





Course: Corrosion & Materials and Corrosion Control

Code	City	Hotel	Start	End	Price	Language - Hours
814	Washington (US)	Hotel Meeting Room	2025-09-01	2025-09-05	7450 €	En - 25

PROGRAMME SUMMARY

Corrosion Prevention & Control (CPC) planning is the most efficient method for effectively addressing and reducing the impact of corrosion at every stage of a product or facility's lifecycle. This eCourse walks through the NACE SP21412-2016/SSPC-CPC 1 standard, diving into the key aspects of CPC planning for products and facilities. It covers: attributes that impact CPC planning; considerations for material selection and design to minimize corrosion; and items that should be addressed in CPC planning which affect CPC in design, fabrication and construction, operation and use, and maintenance and sustainability.

OBJECTIVE

- Understand the mechanisms of corrosion
- Understand the costs of corrosion across industry
- Recognize the importance of corrosion prevention and control planning
- Recognize the purpose of the CPC planning standard
- Identify the different components of the standard
- Identify the items or topics that should be addressed during CPC planning
- Possess a fundamental understanding of how this standard can be utilized as an effective tool during CPC planning
- Development skills in the field of to produce competent, professionally qualified graduates who are appropriately trained and will secure immediate, rewarding and useful employment in UK, European or overseas industries as corrosion scientists or engineers.



- To provide conversion training, which is intellectually challenging, as well as being industrially relevant.
- To satisfy the needs of practicing engineers, scientists and technologists wishing to develop professional competence in the areas of corrosion and corrosion control methods.

WHO SHOULD ATTEND

- Corrosion & Integrity Engineers
- Production & Operation Engineers
- Inspection Engineers
- Repair & Maintenance Engineers
- Coating & CP Engineers
- Asset Project Engineers & Asset Managers
- Chemical Treatment Suppliers
- Corrosion Monitoring Systems Suppliers & Lab Technicians
- Applicable to all personnel working in the oil, gas and petrochemical industry, and who are involved in the design, procurement, engineering construction, operation, maintenance and inspection of storage tanks and related facilities.
- Managers, engineers and technicians, and all involved and work-related to inspection & laborites in oil refinery operation of various public institutions and private companies and various ministries .

THE SCIENTIFIC CONTENT OF THE PROGRAM

Corrosion Management in the Oil and Gas Industry:-

- Introduction
- What it is Corrosion? - Definition of Corrosion
- Corrosion in Action: Examples of Corrosion
- Corrosion and Society: Its economic, social, political and environmental impacts



- Liabilities due to corrosion
- Lessons of History
- Basic Concepts in Corrosion.
- Corrosion and Corrosion Engineering (CE) in the Oil and Gas Industry
- The Two Current Corrosion Management (CM) Models
- The Corrosion Management Concept Definition

The Corrosion Management Implementation Process:-

- The Integrity Review Process
- The Corrosion Engineering and Corrosion Management Interactions Post-Commissioning
- The Corrosion Management Process Implementation
- A Brief Introduction to Risk-Based Inspection (RBI)
- Inspection Basics
- Risk Basics
- Risk-Based Inspection Basics
- Corrosion Loops and Process Flow Diagrams

Identification and Maintenance of Management Requirements:-

- An Introduction to Management Requirements
- Registers, Strategies and Procedures
- Databases, Documentation and Data Management
- The Significance of Communication
- The Asset Corrosion Management Strategy Document
- Corrosion Control Matrices and Corrosion Key Performance Indicators
- Team Structure, Roles and Responsibilities
- The Significance of Competency

Corrosion Management Shortcomings and Other CM Requirements:-

- Corrosion Management Shortcomings



- Corrosion Failure Pre-emption
- Corrosion Cost Optimisation
- Other Important CM Requirements
- The Corrosion Management Audit
- The Management of Change Process
- Anomalies and their Management
- Leak Register, Failure Investigations and Learning

Corrosion Management Benefits and Implementation Recommendations :-

- Potential Benefits of Corrosion Management Applications
- Recommendations for Optimized Corrosion Management Implementation
- Main Conclusions
- Main Recommendations
- Post-Course Assessment.
- Case studies and examples.



The Scandinavian Academy for Training and Development 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 and Development.

Program Timings:

- 9:00 AM to 2:00 PM in Arab cities.
- 10:00 AM to 3:00 PM in European and Asian cities.

The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.