

CORROSION CONTROL AND CATHODIC PROTECTION SYSTEMS

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

OVERVIEW

This course focuses on corrosion mechanisms in oil & gas infrastructure and the application of cathodic protection (CP) systems. It equips professionals with practical skills to assess corrosion risks, design CP systems, and implement monitoring and maintenance programs.

OBJECTIVES

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

- Identify types and causes of corrosion in pipelines and facilities.
- Select and apply appropriate corrosion control techniques.
- Design and operate cathodic protection systems (galvanic and impressed current).
- Monitor and troubleshoot CP systems using field instrumentation.
- Ensure compliance with corrosion control standards and improve asset lifespan.

COURSE OUTLINE

1. Corrosion Mechanisms and Failure Modes in Oil & Gas
2. Corrosion Prevention Methods and Protective Coatings
3. Cathodic Protection Systems: Design and Installation
4. Field Testing, Monitoring, and Troubleshooting of CP Systems
5. Compliance Standards, Documentation, and Life-Cycle Optimization

TARGET AUDIENCE

Corrosion engineers, maintenance personnel, integrity specialists, and field operators involved in corrosion management and protection systems.

METHODOLOGY

Field simulation labs, CP system design exercises, coating evaluations, and case study analysis.

CONCLUSION

Participants will be prepared to lead or support effective corrosion control programs, including cathodic protection design, operation, and compliance across oil & gas assets.

DAILY AGENDA

Day 1: Corrosion Mechanisms in Oil & Gas Infrastructure

Types of corrosion, failure modes, and risk factors affecting pipelines and tanks.

Day 2: Prevention Techniques and Protective Coatings

Applying internal and external protection methods including coatings and inhibitors.

Day 3: Cathodic Protection System Design

Fundamentals of galvanic and impressed current systems, and design calculations.

Day 4: Monitoring and Maintenance of CP Systems

Using field equipment to test, monitor, and troubleshoot cathodic protection systems.

Day 5: Standards, Records, and Life-Cycle Strategy

Documenting compliance and optimizing long-term corrosion control strategies.

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