

ASSESSING AND REPAIRING REINFORCED CONCRETE STRUCTURES ميري قوت - ةيل مع تاقوي ببط ةيناسرخلا تآشنملا حالصاو

"Preserve Structural Integrity Through Expert Assessment and Practical Repair Solutions."

Schedule

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

► Available delivery methods: In-House Training

Introduction

This course equips participants with advanced knowledge and practical skills to assess the condition of reinforced concrete structures and execute effective repair strategies. Emphasis is placed on the causes of deterioration, modern diagnostic tools, repair materials, and implementation of repair techniques with case-based learning.

Objectives

- Identify causes and symptoms of concrete deterioration.
- Use visual, non-destructive, and laboratory techniques for assessment.
- Select suitable repair methods and materials.
- Design repair strategies for various structural conditions.
- Understand standards and best practices in rehabilitation work

Why Attend

- To strengthen your technical understanding of structural distress.
- To apply diagnostic methods in real-life structural scenarios.
- To implement repair strategies that extend the lifespan of assets.
- To meet industry codes and avoid costly failures

Target Audience

- Civil & Structural Engineers
- Maintenance & Asset Managers
- QA/QC Engineers
- Construction Inspectors
- Project Managers
- Government and Municipal Engineer

Individual Benefits

- Gain hands-on knowledge in damage assessment.
- Learn the latest repair technologies and tools.
- Build your reputation in structural rehabilitation

Organizational Benefits

- Reduce operational risks and failures.
- Extend the service life of infrastructure.
- Minimize maintenance costs through efficient repair

Instructional Methodology

- Case-based learning and real-world examples
- Site-based diagnostics and video demonstrations
- Group problem-solving sessions
- Repair strategy design exercises
- Lectures supported with visual tools and checklist

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 - Understanding Structural Deterioration

- Module 1 (07:30–09:30): Introduction to RC Structural Behavior and Failure Modes
- Module 2 (09:45–11:15): Environmental and Load-Induced Degradation
- Module 3 (11:30–01:00): Case Studies of Common Defects

Day 2 - Techniques for Assessment and Diagnosis

- Module 4: Visual Inspection and Mapping Damage
- Module 5: NDT Techniques (Ultrasonic, Rebound Hammer, GPR, etc.)
- Module 6: Core Sampling and Lab Testing Procedures

Day 3 - Repair Materials and Design Principles

- Module 7: Repair Materials—Cementitious, Epoxies, Polymers
- Module 8: Crack Injection, Jacketing, and Strengthening
- Module 9: Surface Treatments and Corrosion Protection

Day 4 - Execution of Repair Works

- Module 10: Repair Planning and Sequencing
- Module 11: Site Preparation and Safety in Repair Works
- Module 12: Quality Assurance and Monitoring of Repair Effectiveness

Day 5 - Practical Workshop & Final Review

- Module 13: Interactive Repair Strategy Development (Group Work)
- Module 14: Real Case Evaluation and Solution Presentation
- Module 15: Feedback Session, Wrap-up, and Certification Distribution

Certification

Participants will receive a Certificate of Completion upon full participation.

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

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.