Industrial technology and technology education accompany occupational safety and environmental health as programs within the Department of Industry & Technology. These programs contribute to the department’s mission of preparing individuals who value leadership, ingenuity, problem-solving, professionalism and teamwork with knowledge and expertise in technology, design, safety, environmental health and applied engineering. The department is committed to outstanding teaching, creative scholarship, and relevant service to industry, education, and the community.

Industrial Technology prepares you for interesting and challenging applied engineering and technical management employment positions. Our graduates report excellent job satisfaction in a diverse array of positions. You can pursue a 4-year Bachelor of Science (B.S.), or a 2-year Associate of Technology (A.T.) degree in Industrial Technology with a choice of eight technical options.

Technology Education prepares you with a bachelor's degree in education (B.S.Ed.) for a career as a Pennsylvania PK-12 certified technology education teacher. Your certification will enable you to educate children and youth to understand, apply, manage, and assess technology. You will be able to develop both technological literacy and technical capabilities in your future students. Technology education teachers are currently in high demand in Pennsylvania and throughout the United States.
Faculty & Facilities

The technology faculty are among the most accomplished in their fields with many serving on local, regional, national, and international committees and boards. Millersville faculty members have been recipients of numerous prestigious awards and honors for excellence in teaching, scholarship, and service.

The Department of Industry & Technology is housed in Osburn Hall. This 70,000-square-foot, state-of-the-art facility is dedicated exclusively to the study of technology. Bright and contemporary laboratories and classrooms with current instructional technology combine to provide an ideal learning environment in the academic center of campus.

There are sixteen well-equipped laboratories that deal with rapid prototyping, drawing and design, computer-aided drafting and design, desktop publishing, graphic communications, metallic materials, production, polymers and ceramics, general technology, electronics, energy/power/transportation, automation and robotics, fire safety and prevention, safety engineering, industrial hygiene, and ergonomics. Virtually all of the technical classes have a hands-on, laboratory component.

These laboratory experiences are conducted by dedicated professors who teach all classes. There are also opportunities for students to use labs at times other than class time if they need extra time or have extra interest. Four computer labs are available, equipped with industry standard software applications for student use.

Technology Degree Programs

Our industrial technology and technology education programs focus on developing competent technologists and educators prepared for the growing demand for leaders and innovators.

The bachelor’s degree program in industrial technology is fully accredited by the Association of Technology Management and Applied Engineering, The International Technology Education Association and the Council on Technology Teacher Education have nationally recognized the fully accredited technology education program.

Learn more about...

- Computer-aided Drafting & Design (CADD)
- Architectural Design
- Print Media
- Automation
- Robotics and Programming
- Mechanical Technology
- Manufacturing Technology
- Nanofabrication
- Technical Management
- Safety Engineering
- Product Design
- Construction Technology
- Interactive Media
- Computer Numerical Control (CNC)
- Rapid Prototyping
- Quality Management
- Operations Management
- Industrial Training
- Technical Entrepreneurship
- Electricity/Electronics
- Computer Interface and Control
- Bio-Related Technologies
- Engines/Power Systems
- Industrial Materials
- Desktop Publishing
- Technology Teaching
Technology Specialties

Computer-aided Drafting and Design (CADD) – B.S. or A.T.
Provides theoretical knowledge and practical skills in technical sketching, tool and product design, descriptive geometry, engineering drawing, rapid prototyping, residential CADD, technical illustration, statics, and design for manufacturing and assembly.

Construction Technology – B.S. or A.T.
Deals with concepts and skills in CADD, architectural design, blueprint reading, materials and processes, and construction techniques and management, including planning, scheduling, estimating, contracting, and supervising.

Electronics/Control Systems – B.S. or A.T.
Explores theory and develops practical skills in power, control, and electronic systems. Enables a concentration in electronics, instrumentation, control circuitry, and electronic communication systems or in fluid power, robotic systems, and industrial controls.

General Technology – B.S.
Provides a well-rounded and broad-based introduction to industrial technologies with experiences in CADD, graphic communications, electricity/electronics, manufacturing materials and processes, power technologies, and advanced technical courses of interest.

Graphic Communication – B.S. or A.T.
Enables preparation for a successful career in print and electronic media with course work in graphic design and illustration, desktop publishing, principles of photography, digital imaging, contemporary printing technology, color reproduction, and print for packaging.

