

Career Pathways & Registered Apprenticeships

Finding skilled workers is difficult and retaining them can be just as challenging. Workforce shortages, skill gaps, and turnover can slow productivity and limit growth.

Career Pathways, part of a comprehensive Talent Pipeline strategy, help manufacturers attract, develop, and retain talent through structured training aligned to real manufacturing roles. These pathways provide clear advancement opportunities for employees while strengthening workforce stability and performance.



**BUILD
YOUR
TEAM**

At the core are U.S. Department of Labor Registered Apprenticeships, an earn-while-you-learn model that combines on-the-job training with related technical instruction. Apprentices build practical, in-demand skills while contributing to operations from day one, ensuring training is directly tied to business needs.

Working with an apprenticeship partner simplifies implementation by providing guidance, administrative support, and access to funding opportunities. The result is a cost-effective way to build a reliable talent pipeline, improve retention, and develop a future-ready workforce.



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Apprenticeship Programs Available



Position	Description	Duration
Additive Manufacturing Technician	Maintain and repair additive manufacturing and 3-D printing equipment, ensuring the productivity and safety of the entire production team.	2 years
CNC Machine Operator	Operate computer-controlled tools, machines, or robots to machine or process parts, tools, or other work pieces.	1 year
CNC Set-Up Programmer	Develop programs to control machining or processing of materials by automatic machine tools, equipment, or systems. Also set up, operate, or maintain equipment.	4 years
Fabricator	Fabricate, position, align, and fit parts of structural metal products using hand tools and machines. Design and construct templates and fixtures. Verify conformance of workpieces to specifications.	4 years
Industrial Engineering Technician	Apply engineering theory and principles to problems of industrial layout or manufacturing production, usually under the direction of engineering staff.	2-3 years
Industrial Maintenance Mechanic	Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems. Install, dismantle, or move machinery and heavy equipment according to plans.	3 years
Industrial Manufacturing Technician	Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications, while also using precision measuring instruments and complex test equipment.	2 years
Plastic Process Technician	Set up, operate, monitor, and troubleshoot plastic injection molding, casting, or core-making machines to mold or cast thermoplastic parts or products.	3-4 years



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Apprenticeship Programs Available



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Quality Control Inspector	Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications. Use precision measuring instruments and complex test equipment.	2 years
Robotics Technician	Build, install, test, or maintain robotic equipment or related automated production systems.	2 years
Tool and Die Maker	Analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinists' hand tools.	4 years
Welder	Use hand-welding, flame-cutting, hand-soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.	3 years
Woodworking Manufacturing Specialist	Set up, operate, or tend woodworking machines, such as drill presses, lathes, shapers, routers, sanders, planers wood nailing machines, and CNC equipment.	2 years
Electrical and Electronic Engineering Technician	Develop communications equipment, computers, medical monitoring devices, or other equipment that is powered by other electricity or electric current. Work in product evaluation and testing, using measuring and diagnostic devices to test, adjust, and repair equipment.	2 years
Electrical and Electronic Equipment Assembly Technician	Assemble or modify electrical or electronic equipment, such as computers, test equipment telemetering systems, electric motors, and batteries.	2 years



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Apprenticeship Programs Available



Position	Description	Duration
Electromechanical and Mechatronics Technician	Operate, test, maintain, or adjust unmanned, automated, servo-mechanical, or electromechanical equipment. May operate unmanned submarines, aircraft, or other equipment to observe or record visual information at sites such as oil rigs, crop fields, buildings, or for similar infrastructure, deep ocean exploration, or hazardous waste removal. May assist engineers in testing and designing robotics equipment.	2 years
Energy Storage Technician	Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, adjust, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions.	1 year
Electrical and Electronic Equipment Assembler	Assemble or modify electrical or electronic equipment, such as computers, test equipment telemetering systems, electric motors, and batteries.	1 year
Customer Service Representative	Provide customer support by responding to inquiries, processing orders and payments, maintaining accurate account records, resolving service or billing issues, promoting products or services, and referring unresolved concerns to appropriate personnel.	2 years
Machinist	Set up and operate a variety of machine tools to produce precision parts and instruments out of metal. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, mathematics, metal properties, layout, and machining procedures.	4 year
Industrial Production Supervisor	Plan, direct, or coordinate operations and functionalities of facilities and buildings. May include surrounding grounds or multiple facilities of an organization's campus.	2 year



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IMEC Apprenticeship Opportunities.

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