



Lake Superior State University
Sault Ste. Marie, MI 49783 • USA

ROBOTICS at LSSU



Courses are taught by faculty who view teaching as a priority.

You may choose to specialize in robotics while completing your bachelor's degree at LSSU in one of the following fields:

- **Computer Engineering**
- **Electrical Engineering**
- **Mechanical Engineering**
- **Manufacturing Engineering Technology**

A rare opportunity to combine robotics with your engineering degree

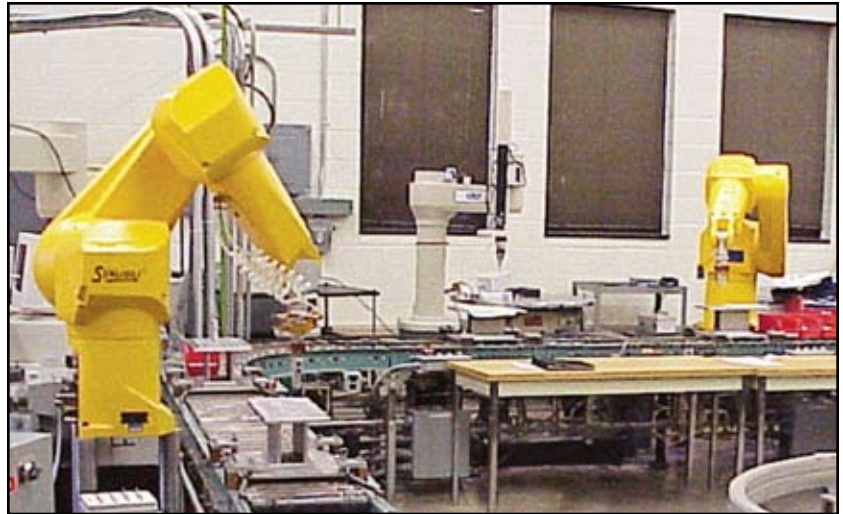
- One of three universities in the U.S. with robotics specialization at the undergraduate level
- Nearly 100-percent placement of graduates as engineers (companies include FANUC Robotics, GM, Applied Manufacturing Technologies, GE, JR Automation and Kawasaki Robotics)
- \$1 million robotics lab that includes 14 industrial robots, machine vision systems and intelligent sensors
- Average engineering class size of 14
- Nationally-accredited engineering and engineering technology programs
- Companies that are involved in robotics and automation specifically seek out LSSU graduates.



A series of workstations dubbed "the oval line" features an integrated Fanuc robotics system.

Check out our robots...

- **Staubli:** One of the fastest and most accurate articulated robots with six degrees of freedom.
- **Adept:** Made by the only U.S. robot manufacturer and one of the most widely used selective compliance articulate robot arm (SCARA) type robots fitted with machine vision systems and cameras.
- **Fanuc:** From the Arcmate family with six degrees of freedom built by one of the world's largest robot manufacturers.
- **Motoman:** One of the three largest robotics companies and one of America's fastest-growing companies.



Staubli and Adept robots share rotary index tables and a roller conveyor system in an L-line set-up controlled by V+ programming and PLCs.



Karel software is used to program a family of Fanuc Arcmate robots.

Students begin working extensively with the robots at the junior level. However, there are earlier opportunities for those students who have a personal desire to learn and work with the robotics equipment.

Your B.S. degree transcripts will list you having an Emphasis in Robotics and Automation.

Contact the **School of Engineering & Technology** at
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Robotics option:

The robotics option will provide you with a strong background in robotics applications, robotics system design and integration, machine vision, sensors, communications, manufacturing simulation and automation.

As part of your Computer Engineering, Electrical Engineering, Mechanical Engineering or Manufacturing Engineering Technology bachelor's degree, there are several choices for technical electives. For the robotics and automation option, the technical electives you would choose are as follows.

• Engineering students:

EGRS385 Robotics Engineering
EGRS430 Systems Integration & Machine Vision
EGRS435 Automated Manufacturing Systems

• Manufacturing Engineering Technology students:

MATH152 Calculus II
EGNR140 Linear Algebra & Numerical Methods
CSCI105 Introduction to Computer Programming
EGRS430 Systems Integration & Machine Vision

If you have any questions about LSSU or would like to visit and take a campus tour, please contact:

Admissions Office

888-800-LSSU, ext. 2231 (toll-free)
or (906) 635-2231 (direct)
e-mail: admissions@lssu.edu
on the web: <http://www.lssu.edu>

The University is an equal opportunity employer and educator and prohibits discrimination, including harassment, on the basis of race, color, national origin or ancestry, gender, age, disability, religion, height, weight, sexual preference, marital status, or veteran status.

Check us out on the web at
<http://engineering.lssu.edu>