

Career & Technical Education (CTE)

FABRICATION LAB 1

Grades: 9-12

Credits: 0.5 Arts/CTE/2nd Language

Prerequisite: None

Repeat for Credit: No

Other: College credit may be available

This manufacturing course introduces students to the various methods used to design, build, and repair parts and equipment. Students will have an opportunity to learn basic drafting, CAD, layout, thread cutting and the use of a manual mill and lathe in addition to other equipment found in any machine shop.

FABRICATION LAB 2

Grades: 9-12

Credits: 0.5 Arts/CTE/2nd Language

Prerequisite: Fabrication 1

Repeat for Credit: No

Other: College credit may be available

Students will continue to build on the skills they developed in Fabrication 1. More complex projects and skills that include threading (internal and external), knurling, tool grinding, advanced blueprint reading as well as further progression through CAD software using both Solidworks and Inventor.

FABRICATION LAB 3

Grades: 10-12

Credits: 0.5 Arts/CTE/2nd Language

Prerequisite: Fabrication 2

Repeat for Credit: No

Other: College credit may be available

Students will continue to develop skills from Fabrication 2 with more challenging projects and tools. Students will also learn how to set up and maintain common tools found in any machine shop. In addition students will get an opportunity to work with MasterCAM software to develop their skills in CNC programming.

FABRICATION LAB 4

Grades: 10-12

Credits: 0.5 Arts/CTE/2nd Language

Prerequisite: Fabrication 3

Repeat for Credit: Yes

Other: College credit may be available

Students will be developing their skills learned from the previous levels and developing to industry quality. Students will plan, design using CAD software and build various projects that meet industry quality. Students will have an opportunity to set up and operate a Haas VF1 CNC mill.

