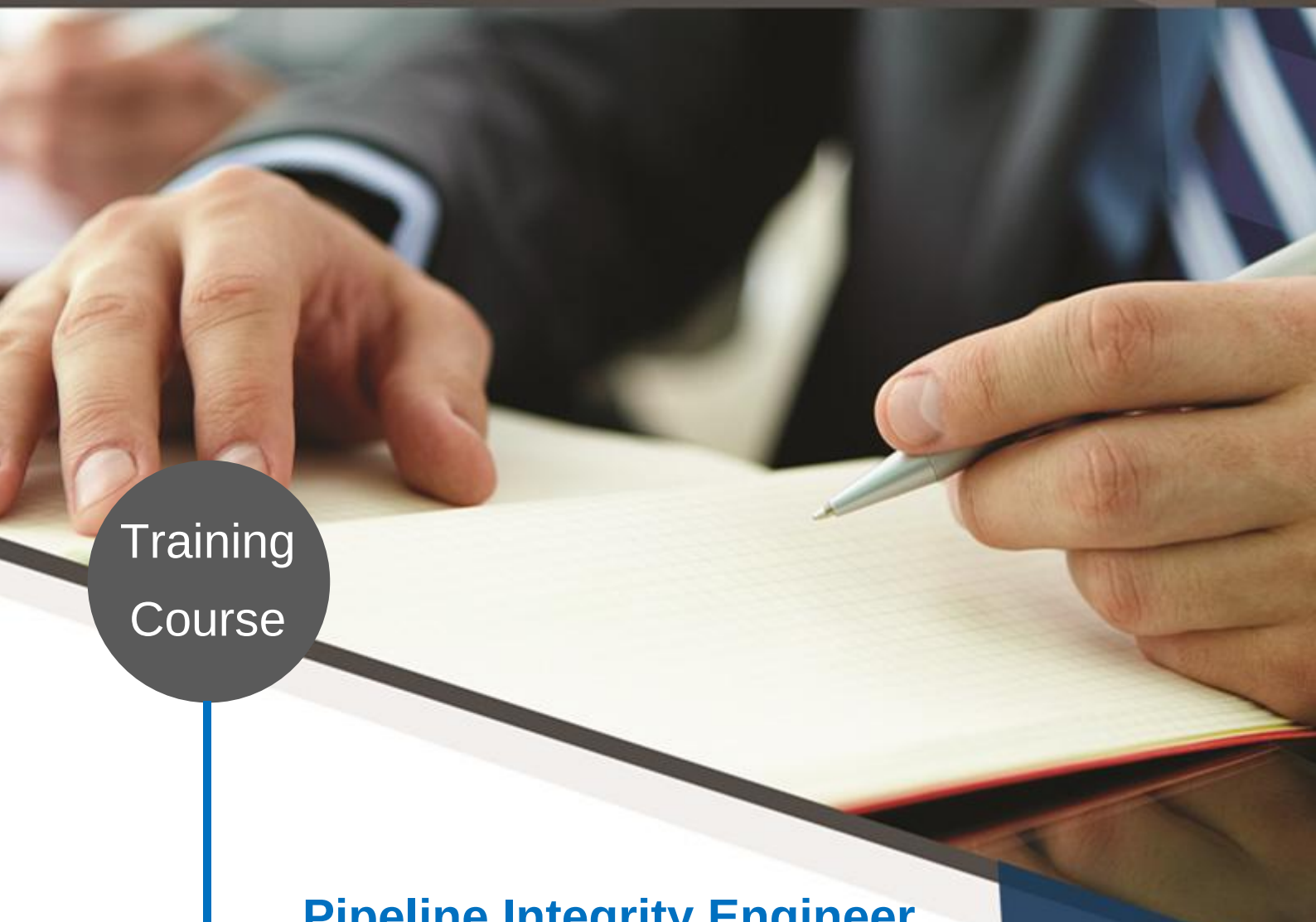
Skills International for Training & Consulting



