London TDM

Oil and Gas Industry Training Courses

Course Venue: Malaysia - Kuala Lumpur

Course Date: From 19 April 2026 To 23 April 2026

Course Place: Royale Chullan Hotel

Course Fees: 6,000 USD

Introduction

The "Refinery Process Yields and Optimization" course is a comprehensive program aimed at equipping professionals with the knowledge and skills needed to enhance refinery process efficiency and yield. Through in-depth exploration of key processes, optimization strategies, and practical applications, attendees will gain insights into maximizing productivity and profitability in refinery operations.

Objectives

- Understand the fundamental principles of refinery processes.
- Identify key performance indicators for process yields.
- Explore strategies for process optimization and efficiency improvement.
- Learn to apply advanced techniques in process simulation and modeling.
- Develop skills to perform economic evaluation of optimization opportunities.

Course Outlines

Day 1: Introduction to Refinery Processes

- Overview of refining processes and their importance.
- Crude oil types and characteristics affecting process yields.
- Basic refining units: Distillation, Cracking, Reforming, etc.
- Understanding process flow diagrams (PFDs).
- The role of catalysts in refining processes.

Day 2: Key Performance Indicators and Yield Analysis

- Defining and measuring process yields.
- Critical performance indicators in refinery operations.
- Analyzing yield patterns and trends.
- Case studies: Yield improvement initiatives.
- Tools and technologies for yield analysis.

Day 3: Process Optimization Techniques

- Principles of process optimization.
- Techniques for optimizing distillation, cracking, and reforming.
- Energy efficiency improvements in refining operations.
- Real-time optimization and control systems.
- Case studies on successful process optimization.

Day 4: Simulation and Modeling in Refinery Optimization

- Introduction to simulation and modeling tools.
- Building and validating process models.
- Scenario analysis and optimization using models.
- Integration of simulation tools in decision-making.
- Hands-on exercise with industry-standard software.

Day 5: Economic Evaluation and Strategic Implementation

- Cost-benefit analysis of optimization projects.
- Risk assessment and management in process changes.
- Implementing optimization strategies effectively.
- Monitoring and sustaining process improvements.
- Project presentations and feedback session.