

# FIXED EQUIPMENT INTEGRITY AND FITNESS-FOR-SERVICE

Start Date:	14/12/2026	End Date:	18/12/2026
Categories:	Engineering & Maintenance	Venues:	Barcelona
Formats:	In Person	Instructors:	

## OVERVIEW

This course provides practical knowledge on assessing the integrity and serviceability of fixed equipment in oil & gas, focusing on degradation mechanisms, inspection practices, and fitness-for-service evaluations per API 579.

## OBJECTIVES

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

- Identify common degradation mechanisms in fixed equipment.
- Conduct inspection planning and apply NDT methods effectively.
- Perform fitness-for-service assessments per API 579.
- Evaluate repair or replacement decisions based on asset condition.
- Enhance operational safety and minimize equipment failure risks.

## COURSE OUTLINE

1. Degradation Mechanisms and Risk Factors 2. Inspection Planning, NDT Techniques and Intervals 3. Fitness-for-Service Framework (API 579) 4. Case-Based FFS Level 1 & Level 2 Assessments 5. Repair, Replacement, and Life Extension Strategies

## TARGET AUDIENCE

Inspection engineers, plant integrity teams, reliability professionals, and maintenance managers involved in fixed equipment evaluations.

## METHODOLOGY

API-based analysis, case exercises, inspection walkdowns, and evaluation templates.

## CONCLUSION

Participants will return equipped with technical strategies for evaluating and managing the fitness-for-service of fixed assets in complex operating environments.

## DAILY AGENDA

### **Day 1: Fixed Equipment Integrity Overview**

Types of degradation, corrosion loops, and integrity principles.

### **Day 2: NDT and Inspection Strategies**

Planning and executing visual, UT, PT, and RT inspections.

### **Day 3: Fitness-for-Service (API 579)**

FFS levels, component assessment methods, and API workflow.

### **Day 4: Case Study Applications**

Practical FFS examples and run-repair-replace decision making.

### **Day 5: Life Extension & Repair Planning**

Documentation, repair criteria, and post-repair evaluations.

*For more information, please contact us:*

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