COURSE OVERVIEW SE0075
Construction Supervision (Works Inspection)

Course Title
Construction Supervision (Works Inspection)

Course Date/Venue
Session 1: January 11-15, 2026/Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE or Online Virtual Training
Session 2: July 05-09, 2026/ Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE or Online Virtual Training

Course Reference
SE0075

Course Duration/Credits
Five days/3.0 CEUs/30 PDHs

Course Description

This practical and highly-interactive course includes real-life case studies where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to provide participants with a detailed and up-to-date overview of Construction Supervision (Works Inspection). It covers the role of the construction supervisor / inspector and construction documentation and standards; the inspection company quality systems, inspection company capability and adequacy; the safety and ethics in construction supervision, site induction and pre-work inspection; and the concrete materials and mix design review, pre-pour inspection of concrete, concrete testing and sampling methods.

Further, the course will also discuss the concrete pouring and placement inspection, curing and protection of concrete and non-conformance identification in concrete work; the structural steel material inspection, welding inspection and controls, bolting and connection inspection; the formwork design, structural stability, formwork installation inspection, dismantling and reuse inspection; the soil type identification and classification; and the earthworks inspection procedure, compaction testing methods and bearing capacity and field tests.

During this interactive course, participants will learn the ground improvement techniques, foundation inspection criteria and inspection and testing procedure methodology; the measurement and quality control of works and preparation of compliance control reports (CCR); and the non-conformance and corrective action process.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an in-depth knowledge on construction supervision (works inspection)
- Discuss the role of the construction supervisor / inspector as well as construction documentation and standards
- Recognize inspection company quality systems and apply the inspection company capability and adequacy
- Apply safety and ethics in construction supervision and site induction and pre-work inspection
- Carryout concrete materials and mix design review, pre-pour inspection of concrete, concrete testing and sampling methods
- Employ concrete pouring and placement inspection, curing and protection of concrete and non-conformance identification in concrete work
- Apply structural steel material inspection, welding inspection and controls as well as bolting and connection inspection
- Illustrate formwork design and structural stability, formwork installation inspection, dismantling and reuse inspection and soil type identification and classification
- Apply earthworks inspection procedure, compaction testing methods and bearing capacity and field tests
- Employ ground improvement techniques, foundation inspection criteria and inspection and testing procedure methodology
- Carryout measurement and quality control of works, preparation of compliance control reports (CCR) and non-conformance and corrective action process

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of construction supervision (works inspection) for construction supervisors and inspectors, site engineers and project engineers, QA/QC engineers and technicians, site foremen and team leaders, project managers overseeing site activities, client/owner representatives involved in site supervision and consultants and resident engineers.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Fee

F2F Classroom: US$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Online Virtual: US$ 2,750 per Delegate + **VAT**.

Virtual Training (If Applicable)

If this course is delivered online as a Virtual Training, the following limitations will be applicable:-

Certificates	Only soft copy certificates will be issued to participants through Haward's Portal. This includes Wallet Card Certificates if applicable
Training Materials	Only soft copy Training Materials (PDF format) will be issued to participant through the Virtual Training Platform
Training Methodology	80% of the program will be theory and 20% will be practical sessions, exercises, case studies, simulators or videos
Training Program	The training will be for 4 hours per day starting at 0930 and ending at 1330
H-STK Smart Training Kit	Not Applicable
Hands-on Practical Workshops	Not Applicable
Site Visit	Not Applicable
Simulators	Only software simulators will be used in the virtual courses. Hardware simulators are not applicable and will not be used in Virtual Training

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations

Haward's certificates are accredited by the following international accreditation organizations:

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

- The International Accreditors for Continuing Education and Training (IACET - USA)

  Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

  Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

  Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Dr. Andrea Mercalli, PhD, is a **Senior Civil Engineer** with over **30 years** of extensive experience. His wide expertise includes **Concrete Mixing & Testing**, Advanced **Concrete Technology**, **Concrete Structural Material**, **Mixing** & **Handling Concrete**, **Structural Analysis** Calculation, **Structural Engineering**, **Concrete** & **Steel Design**, **Reinforced Concrete Structures**, **Concrete Inspection** & **Repair**, **Damage Assessment** & **Rehabilitation**, **Structured Reliability Analysis**, **Engineering Design**, **Building Preventive Maintenance**, **Cement Properties**, **Admixtures**, **Structural Analysis**, Backfiling & Asphalting, Asphalt Paving Installation, **Road Maintenance** & Safety, **Road Design** Skills, **Construction Engineering**, **Engineering Projects Surveying**, **Land Surveyor**, **GPS** and **Building Seismic Designs**. He is currently the **Materials Manager** of **Autostrade per l'Italia**, where he is in-charge of the **tests** on **all the materials** involved in **Structure** and **highway construction** (bituminous pavement, **concrete**, **reinforcement steel**, maintenance and repair) and **research and development of new materials** and techniques collaborating with several Universities and external institutes. The activity also concerns **peculiar types of structures monitoring**.

Dr. Mercalli is a **Senior Researcher** in the field of **corrosion of concrete reinforcement**, and an **author** of **many papers** in this field. He is an **Expert** in the **monitoring of the corrosion state of reinforcement** by means of chemical, physical and electrochemical techniques.

Dr. Mercalli has a **PhD** and **Bachelor's** degree in **Geological Science** from the **Pavia University**, **Italy** as well as **Post Graduate** degrees in **Acoustic Emission Monitoring** and **Corrosion** in **Concrete Monitoring** from the **Cardiff University**, **UK** and **LA Sapienza University**, **Italy** respectively. He participated to the **European Project BRITE – SMART STRUCTURES** concerning the corrosion monitoring on concrete bridges in Denmark and Italy collaborating with Danish partners and Berlin BAM. Further, he was the **Responsible Scientist** for the project "Monitoring of the Corrosion State in Existing Structures" of European concerted action COST 521 "Corrosion of Steel in Reinforced Concrete Structures" (1998-2002). Moreover, he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management** (**ILM**) and has conducted numerous courses, seminars, workshops and conferences internationally.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Role of the Construction Supervisor / Inspector*** *Duties and Authority of the Works Inspector • Difference Between Supervision, Inspection, and QA/QC Roles • Legal Responsibilities and Professional Liabilities • Interface with Engineer, Contractor and Client*
0930 – 0945	*Break*
0945 – 1030	***Construction Documentation & Standards*** *IFC Drawings and Specifications Interpretation • Project Quality Plan (PQP) and Inspection Test Plan (ITP) • Method Statements and Work Procedures Review • Codes & Standards (ASTM, ACI, BS, ISO, EN)*
1030 – 1130	***Introduction to Inspection Company Quality Systems*** *Structure of a Quality Management System (QMS) • ISO 9001 Compliance and Certification • Document Control and Traceability Systems • Internal Audits and Management Reviews*
1130 – 1215	***Analysis of Inspection Company Capability & Adequacy*** *Accreditation Bodies (ISO/IEC 17020 & 17025) • Personnel Qualification Requirements • Equipment and Calibration Programs • Technical Procedures Evaluation*
1215 – 1230	*Break*
1230 – 1330	***Safety & Ethics in Construction Supervision*** *Inspector's HSE Responsibilities • Ethical Practices in Inspection • Conflict of Interest Prevention • Reporting Unsafe Acts & Conditions*
1330 – 1420	***Site Induction & Pre-Work Inspection*** *Site Access and Conduct Rules • Pre-Construction Checklist • Site Readiness Evaluation • Permit to Work Overview*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2

0730 – 0830	***Concrete Materials & Mix Design Review*** *Cement Type and Properties • Aggregate Grading & Suitability • Water-Cement Ratio & Admixtures • Mix Design Approval Process*
0830 - 0930	***Pre-Pour Inspection of Concrete*** *Formwork Alignment & Integrity • Rebar Spacing and Cover Verification • Anchorage and Lap Splices • Embedded Items and Openings*
0930 – 0945	*Break*

