

Course Objectives/Course Outline
Spokane Community College

Course Title: Schematic CAD Applications
Prefix and Course Number: CAD 258

Course Learning Outcomes:

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

- Generate production type schematic drawings
- Describe the design factors and shop drawing requirements for schematic symbols and terminology in electricity, electronics, hydraulics, pneumatics, wiring, and logics
- Generate the required types of schematic drawings found in the various engineering design industries
[Include schematic projects from: electrical/electronics, hydraulics/pneumatics, and building system electrical – see arch students drafting electrical systems]

Course Outline

- I. Schematic Drawings
 - A. Component Selection and Identification
 - B. Catalog Information Selection
 - C. Ordering Procedures
 - D. Drawing Number Systems and Documentation
- II. Engineering Office/Design Specifications
 - A. Personnel
 - B. Physical Structure
 - C. Technician Responsibilities
 - D. Customer/Government Specifications
- III. Design and Drawing of schematics and block/logic diagrams in various industry-relevant design layout styles for electricity, electronics, hydraulics, pneumatics, wiring harnesses, and logic devices
 - A. Terminology
 - B. Symbols
 - C. Component Characteristics
 - D. Full schematic and block/logic drawings