London TDM

Mechanical and Electrical Engineering Training Courses

Course Venue: United Arab Emirates - Dubai

Course Date: From 21 June 2026 To 25 June 2026

Course Place: Downtown Dubai

Course Fees: 5,000 USD

Introduction

The "Electrical Installation and Maintenance" professional course is designed to equip participants with essential skills and knowledge for efficiently installing and maintaining electrical systems. The course covers fundamental principles, safety protocols, and technical skills necessary for careers in the electrical industry. Through theoretical lessons and practical exercises, attendees will gain confidence and competence in handling electrical tasks.

Objectives

- Understand the basics of electrical systems and components.
- Learn industry-standard safety practices and regulations.
- Develop skills for installing and maintaining various electrical systems.
- Analyze and solve common electrical problems.
- Gain hands-on experience with practical electrical installations.

Course Outlines

Day 1: Introduction to Electrical Systems

- Overview of electrical theory and principles
- Introduction to key components and tools
- Understanding wiring diagrams and blueprints
- Introduction to electrical codes and standards
- Safety practices and risk assessment

Day 2: Electrical Installation Techniques

- Planning electrical installations
- Installation of cables, switches, and outlets
- Methods for circuit protection and grounding
- Hands-on installation exercise
- Quality control and inspection

Day 3: Maintenance and Troubleshooting

- Routine maintenance procedures
- Troubleshooting common electrical issues
- Use of diagnostic tools and equipment
- Repair techniques and patching
- Case studies and problem-solving exercises

Day 4: Advanced Electrical Systems

- Introduction to advanced electrical systems
- Installation and maintenance of lighting systems
- Overview of HVAC and motor systems
- Renewable energy systems (solar/wind)
- Hands-on project: Building a complex circuit

Day 5: Final Assessment and Certification

- Review of key concepts and skills
- Final practical assessment
- Written examination
- Feedback session and Q&A
- Course completion and certification awarding