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**MINNESOTA STATE
UNIVERSITY**
MANKATO

ELECTRONIC ENGINEERING TECHNOLOGY *College of Science, Engineering & Technology*

BACHELOR OF SCIENCE IN ELECTRONIC ENGINEERING TECHNOLOGY

Electronic Engineering Technology is a technological field requiring the application of scientific and engineering knowledge and methods, combined with technical skills, in support of engineering activities. An electronic engineering technologist is a person who is knowledgeable in electronics theory and design and who understands state-of-the-art practices on digital and analog circuits and systems.

CAREER OPPORTUNITIES AVAILABLE FOR STUDENTS COMPLETING THIS DEGREE

Graduates of this program are prepared for entry into the engineering support work environment with well-developed laboratory skills and a broad foundation in the application of engineering technology, including computers, controls/automation, robotics, instrumentation, and communications technology to engineering problems. Graduates will also be ready for advancement into managerial/entrepreneurial endeavors.

ABOUT THE DEGREE?

As an accredited engineering technology program, the Electronic Engineering Technology curriculum requires students to complete courses in mathematics, physical sciences and engineering technology. Students will experience extensive hands-on laboratories throughout the program. Most of the coursework is completed concurrently with associated laboratory content. The curriculum starts with introductory engineering technology courses with laboratory content focusing on the fundamentals of digital systems and programming and fundamental circuit theory courses in preparation for more advanced electronics, communications and other electrical and electronic systems courses. The curriculum

proceeds to establish a foundation for applied electronics systems integration associated with analog and digital circuits and finishes with a creative capstone design project associated with automation during the senior year.

PROGRAM QUALITY INDICATORS

Faculty credentials

The faculty members have extensive educational and industrial experience. Some are licensed professional engineers. All tenured and tenure-track faculty have a terminal (PhD) degree. Many of our faculty members have active theoretical and /or applied research at the undergraduate and graduate levels.

Accreditation

The Electronic Engineering Technology program at Minnesota State University, Mankato is accredited by ABET, www.abet.org.

Laboratories

The Electronic Engineering Technology program is housed in Trafton Science Center, a facility with more than \$9 million of modern laboratory equipment used in the support of departmental programs. The Department of Electrical and Computer Engineering and Technology maintains laboratories to support communications, integrated circuit design and fabrication, electronics, networking, digital system design, microprocessor design and interfacing, and antenna design.

Alumni successes

Many successful engineering technicians have received their degrees from Minnesota State University, Mankato. Some have continued on to pursue advanced degrees and others have joined the ranks of engineering technology professionals in circuit test rig development, automation technology development, embedded design and in other industries.

FOR MORE INFORMATION, PLEASE CONTACT:

Department of Electrical and Computer Engineering and Technology

Minnesota State University, Mankato
242 Trafton Science Center N
Mankato, MN 56001

Phone

507-389-5747
800-627-3529 or 711 (MRS/TTY)

Fax

507-389-6280

Website

cset.mnsu.edu/departments/electrical-and-computer-engineering-technology/

To apply for admission, contact:

Office of Admissions

Minnesota State University, Mankato

122 Taylor Center

Mankato, MN 56001

Phone: 507-389-1822 Toll-Free: 800-722-0544

Fax: 507-389-5114

TYPICAL ELECTRONIC ENGINEERING TECHNOLOGY PROGRAM OF STUDY

First Year (FALL)	First Year (SPRING)
ENG 101 English Comp (4) MATH 115 Pre-Calculus (4) EET 113 DC Circuits (3) EET 141 Int. Comp. Tech. I (4) EE 105 Intro to Electrical and Computer Engineering and Technology	CMST 102 Public Speaking (3) MATH 121 Calculus I (4) EET 114 AC Circuits (3) EE 107 Intro to Electrical and Computer Engineering Through Software Development (3) General Education Elective
Second Year (FALL)	Second Year (SPRING)
PHYS 211 Principles of Physics I (4) EET 222 Electronics I (4) EET 143 Int. Comp. Tech. III (4) EET 221 Electronic CAD (3) MATH 127 Calc II for ET (2)	PHYS 212 Principles of Physics II (4) EET 223 Electronics II (4) EE 234 Microprocessor Engineering I (3) EE 235 Microprocessor Engineering Lab (1) EET 341 Elec. Shop Practices (2) General Education Elective
Third Year (FALL)	Third Year (SPRING)
EET 384 Microprocessors II (4) EET 452 Op Amp Applications (3) EET 355 Electrical Power Systems (3) General Education Elective CHEM 104 Intro to Chemistry (3)	EET 456 Analog Communications (4) EET 340 Programmable HW Tech (4) STAT 221 Applied Probability and Statistics for Engineers (3) General Education Elective General Education Elective
Fourth Year (FALL)	Fourth Year (SPRING)
EET 461 Industrial Automation I (4) MET 427 Quality Mgmt Systems (3) *EET Technical Elective_____ EE 450 Engineering Economics (3) General Education Elective	EET 462 Industrial Automation II (4) *EET Technical Elective_____ General Education Elective **EET 497 Internship (3)

*6 hours of 300-level and 400-level technical electives are required.

**One additional EET technical elective may be substituted for Internship - Permission required. Must have 20 or more credits upper division EET at Minnesota State Mankato. Must have a cumulative GPA of 2.0 or better for all upper level EET courses

For additional information about course requirements, please visit mnsu.edu/academics/academic-catalog/

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