



Pathways Wisconsin
Advanced Manufacturing Technology
M7 Regional High School Career Pathway



CAREERS POSSIBLE

There are many exciting career options in Advanced Manufacturing Technology! Is this the pathway for you? Go to page two to learn how you can get started NOW!

ENTRY LEVEL POSITIONS

- Assembler
- Data Entry
- Laborer
- Material Handler
- Operator
- Packager

Credentials Needed

- Some positions require High School Diploma or GED

Median Salary: \$19,400-\$28,920

MILITARY POSITIONS

- Communications Equipment Repairers
- Computer Repairers
- Electrical Instrument and Equipment Repairers
- Machinists
- Non-Destructive Testers
- Power Plant Electricians
- Power Plant Operators
- Powerhouse Mechanics
- Precision Instrument and Equipment Repairers
- Preventive Maintenance Analysts
- Radar and Sonar System Repairers
- Survival Equipment Specialists
- Tactical Data System Repairers
- Weapons Maintenance Technicians
- Welders and Metal Workers

SKILLED POSITIONS

- **Mechatronics Technician**
- **CNC Operator** ⚙️
- **CNC Programmer** ⚙️
- **Chemical Operator**
- **Chemical Technician** ⚙️
- **Electrical/Electronics Drafter** ⚙️
- **Electromechanical Industrial Control Technician**
- **Finishing Technician**
- **Industrial Electrician**
- **Industrial Engineering Technician**
- **Industrial Machinery Mechanic** ⚙️
- **Manufacturing Technician**
- **Mechanical Designer (CAD)**
- **Mechanical Engineering Technician**
- **Metrologist**
- **Millwright**
- **Network Specialist**
- **Operation Technologist (OT)**
- **Product Lifecycle Management (PLM) Analyst**

Credentials Needed

- Completion of Industrial Apprenticeship Program, Technical Diploma or Associate Degree
- **Click here for college options**
- Some positions may also require industry certifications, field training or experience

Median Salary: \$35,580-\$53, 870

PROFESSIONAL POSITIONS

Engineer

- **Advanced Manufacturing Engineer**
- **Automation/Mechatronics Engineer** ⚙️
- **Electrical Engineer**
- **Electromechanical Engineering Technologist** ⚙️
- **Industrial Engineer** ⚙️
- **Industrial Software Engineer**
- **Metallurgist/Materials Engineer** ⚙️
- **Mechanical Engineer**
- **Network or Cybersecurity Engineer**
- **Process Engineer** ⚙️
- **Quality/Reliability Engineer** ⚙️

Manager

- **Maintenance Manager**
- **Operations Manager**
- **Project Manager**
- **Safety Manager**
- **Supply Chain Manager**

Other

- **Industrial Data Scientist**
- **System Designer**

Credentials Needed

- Completion of Associate Degree or Bachelor Degree
- **Click here for college options**
- Some positions may require an additional Graduate Level Degree

Median Salary: \$51,940-\$77,080

TOP MANUFACTURING EMPLOYMENT CATEGORIES IN WI

- Computer and Electronic Products
- Consumer Products
- Paper
- Electrical Equipment
- Plastics and Rubber Products
- Fabricated Metal Products
- Printing
- Food and Beverage
- Transportation Equipment
- Machinery
- Wood Products

Quarterly Census of
Employment and Wages -
Bureau of Labor Statistics,
Annual 2016 employment





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HIGH SCHOOL OPTIONS

High schools offering a Regional Career Pathway need to include one option from each of the four elements.
Students can get a head start in high school by completing 3 of the 4 pathway elements in a Regional Career Pathway.

To see all the POST SECONDARY OPTIONS for this pathway, click [HERE](#).

Career Awareness and Exploration Experiences

- ACE Mentor Program - Engineering
- Destination Imagination Wisconsin - STEM
- Discovery World Lab Experiences & STEMfest
- EgGs Initiative - STEM
- First Robotics
- Future City Competition
- Hour of Code
- Mad Science
- Ozaukee Co MFG Career Fair
- STEM Forward
- Waukesha Business County Alliance: Manufacturing Alliance: Schools2Skills™ Manufacturing Tours and M.A.D.E. Career Pathways Expo
- Wisconsin Manufacturing Month (October)
- Wisconsin SkillsUSA

Pre-College Programs

(Check the college website for specific programs and events)

- **Concordia University** - STEAM Camps
- **GTC** - Explore Gateway, Fab Lab, KIDS Lab, Manufacturing Expo, Middle School Expo, SUMO Bot, Summer Camps
- **MATC** - Summer Camp: Silly Boys, Manufacturing Is for Girls
- **Marquette University** - Engineering Leadership Academies & Engineering Institutes
- **MSOE** - Catalyst for Future Success Summer Program, Discover the Possibilities, Engineering Impossible, Explore Summer Programs, FIRST Robotics Immersion Programs, LAME, Focus Summer Programs, STEM Fair with Boy Scouts of America Three Harbors Council, Girl Scout STEM Day, NFPA Fluid Power Challenge
- **UW-Milwaukee** - EnQuest, FIRST Tech Challenge, Planning for the Future, Saturday Academy
- **UW-Parkside** - Lego Robotics
- **UW-Waukesha** - Youth Learning
- **WCTC** - Machining for Women: Masters of Metal, Electronics and Engineering for Women

ELEMENT 1: Sequence of Courses

- Must offer a sequence of three courses
- Course should include the **Education Building Blocks** for this pathway

ELEMENT 2: State Certified Work-Based Learning Program

Employability Skills (90 hrs)

State Skill Standards Co-Op (480 hrs/1 yr)

- **Electronics Co-Op**

Youth Apprenticeship (450-900 hrs/1-2 yrs)

- **Manufacturing Production**
- **Production Operations Management**
- **Maintenance**
- **Installation and Repair**

ELEMENT 3: College Credit Opportunities

To see a list of College Credit Opportunities for this pathway, click on the links below

- **Technical College Options:** Advanced Standing (AS), Start College Now (SCN), Transcribed Credit (TC), Vanguard
- **University Options:** Early College Credit Program (ECCP)
- **Advanced Placement (AP) and International Baccalaureate (IB) Options**

ELEMENT 4: Industry Recognized Certifications

[Certified Solidworks Associate](#)

[Lean Six Sigma](#) (ASQ)

[Manufacturing Skills Standards Council](#) (MSSC) *

- Certified Production Technician (CPT) full program or any of the modules

[NC3 Industry 4.0 and Mechatronics](#)

[OSHA 10 -General Industry Version](#)

[National Institute for Metalworking Skills](#) (NIMS)

- Industrial Technology Maintenance Level 1 (any)
- Machining Level I (any) *
- Metalforming Level I *

[Smart Automation Certification Alliance](#) (SACA)

- Associate level (any)

[Snap On](#) *

- **Precision Measurement Instruments Certification**
- **Multimeter**
- **Mechanical and Electronic Torque Certification**

[The Association for Packaging and Processing Technologies](#) (PMMI) [Mechatronics Certification](#)

*Approved for CTE Incentive Grants



State-Endorsed

NEW V1: AUG2019