



**London TDM**

# **Engineering and Technical Skills Training Courses**

**Course Venue:** United Arab Emirates - Dubai

**Course Date:** From 25 January 2026 To 29 January 2026

**Course Place:** Downtown Dubai

**Course Fees:** 5,000 USD

## Introduction

This 5-day professional course on "Electrical Troubleshooting and Diagnostics" is designed to equip participants with essential skills and knowledge required to identify, diagnose, and resolve electrical issues in various systems. Throughout the course, attendees will engage in both theoretical and practical sessions, enhancing their ability to effectively troubleshoot and implement solutions across diverse electrical environments.

## Objectives

- Understand fundamental electrical principles and concepts.
- Identify and use appropriate diagnostic tools and equipment.
- Develop systematic approaches to troubleshoot electrical problems.
- Interpret electrical diagrams and schematics for diagnostics.
- Apply safety standards and practices in all troubleshooting activities.

## Course Outlines

### Day 1: Introduction to Electrical Systems

- Overview of basic electrical concepts and terminology.
- Introduction to electrical circuits and components.
- Understanding electrical measurements and units.
- Review of electrical safety standards and practices.
- Hands-on session: Identifying components in an electrical panel.

### Day 2: Diagnostic Tools and Techniques

- Introduction to multimeters and oscilloscopes.
- Using thermal imaging cameras for diagnostics.
- Software tools for electrical diagnostics.
- Practical session: Setting up and using diagnostic tools.
- Case studies: Diagnostic scenarios and solutions.

### Day 3: Troubleshooting Common Electrical Issues

- Identifying and troubleshooting circuit failures.
- Addressing motor and control system issues.
- Diagnosing power supply and distribution problems.
- Troubleshooting lighting and illumination systems.
- Hands-on session: Real-world troubleshooting exercises.

### Day 4: Interpreting Diagrams and Schematics

- Understanding electrical symbols and legends.
- Reading and analyzing circuit diagrams.
- Creating and interpreting wiring schematics.
- Using diagrams for troubleshooting guidance.
- Workshop: Diagram analysis and diagnostic planning.

## **Day 5: Advanced Diagnostic Strategies and Safety**

- Developing systematic troubleshooting methodologies.
- Advanced fault-finding techniques.
- Ensuring electrical safety during diagnostics.
- Workshop: Applying advanced diagnostic strategies.
- Course review and evaluation.