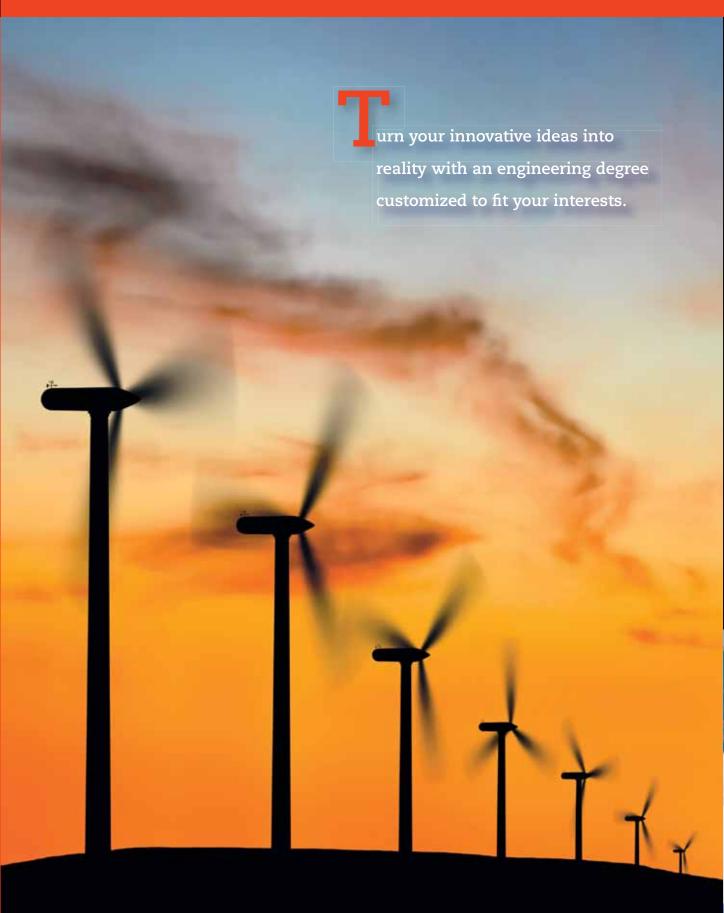
# BACHELOR OF SCIENCE IN ENGINEERING





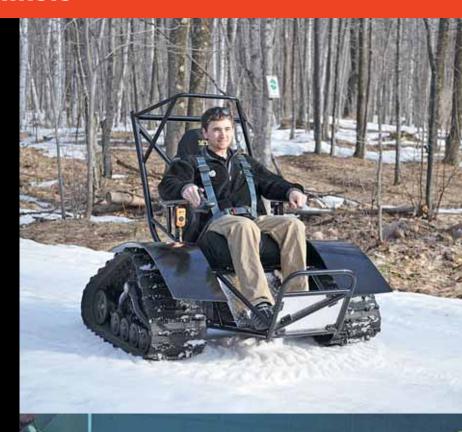
## SELECT YOUR EMPHASIS

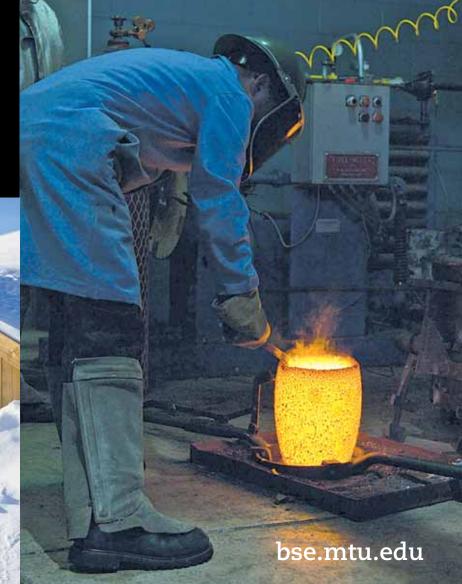
Would you like to pursue your own unique path in engineering, or enter an emerging field? If so, consider earning a Bachelor of Science in Engineering (BSE) degree.

The BSE degree program consists of courses fundamental to all engineering disciplines and a large number of elective courses built in to provide flexibility. You can customize your degree to fit your career goals, or select from several defined paths.

## **BSE Strengths**

- A solid, accredited\* program in basic engineering principles
- The ability to customize your engineering degree
- Access to new and innovative coursework
- Hands-on learning experiences
- Co-ops and internships
- Multidisciplinary teamwork









Create your own course of study, or choose from among several defined paths:

### **Industrial Engineering**

As an industrial engineer, you will focus on the optimization of manufacturing processes. You will design, improve, and install production systems of people, materials, information, equipment, and energy, working in a wide variety of businesses to increase sustainability. You will reduce costs associated with new technologies and strive to make work faster, easier, and more rewarding.

## Geospatial Engineering

As a geospatial engineer, you will combine the use of spatial information software and analytical methods with terrestrial or geographic data to create 3D maps, employing Earth observation systems, global navigation satellite systems, laser and radar imaging sensors, wireless technologies, and more.

