

ELECTRICAL ENGINEERING



LAKE SUPERIOR
STATE UNIVERSITY

Sault Ste. Marie, Michigan



Participating in a senior year design project has you working on real-world engineering projects, such as the electrical interface for a data acquisition device shown during senior presentations. It was the first of its kind to be developed.

The Hands-On Advantage

Electrical engineers are changing the world and making life better. We provide the control that keeps airplanes on course, manufacture the electronic devices inside your car, and design the micro-electronics inside your cell phone. We also write the signal processing algorithms that make submarines quiet and develop the wireless systems that enable remote information access. We provide the instrumentation to improve public safety and supply the power that makes everything work.

Lake Superior State University's electrical engineering students take physics, chemistry, higher level mathematics, and core electrical engineering courses which include electromagnetics, circuit design, electronic devices, motors and high-power systems, digital electronics, microprocessor programming, and design of control systems.

LSSU emphasizes the practical side of engineering with plenty of "hands on" laboratory experience. More than 75% of our engineering classes have a laboratory component.

Design projects are found throughout the electrical engineering curriculum. They include practical aspects such as use of engineering software and communication of your ideas, as well as design. A senior design project caps your curriculum, typically involving interaction with an industrial customer.

Additional engineering courses may be used to specialize in one of the following areas, or option.

Digital Systems: You will learn how to design practical digital systems utilizing microprocessors and other digital electronic devices. This includes the design of both hardware and software as well as development of algorithms. You will be able to design and implement electronics for a wide variety of applications.

Robotics and Automation: You will gain a strong background in robotics, machine vision, sensors, communications, and automation. In addition, you will be able to design and implement automated manufacturing systems for a variety of industrial applications.

Vehicle Systems: You will develop a foundation in automotive electronics, sensors, and software and general vehicle dynamics. You will also design, develop and test the types of systems that are utilized in the aerospace and automotive industries.

Electrical/Mechanical: Add breadth to your electrical engineering studies with additional mechanical engineering courses including dynamics, mechanics of materials, and thermodynamics. This option is especially useful for those wishing to enter the power industry.

School of Engineering & Technology

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