

Course Title	Course Code	Credit Hours
Engineering Drawing and Graphics	AE-112	1-1

Textbook:

- David A. Madsen, and David P. Madsen, “Engineering Drawing and Design”, Cengage Learning

Reference Books/Material

- Cecil Howard Jensen, and Jay D. Helsel, “Engineering Drawing and Design.”, McGraw-Hill
- Paul Ross Wallach, “Fundamentals of Modern Drafting”, Cengage Learning
- Frederick E. Giesecke, Alva Mitchell, and Henry C. Spencer, “Technical Drawing with Engineering Graphics”, Pearson Education

Course Objectives:

This course introduces students to the use of technical drawing in an effective way for communicating and integrating with engineering concepts.

Course Outline:

- Fundamentals of Engineering Drawing
- Drafting Equipment and Supplies
- Symbolic Lines and Lettering
- Geometrical Construction
- Drafting Conventions and Formats
- Multiview Orthographic Projections
- Dimensioning and Geometric Tolerancing
- Sectional and Isometric Views
- Projection of Points and Lines
- Fasteners and Springs
- Development of Surfaces
- Working Drawings
- Tool Design Drafting
- Precision Sheet Metal Drafting
- Assembly Drawings