

# **3S SOLID**WORKS Electrical Schematic

# **OVERVIEW**

**CLASSROOM LENGTH:** 3 days / **INSTRUCTOR-LED ONLINE LENGTH:** 6 days

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

**DESCRIPTION:** This SOLIDWORKS Schematic Training Course teaches you how to use the SOLIDWORKS Electrical Schematic software.

#### LESSON 1:

### **PROJECT TEMPLATES**

- Create a Project
- Understand Project Configurations
- Save Project as a Template

# LESSON 2:

# **MODIFYING PROJECT TEMPLATES**

- Create Project Macros
- Update Existing Template
- Create an Environment Archive

#### LESSON 3:

#### **DRAWING TYPES**

- Introduce Schematic, Mixed Scheme, and Line Diagram Drawing Types
- Insert Symbols
- Associate Symbols to Components

#### LESSON 4:

# SYMBOLS AND COMPONENTS

- Understand Components
- Change Component Permanency
- Insert a Symbol from a Component

#### LESSON 5:

#### **MANUFACTURER PARTS**

- Understand Manufacturer Parts
- Electrical Content Portal
- Circuit Association
- · Represent Circuits as Symbols

#### LESSON 6:

# **WIRES AND EQUIPOTENTIALS**

- Create Wire Styles
- Wire Numbering Formulas
- Number Project Wires

#### LESSON 7:

#### **CABELING**

- Include Cables in Projects
- Create Cable Reference
- Document Cables in a Drawing

#### LESSON 8:

#### SYMBOL CREATION

- Understand Symbol Types
- Create Symbol
- Overview Symbol Attributes and Circuits

#### LESSON 9:

# **MACROS**

- Understand Design Reuse
- Define and Use Macros

#### LESSON 10:

### **CROSS REFERENCING**

- Create and Modify Cross Reference symbols
- Navigate Between Associated Symbols
- Resolve Cross Reference Errors





# 35 SOLIDWORKS Electrical Schematic

#### LESSON 11:

# **MANAGING ORIGIN-DESTINATION ARROWS**

- Replace Wire Styles in a Schematic
- Modify Wire Marks
- Connect Wires Across Pages

#### LESSON 12:

#### DDYNAMIC PROGRAMMABLE LOGIC CONTROL

- Create PLC Component
- Insert a PLC Symbol
- Modify PLC Configurations

#### LESSON 13:

# AUTOMATED PROGRAMMABLE LOGIC CONTROL

- Manage PLC Inputs and Outputs
- Add External File Data to I/Os

#### LESSON 14:

# **CONNECTORS**

- Understand Dynamic Connectors
- Create Connector Configuration
- Insert Connector Symbols

#### LESSON 15:

#### **2D CABINET LAYOUTS**

- Manage Locations for Cabinet Layouts
- Insert a Layout Drawing
- Insert Cabinets, Ducts, and Rails
- Represent Electrical Components

#### LESSON 16:

# **DESIGN RULE CHECKS**

- Understand Design Rule Checks
- Resolve Common Design Errors

#### LESSON 17:

#### **REPORTS**

- Understand Reporting
- · Modify Existing Reports

