Advanced Refinery Process Yields Optimisation Training

9 – 13 August 2027
London (UK)



Advanced Refinery Process Yields Optimisation Training

Ref: 322934_219537 **Date:** 9 – 13 August 2027 **Location:** London (UK) **Fees:** 6100 GBP

Course Description

This advanced course delves deep into refinery process yields optimization, equipping participants with cutting-edge techniques to maximize efficiency and product quality. Over five intensive days, industry experts will guide you through advanced process control, simulation tools, and emerging technologies that are revolutionizing refinery operations. You'll gain practical skills to implement immediately, driving significant improvements in your refinery's performance.

Learning Objectives

- Master advanced strategies for optimizing refinery process yields
- Implement cutting-edge process control and simulation techniques
- Analyze and improve energy efficiency in refinery operations
- Apply data analytics and machine learning for yield optimization
- Develop strategies to adapt to changing feedstocks and market demands

Course Modules

Day 1: Advanced Refinery Process Analysis

- Comprehensive refinery process review
- Advanced crude oil characterization techniques
- Process integration and heat exchanger network optimization
- Case study: Identifying yield improvement opportunities

Day 2: Cutting-Edge Process Control Strategies

- Advanced process control APC systems
- Model predictive control for yield optimization
- Real-time optimization techniques
- Hands-on simulation: Implementing APC in key refinery units

Day 3: Energy Efficiency and Sustainability

- Energy audits and pinch analysis
- Waste heat recovery and cogeneration
- Emissions reduction strategies
- Green technologies in refining processes



Day 4: Data Analytics and Machine Learning Applications

- Big data analytics in refinery operations
- Machine learning for process optimization
- Predictive maintenance and reliability improvement
- Workshop: Developing a data-driven optimization model

Day 5: Adapting to Market Trends and Future Technologies

- Flexible operations for changing feedstocks
- Integrating renewable feedstocks in existing refineries
- Emerging technologies in refining
- Strategic planning for long-term yield optimization

Practical Wins for Participants

- Implement advanced process control strategies to increase yields by 2-5%
- Reduce energy consumption by 10-15% through optimized heat integration
- Improve product quality and consistency using data-driven approaches
- Develop a strategic roadmap for long-term refinery optimization