### **Service Systems Engineering**

As a service systems engineer, you will develop ways to make service sector industries function smoothly and efficiently. You will figure out how systems work, focusing on design, operation, and problem solving. Emphasis is on process over product, and the human side of engineering.

## LOTS OF OPTIONS

As a BSE student, you have options and choices for up to 40 percent of your degree path.

This will provide you with a great deal of flexibility to pursue studies that reflect your own interests. You can pick any area of study to blend with the engineering focus that you select for a technical emphasis.

Use your choices, made with the guidance of knowledgeable faculty and advisors, to complete a personalized engineering degree that can include a built-in minor or certificate as part of the degree path. Michigan Tech offers more than fifty minors and eighteen certificate programs.





## Undergraduate Research

Cutting-edge research isn't just for graduate students. Our goal is to nurture your interest in engineering research and help you gain awareness of the vast opportunities available right on campus. You can begin working with a faculty mentor on a research project as early as your freshman year.

## **Enterprise**

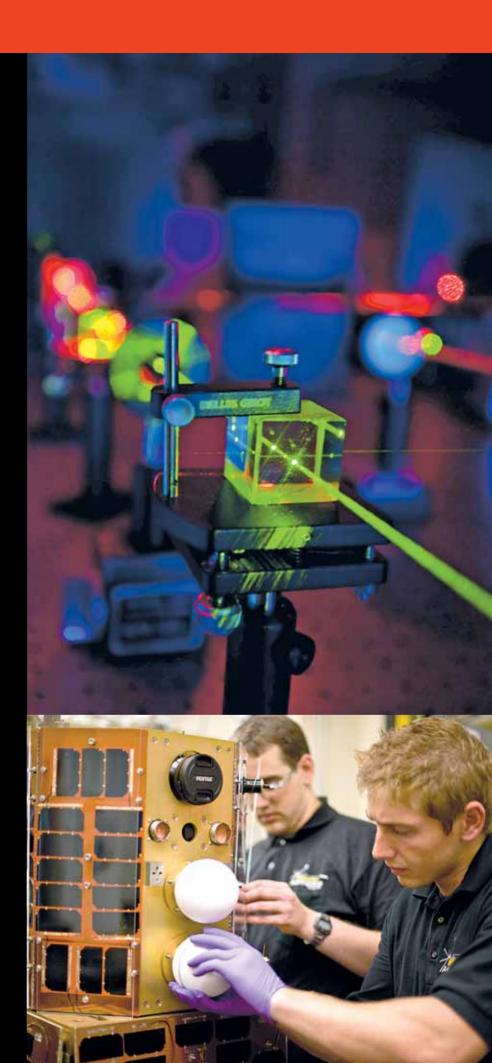
Join an Enterprise team and solve real engineering, design, and communication problems. Develop marketing, business, and leadership skills. Teams are open to students from every major and operate like companies in the private sector. Join an existing team, or help create a new enterprise from the ground up. Choose from close to thirty teams across campus that work in areas such as aerospace, information technology, alternative fuels, energy efficient construction, FIRST Robotics, the green campus initiative, integrated microsystems, and the SAE Mini Baja competition. You can view all the teams online at www.enterprise.mtu.edu.

## Senior Design

During your senior year, you'll have the chance to work with a small team of students on a senior design project. Your team will connect with an industry sponsor through an open-ended design project and provide you with the kind of experience that can launch a successful career.

#### D80 Center

Many challenges confront our planet's inhabitants, particularly the 80 percent not typically considered by those creating infrastructure, goods, and services. Everyone must play a role in elevating the quality of life for all while ensuring that future generations can thrive. This starts with the courage to serve others and the ability to envision new solutions. Michigan Tech's D80 Center provides education, service, and research opportunities for students interested in gaining valuable professional experience while making a difference in the lives of others. For more information, visit the D80 Center online at www.d80.com.





#### Come See Us

There is no substitute for seeing firsthand what Michigan Tech has to offer. We invite you to visit our campus and tour the engineering departments. Call 888-688-1885 to set things up.

## Advising

Our academic advisor meets with future students to map out academic choices and career development. Please feel free to get in touch. We look forward to hearing from you.

## **COLLEGE OF ENGINEERING**

Engineering Fundamentals 112 Dillman Hall T: 906-487-3057 E: engadvisor@mtu.edu bse.mtu.edu

# CREATE THE FUTURE



Michigan Technological University
College of Engineering
Department of Engineering Fundamentals
112 Dillman Hall
1400 Townsend Drive
Houghton, MI 49931-1295
T: 906-487-3057
F: 906-487-1620
E: engadvisor@mtu.edu

# bse.mtu.edu

\*The BSE undergraduate degree program is accredited by the Engineering Accreditation Commission of ABET,111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone (410) 347-7700.

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

Michigan Tech offers more than 130 undergraduate and graduate degree programs in engineering; forest resources; computing; technology; business; economics; natural, physical and environmental sciences; arts; humanities; and social sciences.