

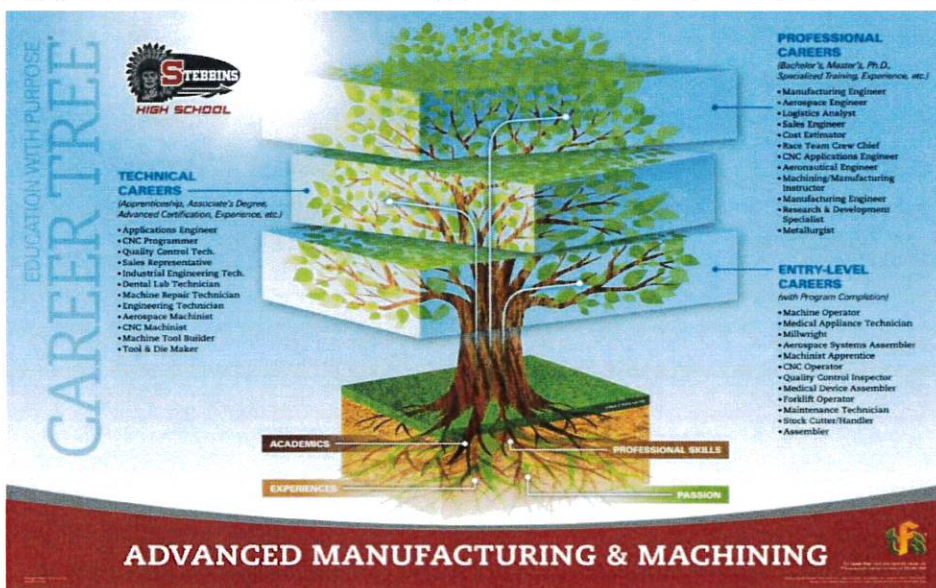


**ADVANCED MANUFACTURING
& MACHINING**

Career Pathway: Manufacturing



Mad River Middle School	
7 th Grade	
Supporting Courses:	Design & Modeling, Robotics & Automation
8 th Grade	
Supporting Courses:	Flight & Space, Green Architecture
Stebbins High School	
9 th grade	
Required Courses:	Algebra 1, English 101, Physical Science, World Studies, Health, PE, Art I
Supporting Courses:	Computer Applications I, Foreign Language, Manufacturing Foundations
10 th grade	
Required Courses:	Geometry, English 201, Biology, American History, Art II
Supporting Courses:	Manufacturing Specialization, Computer Applications II, Foreign Language, Textile Design
11 th grade	
Required Courses:	Algebra II, Chemistry, English 301, American Government,
Supporting Courses:	Textile Design (Construction & Maintenance),
Concentrator Courses:	Machining with Industrial Lathes, Machining with Industrial Milling Machines
12 th grade	
Required Courses:	English 401, Applied Mathematics or Statistics
Supporting Courses:	Advanced Science, Social Studies Elective
Completer Courses:	Machine Tools, Computer Numerical Control Technology with Industrial Mills and Lathes
College Credit Plus	
*10-Hour OSHA, +Guitar Manufacturing using STEM, *Intro to Manufacturing Safety, Practices & *Measurements, +Manufacturing Process, +Maintenance Awareness (Concurrent enrollment courses * Juniors, + Seniors)	
Industry-Recognized Credentials	
OSHA 10-Hour, Forklift, MSSC Certified Production Technician,	
Work-Based Learning	
Apprenticeship & Pre-Apprenticeship, Internship, Virtual, Simulated Work Environment	



This pathway layout is meant to serve as a guide; for your specific graduation plans please schedule a meeting with your counselor.

Manufacturing Curriculum Plan

WebXam (Technical Skill Attainment)

Area of Concentration: R7

Below is the list of WebXams required for state reporting:

Test	Grade	Test Name	Is there a CTAG awarded to this course.
176005	11	Machining with Industrial Lathes	No
176006	11	Machining with Industrial Milling Machines	No
176004	12	Machine Tools	No
176007	12	Computer Numerical Control Technology with Industrial Mills & Lathes	No

Industry Credentials/Certifications

Industry Credentials offered	Completed during Grade
Occupational Safety and Health Administration (OSHA) 10-hour	11
Forklift	12
MSSC (CPT) Manufacturing Safety	11
MSSC (CPT) Practices & Measurement for Manufacturing	11
MSSC (CPT) Manufacturing Process & Production	12
MSSC (CPT) Maintenance Awareness for Manufacturing	12

College Courses are available through: Sinclair

College Credit potentially earned within Career Tech	Credit Hours	Completed during Grade
OPT 1201 Introduction to Manufacturing Safety	2	11
OPT 1202 Practices & Measurement for Manufacturing	2	11
OPT 1203 Manufacturing Process & Production	2	11
OPT 1204 Maintenance Awareness for Manufacturing	2	12
OPT 2297 Special Topics 10-Hour OSHA	1	11
MET 1151 Guitar Manufacturing using STEM	3	12

Sinclair Short Term Certificates

Short Term Certificate	College hours completed in Career Tech	College Hours required
Certified Production Technician	8	8

Daily Schedule

Junior Year	2 periods (Machining with Lathes, Machining with Milling Machines)
Senior Year	3 periods (Machine Tools, CNC with Mills & Lathes, Capstone)