

Why get a STEAM certificate?

The STEAM pathway certificate at Windham High School is designed to elevate hands-on engagement in content areas of Science, Technology, Engineering, Arts, and Math. Students will need to be innovative in applying their knowledge in order to problemsolve, collaborate with peers, and turn their ideas into action.

In a world of unlimited information, the value of an education is not just knowledge acquisition, but learning how to use that knowledge to solve problems.





STEAM FOR ALL

- All students have the opportunity for applied classroom learning
- Gain entrepreneurial skills
- Some courses will require independent learning/motivation to succeed
- Work with industry partners for career exploration.

OBJECTIVES

The student will be able to:

- Complete a sequential program that emphasizes STEAM subject matter, technical skills and their application to real world problems/challenges.
- Extend knowledge through internships, mentorships and job-shadowing in their chosen field.
- Create a product of their own work.

OUR EDUCATIONAL PHILOSOPHY

"STEAM is about having our students become creators/producers of knowledge rather than just consumers of knowledge."

COURSE CERTIFICATE PATHWAY

9TH GRADE

Science --> Integrated Science

Technology --> Computer Science (Python or AP Principles)1

Engineering --> None

Art --> None

Math --> Algebra 1 or Geometry

10TH GRADE

Science --> Biology

Technology --> None

Engineering --> Engineering A (0.5 credit)

Art --> Art or Music elective (0.5 credit)

Math --> Geometry or Algebra II

11TH GRADE

Science --> Chemistry or Physics

Technology --> None

Engineering --> STEAM Project Based Learning (0.5 credit)2

Art --> Art or Music (0.5 credit) or Science of Art Math --> Algebra II or Pre-Calculus

12TH GRADE

Science --> Chemistry or Physics or Early College class

Technology --> Capstone Class

Engineering --> None

Art --> Art or Music (0.5 credit) or Science of Art Math --> Pre-Calculus or Calculus and Statistics (0.5 credit)

^{*}Technology, Engineering and Art classes do not have to be taken in sequence.

^{*}One of the Science or Math classes has to be an AP or Early College class

Minimum GPA 3 2

^{1 -} CTE Computer Technology can be substituted for CS Principles

^{2 -} CTE Biotechnology can be substituted for STEAM PBL class