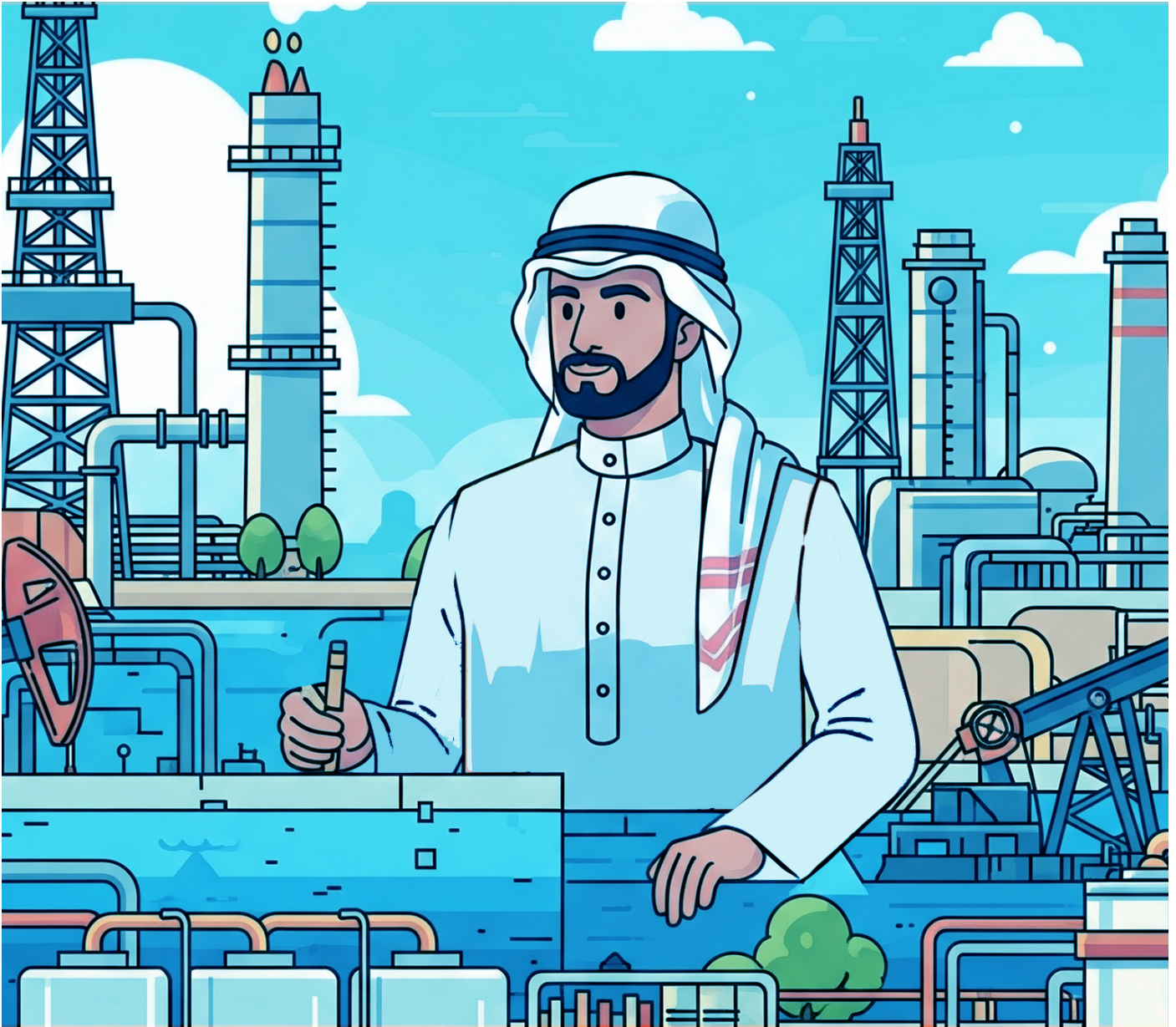




Oil, Gas and Chemical

Cathodic Protection System for Tanks and Pipelines

Course Introduction

Cathodic protection is a crucial technique for preventing corrosion in tanks and pipelines, ensuring the longevity and integrity of industrial infrastructure. This course provides a comprehensive understanding of cathodic protection systems, covering design principles, installation, monitoring, and maintenance. Participants will learn about different protection methods, industry standards, and best practices for safeguarding metal structures against corrosion-related failures. Through practical insights and real-world applications, this course equips professionals with the knowledge to enhance asset reliability and compliance with safety regulations.

Target Audience

This course is suitable for engineers, technicians, and maintenance personnel involved in pipeline and tank management, corrosion prevention, and asset integrity.

Learning Objectives

- Understand the fundamentals of corrosion and its effects on tanks and pipelines.
- Identify different types of cathodic protection systems and their applications.
- Design and implement effective cathodic protection systems.
- Conduct maintenance and monitoring of cathodic protection systems.
- Analyse case studies to understand real-world applications and challenges.

Course Outline

• 01 Day One

Fundamentals of Corrosion and Cathodic Protection

Session 1: Introduction to Corrosion

- Definition and types of corrosion.
- Factors influencing corrosion rates.
- Consequences of corrosion in tanks and pipelines.

Session 2: Basics of Cathodic Protection

- Principles of cathodic protection.
- Comparison of cathodic protection methods: sacrificial anodes vs. impressed current systems.

Session 3: Cathodic Protection Components

- Overview of components used in cathodic protection systems (anodes, reference electrodes, rectifiers, etc.).
- Material selection and compatibility.

• 02 Day Two

Design and Implementation of Cathodic Protection Systems

Session 4: Designing Cathodic Protection Systems

- Key design considerations for tanks and pipelines.
- Calculating current requirements and anode placement.
- Environmental factors affecting design.

Session 5: Installation Practices

- Best practices for installing cathodic protection systems.
- Safety measures and compliance with regulations.

Session 6: Monitoring and Maintenance

- Techniques for monitoring cathodic protection performance.
- Maintenance strategies for long-term effectiveness.
- Troubleshooting common issues in cathodic protection systems.

• 03 Day Three

Case Studies and Practical Applications

Session 7: Case Studies of Cathodic Protection in Action

- Review of successful cathodic protection implementations in various industries.
- Lessons learned from failures and successes.

Session 8: Final Assessment and Q&A

- Participants complete a final assessment to demonstrate their understanding of course content.
- Open forum for questions, discussion, and sharing experiences.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 25, 2025	May 27, 2025	3 days	4250.00 \$	KSA - Riyadh
Sept. 8, 2025	Sept. 10, 2025	3 days	4250.00 \$	UAE - Dubai
Nov. 24, 2025	Nov. 26, 2025	3 days	4950.00 \$	Indonsia - Jakarta
Jan. 6, 2025	Jan. 8, 2025	3 days	4250.00 \$	UAE - Dubai