London TDM

Mechanical and Electrical Engineering Training Courses

Course Venue: United Kingdom - London

Course Date: From 05 April 2026 To 09 April 2026

Course Place: London Paddington

Course Fees: 7,500 USD

Introduction

This 5-day comprehensive course on "Electrical Safety and Grounding Systems" is designed for professionals aiming to enhance their understanding of electrical safety practices and effective grounding techniques. Participants will gain valuable insights into regulatory standards, risk assessment, and the implementation of grounding systems to ensure electrical safety in various environments.

Objectives

- Understand the fundamental principles of electrical safety and the importance of grounding systems.
- Recognize and mitigate electrical hazards in the workplace.
- Gain knowledge of industry standards and regulations governing electrical safety.
- Develop skills for designing and implementing effective grounding systems.
- Learn best practices for maintaining electrical safety and conducting risk assessments.

Course Outlines

Day 1: Introduction to Electrical Safety

- Overview of electrical hazards and accidents
- Key principles of electrical safety
- Basic electrical concepts and terminologies
- Understanding personal protective equipment (PPE)
- Case studies on electrical incidents

Day 2: Regulatory Standards and Guidelines

- Introduction to international electrical safety standards
- National Electrical Code (NEC) and other regulations
- Compliance and legal obligations
- Inspection and auditing procedures
- Recordkeeping and documentation

Day 3: Fundamentals of Grounding Systems

- Purpose and function of grounding systems
- Types of grounding methods and their applications
- Components of grounding systems
- Grounding and bonding techniques
- Assessing grounding system performance

Day 4: Designing and Implementing Grounding Systems

- Design principles for effective grounding systems
- Site analysis and risk assessment
- Ground resistance measurement techniques
- Choosing appropriate materials and equipment

- Installation best practices and troubleshooting

Day 5: Maintenance, Testing, and Risk Assessment

- Routine maintenance requirements for grounding systems
- Testing procedures and equipment
- Conducting electrical safety audits
- Updating safety protocols and training
- Developing a culture of safety and awareness