COURSE OVERVIEW OE0058
Design of Dredging, Channels & Mooring

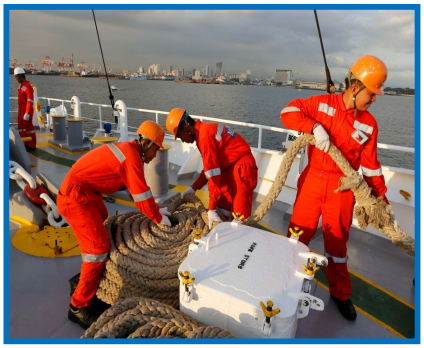
Course Title
Design of Dredging, Channels & Mooring

Course Date/Venue
Session 1: June 22-26, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
Session 2: November 17-21, 2025/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Reference
OE0058

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

This course is designed to provide participants with a detailed and up-to-date overview of Mooring Operation & Mooring Equipment Guidelines. It covers the basics, purposes and significance of mooring in maritime operations; the different types of mooring systems, mooring equipment and principles of safe mooring; the basic mooring patterns and their applications; the regulatory framework and standards; the detailed equipment specifications, mooring ropes and cables; inspecting and maintaining mooring equipment; the corrosion and wear prevention; operating, maintaining and troubleshooting the mooring winches and capstans including fenders and berthing equipment; and preparing vessel and crew for mooring and pre-arrival checks and communication protocols.

During this interactive course, participants will learn the mooring operations, using tugs in assisting with mooring operations and safety precautions during mooring; the environmental considerations in mooring operations including noise, pollution prevention and habitat protection; the single point mooring (SPM) systems, dynamic positioning systems and automated mooring technologies; the latest innovations in mooring equipment and materials including future trends in mooring operations; the strategies for mooring in special conditions such as ice conditions, restricted waters and during extreme weather; the emergency mooring and unmooring incident management and response; and the training and competency development.

Course Objectives

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

- Apply and gain a comprehensive knowledge on mooring operation and mooring equipment guidelines
- Discuss the basics, purposes and significance of mooring in maritime operations
- Recognize the different types of mooring systems, mooring equipment and principles of safe mooring
- Review the basic mooring patterns and their applications including the regulatory framework and standards
- Identify detailed equipment specifications, mooring ropes and cables
- Inspect and maintain mooring equipment as well as apply corrosion and wear prevention
- Operate, maintain and troubleshoot mooring winches and capstans including fenders and berthing equipment
- Prepare vessel and crew for mooring, including pre-arrival checks and communication protocols
- Execute mooring operations, use tugs in assisting with mooring operations and apply safety precautions during mooring
- Discuss the environmental considerations in mooring operations including noise, pollution prevention and habitat protection
- Recognize single point mooring (SPM) systems, dynamic positioning systems and automated mooring technologies
- Discuss the latest innovations in mooring equipment and materials including future trends in mooring operations
- Implement strategies for mooring in special conditions such as ice conditions, restricted waters and during extreme weather
- Employ emergency mooring and unmooring incident management and response and training and competency development

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 mooring operationss and mooring equipment guidelines for mooring masters, ship captains, maritime pilots, port authorities, ship operators, emergency response personnels, safety officers and environmental officers.

Course Fee

US$ 8,000 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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: -

- 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.

- 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:

Captain Sergey Kole, is an **International Expert** in **Port Operations & Logistics Management** with over **25 years** of **onshore** and **offshore** experience within the **Oil & Gas**, **Petroleum** and **Refinery** industry. His expertise widely covers in the areas of **Anatomy of Shipping**, **Logistics & Transportation Planning** Methods, **Forecasting Logistics** Demands, Visual Network Model, **Logistics Operations**, **Tanker Vetting & Inspection**, **Marine Vetting & Audit Criteria Manual** for **Tank Ships**, **Marine & Ship Vetting**, **Vetting Process & Marine Safety Criteria**, **Tanker Vetting** for **Terminals**, **Ship Vetting**, **Marine Terminal** Operations & Management, **Marine Hazards** Prevention & Control, **Marine Communication** Systems, **Marine Safety**, **Ship** Management, **Oil Terminal** Planning, **Vessels** Operations, **Terminal** Management & Support Operations, **Oil Spill Contingency & Emergency Response Plan**, **Qualitative & Quantitative Risk** Assessments, **Terminal** Planning, **Oil Tanker Storage** Planning, **Cargo Transfer** Handling, Loading & Discharging, **Ballasting**, **Tank** Cleaning, **Crude Oil Washing**, **Ship** Handling, **Radar** Navigation, **Navigational** Aids, **Meteorological** Data Review, **Sea & Weather** Condition Monitoring, **ERT Vessel** Coordination and **Transport & Distribution Carrier**. Further, he is well-versed in **Sea-going** Personnel Human Resource Management, **Survival Craft & Rescue Boats**, Dynamic Positioning, Anti-Piracy Preparedness & Response, **Shipping** Maintenance System, **Oil & Chemical Tanker**, **Liquefied Gas Tanker**, **Inert Gas** System, **Crude Oil** Tanker & Gas Carrier, Offshore Logistics & Supply Management, **Marine Fleet** Management & Operations, **International Maritime Conventions & Codes**, **Marine Radar**, **Port Traffic Control** Systems & Instrumentation, **H^2S** Hazard Awareness, **Firefighting**, Medical Care Onboard, Carriage of Dangerous & Hazardous Substances and **Ballast Water & Sediment** Management.

