



Electrical Engineering

Advanced Electrical Troubleshooting, Repair and Isolation Techniques

Course Introduction

This training emphasizes the importance of working safely and of measuring your skills based on time and materials standards to save you and your employer money on troubleshooting projects.

Target Audience

- Electrical Engineer
- Electrical Project Engineer
- Electronics-research engineer
- Instrumentation and Electrical (I&E) Reliability Engineer

Learning Objectives

- Gain a comprehensive understanding of the basic principle of typical process sensor
- Enhance troubleshooting skill for 3 phase AC facilities and equipments
- Review, measure and test electrical parameter
- Identify mechanical faults associated with process facilities and equipments

Course Outline

- DAY 01

Review of basic electrical troubleshooting

- Introduction to advance troubleshooting
- Principles of Typical process equipments and facilities
- Pump, Agitator, Heaters
- Motors, Transformers
- Contactors, Overloads

• Day 02

Instrument testing and measurement of electrical parameters

- Operate the system remotely or locally
- Take Voltage, Resistance and Current
- measurements with a multimeter

• Day 03

Instrument testing and measurement of electrical parameters

- Inspect, Repair and Replace components
- Disconnect and ring out wires.

• Day 04

Principles of input transducers and sensors

- Temperature, Float, & Selector Switches
- Relays, Timers, Pushbuttons
- Solenoid Valves, Fuses, Indicators

• Day 05

Interpretation of electrical schematic diagram

- Cross references
- Electrical designator
- Electrical symbols
- Wiring, Terminal Blocks, Wire Connectors

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 14, 2025	April 18, 2025	5 days	4250.00 \$	UAE - Dubai
Aug. 4, 2025	Aug. 8, 2025	5 days	4250.00 \$	UAE - Dubai
Nov. 23, 2025	Nov. 27, 2025	5 days	4250.00 \$	Bahrain - Manama