



Advanced Manufacturing Career Pathway

New North 2020-2021



EXPLORE: Click on the links to find the job titles that seem most interesting to you to learn more! Save any jobs you are interested in from this career pathway in your XELLO account so that you can create an Academic and Career Plan (ACP) later on.

Educational Level May also require work experience	Production	Engineering and Design	Industry 4.0	Electro-Mechanical	Supply Chain
High School Diploma,	Engine/Machine Assembler <input type="radio"/> , Data Entry Clerk <input type="radio"/> , General Laborer , Packager Material Handler Range \$23,750-\$50,130				
Certificates	Operator	CAD Drafter	Robotic Welder *	Electronics Technician <input type="radio"/> *	Shipping & Receiving Clerk
Technical Diploma	Paint Technician * Food Processing Operator Welder * Sheet Metal Worker <input type="radio"/> * Production Technician * Range \$27,300-\$66,380	Quality Assurance Technician * Mold Technician * Range \$29,730-\$76,570	Quality Controller <input type="radio"/> * Robotics Technician * Range \$32,010-79,800	Electrical Engineering Tech <input type="radio"/> * Industrial Engineering Tech <input type="radio"/> * Industrial Maintenance Mechanic <input type="radio"/> * Range \$36,480-88,050	Robotics and Material Handler Technician Inventory Control * Range \$24,340-\$56,800
Registered Apprenticeship	Industrial Pipefitter * Tool and Die Maker * Pattern Maker Machinist <input type="radio"/> * Range \$32,930-\$83,680	Mold Maker Range \$24,400-52,570	Electrical Discharge Machining Technician Range \$39,190-\$96,690	Millwright <input type="radio"/> * CNC Technician * Industrial Electrician * Industrial Machinery Technician <input type="radio"/> Maintenance Mechanic <input type="radio"/> * Mechatronics Technician * Range \$33,940-\$83,950	
Associate Degree	CNC Programmer <input type="radio"/> * CNC Machine Operator <input type="radio"/> * Range \$26,400-57,800	Mechanical Designer (CAD) <input type="radio"/> * Range \$36,300-92,000	Electronics Engineering Tech <input type="radio"/> Computer Network Specialist <input type="radio"/> Manufacturing Engineer Tech Business Analyst * Chemical Engineering Tech <input type="radio"/> Range \$39,400-105,780	Mechanical Engineering Technician Electrical Engineer Technician Electro-mechanical Technician Range \$36,700-93,000	Buyer Production Planner Logistics Analyst Range \$37,500-101,300
Bachelor Degree and beyond	Manufacturing Manager <input type="radio"/> * Operations Manager Range \$55,000-192,000	Electrical Engineer <input type="radio"/> Mechanical Engineer <input type="radio"/> Environmental Engineer <input type="radio"/> Quality Controller <input type="radio"/> * Range \$51,240-129,420	Process Engineer/Systems Engineer * Business Intelligence Analyst Chemical Engineer Computer Scientist <input type="radio"/> * Range \$61,660-165,487	Industrial Engineer <input type="radio"/> * Manufacturing Engineer * Electromechanical Engineering Technologist <input type="radio"/> Range \$60,150-145,000	Supply Chain Analyst Procurement Manager * Data Warehouse Analyst * Range \$59,700-167,186
Postsecondary Options	Click HERE for Postsecondary Options	Click HERE for Postsecondary Options	Click HERE for Postsecondary Options	Click HERE for Postsecondary Options	Click HERE for Postsecondary Options

* **BRIGHT OUTLOOK** = these jobs are expected to grow in the future – which means more opportunities for you!



