

Principles of Manufacturing Syllabus

Course Description/Goals:

This course is an introduction to manufacturing processes and technology used to solve problems. Students will learn about the tools, technology and processes used to influence manufacturing practices. Students will learn sketching techniques to create multiview drawings and interpret blueprint drawings including dimensions, notes, symbols, sections and auxiliary views. Professional employability skills like teamwork, communication, safety and portfolios will be a key element in this course. Students will have the opportunity to complete the OSHA 10 hour training program and be certified in C-101 Certified Industry 4.0 Associate_Basic Operations.

Course TEKS/Objectives:

In Principles of Manufacturing, students are introduced to knowledge and skills used in the proper application of principles of manufacturing. The study of manufacturing technology allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities. Students will gain an understanding of what employers require to gain and maintain employment in manufacturing careers.

[Principles of Manufacturing TEKS](#)

Course Outline:

Semester 1	Semester 2
<ul style="list-style-type: none">-Principles in Manufacturing-Safety - OSHA-Tool Identification-Introduction to Print Reading-Basic Robot Operation-Math in Manufacturing-Communication in Manufacturing-Introduction to SACA	<ul style="list-style-type: none">-Electrical Concepts-Relay Control Circuits-Intro to CAD-SACA Certification - Basic Operations