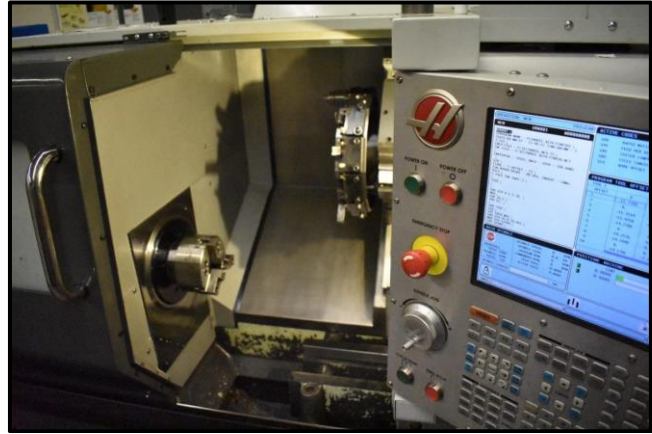


Diversified Manufacturing I



Prerequisite: Principles of Manufacturing

Course: 1828CT

Credits: 1

Length: 18 weeks

Placement: 9-12

Course Description

In Diversified Manufacturing I, students gain knowledge and skills in the application, design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing. The study of manufacturing systems allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in a manufacturing setting. Diversified Manufacturing I allows students the opportunity to understand the process of mass production by using a wide variety of materials and manufacturing techniques. Knowledge about career opportunities, requirements, and expectations and the development of skills prepare students for workplace success. Students will be expected to design a project, develop a process plan, develop a budget, and ultimately build their projects.

Student Activities

Students will develop the processes needed to complete a project such as initiate, plan, execute, monitor and control, and close. Students will learn and develop these skills using different types of materials such as wood, plastic, and metal. The tools that they will be using will include welders, milling machines, turning machines, 3D printer, and more. Some of the projects students will put into mass production may include fire pits, dice theme rings, puzzles and projects for actual customers like building parts for NASA HUNCH. All of these skills are meant to further the knowledge and skills and prepare them for real world practices seen in industry.

Additional Considerations

Students need fine motor skills and mobility. Students handle sharp objects and use dangerous equipment. If seeking certification, curriculum cannot be modified.

Organizations/After School/Competition

SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce.