



Manufacturing

Learn how to map your career and find path to success!



Manufacturing Engineering Technology

Manufacturing pays well!

Manufacturing is still an important industry. While some people think of manufacturing as offering low-skill, entry-level jobs, they couldn't be more wrong. This is a high-tech, advanced industry requiring skilled and talented people who need to keep learning throughout their careers to keep up with technology.

In fact, many manufacturers in the U.S. report that they can't find the skilled employees they need! This means **opportunities** for high-paying jobs, many of which offer on-the-job-training. A machinist, for example, can make up to \$35 an hour.

Manufacturing jobs are available at the entry level for people without specialized skills. However, jobs paying more than minimum wage usually require training. Some skills you can learn on the job, but a position as an engineer or technician may require a certificate or degree.

How to learn more:

- Explore this and other industries at www.nvcis.intocareers.org
- Find out if a job will pay your bills using the Reality Check at www.nvcis.intocareers.org
- Search for all the training programs in Nevada, schools and other information regarding career or education options in Nevada by exploring <http://www.nevadayouth.org/>

How do I get started in Manufacturing?

- » Keep your grades up in high school. Take math, science, computer and English classes.
- » Explore careers you might be interested in at Connect with NCIS at www.nvcis.intocareers.org
- » Explore careers and employment possibilities at www.NevadaYouth.org.
- » Do you know anyone who works in Manufacturing? Interview him/her and ask if you can visit his/her workplace.
- » Make a plan based on your interests. How much training do different jobs require? Where can you find the training you need? How will you pay for it? What steps can you take to get you closer to your goal?

Career Paths in Manufacturing

Education Level	Hourly Wage Ranges* (25 th – 75 th percentile)	Electronic Engineering and Electronic Technology	Mechanical & Machine Tool Technology	Metalworking & Welding Technology	Mechanical Engineering and Drafting and Design
HIGH LEVEL	Manufacturing Engineer \$29.28 - \$53.52	Electronic Engineers, Electrical Engineers	Manufacturing Engineer, Mechanical Engineer, Industrial Engineer	Welding Engineers, Materials/Metallurgical Engineer, Metallurgist	Design Engineer, Industrial Engineer, Manufacturing Engineer
MID LEVEL	Manufacturing Engineering Technologist \$19.90 - \$34.33	Communication Systems Technician, Electrical Equipment Technician, Industrial Electronic Technician	Calibration Technician, Instrument Control Technician, Industrial Manufacturing Tech., Machinist, Automation Technician	Welding Technicians, Welding Inspectors, Sheet Metal Workers, Pipe Fitters, Boilermakers	Drafters, Process Improvement Technician
ENTRY LEVEL	Welding Machine Operators \$15.32 - \$21.96	Industrial Electronic Repairers, Electrician Helpers	Machinery Mechanics, Millwright, Machine Operator, Assembler, CNC Machinist, Tool & Die Maker	Welders, Welding Machine Operators, Metal Workers, Foundry Workers, Tool & Die Makers	Precision Inspector, Tester, and Grader

*For info on wage ranges visit – Nevada Workforce Informer at <https://nvcis.intocareers.org>

Note: the colors for career path aligns with the CTE classes available in the school.

Our mission is to provide Nevada's businesses with access to a qualified workforce and encourage equal employment opportunities.



Manufacturing

Learn how to map your education and find path to success!

Classes to take for different Programs of Study in Manufacturing:

High School	9 th Grade	10 th Grade	11 th Grade	12 th Grade	Post Secondary
» Base course schedule that students will take in high school:	English I	English II	English III	English IV	College of Southern Nevada Great Basin College Nevada State College Truckee Meadows Community College University of Nevada, Las Vegas University of Nevada, Reno Western Nevada College
	Algebra I	Geometry	Algebra II	Senior Level Math Course	
	Biology	Chemistry or Geoscience	Junior Level Science Course	Elective	
	Health / Computer Literacy	World History	US History	US Government	
	Physical Education	Physical Education	Foreign Language or Elective	Foreign Language or Elective	

» Recommended classes for selected career paths in Manufacturing:

Industry Recognized Certifications:

Electronic Technology:	Electronic Technology I	Electronic Technology II	Electronic Technology III	Electronic Technology Adv. Studies	Career Safe (OSHA), J-STD-001 (IPC Cert.), Student Electronic Tech. (ETA)
(PLTW) Project Lead the Way Electronic Engineering:	Introduction to Engineering Design	Principles of Engineering	Digital Electronics	Engineering Design and Development	
Mechanical Technology:	Mechanical Technology I	Mechanical Technology II	Mechanical Technology III	Mechanical Tech. Adv. Studies	Career Safe (OSHA), Core Curriculum (NCCER), MSSC/APICS/CPT
Machine Tool Technology:			Machine Tool Technology I	Machine Tool Technology II	
Metalworking:	Metalworking I	Metalworking II	Metalworking III	Metalworking Adv. Studies	Career Safe (OSHA), NIMS
Welding Technology:	Welding Technology I	Welding Technology II	Welding Technology III	Welding Technology Adv. Studies	
(PLTW) Project Lead the Way Mechanical Engineering:	Introduction to Engineering Design	Principles of Engineering	Computer Integrated Manufacturing	Engineering Design and Development	Career Safe (OSHA), Core Curriculum (NCCER) AWS
Drafting & Design	Drafting and Design I	Drafting and Design II	Drafting and Design III	Drafting and Design Adv. Studies	
					Autodesk Certified User, Certified Apprentice Drafter, Certified Solidworks Associate

This program of study is based upon the requirements needed for an Advanced Diploma. Academic course names may vary among school districts. For detail information please visit: <http://cteae.nv.gov/>

Note: the colors for career path aligns with the CTE classes available in the school.

Our mission is to provide Nevada's businesses with access to a qualified workforce and encourage equal employment opportunities.