

Course: SOLIDWORKS Electrical 2D Schematics

MFG

Description

Learn how to create PLCs, drawings and reports. The course teaches you how to use SOLIDWORKS Electrical to optimise your drawings and designs for manufacturability so you can maximise quality, avoid rework and decrease time to market.

Training objectives

On completion of this course you will have a clear understanding of the skills, tools, and concepts available which can then be applied to a range of industry design challenges.

Prerequisites

Electrical design experience.

Experience with Windows Operating System.

DraftSight installed.

Skills you will acquire


Able to create Electrical diagrams. Able to route Wires and Cables. Able to create PLCs and cabinets.

Who should attend


Electrical Engineers.

Delivery mode

 Face-to-face or Online

 Virtual classroom

Duration

 3 days or 32 hours

Course Outline

Lesson 1: Project Templates

- SOLIDWORKS Electrical
- Stages in the Process
- Starting SOLIDWORKS Electrical
- What are Projects?
- Project Templates
- Project Configurations
- How is a Project Structured?
- Stages in the Process

Lesson 2: Modifying Project Templates

- What are Environments?
- Stages in the Process
- Draw Multiple Wires

Lesson 3: Drawing Types

- What are Drawing Types?
- Stages in the Process
- Existing and Archived Projects
- Line Diagram Symbols
- Adding Cables
- Stages in the Process
- Symbols Panel
- Schematic Symbols
- Symbol Properties

Lesson 4: Symbols and Components

- What is a component?
- Stages in the Process
- Symbol Component Association

Lesson 5: Manufacturers Parts

- What are Manufacturers Parts?
- Stages in the Process
- Finding Manufacturer Parts
- Super Parts

Lesson 6: Wires and Equipotentials

- Equipotentials and Wires
- Stages in the Process
- Wire Style Manager
- Replacing Wires
- Equipotential Numbering Results
- Wire Numbering Results
- Using Nodal Indicators

Lesson 7: Cabling

- What is Cabling?
- Stages in the Process
- Cables
- Detailed Cabling
- Terminal Strip
- Pin to Pin Connections
- Copy and Paste

Lesson 8: Symbol Creation

- Symbols and Standards
- Stages in the Process
- Symbols Manager
- Symbol Properties
- Circuits, Terminals, Types
- Multiple Attribute
- Splitting Attribute Data
- Add to Library
- Copy, Paste Symbol

Lesson 9: Macros

- What are Macros?
- Stages in the Process
- Creating and Adding Macros

Lesson 10: Cross Referencing

- What is Cross Referencing?
- Stages in the Process

Lesson 11: Managing Origin-Destination Arrows

- What are Origin-Destination Arrows?
- Stages in the Process
- Origin-Destination Arrows

Lesson 12: Dynamic Programmable Logic Control

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

Lesson 13: Automated Programmable Logic Control

- How are PLCs Automated?
- Stages in the Process
- PLC Mark, Part
- IO Manager

Lesson 14: Connectors

- Connectors
- Stages in the Process
- Insert Connector
- Connector Insertion

Lesson 15: 2D Cabinet Layouts

- What are 2D Cabinet Layouts?
- Stages in the Process

Lesson 16: Design Rule Checks

- What are Design Rule Checks?
- Stages in the Process
- Unconnected Pins
- Equipotential Conflicts
- Max. Terminal Wires
- Duplicated Parent Symbols
- Child Symbols without Parent
- Empty Terminal Strip
- Duplicated Terminals

Lesson 17: Reports

- What are Reports?
- Stages in the Process
- Report Templates
- Report Columns
- Column Formula
- SQL Query Column Variable
- Sort and Break