

COURSE OVERVIEW SE0210(KP4)
Advanced Onshore Foundations Construction

Course Title

Advanced Onshore Foundations Construction

Course Date/Venue

Session 1: July 06-10, 2025/Boardroom 1,
 Elite Byblos Hotel Al Barsha, Sheikh
 Zayed Road, Dubai, UAE
 Session 2: December 08-12, 2025/Fujairah
 Meeting Room, Grand Millennium Al
 Wahda Hotel, Abu Dhabi, UAE



Course Reference

SE0210(KP4)



Course Duration/Credits

Five days/3.0 CEUs/30.0 PDHs

Course Description



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



Advanced Onshore Foundations Construction in the oil and gas industry involves specialized engineering techniques to support heavy infrastructure such as drilling rigs, processing facilities, and pipelines. These foundations must withstand extreme loads, dynamic forces, and varying soil conditions while ensuring long-term stability and safety. Advanced methods include deep foundation systems like pile foundations, drilled shafts, and soil stabilization techniques such as ground improvement and grouting. The selection of foundation type depends on geological assessments, environmental considerations, and project-specific requirements, ensuring optimal performance in challenging onshore environments.



This course is designed to provide participants with a detailed and up-to-date overview of Advanced Onshore Foundations Construction. It covers the various types of construction materials; the technical specifications of construction materials; the fundamentals of acceptance; the construction materials testing; the proper inspection for warehouse in order to accept or reject materials; and witness tests of equipment and materials for quality check.



Course Objectives

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

- Apply and gain an in-depth knowledge on the fundamentals of construction materials and testing foundations
- Differentiate and identify the various types of construction materials
- Identify the technical specifications of construction materials and fundamentals of acceptance
- Demonstrate and explain construction materials testing
- Employ proper inspection for warehouse in order to accept or reject materials
- Perform witness tests of equipment and materials for quality check

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 advanced onshore foundations construction for purchase inspection engineers, civil engineers, construction managers, project managers, geotechnical engineers, site supervisors and foremen, consultants, safety officers, industry researchers and academics and other technical staff.

Course Fee

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

Accommodation

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

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 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

Certificates are accredited by the following international accreditation organizations: -

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British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. 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.

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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.

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:



Mr. Luis Manuel is a **Senior Structural Engineer** with over **25 years** of extensive experience in the **Oil & Gas Industry**. He is an **Expert** in the areas of **Structural Analysis & Design, Dynamic Analysis Reinforced Concrete Structure, Engineering Drawings, Standards & Codes, Naval Architecture, Stress Analysis, Underwater Inspection & Maintenance, Assessment Engineering, Regulatory**

Compliance Inspections, and Finite Element Analysis.

Presently, Mr. Manuel is the Technical Advisor and Senior Structural Engineer of a leading engineering consultancy company, where he leads in all Structural Engineering related operations, coordinates structural activities for platform modifications, mobilizes the preparation of detailed drawings, the construction work scope, the development of structural material take-off reports, analyses reports, structural details and welding details, carry out advanced assessment analyses of existing structures and special fatigue investigations. He had also been heavily involved in the development of instruction materials as authorized by EDI (Engineering Dynamic Incorporated) and the training of engineers on the SACS software (Structural Analysis Computer System). He had gained his expertise & thorough practical experience through his stint with numerous international organizations including Chevron, ExxonMobil, W.S.Atkins, MSL, Atlas Engineering, Heerema, the US Navy, Ingalls, Textron and Barnett & Casbarian.

During his long career life, Mr. Manuel has accomplished many challenging assignments such as **performing linear elastic SACS® analyses for the strength, seismic and fatigue assessment** of various platforms; **the supervision of the data recording for underwater inspection by ROV**; **generating topside structural inspections of existing platforms to document structural deficiencies and corrosion impingement**; **designed and produced fabrication drawings for updating and rehabilitating an existing platform**; **performed analysis and developed construction drawings**; **provided the design and installation/rigging drawings for the transportation of modules**; **supplying reinforcement analysis for helidecks slated for relocation and their corresponding reuse offshore**; **managing the design of transportation cradle and lifting sling for the installation of jacket structures**; **producing designs on various green field structures such as tripods and 4-leg platforms**; **creating the deck analysis and design of an overhead crane rail system**; **preparing the fabrication drawings for the strengthening and the modification of an international barge and drafting out the structural repairs of a cruise ship.**

Mr. Manuel has a **Bachelor degree in Mechanical Engineering** from the **State University of New York**. Further, he is a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)**, a **Certified Instructor/Trainer** and the **author of the book “Offshore Platforms Design”** and the **“SACS Software Training Module”**.

