goengineer

TRAINING AGENDA

SOLIDWORKS Electrical 3D & Schematics

Length: 3 days

Prerequisites: Mechanical design experience; completion of SOLIDWORKS Essentials or similar experience.

Description: The goal of this course is to teach you how to use SOLIDWORKS Electrical 3D to optimize your drawings and designs for manufacturability so you can maximize quality, avoid rework and decrease time to market.

TOPICS COVERED IN THIS COURSE ARE:

SOLIDWORKS ELECTRICAL SCHEMATICS

1: Projects

- SOLIDWORKS Electrical
- What are Projects?
- Creating a New Project
- Project Overview
- Locations
- Zooming and Scrolling

2: Single Line Diagrams

- What is a Single Line Diagram?
- Existing and Archived Projects
- Line Diagram Symbols
- Adding Cables
- Drawing Tools

3: Cabling

- What is Detailed Cabling?
- Cables
- Detailed Cabling
- Adding Manufacturer Parts
- Terminal Strip
- Pin to Pin Connections
- Copy and Paste

4: Creating Schematics

- What is a Schematic?
- Draw Multiple Wires
- Schematic Symbols
- Symbol Properties
- Creating New Symbols

5: Cross Referencing the Single Line Diagram

- Adding Cross References to the Single Line Diagram
- Cross Referencing Drawings
- Inserting Multiple Terminals
- Location Outlines

6: Control Drawings

- What are Control Drawings?
- Stages in the Process
- Drawing Single Wires
- The Cross Reference List
- Using Functions
- Inserting Single Terminals
- Function Outlines
- Updating the Catalog

7: Managing Origin-Destination Arrows

- What are Origin-Destination
- Arrows?
- Replacing Wires
- Origin-Destination Arrows

8: Programmable Logic Controllers

- What is a PLC?
- Stages in the Process
- Adding a New Scheme
- Adding a PLC Mark
- Inserting a PLC
- Editing a PLC

9: Macros

- What are Macros?
- Creating and Adding Macros

10: Editing the PLC Drawing

- Stages in the Process
- Associate Cable Cores
- Adding a Part Manually
- Assigning a Part
- Wire Style Manager
- Numbering Wires
- Assigning Parts to Other Objects

11: Reports

- What are Reports?
- Report Manager
- Drawing Terminal Strips

SOLIDWORKS ELECTRICAL 3D

1: Adding a Cabinet

- Unarchiving a Project
- SOLIDWORKS Cabinet Layout
- Insert Component
- Inserting Rails
- Inserting Ducts

2: Inserting Components in the Cabine

- Inserting Electrical Components
- Converting to an Electrical
- Component
- Inserting Terminals

3: Adding Door Components

- Smart Components
- Inserting Smart Features

4: Propagating 2D Changes to 3D

- Changes in SOLIDWORKS Electrical 2D
- Changes at the Assembly Level

5: Routing Wires

- Routing Path
- Route Wires