



Advanced Manufacturing Career Pathway

<Name of Region>
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, Certification	Engine/Machine Assembler ○, Data Entry Clerk ○, General Laborer , Shipping & Receiving Clerk ○, Packager Range \$xxx,xxx-xxx,xxx				
Certification or Technical Diploma	Paint Technician * Food Processing Operator Welder * Sheet Metal Worker ○* Production Technician * Range \$xxx,xxx-xxx,xxx	CAD Drafter Quality Assurance Technician * Range \$xxx,xxx-xxx,xxx	Robotic Welder * Quality Controller ○* Robotics Technician * Range \$xxx,xxx-xxx,xxx	Electrical Engineering Tech ○* Industrial Engineering Tech ○* Industrial Maintenance Mechanic ○* Range \$xxx,xxx-xxx,xxx	Robotics and Material Handler Technician Inventory Control * Range \$xxx,xxx-xxx,xxx
Registered Apprenticeship	Industrial Pipefitter * Tool and Die Maker * Pattern Maker Machinist ○* Mold Maker Range \$xxx,xxx-xxx,xxx		Electrical Discharge Machining Technician Range \$xxx,xxx-xxx,xxx	Millwright ○* CNC Technician * Industrial Electrician * Industrial Machinery Technician ○ Maintenance Mechanic ○* Mechatronics Technician * Range \$xxx,xxx-xxx,xxx	
Associate Degree	Manufacturing Machine Operator ○* Range \$xxx,xxx-xxx,xxx	Drafter ○* Range \$xxx,xxx-xxx,xxx	Electronics Engineering Tech ○ Computer Network Specialist ○ Manufacturing Engineer Tech Business Analyst * Chemical Engineering Tech ○ Range \$xxx,xxx-xxx,xxx	Mechanical Engineering Technician Electrical Engineer Technician Electro-mechanical Technician Range \$xxx,xxx-xxx,xxx	Buyer Production Planner Logistics Analyst Range \$xxx,xxx-xxx,xxx
Bachelor Degree and beyond	Manufacturing Manager ○* Operations Manager Range \$xxx,xxx-xxx,xxx	Electrical Engineer ○ Mechanical Engineer ○ Environmental Engineer ○ Quality Controller ○* Range \$xxx,xxx-xxx,xxx	Process Engineer * Business Intelligence Analyst Chemical Engineer Computer Scientist ○* Range \$xxx,xxx-xxx,xxx	Industrial Engineer ○* Manufacturing Engineer * Electrical Engineer ○ Range \$xxx,xxx-xxx,xxx	Supply Chain Analyst Procurement Manager Data Warehouse Analyst * Range \$xxx,xxx-xxx,xxx
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)



Advanced Manufacturing Career Pathway 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	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
Additional Employer Recommended Courses	Should align with Education Building Blocks for this pathway: <ul style="list-style-type: none"> • • 				Regional: <ul style="list-style-type: none"> • •
Career and Technical Student Organization	SkillsUSA				Local: <ul style="list-style-type: none"> • •
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 				
	Production	Engineering and Design	Industry 4.0	Electro-Mechanical	Supply Chain
Industry Recognized Credential Options Learn the skills that employers want to see! <i>Italics = must be 18 years old to obtain</i> <i>*This certification is eligible for reimbursement through the technical incentive grant</i>	<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 * 	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 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 .				