



**LAKE SUPERIOR**  
STATE UNIVERSITY

**BACHELOR OF SCIENCE IN**

# COMPUTER ENGINEERING

**LSSU.edu/GoCE**

## COMPUTER ENGINEERING PROGRAM

The Computer Engineering program blends Computer Science courses in programming, operating systems, and discrete mathematics with Electrical Engineering courses in digital circuits and systems, embedded microprocessor systems, and signal processing. This combination gives you a broad-based education that ties software to hardware and theory to application.

## SKILLS DEVELOPED

- Programming: C/C++/C#, MATLAB, Python
- FPGAs: ModelSim, Quartus Prime, DE1 Boards
- Circuit Analysis & Simulation: LTspice
- Technical Electives Include: Robotics Programming, Machine Vision, PLCs, Mobile Robotics, Mobile Apps, 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
- Computer Design
- Embedded Systems
- Medical Technology
- Renewable Energy
- Robotics
- Software Development



Engineering  
Technology  
Accreditation  
Commission

The School of Engineering & Technology's Computer 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 Computer Engineering.

## EMPLOYERS OF LSSU GRADUATES

- AMT
- Boeing
- Continental
- Ford
- FANUC
- Gentex
- GM
- Honeywell
- Honda
- JR Automation
- KUKA
- Nexteer



**School of Engineering and Technology**  
Contact: 906-635-2207 • [engineering@lssu.edu](mailto:engineering@lssu.edu)  
School Chair: Dr. Paul Weber

**LSSU.edu/ApplyFree**

# COURSE & CLUB INFO COMPUTER ENGINEERING

## Major Engineering Requirements

Introduction to Engineering  
Digital Fundamentals  
Digital Design  
Introduction to Computer Programming  
Principles of Programming  
Data Structures and Algorithms  
Microcontroller Fundamentals  
Microcontroller Systems  
Operating Systems Concepts  
Circuit Analysis  
Electronic Devices  
Linear Algebra & Numerical  
Applications  
Introduction to Signal Processing

## Core Engineering Requirements

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

## 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](http://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 Computer  
Engineering and Robotics, Electrical,  
or Mechanical 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](http://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



Grads rate  
education experience  
90% positive



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

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