Career and Technical Education Courses	<ul style="list-style-type: none"> Materials & Processes Exploring Robotics & Automation Electricity, Electronics & Automation Metals Fab Lab 	Start creating your professional network through CAREER EXPLORATION PROGRAMS . Record your experiences in XELLO.
Other Recommended Courses	<ul style="list-style-type: none"> Advanced Metals Fab Lab Red Raider Manufacturing 	<u>Regional:</u> <ul style="list-style-type: none"> Virtual Career Events First Robotics Hour of Code Wisconsin Manufacturing Month LTC Summer Camps Moraine Park Summer Manufacturing Bootcamp UWGB Summer Camps NWTC Career Events
Career and Technical Student Organization	<ul style="list-style-type: none"> Red Raider Robotics 	
Work-Based Learning Options	<ul style="list-style-type: none"> Employability Skills (90 hrs) Youth Apprenticeship-Manufacturing (450 hrs/year; 1-2 years) Local Internship/Local Work-based Learning Programs that meet state quality requirements Technology Education Co-op – This is a year course, semester divided, open to all students enrolled in an advanced technology education course. An average of 5-15 hours of work weekly with a local industry (work station) is required. Student placement is dependent upon student interviews and the availability of workstations. Industrial Equipment Youth Apprenticeship – For students focused on a career in industrial maintenance. Students apply through their counselor in early March of their sophomore or junior year and attend three Lakeshore Technical College courses (4 college credits) that align with their paid work experience. Transportation must be available for travel to work site and LTC campus. A mentor is assigned to the student at the job site. Manufacturing/Machining Youth Apprenticeship – For students focused on a career in computer numerical control (CNC) machining. Students apply through their counselor in early March of their sophomore year and attend four Lakeshore Technical College courses that align with their paid work experience. Transportation must be available for travel to work site and LTC campus. A mentor is assigned to the student at the job site. Welding Youth Apprenticeship – For students focused on a career in welding. Students apply through their counselor in early March of their sophomore or junior year and attend four Lakeshore Technical College courses (4 college credits) that align with their paid work experience. Transportation must be available for travel to work site and LTC campus. A mentor is assigned to the student at the job site. 	<u>Local:</u> <ul style="list-style-type: none"> LTC Manufacturing Rocks Inspire Sheboygan County

Industry Recognized Credential Options <i>Italics = must be 18 years old to obtain</i> <i>*This certification is eligible for reimbursement through the technical incentive grant.</i>	Production	Engineering and Design	Industry 4.0	Electro-Mechanical	Supply Chain
	<u>OSHA 10-General Industry Version</u>				
	American Welding Society (AWS) Level 1 Entry Welder * Manufacturing Skills Standards Council-Certified Production Technician (full program or any of the modules) * National Institute for Metal Working Skills (NIMS)- <ul style="list-style-type: none"> Industrial Technology Maintenance Level 1 Machining Level * Metalforming Level 1* 	NC3 Snap-on Multimeter The Association for Packaging and Processing Technologies Mechatronics Certification Certified Solidworks Associate Snap On-Precision Measurement Instruments Multimeter, Mechanical and Electronic Torque Certification *	Smart Automation Certification Alliance (SACA)-Associate Level NC3 Industry 4.0 and Mechatronics NC3 Snap-on Torque	NC3 Industry 4.0 and Mechatronics NC3 Snap-on Torque NC3 Snap-on Multimeter	Lean Six Sigma (ASQ) MSSC-Certified Logistics Technician (CLT)

College Credit Opportunities You can find the list of college credit opportunities included in the postsecondary options for this pathway HERE	College Courses Offered at Your High School		
	<ul style="list-style-type: none"> Lakeshore Technical College, Metals FabLab 1 Lakeshore Technical College, Metals FabLab 2 Lakeshore Technical College, Manufacturing Math 	<ul style="list-style-type: none"> Lakeshore Technical College, Advanced Metals FabLab 1 Lakeshore Technical College, Advanced Metals FabLab 2 	
	College Courses You Can Take at a College Campus		
	Application Deadlines:		
October 1st: Spring Courses			
February 1st: Summer Courses (ECCP only)			
March 1st: Fall Courses			
Start College Now <ul style="list-style-type: none"> Lakeshore Technical College, Welding Introduction Lakeshore Technical College, DC Fundamentals Lakeshore Technical College, Welding Math 1 	Early College Credit Program <ul style="list-style-type: none"> University of Wisconsin-Green Bay, Parametric Modeling University of Wisconsin-Green Bay, Engineering Materials University of Wisconsin-Green Bay, Mechanics I 		