



OUR MISSION

The regional collaboratives adopt, implement, promote, and monitor high school career pathways in high-skill, in-demand industry sectors. They act as an advisory group, on behalf of regional districts, to identify and overcome barriers that prevent students in the region from accessing the pathway. An example of such a barrier may include college curriculum that is not aligned with the career pathway. In addition, the collaborative provides the means necessary for students to participate and complete a pathway by:



Taking a sequence of aligned courses,



Earning an industry-recognized credential,



Enrolling in dual college credit classes,



Participating in career-based and work-based learning experiences, and



Accessing related Career and Technical Education (CTE) student organizations

WHY JOIN A PATHWAY?

- For high school students, regional career pathways align education and training with the needs of the local job market, provide a range of postsecondary options, result in a high school diploma with at least one industry-recognized credential, and help students enter or advance within an occupation.
- For schools, career pathways provide a specific ACP plan for occupations that are in demand in Wisconsin. This allows schools to focus on student and curriculum activities with input and support from regional employers and higher education.
- For employers, regional career pathways make partnerships with a greater number of schools possible. This allows employers to shape the future talent pipeline, foster young talent, and highlight local career opportunities across an entire region.



CONTACT

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LET'S EXPLORE...

Advanced Manufacturing

A REGIONAL CAREER PATHWAY
DEVELOPED BY THE GREAT NORTHWEST
COLLABORATIVE AND APPROVED BY THE
DEPARTMENT OF PUBLIC INSTRUCTION



WHAT IS ADVANCED MANUFACTURING?

The term "advanced manufacturing technology" has been coined for this particular pathway to encompass the rapidly changing nature of this industry. In its simplest definition, manufacturing takes in raw materials to produce products that are useful for a customer. Advanced manufacturing builds on this definition by utilizing technology to improve products or processes; thereby increasing efficiency, reliability, and quality for newer and better products.

WHY ADVANCED MANUFACTURING IN HIGH SCHOOL...

Advanced Manufacturing Career Pathway The Great Northwest 2021-2022					
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. Salary range reflects from no experience through 30+ years experience.	Production	Engineering and Design	Industry 4.0	Electro-Mechanical	Supply Chain
High School Diploma	Enline/Machine Assembler Data Entry Clerk General Laborer Shelving & Receiving Clerk Packager Range \$17,060-\$83,160				
Certification or Technical Diploma	Paint Technician Food Processing Operator Welder Semi-Conductor Technician Production Technician Range \$17,890-\$78,800	CAD Drafter Quality Assurance Technician Range \$27,390-\$59,210	Robotic Welder Quality Controller Robotics Technician Range \$25,460-\$56,600	Electrical Engineering Tech Industrial Engineering Tech Mechanics Range \$22,090-\$46,650	Robotics and Material Handler/Technician Inventory Control Range \$22,970-\$54,670
Registered Apprenticeship	Industrial Plasterer Tool and Die Maker Pattern Maker Mechanical Machinist Range \$22,380-\$64,780		Electrical Discharge Machine Technician Range \$26,740-\$93,050	Millwright CNC Technician Industrial Electrician Industrial Machinery Technician Maintenance Mechanic Mechanics Technician Range \$22,090-\$42,910	
Associate Degree	Manufacture Machine Operator Range \$41,730-\$80,560	Drafter Range \$28,180-\$75,670	Electronics Engineering Tech Computer Network Specialist Manufacturing Engineer/Tech Business Analyst Chemical Engineering Tech Range \$27,560-\$76,000	Mechanical Engineering Technician Electrical Engineer/Technician Electro-mechanical Technician Range \$43,400-\$87,770	Buyer Production Planner Logistics Analyst Range \$23,270-\$95,970
Bachelor Degree and beyond	Manufacturing Manager Operations Manager Range \$35,220-\$94,110	Electrical Engineer Mechanical Engineer Environmental Engineer Quality Control Range \$32,100-\$105,999	Process Engineer Multimedia Information Analyst Chemical Engineer Computer Scientist Range \$30,640-\$76,000	Industrial Engineer Mechanical Engineer Electrical Engineer Range \$31,780-\$63,000	Supply Chain Analyst Procurement Manager Data Warehouse Analyst Range \$31,790-\$76,230
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!
XELLO = you can learn more and save this job in your Xello account (note: some job titles might look a little different in Xello)

The image to the left shows the first page of a pathway map. It explains different career paths within manufacturing, level of education needed, salary range, high demand jobs, and each is linked to more career information.

Advanced Manufacturing Career Pathway In High School					
A career pathway in high school must include: <ul style="list-style-type: none"> A sequence of courses (including at least 5 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	Must include a sequence of at least TWO Career and Technical Education courses. Should align with Education Building Blocks for the pathway: <ul style="list-style-type: none"> 				CAREER EXPLORATION PROGRAMS
Relevant Academic Courses	Should align with Education Building Blocks for this pathway:				Regional: <ul style="list-style-type: none"> Local: <ul style="list-style-type: none">
Career and Technical Student Organization	SkillsUSA EFA FBLA DECA				
Work-Based Learning Program 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 				
Industry Recognized Credential Options	Production	Engineering and Design	Industry 4.0	Electro-Mechanical	Supply Chain
Learn the skills that employers want to see! *This certification is eligible for reimbursement through the technical incentive grant	OSHA 10 General Industry Version				
	American Welding Society (AWS) Level 1 Entry Welder Manufacturing Skills Standards Council's 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 1 Metforming Level 1 	The Association for Packaging and Processing Technologies (ATPT) Certified Solidworks Associate Sigma Six Precision Measurement Instruments, Multimeter, Mechanical and Electronic Tester Certification	Smart Automation Certification Alliance (SACA) Associate Level NCI Industry 4.0 and Mechatronics	NCI Industry 4.0 and Mechatronics	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 .				

2021-2022

The image to the left shows the second page of a pathway map. It shows what courses are available in your school district. It also shows internships, work-based learning opportunities and industry-recognized credentials that are available.