“The new trend in our field is the integration of computer science, robotics, and controls engineering, and this degree will undoubtedly help meet this trend.” Chris Roush, VP of Business Development, Multi-Dimensional Integration.

DEGREE

BACHELOR OF SCIENCE (B.S.)

Automation & Intelligent Robotics Engineering Technology (ARET)

Students in the ARET degree are introduced to the fundamentals of power, electronic systems, and formal programming techniques common in industry. The curriculum, supported jointly by the departments of Applied Engineering, Safety & Technology and Computer Science, includes in-depth technical content of electronics, control systems, mechanical systems, and computer programming and applications to prepare professionals equipped to design, improve, maintain, and manage robotic and automated process and control systems. Laboratory courses require students to design, program, develop and construct projects independently and in small teams.

The study of robotics and controls involves the design, modeling, optimization, documentation, and automation of advanced control problems. This major is designed to produce graduates prepared to work with multiple types of technology to design and implement projects that have advanced programming needs. Typical entry-level professions include: Software Engineers, Research & Development Engineers, Systems Engineers, Computer Engineers, Process Engineers, Control Systems Engineers, Controls Technicians, Field Engineers, Manufacturing Engineers, Robotics Programmers, and Robotic Technicians.

Top 3 Reasons to Choose Automation & Intelligent Robotics AT MILLERSVILLE UNIVERSITY

1. Opportunity to learn about automation, robotics, artificial intelligence, and computer programming techniques.
2. Excellent starting salaries for automation/controls/robotics engineers.
3. According to the O*Net Resource Center, sponsored by the U.S. Department of Labor/Employment and Training, the Robotics Engineer and related occupations, is identified as having a “bright outlook” with a score of 100/100.

CLUBS & ACTIVITIES

Association of Technology, Management & Applied Engineering (ATMAE) Student Chapter (aka MU Robotics Team)
The MU Robotics Team has earned more than 30 awards since 2001 in national or international robotics competitions. The team boasts winning the 2010 and 2013 ATMAE National Robotics Competitions.

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

FACILITIES

There are multiple laboratory facilities dedicated to supporting the Automation & Intelligent Robotics Engineering Technology degree.

- Adaptive Computing
- Automation/Robotics
- CADD
- Electronics
- Fluid Power
- Humanoid
- Intelligent Machines
- Materials Processing
- Rapid Prototyping

ABOUT OUR GRADUATES

The study of robotics and controls involves the design, modeling, optimization, documentation, and automation of advanced control problems. This major is designed to produce graduates prepared to work with multiple types of technology to design and implement projects that have advanced programming needs. Typical professions include:

- Software Engineers
- Systems Engineers
- Control Systems Engineers
- Controls Technicians
- Field Engineers
- Computer Engineers
- Process Engineers
- Manufacturing Engineers
- Robotic Technicians
- Robotics Programmers
- Research & Development Engineers

ACCREDITATION

The Automation & Intelligent Robotics Engineering Technology Degree is a new degree program. It is a hybrid study of Applied Engineering and Computer Science. Millersville’s Applied Engineering & Technology Management (AETM) degree is accredited by The Association of Technology Management and Applied Engineering (ATMAE), and Millersville’s Computer Science degree is accredited by the Computing Accreditation Commission of Accreditation Board for Engineering and Technology (ABET).