



Advanced Manufacturing Career Pathway (IAC Code 15.06)
 Name of Region
 2024-2027



Educational Level (May require work experience, experience which could assist with advancement, and educational levels may vary by employer)	Production, Fabrication and Quality Assurance	Engineering, Design and Automation	Industry 4.0	Industrial Maintenance	Supply Chain	Health, Safety, and Environmental Assurance
High School Diploma/Equivalency	Engine/Machine Assembler * ● General Laborer Shipping & Receiving Clerk ● Finishing (Paint Tech, Sand/Bead Blasting) ● Packager * Assembly ● Maintenance Mechanic * ●					
Additional Training, Certification or Technical Diploma	CNC Machinist * ● Welder * ● Industrial Electrician Industrial Machinery Mechanic * Production Technician ● Quality Control Analysts ● Field Service Technician	Quality Assurance Technician ● Electronic Service Technician Solderer *	Quality Assurance Technician Solderer Robotic Welder Robotics Technician ●	Electrical Engineering Technician * ● Industrial Engineering Technician ● Industrial Maintenance Mechanic * ●	Robotics Technician ● Inventory Control Production Planner	Environmental Specialist Industrial Engineering Technician ●
Registered Apprenticeship	CNC Technician ● Electrical and Instrumentation Technician Electrical Discharge Machining Technician Industrial Electrician ● Industrial Manufacturing Technician ● Industrial Pipefitter ● Instrument Mechanic Lubrication Technician Machinist ● Machine Repairer * Maintenance Mechanic * ● Maintenance Technician ● Mechatronics Technician ● Millwright Mold Maker Sheet Metal - Industrial ● Tool Maker Tool and Die Maker ● Welder-Fabricator * Millwright/Pipefitter ● Pattern Maker					
Associate Degree (or equivalent experience)	Manufacturing Machine Operator ● CNC Programmer * ● Manufacturing Technician ● Welder * ● Millwright ● Industrial Machinery Mechanic ● Food Science Technician ● Industrial Electrician ●	Electrical Designer Mechanical Designer Electronics Technician ● CNC Programmer * ●	Integration Specialist Cybersecurity Specialist ● Electronics Engineering Technician ● Computer Network Specialist ● Manufacturing Engineer Technician ● Business Analyst ●	Maintenance Manager * Robotics Programmer ● Mechanical Engineering Technician ● Electrical Engineer Technician * ● Electro-mechanical Technician *	Logistics Analyst ● Materials Planner Materials Manager Purchasing Agent ●	Environmental Health and Safety Leader ●
Bachelor Degree and Beyond	Manufacturing Manager ● Operations Manager ● Quality Control Systems Managers ● Industrial Engineer ● Manufacturing Engineer ●	Electrical Engineer * ● Automation Engineer ● Mechanical Engineer ● Quality Assurance Engineer ● Product Designer Process Engineer Chemical Engineer ●	Data Scientist ● Quality Assurance Engineer ● Automation Leader ● Process Engineer Business Intelligence Analyst Computer Scientist ● Computer Systems Engineer	Industrial Engineer ● Manufacturing Engineer ● Electrical Engineer * ●	Buyer ● Supply Chain Analyst ● Procurement Manager ● Data Warehouse Analyst Import/Export Specialist ● Logistics Manager ●	Environmental Engineer ● Safety Team Leader ● Safety Engineer ● Ergonomist ●
Postsecondary Options	Click HERE for Postsecondary Options					

* BRIGHT OUTLOOK = these jobs are expected to grow in the future ● XELLO = you can learn more and save this job in Xello (note: some job titles might look a little different in Xello)



**Advanced Manufacturing Career Pathway (IAC Code 15.06)
In High School**



A career pathway in high school must include:

- A sequence of courses (including at least 2 CTE courses)
- Two of the following components: *Career and Technical Student Organization, Work-based Learning, Industry Recognized Credential, College Credit Opportunity*

