

Course: SOLIDWORKS Routing – Electrical

MFG

Description

How to create and manage Electrical routes and cables. This course teaches you how to create, edit and manage electrical routes from the critical routing components and their design requirements to the sub assemblies that contain the routes.

Training objectives

On completion of this course you will be able to create routed systems for electrical cable and harness. Create your own library parts which can be dragged and dropped into your electrical routes. Create drawings of your routed systems with route information added.

Prerequisites

Electrical design experience.

Experience with Windows Operating System. Completed the SOLIDWORKS Essentials training course, or equivalent.

At least one month using SOLIDWORKS software.

Skills you will acquire

Add, modify and apply fast routes. Add Routes and Ribbon Cables. Creating Harness and Drawing

Who should attend

Users who need to know how to create and manage electrical routes and cables.

Delivery mode



Face-to-face



Virtual classroom

Duration



2 days

Course Outline

Lesson 1: Fundamentals of Routing

- What is Routing?
- Routing Setup
- General Routing Settings

Lesson 2: Basic Electrical Routing

- Basic Electrical Routing
- Adding Routing Components
- Start by Drag and Drop
- Connector
- Auto Route
- Save to External File

Lesson 3: Routing with Clips

- Routing with Clips
- Routing Through Existing Clips
- Adding Clips while Auto Routing
- Editing a Route
- Working with Clips
- Routing Through a Clip
- Splitting a Route
- Adding a Splice
- Multiple Routes Through a Clip

Lesson 4: Electrical Routing Components

- Routing Library Parts
- Introduction
- Electrical Routing Library Parts Libraries
- Routing Component Wizard
- Routing Component Attributes
- Electrical Libraries

Lesson 5: Standard Cables and Reusing Routes

- Using Standard Cables
- Standard Cables Excel File
- Modifying Standard Cables
- Creating a Standard Cable
- Reuse Route
- Delink Route
- Routing Templates

Lesson 6: Electrical Data Import

- Importing Data
- Routing Library Manager From/ To Lists
- Route Properties
- Route Guidelines
- Using Guidelines and Clips

Lesson 7: Electrical Drawings

- Route Flattening and Detailing Annotation Flattening
- Flatten Route
- Manufacture Flattening

Lesson 8: Flex Cables

- Flex Cables
- Flex Cable Routes
- Flex Cable Auto Routing Using Flex Cables With Clips

Lesson 9: Electrical Conduits

- Electrical Conduits
- Rigid Conduit
- Orthogonal Routing with Auto Route
- Electrical Data in Conduits
- Manual Sketch Routing
- Flexible Electrical Conduit

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