

# Quality Control and Assurance For Concrete and Steel Structure Projects Course

## Venue Information

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**Venue:** London UK

**Place:**

**Start Date:** 2025-09-08

**End Date:** 2025-09-12

## Course Details

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**Net Fee:** £4750.00

**Duration:** 1 Week

**Category ID:** CACETC

**Course Code:** CACETC-41

## Syllabus

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### Course Syllabus

#### Course Description

This course is intended for structural and civil engineers who are interested in the quality control and QA with the most recent non-destructive testing for concrete and steel structure.

#### Course Objective

The participants will be familiar with all quality management technique and procedure and the available non-destructive testing for concrete and steel structure project.

#### Course Outline

- who will perform the quality control:
- Pareto chart
- Process chart for ready mix plant
- Coefficient of variation
- Auditing the construction site quality

### **The nature of concrete variability**

- Concrete materials properties
- Aggregate QC
- Cement QC
- Concrete mix QC
- Submittal steel sections QC
- Check laminar and porosity in steel sections

### **Quality control for concrete formwork**

- Pouring concrete in hot and cold weather
- Workability test for concrete
- Cube and cylinder test
- The replacement of the steel bars
- The permissible deviation in erection steel structure
- Comparison between different Non-destructive test
- Core test
- Rebound hammer
- Lok test
- Load test
- Ultrasonic test

### **Welding procedure**

- Materials that is using in welding in steel structure
- Understanding the welding symbol
- The precaution in welding process
- The reasons of welding defects.

### **Differentiate between Non-destructive test**

- Magnetic particle test procedure
- Penetration test procedure
- Radiographic test procedure
- Radiographic test precaution
- How to define the defects from RT film
- Ultrasonic test procedure