Bachelor of Science in Electrical Engineering Technology

Academic programs in the School of Technology are designed to prepare technical and/or management oriented professionals for employment in business, industry, education, and government. These programs, which usually include a significant hands-on laboratory component, prepare students for practical design and production work rather than for jobs that require more theoretical and scientific knowledge.

The Electrical Engineering Technology program is accredited by the Technology Accreditation Commission of ABET. The EET program is applications oriented and focuses on preparing graduates for entry into the work force upon graduation as Engineering Technologists. The program is constantly updated in response to input from an Industrial Advisory Board that has representatives from manufacturing, power utilities, process industries, and electronics companies.

The EET program has two focus areas:
- Power and Industrial Control
- Computer Engineering Technology (NEW)

Undergraduate enrollment: 79
Facility: 6
Average class size: 16
Average lab size: 12
Courses with labs: 12+ of 16
Credit hours required: 127

Student/professional organizations:
- Institute of Electrical and Electronics Engineers
- Tau Alpha Pi National Honor Society

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Why get a degree in Electrical Engineering Technology?
Electrical Engineering Technology is one of the largest and most rapidly developing technical fields. It concerns generating, transmitting, and utilizing electrical energy as well as developing and manufacturing electrical, electronic, and computer equipment and its applications in a wide variety of systems, such as communications and process control.

Students interested in the electrical, electronics, or computer fields, and who prefer applying established techniques to solve current technical problems, should consider this program.

What will I learn?
Students who pursue the Bachelor of Science in Electrical Engineering Technology are prepared to be technologists through a broad-based educational experience that emphasizes practical, hands-on laboratory work that is closely coordinated with theoretical classroom discussion.

- Communication, both oral and written
- Ethics
- Physics (lab based)
- Calculus and Statistics
- Electric Circuits
- Digital Electronics
- Project Management
- Digital Design and Hardware Modeling
- Solid-State Electronics
- Power and Electrical Machinery
- Industrial Networks and Control
- Microcomputers and Microcontrollers
- Antennas & Wireless Comm. Systems
- Computer Architecture
- Real-Time Robotics
- Digital Signal Processing
Electrical Engineering Technology

What is Electrical Engineering Technology?
The Electrical Engineering Technology program provides students with a traditional electrical and electronics engineering curriculum with extra concentration in subject areas that are particularly important to industry either local to the state of Michigan or nationwide. These subject areas are: analog/digital electronics design; electrical machinery operation; and microcomputer applications. All courses in the program are taught in a way that includes a strong component of practical applications, along with basic theoretical concepts.

What is a Capstone Design Experience?
A very important part of the education of all EET students is a Senior Design Project course that is taken during both semesters of their senior year. Design projects are required in most of the EET courses to prepare students for their capstone project. The Senior Design Project requires student teams to solve a design problem while utilizing good engineering design and reporting procedures.

Who are EET faculty?
The faculty in the EET program focus on teaching the students. They have significant industrial experience. Program faculty teach all classes and laboratories. Thus, students learn first-hand about current industry trends and the latest engineering equipment.

Can an EET graduate go to graduate school?
Yes. While most graduates grab the many lucrative offers made to them at graduation, a few have gone on to earn a graduate degree. Many of the graduates that have gone on to graduate school have pursued a Master of Business Administration (MBA).

Who will I work for?
Graduates of the EET program are trained to enter the work force as Electrical Engineering Technologists through a broad-based educational experience that emphasizes practical, hands-on laboratory work that is closely coordinated with theoretical classroom discussion. New graduates can expect excellent starting salaries with almost 100% placement. Job opportunities for interns and graduates are available in such diverse industries and organizations as research and development, automobile manufacturing, defense, construction, pharmaceuticals, energy and transportation, power, hospitals, aerospace, education, and state and local governments.

- American Medical Systems
- AT&T
- Black & Veatch
- Cable Constructor Corp.
- Caterpillar Inc.
- Chrysler
- Consumers Power
- Control Data Corporation
- Cummins Inc.
- General Cable Corporation
- General Electric
- Gentex
- Haliburton
- Ironwood Plastics
- John Deere
- Johnson Controls Inc.
- Oshkosh Truck Corp.
- Praxair Inc.
- Smiths Aerospace
- United States Steel
- Zenith

What are my career options and how much will I make?
Graduates of the EET program fill a wide variety of professional technical positions in industry. Typically, they take jobs that involve designing and manufacturing a product or operating a plant. EET graduates are the electrical backbone of the manufacturing community and often manage project and maintenance teams of electricians and engineers. Their responsibilities lean toward design and production rather than research. Current starting salaries range from $40,000 to $60,000.

What preparation do I need in high school?
In preparation for a degree in technology, the high school student should take at least three years of math and as much science, English and communications as possible. In addition, practical, hands-on courses and at least one year of hands-on computer experience is strongly recommended.

- **Average ACT**: Composite 25.1; English 23.7; Math 26.2
- **Average high school GPA**: 3.50

*Electrical Engineering Technology (2/2)*
Revised October 6, 2006