Black Engineers
- Society of Automotive Engineers
- Society of Manufacturing Engineers
- Society of Women Engineers

Laboratory Facilities
- Asphalt Lab
- Electrical Lab
- Automation and Manufacturing Lab
- Materials Lab
- Soils and Concrete Lab
- Instrumentation Lab
- Vibrations and Controls Lab
- Electrical Development Lab
- Civil and Mechanical Lab
- Student Development Lab

State-of-the-art Computer Labs with Cutting-Edge Software
Two dedicated computer labs for engineering students, with a wide range of software including Matlab, LabVIEW, IDEAS, Adams, AutoCAD, Microstation and PSpice.

Internships and Cooperative Education Program
All engineering students are required to complete a one-semester or summer internship. Some students choose to complete a one-year co-op.

Graduate School Opportunities
Approximately 20% of our graduates attend nationally ranked graduate schools.

Career Opportunities
Our graduates find professional engineering positions locally, regionally, and nationally in a wide range of engineering disciplines.