



BACHELOR OF SCIENCE IN

MECHANICAL ENGINEERING

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MECHANICAL ENGINEERING PROGRAM

Mechanical Engineering involves the creative application of solid and fluid mechanics, thermal and energy sciences, materials science, mathematics, and other fundamental subjects, to conceive of, and best adapt, artificial products to human needs. It is a very broad field with applications in manufacturing, energy, and transportation, among other industries. Practicing Mechanical Engineers are tasked with such diverse duties as product design, lab and field testing, research & development, and computer simulation of product performance. Graduates in Mechanical Engineering find abundant opportunities to work in the field and make meaningful contributions to society.

SKILLS DEVELOPED

- Solid Modeling: CREO
- Mechanical, Fluid, Acoustic Simulation: COMSOL
- Programming in C, MATLAB
- CNC Machining
- Technical Electives Include: Vehicle Dynamics, Vehicle Development & Testing, Finite Element Analysis, Robotics Programming, Machine Vision, PLCs, Mobile Robotics, Sustainable Energy

ROBOTICS AND AUTOMATION LABORATORY

Our multi-million dollar facility is one of the most complete and advanced of its kind in the country. The lab includes 18 industrial robots, 8 mobile robots, and various vision systems, sensors, and conveyor systems.

CAREER OPPORTUNITIES

The program boasts a 100% placement rate, and most students pursue paid summer internships in the field. Our engineering graduates have a pass rate on the Fundamentals of Engineering Exam over 10 percentage points higher than the national average, become part of a strong alumni network, and are qualified to work in the following technical areas:

- Aerospace
- Automotive/Transportation
- Cryogenics
- Metallurgy
- Medical Technology
- Noise & Vibrations
- Renewable Energy
- Robotics & Automation

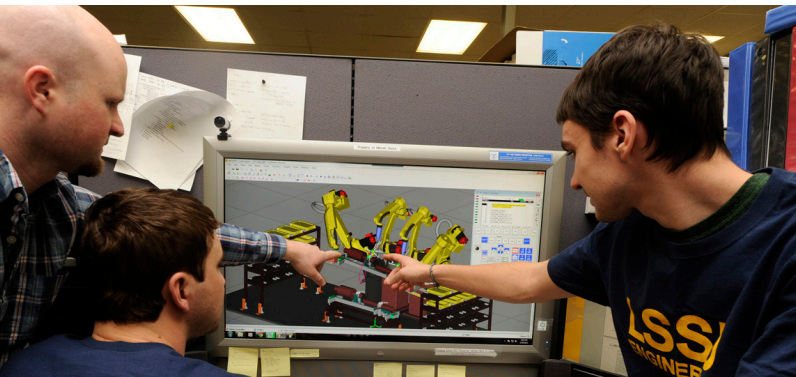


Engineering
Technology
Accreditation
Commission

The School of Engineering & Technology's Mechanical Engineering bachelor's degree program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>, under the commission's General Criteria and Program Criteria for Mechanical Engineering.

EMPLOYERS OF LSSU GRADUATES

- Algoma Steel
- Amazon Robotics
- Bosch Automotive
- Continental
- Union Pacific
- FANUC
- Ford
- GM
- Honeywell
- ZF
- HydroTech
- John Deere
- JR Automation
- Procter & Gamble



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School of Engineering and Technology
Contact: 906-635-2207 • engineering@lssu.edu
Department Chair: Dr. Paul Weber

COURSE & CLUB INFO

MECHANICAL ENGINEERING

Major Engineering Requirements

Introduction to Engineering
Solid Modeling
Machine Design
Statics
Dynamics
Mechanics of Materials
Strength of Materials Lab
Thermodynamics
Fluid Mechanics
Thermal - Fluids Lab
Heat Transfer
Manufacturing Processes
Control Systems
Numerical Methods
"C" Programming
Circuit Analysis
Linear Algebra & Numerical Applications

Core Engineering Requirements

Calculus I-III
Probability and Mathematical Statistics
Differential Equations
Applied Physics for Engineers and Scientists I & II
General Chemistry I

Capstone Options

Industry-Sponsored Senior Projects
Engineering Research Projects
Cooperative ("Co-op") Projects

Additional General Education and Free Electives are required.

For a detailed breakdown of courses, requirements, and descriptions, visit LSSU.edu/catalog

JOIN THE CLUB!

LSSU offers student chapters of international engineering organizations such as:

- Society of Women Engineers (SWE)
- Society of Automotive Engineers (SAE)
- The American Society of Mechanical Engineers (ASME)
- Institute of Electrical and Electronics Engineers (IEEE)

DUAL MAJOR OPTION

Students can dual major in Mechanical Engineering and Robotics, Electrical, or Computer Engineering in 4 to 4 ½ years after completing 4 extra courses

SCHOLARSHIPS

Engineering-specific scholarships are available for admitted students. Learn more at LSSU.edu/EngScholarships



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LAKE SUPERIOR STATE UNIVERSITY

Founded in 1946, Lake Superior State University is ensuring graduates are career-ready by providing real-world experiences in over 65 degree programs. Our faculty teach lifelong skills through guided research, industry-based projects, internships, and community service. We are located in Sault Sainte Marie, Michigan, surrounded by three Great Lakes and 8.8 million acres of state and national forests, making our campus an unsurpassed location for research and outdoor fun. Our students enjoy activities including hiking, fishing, and canoeing, while living in a welcoming and friendly college town.



Student Body
You+2000



\$22 Million in financial aid
awarded annually



16:1
student/faculty ratio



Grad rate
education experience
90% positive



100% placement in
Engineering, Nursing,
Education, and Geology

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