A Career and Technical Education Program offered by Monroe 2-Orleans BOCES as a Locally Approved Pre-Apprenticeship Program that is part of the Advanced Manufacturing Program Cluster

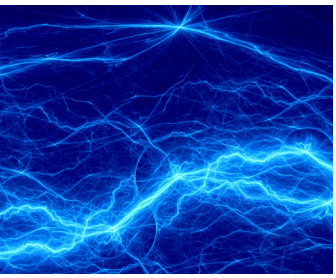
ELECTRO-MECHANICAL TRADES

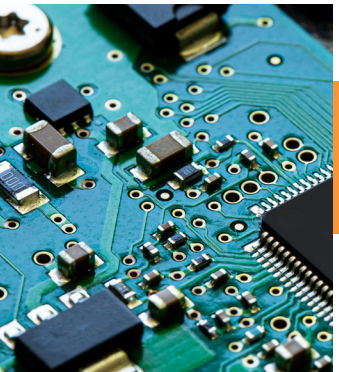
Get amped to build what runs the world

Develop career-ready skills in Electro-Mechanical Trades through a one-year program with hands-on training. Students in this program will learn electrical through how it applies to residential electronics, industrial electricity, and mechanical and robotic operations. The program explores how to read blueprints and apply that understanding to interpreting schematics and troubleshooting.









What You Can LEARN

Units of Study

- Introduction to Electro-Mechanical Systems
- Shop Safety
- Proper Tool Usage
- Pneumatics and Hydraulics
- Job Planning and Strategies
- Applied Mathematics with Trigonometry and Geometry
- Fusion Software
- Process Control and Feedback Loops
- Advanced Process Control and PLC Tuning
- Advanced Motor Control
- Wiring, Installation, Soldering and Safety
- Advance Process Control Systems Integration and Troubleshooting
- Material Properties and Processes
- Technical Print Reading with Geometric Dimensioning and Tolerancing (GD&T)
- 3-D Printing and Prototyping
- Capstone Project

What You Can EARN

Licensing/Industry-Based Certifications

Students have opportunities to earn:

- OSHA 10: Certification
- SACA - Smart Automation Certification Alliance

Work-Based Learning

- Educational Tours
- Guest Speakers
- Career Fair
- Job Shadow

Where You Can GO

Career Opportunities

- Electro-Mechanical Technician
- Field Service Technician
- PLC Programmer
- Product Support Technician
- Electro-Mechanical Assembly Technician
- Robotics and Automation Technician
- Maintenance Technician
- Electronics Repair Technician

Now You Can KNOW

According to the Bureau of Labor Statistics, employment growth of Electro-Mechanical or Mechatronic Technologists and Technicians is projected to be 1,300 openings each year from 2024-34.

Your Educational Partner of Choice BOCES 2

Monroe 2-Orleans BOCES Career and Technical Education
WEMOCO Career and Technical Education Center
3589 Big Ridge Road, Spencerport, NY 14559
(585) 352-2471 • www.monroe2boces.org/cte • @BOCES2CTE

Western Monroe & Orleans Counties WEMOCO Career & Technical Education Center