0945 – 1100	***Concrete Testing & Sampling Methods*** *Slump Test Methodology • Cube & Cylinder Sampling • Temperature & Air Content Testing • Frequency and Acceptance Criteria*
1100 – 1215	***Concrete Pouring & Placement Inspection*** *Transportation & Discharge Methods • Vibration and Compaction Techniques • Segregation and Bleeding Prevention • Joint Treatment and Sequencing*
1215 – 1230	*Break*
1230 – 1330	***Curing & Protection of Concrete*** *Curing Methods & Duration • Environmental Protection Measures • Early-Age Cracking Prevention • Strength Gain Monitoring*
1330 – 1420	***Non-Conformance Identification in Concrete Work*** *Honeycombing • Cracking and Segregation • Cold Joints • Incorrect Cover Issues*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3

0730 – 0830	***Structural Steel Material Inspection*** *Mill Test Certificate (MTC) Verification • Steel Grade and Dimension Checks • Surface Condition & Defects • Storage and Handling Requirements*
0830 – 0930	***Welding Inspection & Controls*** *Welding Procedures (WPS/PQR) • Welder Qualification Verification • Pre-Heat and Post-Heat Treatment • Visual Weld Inspection Techniques*
0930 – 0945	*Break*
0945 – 1100	***Bolting & Connection Inspection*** *Bolt Grade and Torque Verification • Pretensioning Techniques • Connection Alignment and Fit-Up • Inspection Documentation*
1100 – 1215	***Formwork Design & Structural Stability*** *Load-Bearing Capacity Calculations • Bracing and Support Systems • Deflection Control • Safety Margins and Failure Risks*
1215 – 1230	*Break*
1230 – 1330	***Formwork Installation Inspection*** *Level, Plumb and Dimensional Checks • Tightness and Joint Sealing • Access and Egress Safety • Release Agent Application*
1330 – 1420	***Dismantling & Reuse Inspection*** *Safe Stripping Sequence • Damage Assessment • Cleaning and Repair • Re-Use Acceptance Criteria*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4

0730 – 0830	***Soil Type Identification & Classification*** *Grain Size Distribution • Atterberg Limits • USCS Classification • Soil Behavior and Strength Characteristics*
0830 – 0930	***Earthworks Inspection Procedure*** *Excavation Methods and Safety • Backfill Material Approval • Layer Thickness Control • Site Drainage Evaluation*
0930 – 0945	*Break*
0945 – 1100	***Compaction Testing Methods*** *Standard & Modified Proctor Tests • Field Density Tests (Sand Cone) • Nuclear Density Gauge Testing • Acceptance Limits*
1100 – 1215	***Bearing Capacity & Field Tests*** *Plate Load Test • CBR Test for Subgrade • Shear and Penetration Tests • Evaluation of Suitability*
1215 – 1230	*Break*
1230 – 1330	***Ground Improvement Techniques*** *Soil Stabilization Methods • Geotextiles and Geogrids • Vibro-Compaction • Grouting Techniques*
1330 – 1420	***Foundation Inspection Criteria*** *Footing Dimension Verification • Ground Condition Verification • Dewatering Assessment • Blinding Concrete Inspection*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

Day 5

0730 – 0830	***Inspection & Testing Procedure Methodology*** *Inspection Sequence Planning • ITP & Check Sheet Implementation • Sampling and Verification Protocols • Acceptance & Rejection Criteria*
0830 – 0930	***Measurement & Quality Control of Works*** *Dimensional Checks of Concrete & Steel • Surface Flatness & Levelness Testing • Tolerance Verification • Recording Results*
0930 – 0945	*Break*
0945 – 1100	***Preparation of Compliance Control Reports (CCR)*** *Structure & Components of a CCR • Evidence Attachment (Photos, Test Results) • Non-Conformance Documentation • Corrective Action Tracking*
1100 – 1215	***Non-Conformance & Corrective Action Process*** *NCR Issuance Procedures • Root Cause Analysis Methods • Rectification Verification • Close-Out Documentation*
1215 – 1230	*Break*
1230 – 1300	***Final Inspection, Handover & Certification*** *Snagging and Punch Listing • Final Acceptance Inspection (FAI) • As-Built Drawing Verification • Completion Certificate Support*

1300 – 1345	***Digital Tools & Automation in Inspection*** *Mobile Inspection Apps • BIM for Quality Verification • Drone Use in Construction Inspection • Digital Record Keeping*
1345 – 1400	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:-

Course Coordinator

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