Career and Technical Education Courses (Wisconsin Standards for Technology and Engineering)	1. 2.					
Other Recommended Courses (Wisconsin Career Readiness Standards)	1. 2.					
Career and Technical Student Organization	SkillsUSA					
Work-Based Learning Options	Employability Skills (90 hrs) Youth Apprenticeship-Manufacturing (450 hrs and 1 high school or 3 college related instruction credits/year; 1-2 years) Local Work-based Learning Programs (state quality requirements)					
Industry Recognized Credential Options <i>*This certification is eligible for reimbursement through the technical incentive grant</i> <i>Please note, some credentials may require a high school diploma and/or the student to be 18</i>	Production, Fabrication and Quality Assurance	Engineering, Design and Automation	Industry 4.0	Industrial Maintenance	Supply Chain	Health, Safety, and Environmental Assurance
	OSHA 10-General Industry Version First-Aid/CPR/AED Seal of Biliteracy (DPI) Certificate of Global Competence (DPI)					
	<p align="center">Technical Incentive Grant Certifications (these are eligible for reimbursement): Could align to more than one sector</p> <ul style="list-style-type: none"> • American Welding Society: Level 1 SENSE/Entry Welder* • Haas: CNC Certification* • Manufacturing Skills Standards Council Certified Production Technician (CPT: Full program*, Green Production*, Maintenance Awareness*, Manufacturing Processes & Production*, Quality Practices & Measurement*, Safety Module* • National Institute for Metalworking Skills (NIMS): Any Industrial Technology Maintenance Level 1 certification*, Any Machining Level 1 or 2 certification* • FANUC: Certified Robot Operator 1* • Smart Automation Certification Alliance Certified Industry 4.0 Associate: Basic Operations*, Advanced Operation*, Robot Systems*, IoT and Data Analytics* • Snap-on via NC3 certification (Snap-on - PMI (Precision Measurement Instruments)* Snap-on - Or any two other certifications*) • SolidWorks (Certified SolidWorks Associate, Certified SolidWorks Professional)* • Certiport ITS Network Security* • CompTIA Security+* 					
<ul style="list-style-type: none"> • ASQ Certifications <ul style="list-style-type: none"> ○ Certified Quality Technician ○ Certified Quality Inspector • WCA Sawblade • Autodesk Inventor • Soldering Certification 		<ul style="list-style-type: none"> • Certified Production Technician (CPT) 4.0 	<ul style="list-style-type: none"> • Vibration Analysis Certification • Arc Flash (OSHA) • Robotics Certification • Maintenance Certification 	<ul style="list-style-type: none"> • Microsoft Excel • Association for Supply Chain Management (ASCM) <ul style="list-style-type: none"> ○ CPIM- Certified in Planning and Inventory Management ○ CSCP- Certified Supply Chain Professional ○ CLTD- Certified in Logistics, Transportation and Distribution ○ CTSC- Certified in Transformation for Supply Chain • Lean Six Sigma • Forklift/Crane Certification (OSHA) (must be 18) 		
College Credit Opportunities	You can find the list of college credit opportunities HERE (Identify the school and then click "college credit opportunities")					

Check out Career Pathway Resources and Exploration Opportunities [HERE](#)

**Advanced Manufacturing Career Pathway (IAC Code 15.06)
At (Insert Name of High School)**



A career pathway in high school must include:

- A sequence of courses (including at least 2 CTE courses)
- Two of the following components: *Career and Technical Student Organization, Work-based Learning, Industry Recognized Credential, College Credit Opportunity*

Career and Technical Education Courses (Wisconsin Standards for Technology and Engineering)	<ul style="list-style-type: none"> • CTE Course #1 • CTE Course #2 												
Other Recommended Courses (Wisconsin Career Readiness Standards)	<ul style="list-style-type: none"> • Course #1 • Course #2 												
Career and Technical Student Organization	<ul style="list-style-type: none"> • Name of CTSO 												
Work-Based Learning Options	<ul style="list-style-type: none"> • WBL Option #1 • WBL Option #2 												
Industry Recognized Credential Options	Production, Fabrication and Quality Assurance	Engineering, Design and Automation	Industry 4.0	Industrial Maintenance	Supply Chain	Health, Safety, and Environmental Assurance							
	IRC Name/link #1 IRC Name/link #2												
	IRC Name/link #1 IRC Name/link #2 IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2 IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2 IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2 IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2 IRC Name/link #1 IRC Name/link #2	IRC Name/link #1 IRC Name/link #2 IRC Name/link #1 IRC Name/link #2							
College Credit Opportunities <small>(You can find the list of college credit opportunities HERE. Identify the school and then click "college credit opportunities")</small>	College Courses Offered at Your High School												
	Transcripted Credit <ul style="list-style-type: none"> • Name of HS Course #1, IHE granting credit • Name of HS Course #2, IHE granting credit 			AP and/or IB Courses <table border="0"> <tr> <td>Name of AP/IB Course #1</td> <td>Name of AP/IB Course #2</td> </tr> <tr> <td>- Score, College, Course</td> <td>- Score, College, Course</td> </tr> <tr> <td>- Score, College, Course</td> <td>- Score, College, Course</td> </tr> </table>			Name of AP/IB Course #1	Name of AP/IB Course #2	- Score, College, Course	- Score, College, Course	- Score, College, Course	- Score, College, Course	
	Name of AP/IB Course #1	Name of AP/IB Course #2											
	- Score, College, Course	- Score, College, Course											
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College Courses You Can Take at a College Campus													
Application Deadlines: <table border="0"> <tr> <td align="center">October 1st: Spring Courses</td> <td align="center">February 1st: Summer Courses (ECCP only)</td> <td align="center">March 1st: Fall Courses</td> </tr> </table>						October 1st: Spring Courses	February 1st: Summer Courses (ECCP only)	March 1st: Fall Courses					
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Start College Now <ul style="list-style-type: none"> • Name of College #1, College Course #1 • Name of College #1, College Course #2 • Name of College #2, College Course #1 • Name of College #2, College Course #2 			Early College Credit Program <table border="0"> <tr> <td>- Name of College #1, College Course #1</td> <td>- Name of College #1, College Course #2</td> </tr> <tr> <td>- Name of College #2, College Course #1</td> <td>- Name of College #2, College Course #2</td> </tr> <tr> <td>- Name of College #3, College Course #1</td> <td>- Name of College #3, College Course #2</td> </tr> <tr> <td>- Name of College #4, College Course #1</td> <td>- Name of College #4, College Course #2</td> </tr> </table>			- Name of College #1, College Course #1	- Name of College #1, College Course #2	- Name of College #2, College Course #1	- Name of College #2, College Course #2	- Name of College #3, College Course #1	- Name of College #3, College Course #2	- Name of College #4, College Course #1	- Name of College #4, College Course #2
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