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PIPELINE HYDRAULIC OPERATIONS & MAINTENANCE

Start Date:	19/04/2027	**End Date:**	23/04/2027
Categories:	Engineering & Maintenan	**Venues:**	London
Formats:	In Person	**Instructors:**	

OVERVIEW

This course provides a comprehensive understanding of the principles and practices essential for the effective hydraulic operations and maintenance of pipelines. Participants will gain insights into fluid dynamics, system integrity, and proactive maintenance strategies to ensure safe, efficient, and reliable pipeline performance.

OBJECTIVES

By the end of this course, participants will be able to: – By the end of this course, participants will be able to: – Analyze pipeline hydraulic behavior under various operating conditions. – Implement effective maintenance strategies to prevent failures and optimize performance. – Understand and apply relevant industry standards and best practices for pipeline operations. – Identify and mitigate potential hydraulic-related risks and operational challenges. – Utilize diagnostic tools and techniques for monitoring pipeline health. – Develop emergency response plans for hydraulic anomalies.

COURSE OUTLINE

1- Pipeline Hydraulics Fundamentals 2- Operational Monitoring and Control 3- Preventive and Predictive Maintenance 4- Integrity Management and Risk Assessment 5- Troubleshooting and Emergency Response

TARGET AUDIENCE

Pipeline engineers, operations managers, maintenance technicians, integrity engineers, and field supervisors involved in the day-to-day operations and upkeep of pipeline systems.

METHODOLOGY

The course combines theoretical instruction with practical case studies, interactive simulations, and group discussions. Participants will engage with real-world scenarios to apply learned concepts and develop problem-solving skills.

CONCLUSION

Upon completion of this course, participants will be equipped with the knowledge and skills to manage pipeline hydraulic operations and maintenance effectively, ensuring the integrity, safety, and efficiency of their pipeline assets.

DAILY AGENDA

Day 1: Hydraulic Principles

Focuses on the fundamental principles of fluid mechanics as they apply to pipeline flow, including pressure, flow rate, viscosity, and energy losses.

Day 2: Operational Systems

Covers the components of pipeline hydraulic systems, control mechanisms, SCADA integration, and real-time monitoring techniques for operational efficiency.

Day 3: Preventative, predictive, and corrective maintenance approaches

Explores preventative, predictive, and corrective maintenance approaches for hydraulic components, including pump and valve maintenance, and integrity management.

Day 4: Risk and Troubleshooting

Addresses common hydraulic operational issues, failure modes, diagnostic tools, and systematic troubleshooting methodologies using risk assessment matrices.

Day 5: Compliance and Optimization

Reviews regulatory requirements, safety protocols, and strategies for optimizing pipeline hydraulics for maximum throughput and minimal environmental impact.

For more information, please contact us:
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