

Scandinavian Academy Training Center

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Email | info.en@scandinavianacademy.co Web site:https://scandinavianacademy.co/en :
Riyadh - Al Khaleej District - Sheikh Abdul Aziz Bin Abdul Rahman Bin Bishr Street - 13223 - Office No. 5 | P.O.BOX : 13224

# Course: Cathodic Protection and Chemical Treatment

| Code | City | hotel | Start | End | price | Language - Hours |
|---|---|---|---|---|---|---|
| OG-371SA | Al Khobar | Hotel Meeting | 2027-04-04 | 2027-04-08 | 12950 SR | En - 25 |

## Overview :

Maintaining the ageing infrastructure such as underground pipelines is a challenge to the oil and gas industry worldwide. Understanding why and how cathodic protection works or fails can help the operator formulate appropriate strategy in managing the pipeline corrosion problems. This five-day course covers both the fundamentals and practices in designing, operating and maintaining cathodic protection of underground pipelines. An overview of the NACE standard on “Pipeline External Corrosion Direct Assessment Methodology” will also be presented.

**Objectives of the training program:**

- Draw a simple model of a Cathodic Protection cell and name the different elements
- Name 2 types of Cathodic Protection Systems
- Explain the relationship between Coatings and Cathodic protection
- Name and describe 2 different testing methods used to test Cathodic Protection
- Understand terminology commonly used when discussing Cathodic Protection

## Course Outline

### Day 1

- Primer on Chemistry and Metallurgy
- Fundamentals of corrosion

- Cathodic Protection
- Sacrificial Anode Cathodic Protection
- Impressed Current Cathodic Protection
- Criteria for Cathodic Protection
- Reference potential devices

**Day 2**

- Potential measuring instrument
- Soil resistivity test instruments
- Wall thickness and pit gages
- Current interrupters
- Test rectifiers
- HoliModule detectors
- Electrical resistivity

**Day 3**

- Resistance of ground connection
- Non-uniform electrolyte
- Groundbed Design
- Long pipelines and pipe insulating joints
- Stray current corrosion and electrolysis
- Practical stray current problems

**Day 4**

- Interference from other CP installations
- Effectiveness of coatings
- Coatings specification
- Coatings inspection
- Type of pipeline coatings
- Coating failures and analysis

## Day 5

- Cathodic Protection and Coatings
- Survey methods for pipeline not under cathodic protection
- Survey methods for pipeline under cathodic protection
- Overview of NACE Standard on “Pipeline External Corrosion Direct Assessment Methodology”
- Corrosion Inhibitors
- Scale Inhibitors
- Biocides

**The Scandinavian Academy for Training Center** adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training Center.

**Program Timings:  9:00 AM to 2:00 PM**

**The program includes:**

- A daily buffet provided during the sessions to ensure participants comfort.
- A closing ceremony on the final day to distribute certificates and celebrate participants achievements.
- **Note: All prices are exclusive of 15% Value Added Tax (VAT).**

# Our Success Partners

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