Course Duration: 2 day

Prerequisites: SolidWorks Essentials,

Description: Routing - Piping and Tubing explains how to create, edit and manage Piping and Tubing routes, from the critical routing components and their design requirements to the subassemblies that contain the routes.

Lesson 1: Fundamentals of Routing
What is Routing?
Routing Setup
Routing Library Manager
General Routing Settings

Lesson 2: Piping Routes
Piping Routes
Pipes and Piping Components
Routing Assembly Templates
Creating a Piping Route
Auto Route
Route Specification Templates
Editing a Route

Lesson 3: Piping Fittings
Pipe Fittings
Drag and Drop a Fitting
Creating Custom Fittings

Lesson 4: Tubing Routes
Tubing Routes
Tubes and Tubing Components
Flexible Tubing with Auto Route
Orthogonal Tubing Routes with Auto Route
Bend and Spline Errors
Starting a Tube Route On the Fly
Repairing Bend Errors
Tubing Drawings

Lesson 5: Piping and Tubing Changes
Piping and Tubing Changes
Pipe Penetrations
Flange to Flange Connections
Pipe Spools
Copying Routes
Editing Piping Routes
Editing for Obstructions
Piping Drawings

Lesson 6: Pipe and Tube Routing Components
Routing Library Parts
Libraries
Creating Routing Library Parts
Routing Library Manager
Pipe and Tube Parts
Pipe Parts
Fitting Parts
Routing Functionality Points
Elbow Parts
Tube Parts
Multi-Body Components
Equipment
Assembly Fittings

Lesson 7: Using P&ID Files
Piping and Instrumentation
Adding a Pipe
Pipe with Multiple Lines
Pipes with In-line Fittings
Process Drawings

Lesson 8: Piping Skids
Piping Skids
Grid System Feature
Weldments
Walk-through Animations
Avatar Paths

Lesson 9: Using SolidWorks Content
Using SolidWorks Content

Appendix A: **Review Section**
Review of Configurations
A Note About File References
Design Tables
Review of Top Down Design
Editing Options
Review of Design Library Task Pane
Review of 3D Sketching