



London TDM

# Oil and Gas Industry Training Courses

**Course Venue:** Malaysia - Kuala Lumpur

**Course Date:** From 19 October 2025 To 23 October 2025

**Course Place:** Royale Chulan Hotel

**Course Fees:** 6,000 USD

## Introduction

This professional course on "Asset Integrity and Maintenance in Energy Facilities" is designed to provide participants with in-depth knowledge and practical skills necessary to ensure the reliability, safety, and efficiency of energy facilities. The course emphasizes the importance of maintaining asset integrity to minimize risks and extend the operational lifespan of equipment and infrastructure in the energy sector.

## Objectives

- Understand the fundamental concepts of asset integrity management and maintenance.
- Identify key challenges and solutions in maintaining energy facility assets.
- Learn effective strategies for risk assessment and mitigation.
- Develop skills for planning and executing maintenance programs.
- Familiarize with the latest technological advancements and best practices in asset integrity.

## Course Outlines

### Day 1: Introduction to Asset Integrity Management

- Overview of asset integrity in energy facilities
- Key components of an asset integrity management system
- Regulatory standards and compliance
- Life cycle management of energy assets
- Case studies on asset integrity management successes

### Day 2: Risk Assessment and Mitigation Strategies

- Principles of risk management in energy facilities
- Risk assessment techniques and tools
- Developing and implementing mitigation plans
- The role of safety and environmental considerations
- Interactive workshop on risk assessment

### Day 3: Maintenance Planning and Execution

- Types of maintenance strategies (preventive, predictive, and corrective)
- Developing a maintenance plan
- Resource allocation and scheduling
- Evaluation of maintenance outcomes
- Interactive session on maintenance planning

### Day 4: Technological Advancements in Asset Integrity

- Innovative technologies in asset monitoring (IoT, AI, and drones)
- Data analysis and condition monitoring
- Digital twins and their application in maintenance
- Integrating new technologies into existing systems
- Hands-on demonstration of advanced monitoring tools

## **Day 5: Best Practices and Future Trends**

- Review of best practices in asset integrity management
- Benchmarking and performance evaluation
- Future trends and challenges in asset maintenance
- Panel discussion with industry experts
- Course wrap-up and feedback session