



London TDM

Engineering and Technical Skills Training Courses

Course Venue: United Arab Emirates - Dubai

Course Date: From 02 November 2025 To 06 November 2025

Course Place: Downtown Dubai

Course Fees: 5,000 USD

Introduction

The "Power Distribution and Protection Systems" course is designed for professionals in the electrical engineering and utilities sectors, focusing on the reliability and safety of power delivery. This five-day program covers essential aspects of power distribution, system protection strategies, and state-of-the-art technologies to equip participants with the skills necessary to manage and safeguard power systems effectively.

Objectives

- Understand the principles of power distribution networks.
- Gain insights into the latest protection systems and technologies.
- Learn to design and maintain effective distribution systems.
- Analyze system faults and implement protective measures.
- Enhance skills in managing system upgrades and compliance.

Course Outlines

Day 1: Introduction to Power Distribution Systems

- Overview of Electrical Power Systems
- Components of Distribution Networks
- Load Flow and System Planning
- Distribution Network Configurations
- Regulatory and Safety Standards

Day 2: Fundamentals of Protection Systems

- Introduction to Protection Systems
- Types of Faults and Their Impacts
- Protection System Components
- Relay Coordination and Settings
- Fault Analysis Techniques

Day 3: Advanced Protection Techniques

- Digital Protection Relays
- Overcurrent and Earth Fault Protection
- Distance Protection Techniques
- Differential Protection Schemes
- Arc Flash Analysis and Mitigation

Day 4: Distribution System Design and Analysis

- Network Design Considerations
- Smart Grids and Renewable Integration
- Reliability Analysis and Improvement
- Voltage Regulation and Stability
- Case Studies: Real-world Applications

Day 5: Maintenance, Testing, and System Upgrades

- System Maintenance Strategies
- Testing and Commissioning Procedures
- Troubleshooting and Diagnostic Tools
- Upgrade Planning and Implementation
- Compliance and Risk Management