

Manufacturing Career Cluster

The Manufacturing Career Cluster focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Industrial Maintenance Regional Program of Study



The Industrial Maintenance regional program of study focuses CTE learners on the occupations and educational opportunities available in maintaining and repairing manufacturing equipment and facilities. Students in this program of study will gain knowledge and experience in electrical, welding, hydraulics, plumbing, heating and air conditioning and construction technology.

Keene High School Industrial Maintenance Courses

Level 2

- Metal Fabrication and Machining 1 (2 credits)
- Diversified Manufacturing 1

Level 3

- Metal Fabrication and Machining 2 (2 credits)
- Diversified Manufacturing 2



Postsecondary Opportunities

Certificate / License

- Certified Welder or Welder Inspector
- Certified Welding Engineering

Associates Degrees

- Welding Technology/ Welder
- Industrial Engineering Technicians

Bachelor's Degrees

- Welding Engineering Technology/ Technician
- Industrial Engineering Technicians

Master's, Doctoral, and Professional Degrees

- Welding Engineering Technology/ Technician
- Industrial Engineering Technicians

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> • Participate and compete in SkillsUSA • Shadow a machinist 	<ul style="list-style-type: none"> • Work at a local business • Participate in an industry apprenticeship

Industry-Based Certifications

- C-200 Certified Industry 4.0 Automation Systems Specialist I - 201 Electrical Systems 1
- C-200 Certified Industry 4.0 Automation Systems Specialist I - 202 Electric Motor Control Systems 1
- C-200 Certified Industry 4.0 Automation Systems Specialist I - 204 Motor Control Troubleshooting 1
- Certified Technician-Supply Chain Automation (CT-SCA)
- Industrial Technology Maintenance (ITM) - Basic Mechanical Systems
- Industrial Technology Maintenance (ITM) - Basic Pneumatic Systems
- Industrial Technology Maintenance (ITM) - Electrical Systems
- Industrial Technology Maintenance (ITM) - Maintenance Operations

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Industrial Production Managers	\$106,205	827	9%
Industrial Engineers	\$97,074	1,263	10%
Industrial Engineering Technicians	\$61,672	326	9%
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$53,498	667	9%
Industrial Machinery Mechanics	\$49,816	3,788	27%

