



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Fundamentals of Engineering 2 - Engineering Technology

ENGR 1182.04

Credit Hours:

2.00 - 2.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Lab

Course Description:

Introduction to 3D visualization and CAD; engineering design-build process; teamwork; written, oral and visual communications; project management. Regional campuses and Engineering Technology majors who are concurrently enrolled in EngrTec 2500 Manufacturing Processes II.

Prerequisites and Co-requisites:

Concur: EngrTec 2500.

Course Goals / Objectives:

- Ability to use SolidWorks for 2D and 3D Technical Graphics
 - Ability to communicate effectively in technical writing
 - Ability to use the engineering process in a design, build and test project
 - Ability to collect data and use data analysis
 - Ability to develop an entrepreneurial mindset
-

Course Topics:

- Introduction to Course and Overview
 - Engineering Design Process
 - Project Management
 - Visualization of 3-D Objects (Sketching, Pictorials, & Orthographics)
 - Construction of 3-D Objects with CAD
 - Standard Views and Presentations of Objects
 - Assembly and Presentation of Systems
 - Conventions and Standards (Dimensioning, Tolerance, Sections)
 - Design/Build Project Preparation Exercises
 - Design/Build Project (Project to make use of both Problem Solving and CAD knowledge)
-

Designation:

Required