

Precision Machining CTE Program

Introduction to Precision Machining and Introduction to Lathe courses are AHS courses that also offer SUSCC Dual Credit for qualifying students. These courses are taught on the Auburn Junior High School campus in the Machining Lab by a certified SUSCC instructor. If you have a 2.5 GPA or higher and are interested in dual credit, please sign up for the SUSCC course or contact Mr. Brogan at mbrogan@auburnschools.org for more information.

Career Tech Student Organization: SkillsUSA
Career Readiness Indicator Credential: NIMS

Introduction to Manufacturing

Course Code: 13001G1000

1 Credit

Prerequisite: None

Course Fee: None

A course that will provide the basic conceptual and operational knowledge of manufacturing. This class is the broadest-ranging class in the Precision Machining program. Field trips are taken to local Manufacturers to see how their respective products are made. Manufacturing processes are studied using simulated production runs. Project-Based Learning using metal, plastics, wood and a variety of Computer Aided Design (CAD) programs to run Computer Numerical Controlled (CNC) machines are completed.

Introduction to Precision Machining / INTRODUCTION TO MACHINING TECH

Course Code: 13203G1001 / 13249C1055

1 Credit / 3 SUSCC Credits

Prerequisite: None

Course Fee: None

A course that provides an introduction to manufacturing processes and job opportunities for students who are pursuing careers in manufacturing. Students use critical thinking skills and principles of science, mathematics, and safety. This entry-level course may be taken in the Manufacturing cluster. Topics include blueprint reading, lathe turning, drill press techniques, and manual mill operations. Students entering the Manufacturing cluster must meet the academic goals and expectations of business and industry. Employability skills are stressed and reinforced through application in a job-like environment using industry-grade machining equipment and tools.

Introduction to Lathe / LATHES

Course Code: 13204G1002 / 13249C1005

1Credit / 3 SUSCC Credits

Prerequisite: Introduction to Precision Machining

Course Fee:None

A course that provides an introduction to manufacturing processes and job opportunities for students who are pursuing careers in manufacturing. Students use critical thinking skills and principles of science, mathematics, and safety. This entry-level course may be taken in the Manufacturing cluster. Students choosing the Manufacturing cluster must meet the academic goals and expectations of business and industry. Topics include engine lathe turning techniques, turning, facing, chamfering, cutting a radius, and tapering to accurate dimensions. Employability skills are stressed and reinforced through application in a job-like environment using industry-grade machining equipment and tools.

Milling and Surface Grinder I / MILLING MACHINES

Course Code: 13204G1003 / 13249C1006

1 Credit / 3 SUSCC Credits

Prerequisite: Introduction to Precision Machining

Course Fee: None

A course that provides an introduction to manufacturing processes and job opportunities for students who are pursuing careers in manufacturing. Students use critical thinking skills and principles of science, mathematics and safety. This entry-level course may be taken in the Manufacturing cluster. Students choosing the Manufacturing cluster must meet the academic goals and expectations of business and industry. Milling techniques will be taught and employability skills are stressed and reinforced through application in a job-like environment using industry-grade machining equipment and tools.

Computer-Aided Design and Computer-Aided Manufacturing I

Course Code: 13203G1004

1 Credit

Prerequisite: None

Course Fee: None

Provides an introduction to manufacturing processes and job opportunities for students who are pursuing careers in manufacturing. Students use critical-thinking skills and principles of science, mathematics, and safety. Students who choose to enter the Manufacturing cluster must meet academic goals and expectations of business and industry. Computer-Aided Design and Computer-Aided Manufacturing (CAD-CAM) I includes CAD-CAM safety, mathematics concepts, computer proficiency, 3D modeling, programming CAM software, and the manufacturing of parts.