Course Objectives/Course Outline
Spokane Community College

Course Title: Structural CAD Applications
Prefix and Course Number: CAD 244

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

- Generate production type structural design working drawings
- Describe the design factors and shop drawing requirements for fabricated, welded, assembled parts
- Generate the required types of assembly drawings found in the structural design industry

Course Outline
I. Working/Detail Drawings
   A. Stock Material Selection
   B. Catalog Information Selection
   C. Single/Multiple Detail Formats
   D. Drawing Number Systems and Documentation
II. Assembly Drawing Layout
    A. Types of Assembly Drawings
    B. Information Utilized
    C. Numbering Conventions
III. Engineering Office/Design Specifications
     A. Personnel
     B. Physical Structure
     C. Technician Responsibilities
     D. Customer/Government Specifications
IV. Design and Drawing of Weldments, Fabrications, Footings, and other structural elements and various details in industry-relevant design layout styles
    A. Terminology
    B. Symbols
    C. Strength Characteristics
    D. Full detail and assembly drawings