London TDM

Engineering and Technical Skills Training Courses

Course Venue: Malaysia - Kuala Lumpur

Course Date: From 19 October 2025 To 23 October 2025

Course Place: Royale Chullan Hotel

Course Fees: 6,000 USD

Introduction

Effective energy management in industrial systems is vital for reducing operational costs and minimizing environmental impact. This 5-day professional course is designed to equip participants with the knowledge and skills required to enhance energy efficiency, optimize energy use, and implement sustainable energy practices in industrial operations. Through in-depth sessions, participants will explore a range of strategies and innovations involved in energy management.

Objectives

- Understand the fundamentals of energy management principles and practices.
- Analyze energy consumption patterns in industrial environments.
- Implement strategies for improving energy efficiency.
- Explore emerging technologies in energy management.
- Develop a comprehensive energy management plan for industrial systems.

Course Outlines

Day 1: Introduction to Energy Management

- Overview of energy management and its importance.
- Energy management standards and certifications.
- Identifying key energy consumption areas in industrial systems.
- Understanding energy baselines and benchmarking.
- Conducting energy audits: tools and techniques.

Day 2: Energy Efficiency in Industrial Systems

- Strategies for energy efficiency improvement.
- Energy-efficient technologies and equipment.
- Optimizing heating, ventilation, and air conditioning (HVAC) systems.
- Case studies on successful energy efficiency projects.
- Monitoring and targeting energy consumption.

Day 3: Renewable Energy Integration

- The role of renewable energy in industrial systems.
- Solar, wind, and bioenergy applications.
- Challenges in integrating renewables with industrial systems.
- Financial and environmental benefits of renewable energy.
- Developing a renewable energy integration strategy.

Day 4: Advanced Energy Management Technologies

- Introduction to smart grids and IoT in energy management.
- Energy storage solutions and battery technologies.
- Artificial Intelligence in energy management.
- Data analytics for monitoring and improving energy systems.
- Cybersecurity considerations in energy management systems.

Day 5: Developing an Energy Management Plan

- Components of an effective energy management plan.
- Setting goals and key performance indicators (KPIs).
- Stakeholder engagement and collaboration.
- Continuous improvement processes in energy management.
- Final project: Creating a customized energy management plan.