

## STRUCTURAL COATINGS

*“Safeguarding Infrastructure with Advanced Coating Solutions”*

### Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** Face-to-Face & Online Training, In-House Training

### Introduction

Structural coatings are essential to protect steel, concrete, and other substrates from corrosion, environmental degradation, and mechanical damage. This course offers a comprehensive understanding of structural coating technologies, selection criteria, application methods, inspection, and failure analysis. Participants will explore the latest innovations in coating systems and how they contribute to the longevity and integrity of infrastructure assets across industries such as oil & gas, marine, construction, and energy.

### Objectives

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

- Understand the fundamental principles and functions of structural coatings
- Identify appropriate coatings for specific environments and substrates
- Apply best practices in surface preparation and coating application
- Detect, analyze, and prevent coating failures
- Ensure compliance with international standards and safety regulations
- Select eco-friendly and high-performance coating solutions

## Why Attend

- Gain practical knowledge of selecting and applying the right coating for structural assets
- Reduce downtime and costly maintenance by enhancing corrosion protection
- Understand coating failures and how to prevent them
- Stay current with innovations in sustainable and high-performance coatings
- Build competence in coating inspection and quality assurance

## Target Audience

- Maintenance and operations engineers
- Asset and integrity managers
- Coating inspectors and QA/QC professionals
- Project engineers and construction managers
- Corrosion engineers and facility owners

## Individual Benefits

- Develop expertise in coating system selection and application
- Improve your inspection and troubleshooting capabilities
- Enhance your qualifications with specialized industry knowledge
- Reduce the risk of premature asset failure due to corrosion

## Organizational Benefits

- Increase asset life and structural integrity
- Lower maintenance and rework costs through optimized coating strategies
- Strengthen compliance with industry and regulatory standards
- Improve environmental and safety performance

## Instructional Methodology

- Expert-led technical lectures
- Real-world case studies and coating failure analysis
- Hands-on workshops and visual inspection practice
- Group discussions and standards interpretation (e.g., ISO 12944, NACE)
- Application demonstrations and Q&A

## Course Outline

DETAILED 5-DAY COURSE OUTLINE (Customizable) Training Hours: 07:30 AM – 03:30 PM Daily Format: 3–4 Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

### Day 1: Introduction to Structural Coatings

- Module 1 (07:30 – 09:30): Overview of Structural Coating Functions and Types
- Module 2 (09:45 – 11:15): Substrate Characteristics and Surface Preparation
- Module 3 (11:30 – 01:00): Environmental and Operating Conditions Affecting Coatings

### Day 2: Coating Selection and Application Techniques

- Module 4 (07:30 – 09:30): Selection Criteria for Protective Coatings
- Module 5 (09:45 – 11:15): Coating Application Methods: Spray, Brush, and Roller
- Module 6 (11:30 – 01:00): Curing Processes, Application Hazards & Safety

### Day 3: Standards, Inspection & Quality Control

- Module 7 (07:30 – 09:30): Coating Standards and Specifications (ISO, NACE, SSPC)
- Module 8 (09:45 – 11:15): Coating Thickness Measurement and Holiday Testing
- Module 9 (11:30 – 01:00): Quality Assurance and Documentation

### Day 4: Coating Failures and Maintenance Planning

- Module 10 (07:30 – 09:30): Common Coating Defects and Failure Modes
- Module 11 (09:45 – 11:15): Root Cause Analysis and Remediation Techniques
- Module 12 (11:30 – 01:00): Maintenance Strategies and Life-Cycle Costing

### Day 5: Advanced Technologies and Sustainability Trends

- Module 13 (07:30 – 09:30): Advances in Nanocoatings and Smart Coating Materials
- Module 14 (09:45 – 11:15): Environmental Considerations and VOC Compliance
- Module 15 (11:30 – 01:00): Final Project Review, Q&A, Action Planning & Certification

## Certification

Participants will receive a Certificate of Completion in Structural Coatings: Protection, Performance & Innovation.

## Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation’s unique goals.

### In-House / Customized Training

Interested in running this course for your team?

Please contact us:

TEL:

**+601116373203**

EMAIL:

**info@mawaevents.net**

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