Course Program

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

Day 1

0730 - 0800	<i>Registration & Coffee</i>
0800 - 0815	<i>Welcome & Introduction</i>
0815 - 0830	PRE-TEST
0830 - 0930	<i>Types of Construction Materials</i>
0930 - 0945	<i>Break</i>
0945 - 1100	<i>Types of Construction Materials (cont'd)</i>
1100 - 1215	<i>Types of Construction Materials (cont'd)</i>
1215 - 1230	<i>Break</i>
1230 - 1420	<i>Types of Construction Materials (cont'd)</i>
1420 - 1430	Recap
1430	<i>Lunch & End of Day One</i>

Day 2

0730 - 0930	<i>Technical Specifications</i>
0930 - 0945	<i>Break</i>
0945 - 1100	<i>Technical Specifications (cont'd)</i>
1100 - 1215	<i>Fundamentals of Acceptance</i>
1215 - 1230	<i>Break</i>
1230 - 1420	<i>Fundamentals of Acceptance (cont'd)</i>
1420 - 1430	Recap
1430	<i>Lunch & End of Day Two</i>

Day 3

0730 - 0930	<i>Construction Materials Testing</i>
0930 - 0945	<i>Break</i>
0945 - 1100	<i>Construction Materials Testing (cont'd)</i>
1100 - 1215	<i>Construction Materials Testing (cont'd)</i>
1215 - 1230	<i>Break</i>
1230 - 1420	<i>Construction Materials Testing (cont'd)</i>
1420 - 1430	Recap
1430	<i>Lunch & End of Day Three</i>

Day 4

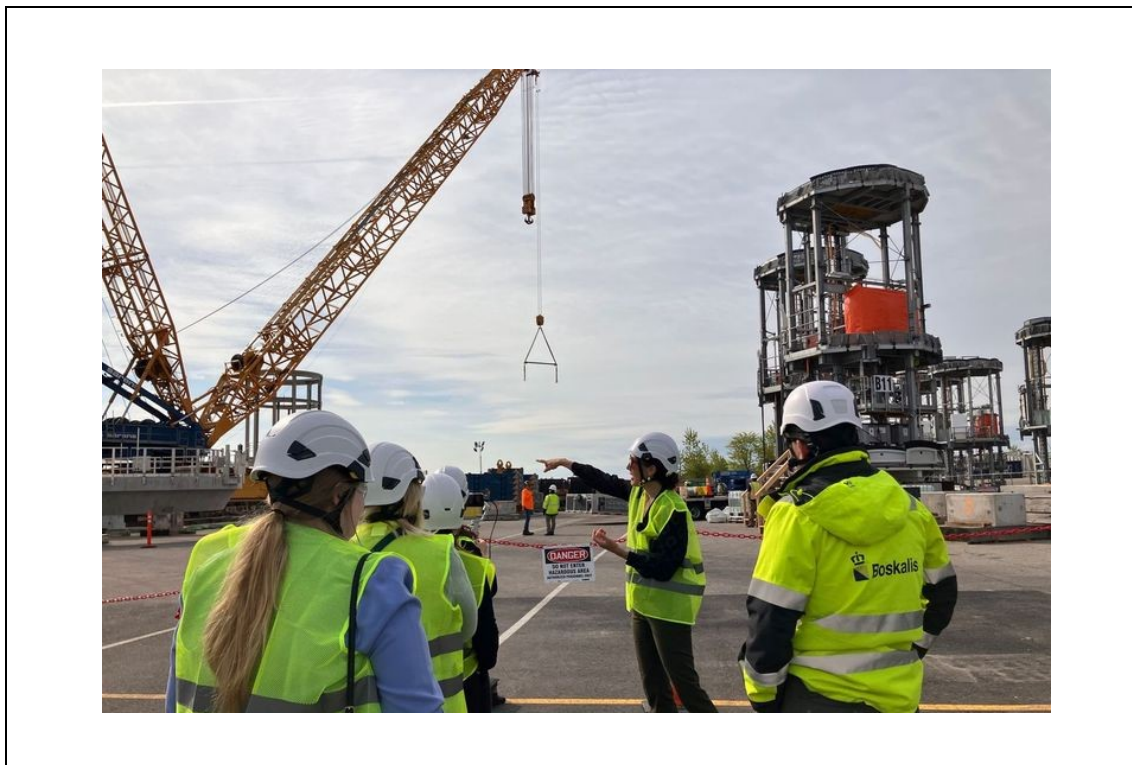
0730 - 0930	<i>Inspection for Warehouse to Accept or Reject Materials</i>
0930 - 0945	<i>Break</i>
0945 - 1100	<i>Inspection for Warehouse to Accept or Reject Materials (cont'd)</i>
1100 - 1215	<i>Inspection for Warehouse to Accept or Reject Materials (cont'd)</i>
1215 - 1230	<i>Break</i>
1230 - 1420	<i>Inspection for Warehouse to Accept or Reject Materials (cont'd)</i>
1420 - 1430	Recap
1430	<i>Lunch & End of Day Four</i>

Day 5

0730 – 0930	<i>Perform Witness Tests of Equipment and Materials for Quality Check</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<i>Perform Witness Tests of Equipment and Materials for Quality Check (cont')</i>
1100 – 1215	<i>Perform Witness Tests of Equipment and Materials for Quality Check (cont')</i>
1215 – 1230	<i>Break</i>
1230 – 1400	<i>Perform Witness Tests of Equipment and Materials for Quality Check (cont')</i>
1400 – 1415	POST-TEST
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch & End of Course</i>

Practical Sessions

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



Course Coordinator

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org