

## CORROSION CONTROL AND CATHODIC PROTECTION SYSTEMS

<b>Start Date:</b>	02/11/2026	<b>End Date:</b>	06/11/2026
<b>Categories:</b>	Oil & Gas	<b>Venues:</b>	London
<b>Formats:</b>	In Person	<b>Instructors:</b>	

### 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.

*Page 2 of 3*

*For more information, please contact us:*

*Email: info@gatewayconsulting.com | Phone: +96522968641*

*<https://gatewayconsulting.com>*