

Electrical Print Reading

OEM: Rockwell Automation • Duration: 2 Days (16 hrs) • Code: FND-030

COURSE MODULES & TOPICS

Objectives

- Describe the organization of an electrical print
- Identify common electrical schematic symbols
- Interpret an electrical block diagram and a one-line diagram
- Interpret an electrical three-line diagram
- Interpret a piping and instrumentation diagram (P&ID)
- Analyze a basic logic circuit
- Interpret basic ladder logic

Student Materials

- Student Manual includes the key concepts, definitions, examples, and activities presented in this course

Next Level Learning

- Electrical Test Equipment course (EMS-115)

Course Agenda

Day 1

- Distinguishing electrical print types and uses
- Recognizing print organization and layout
- Interpreting print symbology and conventions
- Interpreting block diagrams
- Outlining one-line diagrams

Day 2

- Analyzing circuits
- Reading P&ID drawings
- Interpreting loop diagrams
- Recognizing logic symbols
- Analyzing logic circuits

- Diagramming ladder logic symbols
- Interpreting ladder logic layout
- Review
- Written exam