

SMART PIGGING AND IN-LINE INSPECTION TECHNOLOGIES

Start Date:	19/10/2026	End Date:	23/10/2026
Categories:	Oil & Gas	Venues:	London
Formats:	In Person	Instructors:	

OVERVIEW

This course provides technical expertise in smart pigging and in-line inspection (ILI) methods for pipeline integrity assessment. Participants will learn how to select, operate, and interpret data from various pigging tools used for detecting anomalies, corrosion, and mechanical defects in pipelines.

OBJECTIVES

By the end of this course, participants will be able to:

- Understand the principles and applications of smart pigging technologies.
- Select appropriate ILI tools based on pipeline characteristics and inspection goals.
- Execute pigging operations safely and efficiently.
- Analyze inspection data to detect corrosion, deformation, and weld defects.
- Integrate ILI results into pipeline integrity and maintenance programs.

COURSE OUTLINE

1. Introduction to Pigging and Pipeline Cleaning Techniques
2. Types of ILI Tools: MFL, UT, EMAT, Geometry, and Combo Tools
3. Tool Selection and Pre-Inspection Planning
4. Data Collection, Validation, and Anomaly Detection
5. Post-ILI Actions: Maintenance Prioritization and Reporting

TARGET AUDIENCE

Pipeline inspectors, integrity engineers, maintenance supervisors, and field technicians involved in pipeline inspection and diagnostics.

METHODOLOGY

Tool demonstrations, pigging procedure simulations, data analysis labs, and case-based evaluations.

CONCLUSION

Participants will develop hands-on capabilities in smart pigging operations and ILI data interpretation to support effective pipeline integrity management.

DAILY AGENDA

Day 1: Pigging Principles and Pipeline Cleaning

Overview of pigging processes, cleaning techniques, and tool types.

Day 2: ILI Technologies and Applications

Understanding MFL, UT, geometry, and combo pigs for internal inspection.

Day 3: Planning and Running ILI Operations

Pre-inspection planning, launcher/receiver setups, and operational safety.

Day 4: Inspection Data Review and Defect Detection

Data quality checks, signal interpretation, and anomaly classification.

Day 5: Using ILI Results for Integrity Management

Integrating ILI findings into maintenance and repair prioritization.

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