

Course Objectives/Course Outline Spokane Community College

Course Title: CAD Solid Modeling/Graphics 2

Prefix and Course Number: CAD 252

Course Learning Outcomes:

By the end of this course, a student should:

- Generate 3-dimensional CAD parts, assemblies, and drawings per industry standards
- Customize computer-drafting software to meet individual company formats
- Create advanced features in solid modeling software
- Incorporate 2 and 3-dimensional computer models into working engineering shop drawings
- Design and create a company-based drawing filing system in CAD

Course Outline:

- I. Advanced Drafting
 - A. Develop competence in Surface construction, including sheet metal and thin features
 - B. Develop competence in Solids construction including sweeps, lofts, ribs, coils, weldments, and splitting parts
 - C. Develop competence in advanced part assembly techniques
- II. Software Customization
 - A. Create/load/modify custom template files for company or individual formats
 - B. Create symbol and part library files
- III. Programming and Data Manipulation
 - A. Import/Export file formats to/from various software programs
 - B. Lock/Unlock and/or recover damaged drawing files
 - C. External reference / Data table drawings
- IV. CAD Application for industry
 - A. Welding drafting (Symbols, joint styles, weldment options in CAD software)
 - B. Assemblies and Details for shop production drawings