

Advance Electrical Troubleshooting, Repairs and Isolations Techniques





# Advance Electrical Troubleshooting, Repairs and Isolations Techniques

## Introduction:

Electrical troubleshooting is the process of identifying and correcting electrical faults in circuits and equipment. Advanced electrical troubleshooting requires a deep understanding of electrical principles and the ability to use specialized tools and equipment.

## Course Objectives:

- Understand the principles of electrical troubleshooting
- · Use a variety of troubleshooting techniques to identify and correct electrical faults
- Safely troubleshoot electrical circuits and equipment
- Apply their troubleshooting skills to real-world problems
- Analyzing electrical circuits and schematics
- · Testing electrical components and equipment
- · Identifying and repairing common electrical faults

# **Targeted Audience:**

This course is designed for:

• This course is designed for electrical technicians, engineers, and other professionals who need to troubleshoot electrical problems.

# Course Outline:

Unit 1:

- Introduction to electrical troubleshooting
- Principles of Electrical Troubleshooting
- Electrical safety
- Troubleshooting tools and equipment
- Hands-on troubleshooting exercises



## Unit 2:

- Troubleshooting electrical circuits
- Analyzing electrical schematics
- Testing electrical components
- Identifying common electrical faults
- Hands-on troubleshooting exercises

### Unit 3:

- Troubleshooting electrical equipment
- Troubleshooting motors and control circuits
- Troubleshooting power distribution systems
- Troubleshooting industrial control systems
- Hands-on troubleshooting exercises

### Unit 4:

- Advanced troubleshooting techniques
- Troubleshooting complex electrical problems
- Troubleshooting in hazardous environments
- · Case studies

### Unit 5:

- Review of key concepts
  - · Review of the key principles and techniques of electrical troubleshooting
- Troubleshooting quiz
  - · Test of participants' knowledge of electrical troubleshooting
- Final project
  - Participants will apply their troubleshooting skills to a real-world problem