The University and community

MTSU has been ranked by Forbes magazine as the best public university in Tennessee. The spacious campus features modern buildings that exist harmoniously with historic structures. New residence accommodations, a fully computerized library, a recreation center, and computer access make it possible to provide solid programs to more than 22,000 students. Individual help and attention from faculty members is an important aspect of MTSU’s educational philosophy.

The campus is located in the historic town of Murfreesboro, only 30 miles southeast of Nashville and in the center of manufacturing for the region. Living in Murfreesboro allows students to enjoy a metropolitan atmosphere without the impersonalization of a large city.

Transfer with associate degree

A student with an associate degree in mechanical engineering technology or a related field may continue his/her study in this concentration. Many credit hours from the associate degree could be applied toward the requirements. Usually, it takes about two years to complete the B.S. degree in Engineering Technology for students with associate degrees in one of the related areas. A grade of C or better is required on transfer credits accepted as part of the major in Engineering Technology.

Curriculum

The following are curriculum requirements for the Mechanical Engineering Technology concentration. Students are required to complete a minimum of 124 credit hours, 67 of which are in Engineering Technology.

General education

A total of 41 hours in the General Education program is required. The program includes courses in Communication (9 hours), Humanities and/or Fine Arts (9 hours), Social/Behavioral Sciences (6 hours), Natural Sciences (8 hours), Mathematics (3 hours), and History (6 hours). Please refer to the current MTSU Undergraduate Catalog online for more details.

Major courses

- ENGR 1100 Engineering Fundamentals
- ENGR 1210 Introduction to Materials Science and Engineering
- ENGR 2110 Statics
- ENGR 2120 Dynamics
- ENGR 3915 Technical Project Management and Soft Skills
- ENGR 3920 Engineering Safety
- ENGR 3970 Engineering Economy
- ET 2110 Computer-Assisted Drafting and Design I
- ET 2920 Industrial Orientation Internship
- ET 3210 Machine Tool Technology
- ET 3260 Manufacturing Processes and Materials
- ET 3360 Computer-Assisted Drafting and Design II
- ET 3601 Electrical Circuit Analysis I
- ET 3602 Electrical Circuit Analysis II
- ET 3810 Engineering Thermodynamics
- ET 3860 Strength of Materials
- ET 4330 Advanced Computer-Aided Drafting
- ET 4340 Design of Machine Elements
- ET 4710 Professional Development Seminar
- ET 4803 Mechanical Engineering Technology (capstone)
- ET 4815 Heating, Ventilation, and Air Conditioning
- ET 4830 Vibration
- ET 4850 Fluid Power
- ET 4860 Robotics

Supporting courses

- CSCI 1170 Computer Science I
- ENGL 3620 Professional Writing
- MATH 1910 Calculus I
- MATH 1920 Calculus II

American Society of Mechanical Engineers (ASME) Society of Automation Engineers (SAE)

The MTSU student chapters of ASME and SAE are active organizations that exist primarily for Mechanical Engineering Technology students. The groups attend national meetings, routinely tour local industrial sites, and participate in intercollegiate competitions around the country. Student members enjoy all the benefits of these national professional organizations at reduced fees.

Experimental Vehicles Program (EVP)

Students in the EVP build and race vehicles in competitions around the country and the world. Projects include the solar vehicle, solar boat, formula SAE, mini baja, and moon buggy. Students benefit from applying classroom skills to real-world projects and challenges. The program builds team, leadership, and communication skills that are necessary in industry.

Accreditation

The Mechanical Engineering Technology concentration is accredited by the Engineering Technology Accreditation Commission of ABET, abet.org.

Student organizations

Student groups within the Engineering Technology Department represent many programs, including the MET program.

For more information

Dr. Vishwas Bedekar or Dr. Sid Srithara
MTSU Box 19
Murfreesboro, TN 37132
phone: 615-898-2776
fax: 615-898-5697
mtsu.edu/et

Admissions Office
615-898-2111
admissions@mtsu.edu
1-800-331-MTSU (in Tennessee)
1-800-433-MTSU (out of state)
mtsu.edu

Financial aid

A variety of scholarships and grant programs exist for students. Applications should be submitted through the Office of Student Financial Aid.

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MIDDLE TENNESSEE STATE UNIVERSITY
Mechanical Engineering Technology is a concentration that teaches skills integral to machine design, manufacturing, engineering, field service engineering, technical sales, thermal analysis, product design, utilities operations, air conditioning design, plant operations, and many other professions. The program gives students chances to mesh in-class learning with project-oriented assignments and experience in national competitions such as the NASA Human Exploration Rover Challenge, Baja SAE, the Formula SAE, and the Solar Splash (solar boat).

Facilities and faculty
The program is supported by modern facilities and materials including robotics, hydraulics, pneumatics, machine tools, electronics, electric motors, rapid prototyping, and computer modeling laboratories. Faculty members with strong academic backgrounds and industrial experience provide individual attention while instructing and advising.

Industry alliances
An active industry advisory group offers input to ensure that our program produces graduates who meet industry needs. This group also helps through internships and cooperative education projects for students.

The following quotes from graduates in manufacturing managerial positions illustrate the result:

“Attending MTSU prepared me to enter the workforce with the mentality to succeed in my profession. The knowledge gained from instructors with experience in the field has proven to be of great benefit. The Engineering Technology Department and its instructors should be proud of the individuals who graduate and succeed.”
Ernest Dunkley
Corp. tooling/Mfg. engineering supervisor
Calsonic North America-Tennessee

“MTSU’s ET Department prepares students well. I’ve supervised numerous student projects over the past few years. Students and industry both benefit from these hands-on experiences.”
Mark S. Stewman
Director of engineering
Cumberland Swan Holdings, Inc.