

# APPLIED ENGINEERING, SAFETY & TECHNOLOGY



Employers are looking for well-educated professionals to meet the needs of today's global society. With the rapid pace of change, you need to prepare yourself to be competitive as technology- and engineering-related careers evolve. The Department of Applied Engineering, Safety & Technology can help you get the expertise to transform into a highly qualified professional ready to meet the challenges of an exciting career in technical businesses, industries, government or education fields.

## DEGREES/CONCENTRATIONS

### BACHELOR OF SCIENCE (B.S.)

#### **Applied Engineering & Technology Management (AETM)**

This program prepares technical managers, design engineers and technologists with competency in an applied engineering concentration. You will have both technical and management preparation for your professional career. Concentrations are available in:

- Computer-Aided Drafting & Design (CADD)
- Construction Management
- General Technology
- Graphic & Packaging Technology

#### **Automation & Robotics Engineering Technology (AURO)**

Students learn the fundamentals of power, electronic systems and programming techniques common in industry. The curriculum includes in-depth technical content of electronics, control systems, mechanical systems, and computer programming and applications to prepare and equip professionals to design, improve, maintain, and manage robotic and automated process and control systems.

#### **Manufacturing Engineering Technology (MFET)**

Students in the major are introduced to the fundamentals of engineering, materials and production processes used within industry. The program provides in-depth technical content in advanced manufacturing, with an emphasis on automated manufacturing and computer-integrated manufacturing.

#### **Occupational Safety & Environmental Health (OSEH)**

This program is designed for people interested in professions in safety, health and environmental fields. Students gain competency in topics such as accident investigation, industrial hygiene, fire protection, legal aspects of safety and health, ergonomics assessment, indoor air quality and safety engineering.

### BACHELOR OF SCIENCE IN EDUCATION (B.S.E)

#### **Technology & Engineering Education (TECE)**

This program is a teacher training program for individuals seeking certification to teach courses in K-12 technology and engineering. An optional Engineering Design Education concentration is also available. Graduating students are eligible for Pennsylvania teacher certification in Technology Education, which enables them to teach courses in this content area, such as CADD, graphic communication, manufacturing and materials, construction, STEM, energy and power, transportation, electronics, robotics and much more.

### ASSOCIATE OF TECHNOLOGY (A.T.)

#### **Applied Engineering & Technology (AET)**

This program is available for students looking for an applied engineering degree with reduced general education requirements and no management courses. The associate degree is designed so that if you decide to transition into a bachelor's degree, you won't lose credit for the courses already taken. Check the website for available technical concentrations.





## DEGREES/CONCENTRATIONS

*continued*

### MINORS IN APPLIED ENGINEERING SAFETY & TECHNOLOGY

- Advanced Manufacturing Technology
- Computer-Aided Drafting & Design Technology
- Construction Technology
- Control Systems Technology
- General Applied Engineering & Technology
- Graphic Communication Technology
- Occupational Safety & Environmental Health
- Technology & Engineering Education

## INTERNSHIP OPPORTUNITIES

Internships enable students to gain technical work experiences in industry. Professional internships combine academic, technical and management preparation with actual on-the-job experiences in technological enterprises under the supervision of the employer and a department faculty member.

## CLUBS AND ACTIVITIES

**American Society of Safety Professionals (ASSP)** – Millersville University – ASSP is the world's oldest and largest professional safety organization. Our students are consistently awarded scholarships from ASSP and a few private foundations. They also attend numerous local and national conferences that bring them in touch with national experts.

**'Ville Robotics Team – Association of Technology, Management & Applied Engineering** – 'Ville Robotics is a widely respected student organization that has earned more than 45 top awards in national and international robotics competitions. The team boasts winning six national championship titles to date. Team members participate in all aspects of robotics, from ideation and design through fabrication and testing. All team members are welcome to travel to national and international events to compete in top-level competitions.

**CADD Club** is an organization for students interested in all aspects of computer-aided drafting and design, providing internship, networking, community service and competition opportunities.

**Construction Club** is an organization for students interested in construction management, with emphasis on networking, professional opportunities and creating a place for students' creativity to come to fruition.

**Epsilon Pi Tau (EPT) – Beta Phi Chapter** – Epsilon Pi Tau is an international honor society for professions in technology. At Millersville, this includes Engineering Technology, Technology & Engineering Education, Applied Engineering & Technology Management, and Occupational Safety & Environmental Health majors.

**Gamma Epsilon Tau (GET) – Omicron Chapter** – Gamma Epsilon Tau is an American collegiate honors fraternity for graphic artists.

**Marauder Graphics Club (MGC)** is an organization for students interested in the printing and graphic communications industries. MGC sponsors many social and professional events, including tours of local printers and industry trade shows.

**National Society of Black Engineering (NSBE)** is a national student organization with the mission to increase the number of culturally responsible Black engineers who excel academically, succeed professionally and positively impact the community.

**SME – Millersville University.** SME (formerly the Society of Manufacturing Engineers) is an organization for individuals, students, educators and companies involved in all facets of manufacturing. Founded in 1932, it is dedicated to advancing and educating the manufacturing industry. SME focuses its efforts on several areas of manufacturing: aerospace and defense, energy, medical and motorized vehicles.

**Technology & Engineering Education Collegiate Association at Millersville University (TEECA @ MU).** TEECA members engage in a wide variety of social, professional, service and fundraising events. Members participate in the Eastern Regional TEECA Conference every November and another national conference each spring.

## ACCREDITATION

- The AETM degree is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).
- The OSEH degree is accredited by the Accreditation Board for Engineering and Technology (ABET).
- The TECE degree is nationally recognized by the International Technology and Engineering Educators Association (ITEEA) and the Council on Technology & Engineering Teacher Education (CTETE).

### FOR INFORMATION CONTACT

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**AEST NEWS BLOG** | [blogs.millersville.edu/aest](https://blogs.millersville.edu/aest)