Manufacturing Technology – B.S. or A.T.
Prepares individuals with qualifications in CADD, material processing, computer numerical control and related areas such as materials testing, machine tool design, power conversion and control, and robotics for applications in conventional and computer aided manufacturing.

Mechanical Technology – B.S. or A.T.
Provides experiences in electromechanical and fluid systems using tools and machines in a production environment with exposure to material processing and testing along with designing and drawing tools/machines for manufacturing and assembly.

Nanofabrication Manufacturing Technology – B.S. or A.T.
Develops competencies with microelectronic chip manufacturing, power semiconductors, micro- electromechanical devices, information storage, optoelectronics, pharmaceuticals, sensors, and biomedicine cutting across many technological systems and industries. A complete semester is devoted to learning in a state-of-the-art nanofabrication facility at Penn State University.

Occupational Safety – A.T.
Enables foundational knowledge of legal aspects of safety, industrial fire prevention and control, environmental and industrial hygiene, ergonomics, safety engineering, and general, organic, and biochemistry that may be seamlessly continued in the occupational safety and environmental health bachelor's degree program.

Technology Teacher Education – B.S. Ed.
Prepares technology education teachers with knowledge, skills, and dispositions for teaching about design, bio-related, communication, construction, energy and power, manufacturing, and transportation technology with emphasis on systems, practical applications, problem-solving experiences, and the impacts of technology.
Undergraduate Research

A research and development (R&D) activity is required in designated courses.

Students may elect to pursue applied research and participate in various competitions as a member of the robotics or submarine teams. Juniors and seniors may pursue departmental honors through completion of an acceptable independent R&D study. Opportunities also exist for students to collaborate with faculty on special research projects and papers that are showcased and presented at various state and national conferences.

Co-ops & Internships

Cooperative education is an academic program that allows industrial technology students to gain practical work experience in a job related to their major.

Cooperative education enables students pursuing an associate degree to gain technical work experiences in industry. For students in the bachelor's degree program, an industrial internship combines 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.

Field Experience & Student Teaching

Prospective teachers in the technology education program have over 60 hours of field experiences in public schools during their sophomore and junior years. A full semester of student teaching in a public school technology education environment and an accompanying seminar during the senior year complete the professional preparation required for technology teacher certification.

Career Opportunities & Graduate School

Our technology graduates enter the professional workforce earning typical starting salaries from $35,000 to $55,000 in a variety of capacities.

Industrial Technology
- Project Manager
- Quality Analyst
- Electronics Technician
- Technical Trainer
- Laboratory Technician
- Print Processes Manager
- Graphic Designer
- Customer Service Representative

Technology Education
- Elementary Resource Teacher
- Middle School Technology Teacher
- High School Technology Teacher
- Post-Secondary Technology Instructor

Our Students

Technology students typically enjoy working with both their hands and their minds. They like to solve problems, design, innovate and be creative. They like to produce things with tools and machines. They like to learn about how society shapes technology and how technology impacts society, culture, and the environment. Many of our students want to help others to learn and be contributing team leaders.

Aside from the academics, many student clubs and organizations encourage professional interaction and development. There are student chapters of national professional associations including the Association of Technology Management and Applied Engineering and the Technology Education Collegiate Association. Epsilon Pi Tau, an international honor society for all professions in technology, recognizes students who excel.
The School of Education
at Millersville University

The School of Education at Millersville University offers a multitude of programs and majors in six departments. All programs that can be accredited are nationally recognized—ensuring that you will receive the strongest education possible. Our psychology program provides research opportunities for students that are second to none at the University. Our many teacher preparation programs are recognized nationally for their plentiful field-based experiences as well as their focus on young students. To complement these excellent programs, the industry and technology department houses three programs that are distinct in the Commonwealth and include technology education, industrial technology and occupational safety and environmental health. We hope that you will take the time to ask lots of questions about our programs, faculty and students.

While the departments in the school are different, our purpose and focus are the same. We concentrate on students and their connections and future contributions to the community. We offer classes that prepare students for teaching, for the business world and, oftentimes, for graduate studies. Teaching and learning together is what the School of Education is all about!

Want to learn more?
Come to campus for an open house or guided tour. Contact the Admissions Office for information.

1-800-MU-ADMIT
www.millersville.edu/~admit
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ACCREDITATIONS: