

ADVANCED MANUFACTURING ACADEMY

The Advanced Manufacturing Academy allows high school seniors to earn six college credits toward technical diplomas in **Electromechanical Maintenance Technician** and **Industrial Machine Controls**, as well as associate degrees in **Electromechanical Technology**, **IoT Integration Specialist**, and **Mechatronic & Robotic Engineering Technology**.

COURSES OFFERED

Term	Course	Credits
Fall Session	Industrial Electricity	2
Spring Session 1	Intro to Mechatronics	2
Spring Session 2	Intro to Industrial Control Systems	2
	Total Credits	6

Automation & Industrial Systems Core Course Descriptions

Intro to Mechatronics: This course introduces microprocessor-controlled electromechanical systems. Learners explore individual components, their integration into simple systems, and the role of technicians in advanced manufacturing.

Industrial Electricity: This course covers fundamental DC and AC electricity concepts for industrial control systems, including electrical measurements, circuit configurations, transformers, and proper wiring practices. Topics also include residential wiring, soldering, and de-soldering techniques.

Intro to Industrial Control Systems: Learners are introduced to industrial computer-controlled systems, exploring programming with robots and PLCs, electronic inputs/outputs, and Ethernet communication. Lab experiments demonstrate automation principles in manufacturing.

2026-2027 SCHOOL YEAR:

Location–Wanek Center of Innovation, La Crosse

Fall Session: September 8th - December 18th

Spring Session 1: January 11th – February 26th

Spring Session 2: March 8th – April 23rd

This program is perfect for hands-on, focused seniors exploring careers in Advanced Manufacturing. It accelerates degree completion while offering career pathway exploration. After completing the Academy, students can continue their education at Western or another technical college to earn a technical diploma or associate degree.

Schedule: Classes run Monday evenings, 4:30pm-8:30pm:

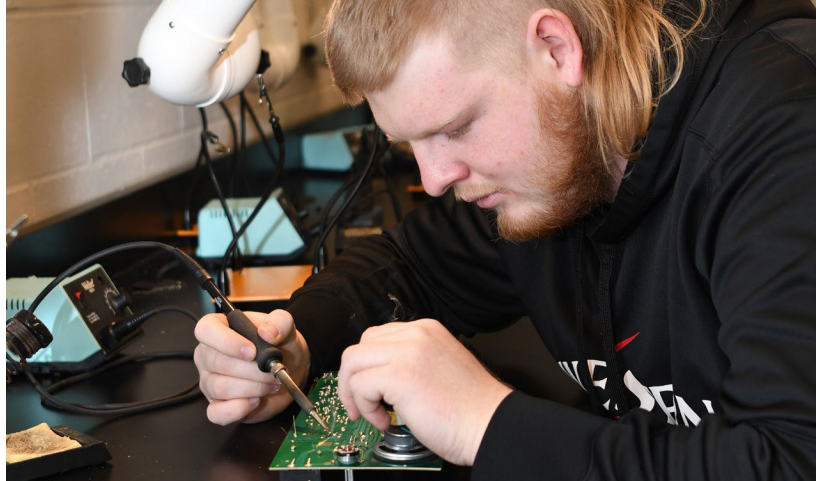
- **15 weeks:** Industrial Electricity (hands-on course)
- **7 Weeks:** Intro to Mechatronics and Intro to Industrial Control Systems (SACA credential courses)
- **Tours*:** Career pathway experiences at local manufacturing businesses

All courses take place in the state-of-the-art Wanek Center for Innovation on Western's La Crosse campus.

For More Information

Contact your high school counselor or **Haley Bahr**
Western K12 Partnership Specialist
bahrh@westerntc.edu





ADVANCED MANUFACTURING ACADEMY

SCHEDULE:

Year Long: Monday Nights

Time	Fall Session	Spring Session 1	Spring Session 2
4:00 p.m.	Travel Time	Travel Time	Travel Time
4:30 p.m.	Industrial Electricity	Intro to Mechatronics*	Intro to Industrial Control Systems*
6:00 p.m.	Hands-on Work Flexible Time	Hands-on Work Flexible Time	Hands-on Work Flexible Time
7:30 p.m.			
8:30 p.m.	Travel Time	Travel Time	Travel Time

*Smart Automation Credential Alliance (SACA) Credential Opportunity Course