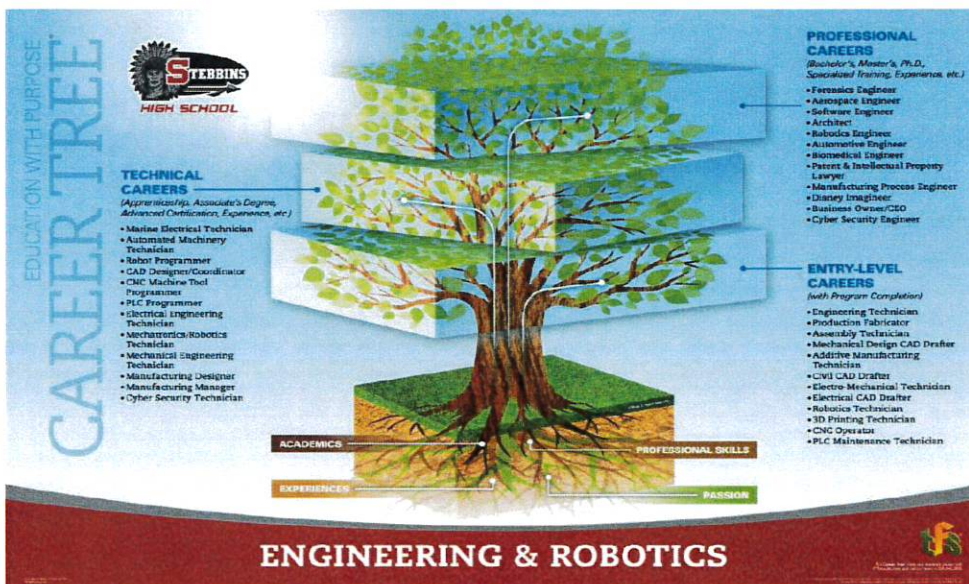


Career Pathway: Engineering



Mad River Middle School	
7 th Grade	
Supporting Courses:	Design & Modeling, Robotics & Automation
8 th Grade	
Supporting Courses:	Flight & Space, Green Architecture, Advanced Robotics
Stebbins High School	
9 th grade	
Required Courses:	Algebra 1, English 101, Physical Science, World Studies, Health, PE, Art I
Supporting Courses:	Intro to STEM Engineering, Computer Applications I, Foreign Language
10 th grade	
Required Courses:	Geometry, English 201, Biology, American History, Art II
Supporting Courses:	Engineering Specialization, Computer Applications II, Foreign Language, Textile Design
11 th grade	
Required Courses:	Algebra II, Chemistry, English 301, American Government,
Supporting Courses:	Speech & Communication, Creative Writing
Concentrator Courses:	Principal of Manufacturing, Manufacturing Operations
12 th grade	
Required Courses:	English 401, Applied Mathematics or Statistics
Supporting Courses:	Advanced Science, Social Studies Elective
Completer Courses:	Engineering Design, Machine Tools, Engineering Capstone
College Credit	
*Basic Mechanical & Electrical Skills, *Additive Design & Printing, +Guitar Manufacturing using STEM, *Solid works Basic, +Additive Manufacturing Post Process (Concurrent enrollment courses * Juniors, + Seniors)	
Industry-Recognized Credentials	
OSHA 10-Hour	
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.

Engineering Curriculum Plan

WebXam (Technical Skill Attainment)

Area of Concentration: F6

Below is the list of WebXams required for state reporting:

Test	Grade	Test Name	Is there a CTAG awarded to this course.
176010	11	Principal of Manufacturing	No
175003	11	Manufacturing Operations	Yes
175001	12	Engineering Design	No
176004	12	Machine Tools	No

Industry Credentials/Certifications

Industry Credentials offered within Engineering	Completed during Grade
Occupational Safety and Health Administration (OSHA) 10-hour	12

College Courses are available through: Sinclair

College Credit potentially earned within Career Tech	Credit Hours	Completed during Grade
EGR 1106 Basic Mechanical & Electrical Skills	2	11
MET 1401 Additive Design & Printing	3	11
MET 1301 Solidworks Basics	4	11
MET 1431 Additive Manufacturing Post Process	3	12
MET 1151 Guitar Manufacturing using STEM	3	12

Sinclair Short Term Certificates

Short Term Certificate	College hours completed in Career Tech	College Hours required
Additive Design Specialist	10	9-10

Daily Schedule

Junior Year	2 periods (Principal of Manufacturing, Manufacturing Operations)
Senior Year	3 periods (Engineering Design, Machine Tools, Capstone)