

# SOLIDWORKS Electrical Schematic

**Length: 3 Days**

**Prerequisite:** SOLIDWORKS Essentials, and having SOLIDWORKS Electrical and Draftsight installed.

**Description:** SOLIDWORKS Electrical Schematic teaches you how to use SOLIDWORKS Electrical to optimize your drawings and designs for manufacturability so you can maximize quality, avoid rework and decrease time to market. This course is focused on 2D design.

## Course Syllabus

### Introduction

- About This Course
- Use of Color
- More SOLIDWORKS Training Resources

### 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?

### 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
- Symbols Panel
- Schematic Symbols
- Symbol Properties

### Lesson 4- Symbols and Components

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

### Lesson 5 - Manufacturer's Parts

- What are Manufacturer's 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, Past 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
- Connector Insertion

### **Lesson 15 – 3D 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





**CADIMENSIONS IS A SOLIDWORKS  
CERTIFIED TRAINING CENTER**

CADIMENSIONS TRAINING CATALOG

