



What Is the Manufacturing Career Cluster?

This diverse Career Cluster prepares learners for careers in planning, managing, and performing the processing of materials into intermediate or final products. Careers also include related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

Possible/Related Careers for the Manufacturing Career Cluster

There are over 40 careers related to the Manufacturing Career Cluster, including but not limited to the following examples:

- Blacksmith
- Design Engineer
- Electrician
- Engineering Tech
- Industrial Designer
- Logistics Technician
- Manufacturing Manager
- Production Manager
- Quality Control Technician
- Safety Engineer
- Tool & Diemaker
- Welder

Possible/Related Majors for the Manufacturing Career Cluster

There are an increasing number of college majors related to the Manufacturing Career Cluster, and among the most common are:

- Apparel & Textiles, General
- Computer Engineering Technology
- Industrial Mechanics
- Machining
- Mechanical Engineering
- Occupational Safety
- Quality Control Technology
- Textile Science
- Welding Technology

Related OLCHS Co-Curricular Activities for the Manufacturing Career Cluster

OLCHS students are encouraged to participate in co-curricular activities. Some related to the Manufacturing Career Cluster are:

- Drama Crew
- Mathletes
- STEM Club

Related Service Learning Sites for the Manufacturing Career Cluster

OLCHS students are required to earn service learning hours in order to graduate. Some volunteer sites related to the Manufacturing Career Cluster are:

Name	Location
Feed My Starving Children	Aurora
Little Red Schoolhouse	9800 South 104th Ave., Willow Springs
Share Your Soles	900 E. 103 rd St., Chicago
Village of Oak Lawn eWaste Program	5532 W. 98 th St., Oak Lawn

Aligned Elective Courses for the Manufacturing Career Cluster

Although required courses align with all 16 Career Clusters, students *must* take these courses in order to graduate from OLCHS. Therefore, they are not included below. Students are encouraged to customize their 4-year plan with specific courses, related prerequisite courses and related career information on Career Cruising.

This guide is intended to provide general information related to career interest areas. It does not imply any guaranteed acceptance into a program of study. Students and families should carefully review post-secondary goals and entrance requirements for all post-secondary institutions of interest. Students and families are encouraged to use this as a supplemental guide during their planning.

Department and Elective Courses	9	10	11	12
Business				
Entrepreneurship	X	X	X	X
Web Design	X	X	X	X
Foreign Language				
French or French Honors	X	X	X	X
Spanish or Spanish Honors	X	X	X	X
Spanish for Heritage Speakers	X	X	X	X
Industrial Technology				
Automotive Essentials	X	X	X	X
Electricity and Electronics I	X	X	X	X
Electricity and Electronics II		X	X	X
PLTW: Introduction to Engineering Design*	X	X	X	X
Auto Maintenance & Light Repairs		X	X	X
Computer Servicing I		X	X	X
Computer Servicing II		X	X	X
PLTW: Principles of Engineering*		X	X	X
Woods 1		X	X	X
Woods 2		X	X	X
Advanced Autos			X	X
Advanced Woodworking			X	X
Independent Study: Computers			X	X
PLTW: Engineering Design & Development*			X	X
Independent Study: Woods				X
Math				
AP Computer Science Principles*				
Pre-Calculus			X	X
Pre-Calculus Honors			X	X
AP Statistics*				X
AP Calculus*				X
Transition to College Math				X
Science				
Advanced Chemistry			X	X
Environmental Science			X	X
Advanced Physics				X
AP Physics*				X
Social Science				
AP Human Geography	X	X	X	X
Geography	X	X	X	X
Law in American Society			X	X
AP Macroeconomics*			X	X
AP Microeconomics*			X	X
Economics			X	X
International Relations			X	X
Career Exploration				
Technology Support Internship		X	X	X

*The Federal Career Clusters framework recommends students enroll in Advanced Placement and/or Dual Credit courses when available and relevant.