

Precision Machining CTE Program

Introduction to Manufacturing

Course Code: 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/MSP 125 INTRODUCTION TO MACHINING TECHNOLOGY (SUSCC)

Course Code: 1 Credit/3 SUSCC Credits

Prerequisite: None Course Fee: None/SUSCC Tuition

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 Lathes/MSP 105 LATHES (SUSCC)

Course Code: 1 Credit/3 SUSCC Credits

Prerequisite: Introduction to Precision Machining/MSP 125 Course Fee: None/SUSCC Tuition

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.

Introduction to Milling, Drill Press, and Surface Grinder/MSP 107 MILLING MACHINES (SUSCC)	
Course Code:	1 Credit/3 SUSCC Credits
Prerequisite: Introduction to Precision Machining/MSP 125	Course Fee: None/SUSCC Tuition
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.	