Training Course

Pipeline Integrity Engineer

Pipeline Inspection & Integrity Management

Skills International for Training & Consulting

سكلز الدولية للتدريب والإستشارات

Course Plan

Introduction

Maintaining the safety, reliability, and efficiency of pipeline systems is critical for the energy and utility sectors. The “Pipeline Integrity Engineer: Pipeline Inspection & Integrity Management” course provides engineers and technical professionals with in-depth knowledge and practical skills to ensure pipeline integrity throughout its lifecycle. Covering inspection techniques, risk assessment, failure analysis, regulatory compliance, and maintenance planning, this course empowers participants to manage pipeline assets proactively and prevent costly incidents and environmental hazards.

Course Objectives:

- ✓ Understand the fundamental principles of pipeline integrity management.
- ✓ Learn various pipeline inspection methods and technologies.
- ✓ Identify and assess common threats to pipeline integrity.
- ✓ Develop strategies for preventive maintenance and risk mitigation.
- ✓ Comply with international codes, standards, and regulatory requirements.
- ✓ Interpret inspection data and make informed decisions on repairs and interventions.
- ✓ Enhance skills in developing and managing integrity management programs (IMP).
- ✓ Promote a culture of safety, reliability, and environmental responsibility.

Who Should Attend?

- Pipeline integrity engineers and inspection specialists
- Maintenance and reliability engineers
- Asset managers and field operations staff
- Health, Safety, and Environment (HSE) professionals
- Project managers overseeing pipeline projects
- Regulatory compliance officers in oil, gas, and utility sectors
- Anyone involved in pipeline maintenance, inspection, or risk management

Training Methods:

- ✓ Online Video material.
- ✓ Presentation.
- ✓ Live Interactive sessions.
- ✓ Course presenter will make extensive use of all tools that will be needed for the virtual environment.
- ✓ Questions & Answers

Course Outline:

Day One

- Introduction to Pipeline Systems and Their Components
- Fundamentals of Pipeline Integrity Management Programs (IMP)
- Understanding Pipeline Design and Construction Basics
- Common Threats to Pipeline Integrity (Corrosion, Cracking, External Damage)
- Risk Assessment Methodologies for Pipelines

Day Two

- Pipeline Inspection Techniques: Visual, Ultrasonic, Magnetic, Radiographic
- In-Line Inspection (ILI) Tools and Technologies (PIGging Tools)
- Non-Destructive Testing (NDT) Methods for Pipelines
- External Corrosion and Cathodic Protection Systems
- Internal Corrosion: Causes, Detection, and Mitigation

Day Three

- Crack Management in Pipelines
- Geotechnical Hazards Impacting Pipelines (Landslides, Subsidence)
- Third-Party Damage Prevention Programs
- Data Management and Analysis in Pipeline Integrity
- Pipeline Failure Investigation and Root Cause Analysis

Day Four

- Development and Implementation of Integrity Management Plans
- Emergency Response Planning and Incident Management
- Repair and Rehabilitation Techniques for Pipelines
- Managing Aging Pipelines and Life Extension Strategies
- Regulatory Frameworks and International Standards (e.g., ASME, API, DNV)

Day Five

- Environmental and Safety Considerations in Pipeline Integrity
- Pipeline Monitoring Systems and Real-Time Data Integration
- Best Practices for Documentation and Record Keeping
- Case Studies: Lessons Learned from Pipeline Failures and Successes
- Future Trends in Pipeline Integrity: Smart Sensors and Digital Monitoring

Training Details

Course Duration	5 Days
Pre-Schedule	28 Sept – 2 Oct 2025
Venue	Barcelona - Spain
Training Fees Per Person	KWD 1800 (One Thousand Eight Hundred Only)
Course Fees Include	✓ Tuition documentation ✓ Curriculum and Training Handout ✓ Five star Lunch ✓ Completion Certificates