

Precision Metal Manufacturing II



Prerequisite: Precision Metal Manufacturing I AND Geometry

Course: 1807CA/1807CB **Credits:** 2 **Length:** 36 weeks **Placement:** 11-12

Course Description

Precision Metal Manufacturing II will provide students the knowledge, skills, and technologies required for employment in precision machining. This course is designed to provide necessary skills for machining in a real-world setting. This course will address a variety of materials through project based learning, manufactured with materials such as plastics, ceramics, wood, and metals. Students will develop knowledge of the concepts and skills related to these systems to apply them to personal and career development. This course is designed to provide entry-level employment for the student or articulated credit integration into a community college and dual credit with a community college with completion of the advanced course. Students will have the opportunity to advance their skills on equipment such as manual lathes and milling machines. They will also work more in depth with CNC machines to create parts and projects. Students will develop skills in areas such as fixture building, computer aided manufacturing software, design, blueprint reading, and G and M code identification and programming.

Student Activities

- **Advanced Precision measurement processes**
- **Milling projects** such as Jenga sets, tic tac toe boards, Sign plates, 1-2-3 blocks, 3-D milling operations, and personal projects.
- **Lathe projects** such as Brass hammers, nut crackers, and chess sets
- **CAM- Computer Aided Manufacturing** – Personal designed and manufactured projects

Certificate of Excellence



Students can earn a Certificate of Excellence by achieving a specific list of real world skills related to this course.

For the list of skills, please visit

goo.gl/9VM3a9

Organizations/After
School/Competition

