



**SOLIDWORKS ELECTRICAL: SCHEMATIC**

PREREQUISITES	LENGTH	DESCRIPTION
<ul style="list-style-type: none"> <li>■ Basic knowledge of SOLIDWORKS. Experience with the Windows Operating System.</li> </ul> <p><b>► PROJECT TEMPLATES</b></p> <ul style="list-style-type: none"> <li>■ SOLIDWORKS Electrical</li> <li>■ What are Projects?</li> <li>■ Project Templates</li> <li>■ Project Configurations</li> <li>■ How is a Project Structured?</li> <li>■ Exercise 1: Creating a Template</li> </ul> <p><b>► MODIFYING PROJECT TEMPLATES</b></p> <ul style="list-style-type: none"> <li>■ What are Environments?</li> <li>■ Stages in the Process</li> <li>■ Draw Multiple Wires</li> <li>■ Exercise 2: Modifying a Template</li> </ul> <p><b>► DRAWING TYPES</b></p> <ul style="list-style-type: none"> <li>■ What are Drawing Types?</li> <li>■ Existing and Archived Projects</li> <li>■ Line Diagram Symbols</li> <li>■ Schematic Symbols</li> <li>■ Adding Cables</li> <li>■ Symbols Panel and Properties</li> <li>■ Exercise 3: Drawing Types</li> </ul> <p><b>► SYMBOLS AND COMPONENTS</b></p> <ul style="list-style-type: none"> <li>■ What is a component?</li> <li>■ Component Symbol Identification</li> <li>■ Symbol Component Association</li> <li>■ Exercise 4: Symbols and Components</li> </ul>	<p>3 Days</p>	<ul style="list-style-type: none"> <li>■ The goal of this course is to teach 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 Schematic Design.</li> </ul> <p><b>► MANUFACTURERS PARTS</b></p> <ul style="list-style-type: none"> <li>■ What are Manufacturers Parts?</li> <li>■ Finding Manufacturer Parts</li> <li>■ Electrical Assemblies</li> <li>■ Exercise 5: Manufacturers Parts</li> </ul> <p><b>► WIRES AND EQUIPOTENTIALS</b></p> <ul style="list-style-type: none"> <li>■ Equipotentials and Wires</li> <li>■ Wire Style Manager</li> <li>■ Replacing Wires</li> <li>■ Wire Numbering Results</li> <li>■ Using Nodal Indicators</li> <li>■ Exercise 6: Wires and Equipotentials</li> </ul> <p><b>► CABLING</b></p> <ul style="list-style-type: none"> <li>■ What is Cabling?</li> <li>■ Detailed Cabling</li> <li>■ Terminal Strip</li> <li>■ Pin to Pin Connections</li> <li>■ Adding Terminals to the Strip</li> <li>■ Exercise 7: Cabling</li> </ul> <p><b>► SYMBOL CREATION</b></p> <ul style="list-style-type: none"> <li>■ Symbols and Standard</li> <li>■ Circuits, Terminals, Types</li> <li>■ Multiple Attribute</li> <li>■ Splitting Attribute Data</li> <li>■ Exercise 8: Symbol Creation</li> </ul>



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#### ► MACROS

- What are Macros?
- Creating and Adding Macros
- Exercise 9: Macros

#### ► CROSS REFERENCING

- What is Cross Referencing?
- Cross Reference Types
- Exercise 10: Cross Referencing

#### ► MANAGING ORIGIN-DESTINATION ARROWS

- What are Origin-Destination Arrows?
- Origin-Destination Arrows
- Interpreting the Arrow Text
- Exercise 11: Origin-Destination Arrows

#### ► DYNAMIC PROGRAMMABLE LOGIC CONTROL

- What is a PLC?
- Adding a New Scheme
- Adding a PLC Mark
- Inserting a PLC
- Editing a PLC
- Exercise 12: Adding a PLC

#### ► AUTOMATED PROGRAMMABLE LOGIC CONTROL

- How are PLCs Automated?
- PLC Mark, Part
- 10 Manager
- Exercise 13: Automated Programmable Logic Control

#### ► CONNECTORS

- Connectors
- Insert Connector
- Exercise 14: Connectors

#### ► 2D CABINET LAYOUTS

- What are 2D Cabinet Layouts?
- Exercise 15: 2D Cabinet Layouts

#### ► DESIGN RULE CHECKS

- What are Design Rule Checks?
- Unconnected Pins
- Equipotential Conflicts
- Max. Terminal Wires
- Duplicated Parent Symbols
- Empty Terminal Strip
- Duplicated Terminals
- Exercise 16: Design Rule Checks

#### ► REPORTS

- What are Reports?
- Report Templates
- Report Columns
- Column Formula
- SQL Query Column Variable
- Sort and Break
- Exercise 17: Reports