

MASTERING STRUCTURAL INSPECTIONS

Overview:

The intent of this short course is to provide inspection and monitoring techniques for bridges and civil structures as well as identifying problematic and dysfunctional elements.

Appropriate condition assessment is the critical foundation of effective upkeep and restoration programs.

This course is a compilation of advanced practical information, condition assessment procedures, and relevant case studies.

Benefits:

- Understand the significance of technical safety principles.
- Increased knowledge of different strategies utilized for the management of structures.
- Learn how structural condition assessment can be structured to respond to specific project conditions and construction activities.
- Local and global case studies, and practical references

Course outcomes:

- Understand the principle of building for integrity
- Identify elements to inspect in civil structures.
- Identify and quantify structural defects.
- Specify maintenance requirements to ensure safety and avoid asset destruction.
- Adequate reporting on structural condition assessments.

Course outline:

1. Introduction & Overview
2. Assessment Procedures
3. Structural Materials Assessments (reinforced concrete, steel, masonry, timber)
4. Evaluation Procedures
5. Evaluation of Structural Materials
6. Remedial Action / Repairs
7. Report writing

Target Audience:

- Civil Engineers
- Project Managers