ROBOTICS & CONTROL SYSTEMS

"I am confident that the education I received is genuinely world class, with the best instructors and facilities. I lean on the skills and knowledge I developed at Millersville every single day in my career."

Pictured above is the 2013 ATMAE National Robotics Championship Team with Robot SAMSON (Semi-Autonomous Marauder with Sensor Optimized Navigation).

DEGREES/MINOR

BACHELOR OF SCIENCE (B.S.)

Applied Engineering & Technology Management (AETM)

The **Robotics & Control Systems** concentration involves the optimization and automation of processes. Students in the Robotics & Control Systems concentration are introduced to the fundamentals of current power and electronic systems used in industry. Laboratory courses may require students to design, program, develop and construct projects independently as well as in small groups. Seniors are encouraged to participate in a cooperative education or internship experience to further their knowledge and technical/managerial skills in an industrial environment.

ASSOCIATE OF TECHNOLOGY (A.T.)

Applied Engineering & Technology (AET)

The **Control Systems Technology** concentration within this program provides students with the same basic technical coursework as the AETM program, but without courses in management. Typical entry-level professions include process technicians, application engineers, controls technicians, field technicians, manufacturing technicians and robotics technicians.

MINOR IN CONTROL SYSTEMS TECHNOLOGY

Applied Engineering & Technology (AET)

A minor in **Control Systems Technology** is available to students who complete 18 credits of technical courses related to the study of Robotics & Control Systems.

TOP 3 REASONS TO CHOOSE ROBOTICS & CONTROL SYSTEMS

1. Opportunity to learn about technology management with an applied engineering concentration in robotics and industrial controls.
2. Excellent starting salaries for automation/controls engineers and system integrators ($65,000–$75,000 per year).
3. "The demand for industrial robotics is anticipated to grow exponentially during the forecasting period [2020-2025], driven by advantages such as cost reduction, improved quality, increased production, and improved workplace health and safety."

Source: PRNewswire Industrial Robotics Market Outlook to 2025. www.prnewswire.com/news-releases/industrial-robotics-market-outlook-to- 2025-market-size--share-technology-trends-government-initiatives-co-bots- and-more-300991435.html

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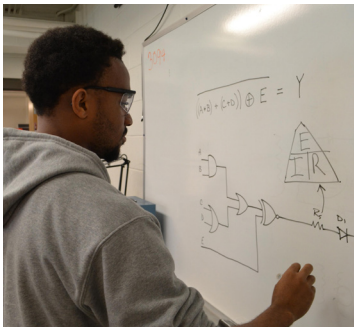
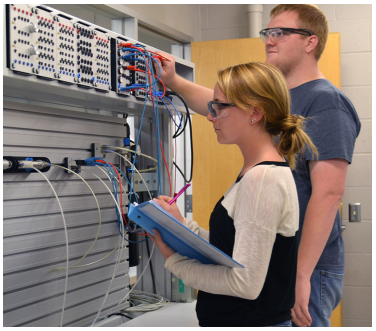
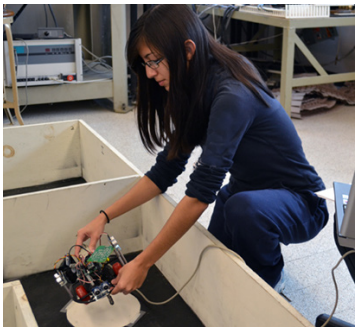





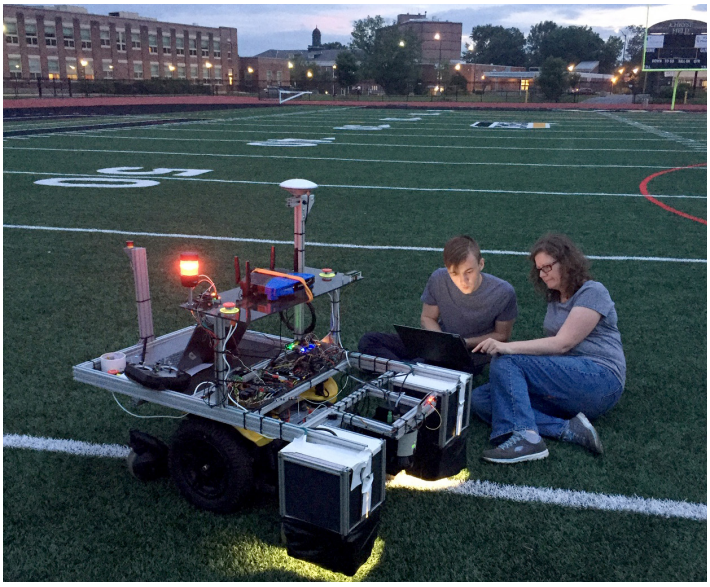
INTERNSHIP OPPORTUNITIES

Robotics & Control Systems internships combine the student's academic, technical and management preparation with actual on-the-job experiences in controls integration and process engineering. Internships have a significant management component, and students are required to engage in management-related activities such as planning, organizing, directing and supervising at the workplace. The student, the employer and the Department of Applied Engineering, Safety & Technology faculty work cooperatively to assure the internship experience achieves the best possible learning value.

CLUBS AND ACTIVITIES

Association of Technology, Management and Applied Engineering (ATMAE) Student Chapter (a.k.a. MU Robotics Team)
The MU Robotics Team has earned more than 35 (1st–3rd place) awards since 2001 in national or international robotics competitions. The team boasts winning six national championships to date.

Epsilon Pi Tau (EPT) – Beta Phi Chapter. EPT 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.



2019 Intelligent Ground Vehicle Competition Robot Testing on Chryst Field.

ABOUT OUR GRADUATES

Graduates of the Robotics & Control Systems concentration are prepared to work with multiple types of technological systems in order to design, implement, prove or justify a newly automated process. The graduate may also optimize processes to increase a company's financial competitiveness. Typical entry-level professions include:

- **Process Engineers**
- **Application Engineers**
- **Controls Engineers**
- **Controls Technicians**
- **Field Engineers**
- **Manufacturing Engineers**
- **Robotics Technicians**
- **Project Managers**
- **Technical Managers**
- **Supervisors and Team Leaders**

FACILITIES

There are multiple laboratory facilities dedicated to supporting the Robotics & Control Systems concentration:

- Automation/Robotics
- CADD
- Electronics
- Energy, Power and Transportation
- Fluid Power
- Materials Processing
- Rapid Prototyping

ACCREDITATION

The Applied Engineering & Technology Management degrees are accredited by the Association of Technology Management and Applied Engineering (ATMAE).

FOR INFORMATION, CONTACT:

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