

ELECTRO-MECHANICAL AND MECHATRONICS TECHNOLOGISTS AND TECHNICIANS

ADVANCED MANUFACTURING INDUSTRY
OCCUPATION OUTLOOK IN SOUTHEAST MICHIGAN, 2023

OCCUPATION SUMMARY

Operate, test, maintain, and adjust unmanned or automated equipment, including servomechanical or electromechanical systems. Additionally, tasks may include installing or programming computer hardware or software in microprocessor-based systems, interpreting blueprints or schematics for assembly methods, and modifying, maintaining, or repairing electrical, electronic, or mechanical components to ensure proper functioning. Learn more at onetonline.org.

JOB TITLES

The Electro-Mechanical and Mechatronics Technologists and Technicians occupation refers to the entire industry in which someone works. Some examples of specific job titles for this occupation include:

- *Instrumentation Technician*
- *Robot Programmer*
- *Calibration Technician*
- *Electronics Technician*
- *Automation Technician*

AVERAGE WAGE IN MICHIGAN

	Entry	Median	Experienced
Hourly	\$19.37	\$26.24	\$38.09
Annually	\$40,290	\$54,579	\$79,227

OCCUPATIONAL GROWTH

Slight decrease projected by 2028 (-1%); 77 annual job openings are predicted.

**-1%
GROWTH
BY 2028**

Debt-free training and additional support may be available to jobseekers and those currently employed in this career

Contact your local **Michigan Works! Agency** to learn more
michiganworks.org/michigan-works-network



EARN WHILE YOU LEARN: REGISTERED APPRENTICESHIP

Employers or sponsors may provide apprenticeship opportunities, enabling individuals to acquire hands-on experience, engage in related instruction while receiving compensation. Completing a registered apprenticeship program can lead to career advancement and an average annual income of \$80,000. [Learn more.](#)

GROW A CAREER WITH ADVANCED DEGREES AND CERTIFICATES

PROFESSIONAL CERTIFICATIONS

- Automotive Service Excellence (ASE) Certification
- Advance Cardiovascular Life Support (ACLS) Certification
- Certified Loss Control Specialist
- Journeyman Electrician
- Six Sigma Black Belt
- Electrostatic Discharge Control (ESD) Certification
- Certification Board for Sterile Processing and Distribution (CBSPD) Certification
- Product Certification

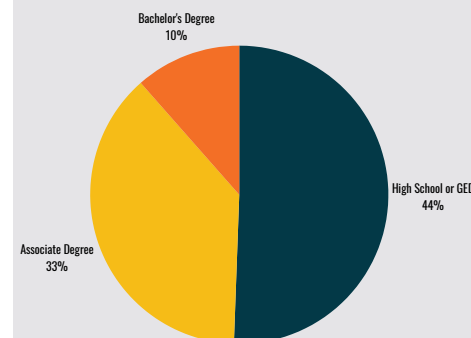
ADVANCED DEGREES AVAILABLE

(Associate, Bachelor's and Master's Degrees)

- Business Administration

EDUCATION

Percentage of Job Postings by Education Level



A POTENTIAL PATH TO SUCCESS

Explore strategies for overcoming significant factors that can impact employment by clicking [here](#). The following illustration outlines a potential career trajectory based on labor market insights within this occupation.

ENTRY LEVEL COMPETENCIES (0-2 YEARS EXPERIENCE)

Current employees who obtain training may be offered a new position, additional responsibility, and/or additional benefits.

Skills/knowledge in:

- Instrumentation
- Calibration
- Electronics
- Automation

Qualifications:

- Valid Driver's License

Skills/knowledge in:

- Programmable Logic Controllers
- Sensors
- Electrical Wiring
- Control Systems
- Microsoft Suite

Qualifications:

- Automotive Service Excellence (ASE) Certification

Skills/knowledge in:

- Machinery
- Robotics
- Test Equipment
- Welding
- Hand Tools
- Debugging
- Visual Basic (Programming Language)

Qualifications:

- Secret Clearance

MID-LEVEL COMPETENCIES (3-6 YEARS EXPERIENCE)

Continue gaining skills to stay relevant in an ever-changing ecosystem.

Skills/knowledge in:

- Tooling
- Hydraulics
- Soldering
- Technical Support
- Fanuc Controllers
- Preventive Maintenance
- Pneumatics
- Production Equipment
- LabVIEW

Skills/knowledge in:

- Human Machine Interfaces
- Project Management
- Metrology
- Electronic Components
- Electrical Systems
- Electronic Engineering
- MATLAB
- Simulink
- AutoCAD

Qualifications:

- Six Sigma Black Belt

Skills/knowledge in:

- Mechanical Engineering
- Distributed Control Systems
- Electronic Control Unit
- Engineering Drawings
- JIRA
- CANalyzer

Qualifications:

- Advanced Cardiovascular Life Support (ACLS) Certification

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