

Course Outline

PREREQUISITES:

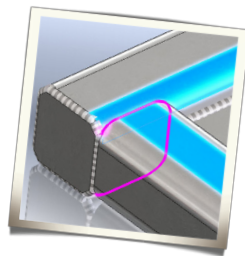
Users attending this course are expected to have mechanical design experience, knowledge of the Windows operating system and to have completed the SolidWorks Essentials training course.

DESCRIPTION:

The goal of this course is to teach you how to build weldment parts in SolidWorks. As the weldment application in SolidWorks is so feature rich, this course focuses on the fundamental skills and concepts central to successfully building weldment parts.

Lesson 1: Weldments

- Weldments
- Weldments toolbar
- Weldment feature
- Structural members
- The default profiles
- Weldment profiles from SolidWorks content
- Groups
- Corner treatments
- Groups vs. structural members
- Manual trimming of structural members
- Sketch considerations
- Adding plates
- Gussets and end caps
- Using symmetry
- Profile sketches
- Custom properties
- Working with weldments
- Sub-weldments
- Non-structural components
- Saving bodies as separate parts
- Post-assembly machining operations



- Managing the cut list
- Balloons
- Automatically generating the cut list
- Cut list properties
- Representing welds

Lesson 2: Weldment Drawings

- Weldment drawings
- Drawing views of individual bodies
- Cut list tables
- Weld tables

Lesson 3: Working with Pipes and Tubing

- Working with pipes and tubing
- 3D sketching
- Using standard planes
- Using 3D sketch planes
- Visibility controls
- Merge arc segment bodies
- Weldments and sheet metal in assemblies
- Sheet metal or structural member?
- Reusing in-context parts

