

Course Objectives/Course Outline
Spokane Community College

Course Title: Engineering Graphics/CAD 2
Prefix and Course Number: CAD 124

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Apply 2-dimensional CAD to create industry drawings
- Apply basic dimensioning techniques and standards
- Demonstrate awareness and application of professionalism and career goals in the engineering industry
- Draw all types of section and auxiliary views
- Draw and sketch pictorial views
- Print and plot CAD drawings to various scales and printers and plotters
- Print and plot CAD files in a Layout format

Course Outline

- I. Application of CAD Drafting in Industry Standard Drawings
 - A. Templates, paper sizes and environment settings for Mechanical, Architectural, Structural, Metric drawings, etc.
 - B. Applications using Model Space and Paper Space
 - C. Setting up, scaling and then plotting CAD drawings to various scales and printers/plotters
- II. Dimensioning Standards and Methods
 - A. Lines and Symbols
 - B. Dimensioning Systems
 - C. Placement
- III. Design for Success – Student Success Skills
 - A. Professionalism in the Workplace
 - B. Develop Career and Job Search Goals
- IV. Section Views and Revolution
 - A. Cutting Planes
 - B. Sectioning Lines/Material Format
 - C. Revolved Views for True Size and Shape
- V. Auxiliary and Removed Views
 - A. Viewing Plane and Viewing Plane Lines
 - B. ANSI Standards for Auxiliary and Removed Views
 - C. Production of Proper Auxiliary Views from Orthographic Projections
- VI. Pictorial drawings/sketches
 - A. Isometric, Oblique, Perspectives
- VII. Specialized Drafting Functions
 - A. Architecture
 - B. Civil/Structural
 - C. Mechanical
 - D. Electronics