

Manufacturing

Industry Snapshot



Traditional ideas about manufacturing have changed. More and more, manufacturing jobs are high-tech oriented, and workers who have current industry skills are more likely to maintain employment. Wages in manufacturing are among the highest for all areas of industry.

In the Phoenix area, some manufacturing jobs pay 10 to 50 percent above the average wage compared to other jobs in the region. Manufacturing jobs are also in demand. Many manufacturing employers suffer shortages of skilled workers, and retiring Baby Boomers will only increase employment demand. Computer equipment, aerospace, and electronic instruments are some of the largest manufacturing sectors in Greater Phoenix.

Essential Industry Skills

For anyone who plans to enter the job market in this field, a strong knowledge base in English, math, and physics, along with operation monitoring, quality control, and trouble-shooting skills are a must.

High school students should meet with an advisor/counselor to create an appropriate career action plan that may include high school classes in:

- Physics
- Engineering Science
- Drafting
- Welding
- Precision Manufacturing

Source: O*NET & Western Maricopa Tech Prep Consortium

Occupation	Annual Entry-Level Wage Range*	Typical Training Required
Computer Numerically Controlled Machine Tool Programmers	\$39,490 - \$64,680	On-the-Job or Community College Training
Computer-controlled Machine Tool Operators	\$22,340 - \$38,520	On-the Job or Community College Training
Industrial Engineering Technicians	\$28,580 - \$48,740	Associate's Degree
Machinists	\$23,830 - \$39,380	On-the-Job or Community College Training
Welders, Cutters, Solderers, & Brazers	\$24,700 - \$34,770	On-the-Job or Community College Training

*Source: U.S. Bureau of Labor Statistics, 2010

Manufacturing Programs at the Maricopa Community Colleges

Program	College/Skill Center	Program	College/Skill Center
ELECTRONICS/ELECTRICAL TECHNOLOGY		Machining I	
Automation Technology	Estrella Mountain, GateWay, Mesa	Machining II	Mesa
Automation Technology Level I	Estrella Mountain, GateWay, Mesa	Manual Machinist	Maricopa Skill Center
Automation Technology Level II	GateWay	Manufacturing Management	Mesa
Automation Technology Level III	GateWay	Manufacturing Productivity - CNC CAD/CAM Programming	GateWay
Computer & Networking Technology	Glendale	Manufacturing Productivity - Conventional Machines Level I	GateWay
Electrical Technology	GateWay	Manufacturing Productivity - Conventional Machines Level II	GateWay
Electric Utility Technology	Chandler-Gilbert	Manufacturing Productivity - Engineering Graphics	GateWay
Electric Utility Design Technology	Chandler-Gilbert	Manufacturing Productivity - Process Improvement	GateWay
Electromechanical Automation Technology	Mesa	Manufacturing Productivity - Team Leadership	GateWay
Electronics Manufacturing Technology	Glendale	Manufacturing Welding	Mesa
Electronics Technology	Mesa	Mechanical Drafting	Mesa
Meter Technology	Chandler-Gilbert	Microcircuit Mask Design	Mesa
Network Maintenance	Glendale	Microcomputer Servicing	Glendale
Telecommunications Technology	South Mountain	Production Technology	Mesa
ENGINEERING		Production Technology - CNC Technology	GateWay
Electronics Engineering Technology	Mesa	Production Technology - Quality Assurance	GateWay
Engineering Technology	Chandler-Gilbert, Estrella Mountain, Glendale	WELDING TECHNOLOGY	
Manufacturing Engineering Technology	Mesa	Arc Welder	Maricopa Skill Center
MANUFACTURING AND DRAFTING		Combination Welder - 2 Process	Maricopa Skill Center
Basic CAD	Glendale	Combination Welder - 3 Process	Maricopa Skill Center
CAD Application	Glendale	Combination Welder - 3 Process with Intro to Pipe Welding	Maricopa Skill Center
CAD Technology	Glendale	Combination Welder - 4 Process	Maricopa Skill Center
CAD/CAM/CNC I	Mesa	Flux Core Welder	Maricopa Skill Center
CAD/CAM/CNC II	Mesa	MIG Welder	Maricopa Skill Center
CAD-BIM Technology	Phoenix	TIG Welder/TIG Fingertip Welder	Maricopa Skill Center
CNC Machinist	Maricopa Skill Center	Welding	Mesa
Commercial Drafting CADD Level II	Mesa		
Computer Aided Design & Drafting CADD Level I	Mesa		
Computer-Aided Drafting	Mesa		
Electromechanical Drafting	Mesa		
Electromechanical Manufacturing Technology	Mesa		
Industrial Design Technology	GateWay		
Industrial Design Technology - Design Specialist - SolidWorks	GateWay		

Source: <http://www.maricopa.edu/academic/ccta/curric/index.php>

