

## PIPELINE INTEGRITY MANAGEMENT

*“Ensuring Safe, Reliable, and Compliant Pipeline Operations from the Inside Out”*

### Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** Face-to-Face & Online Training, In-House Training

### Introduction

Pipeline systems face increasing pressure from aging infrastructure, rising safety expectations, and strict regulatory requirements. This intensive training equips engineers and asset managers with the tools and methodologies to implement robust pipeline integrity programs. Learn to proactively assess risks, prevent failures, and comply with standards such as ASME, API, and ISO to ensure long-term pipeline performance and safety.

### Objectives

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

- Understand the principles of pipeline integrity and failure mechanisms
- Develop and implement a Pipeline Integrity Management System (PIMS)
- Apply in-line inspection (ILI), NDT, and risk-based assessment techniques
- Evaluate threats including corrosion, fatigue, ground movement, and third-party damage
- Respond to incidents with effective mitigation and repair strategies

## Why Attend

- Stay ahead of regulatory expectations and avoid costly shutdowns
- Learn directly from experts using real-world failure data and case studies
- Develop a deep understanding of pipeline integrity threats and prevention
- Be equipped to lead or contribute meaningfully to integrity assessment and planning

## Target Audience

- Pipeline engineers and integrity managers
- Asset management professionals
- Risk managers and HSE personnel
- Maintenance and inspection teams
- QA/QC and regulatory compliance professionals

## Individual Benefits

- Master modern tools and techniques for pipeline monitoring and diagnostics
- Enhance your professional value with integrity-specific expertise
- Build confidence in handling emergency response and repair planning
- Earn a certification respected across pipeline and energy industries

## Organizational Benefits

- Improve pipeline uptime, safety, and environmental performance
- Reduce risk of unplanned outages, fines, and damage to public image
- Ensure regulatory compliance with local and international pipeline standards
- Extend asset life and improve return on pipeline infrastructure investment

## Instructional Methodology

- Instructor-led presentations and technical illustrations
- Group exercises in risk ranking, inspection interpretation, and integrity planning
- Failure case study reviews from international pipeline operations
- Simulation activities and hands-on integrity assessment tasks
- Daily quizzes and guided Q&A for reinforcement

## Course Outline

DETAILED 5-DAY COURSE OUTLINE (Customizable) Training Hours: 07:30 AM – 03:30 PM Daily Format: 3–4 Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

### Day 1 – Integrity Management Foundations

- Module 1 (07:30 – 09:30): Introduction to Pipeline Integrity and Risk-Based Approaches
- Module 2 (09:45 – 11:15): Regulatory Frameworks and PIMS Standards (API 1160, ASME B31.8S)
- Module 3 (11:30 – 01:00): Threat Identification: External, Internal, and Operational

### Day 2 – Inspection and Assessment Tools

- Module 4 (07:30 – 09:30): In-Line Inspection (ILI) Technologies and Data Interpretation
- Module 5 (09:45 – 11:15): Non-Destructive Testing (NDT) Techniques for Pipelines
- Module 6 (11:30 – 01:00): Integrity Assessment Models (Quantitative and Qualitative)

### Day 3 – Corrosion, Fatigue, and Integrity Threats

- Module 7 (07:30 – 09:30): External Corrosion, CP Systems, and Coating Failures
- Module 8 (09:45 – 11:15): Internal Corrosion, MIC, and Erosion Threats
- Module 9 (11:30 – 01:00): Stress Corrosion Cracking, Fatigue, and Mechanical Damage

### Day 4 – Repair Methods and Emergency Response

- Module 10 (07:30 – 09:30): Pipeline Repair Techniques: Sleeves, Clamps, and Composite Wraps
- Module 11 (09:45 – 11:15): Emergency Response Planning and Incident Management
- Module 12 (11:30 – 01:00): Case Studies: Major Failures and Root Cause Analysis

### Day 5 – Building and Implementing an Integrity Plan

- Module 13 (07:30 – 09:30): Data Integration and Risk Ranking Models
- Module 14 (09:45 – 11:15): Developing a Pipeline Integrity Management Plan (PIMP)
- Module 15 (11:30 – 01:00): Workshop: Group Exercise on Threat Assessment and Repair Planning

## Certification

Upon successful participation, delegates will be awarded a Certificate of Completion in Pipeline Integrity Management, validating their competency in pipeline risk prevention and integrity assurance.

## Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

### In-House / Customized Training

Interested in running this course for your team?

Please contact us:

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