During his career life, Captain Sergey has gained his technical and marine expertise through various challenging key positions such as being the **Captain**, **Operations Director**, **Project Manager**, **Port Supervisor**, **Master** of General Cargo Ship, **Master** of Container Ship, **Chief Officer**, **Marine Operations Specialist**, **Marine Coordinator**, **On-call Duty Officer**, **Crewing Consultant**, **2nd Officer**, **Ship Chandler** and **Senior Instructor/Trainer** for several international companies such as **ZADCO**, **AMEC Foster Wheeler**, Fircroft Engineering Services, Ltd., Rusalina Yacht Company, Van Oord Offshore, Exxon Neftegaz Ltd (ENL), Jr Shipping, Carisbrooke Shipping, Unicorn Petrol ve Kimya, Q Shipping BV, m/v Tradeport, Miedema Shipping CV, Rah Management BV, Petrobulk Maritime Inc., Empross Lines Ship Management, Melcard Ltd., Aquarian Shell Marine Inc., Mercy Baaba and Square Ltd.

Captain Sergey has a **Bachelor's** degree in **Navigation** in **Nautical Studies** from the **Kiev State Academy** of **Water Transport**, **Ukraine** and holds a **Master Mariner** (Unlimited) Certificates of Equivalent Competency from the MCA, UK and NSI, Netherlands. Further, he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management** (**ILM**) and has delivered various trainings, courses, seminars, workshops and conferences internationally.

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 Program

The following program is planned for this workshop. 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	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Overview of Mooring Operations:*** *The Basics of Mooring, including Definitions, Purposes, & The Significance of Mooring in Maritime Operations*
0930 – 0945	*Break*
0945 – 1200	***Types of Mooring Systems****: Different Types of Mooring Systems, including Conventional Mooring, Single Point Mooring (SPM), & Dynamic Positioning*
1200 - 1230	***Mooring Equipment Overview****: Mooring Equipment, including Ropes, Wires, Fenders, Winches, & Capstans*
1230 – 1245	*Break*
1245 – 1330	***Principles of Safe Mooring****: Key Principles & Best Practices for Ensuring Safety During Mooring Operations, Focusing on Personnel Safety & Equipment Integrity*
1330 – 1420	***Mooring Patterns****: Basic Mooring Patterns & Their Applications, including Advantages & Limitations of Each Pattern*
1420 – 1430	***Recap***
1430	*End of Day One*

Day 2

0730 – 0930	***Regulatory Framework & Standards****: International Regulations & Standards Governing Mooring Operations, including IMO Guidelines & SOLAS Requirements*
0930 – 0945	*Break*
0945 - 1045	***Detailed Equipment Specifications****: Specifications for Various Mooring Equipment, including Breaking Strength, Durability, And Material Types*
1045 – 1230	***Mooring Ropes & Cables****: Focus on the Selection, Use, and Maintenance of Mooring Ropes & Cables, including Synthetic & Wire Ropes*
1230 – 1245	*Break*

1245 – 1330	***Inspection & Maintenance of Mooring Equipment**: Guidelines for Regular Inspection, Maintenance, and Documentation to Ensure Equipment Reliability & Safety*
1330 – 1420	***Corrosion & Wear Prevention**: Strategies for Preventing Corrosion & Wear in Mooring Equipment, including Protective Coatings & Anodes*
1420 – 1430	***Recap***
1430	*End of Day Two*

Day 3

0730 – 0930	***Mooring Winches & Capstans**: Operation, Maintenance, & Troubleshooting of Mooring Winches & Capstans*
0930 – 0945	*Break*
0945 - 1045	***Fenders & Berthing Equipment**: Selection, Placement, & Maintenance of Fenders & Other Berthing Equipment to Protect Vessels & Berthing Structures*
1045 – 1130	***Preparation for Mooring Operations**: Steps for Preparing a Vessel & Crew for Mooring, including Pre-Arrival Checks & Communication Protocols*
1130 – 1230	***Mooring Operation Techniques**: Techniques for Executing Mooring Operations Under Various Conditions, including Tidal, Wind, & Current Considerations*
1230 – 1245	*Break*
1245 – 1330	***Use of Tugs in Mooring Operations**: Best Practices for the Use of Tugs in Assisting with Mooring Operations, including Communication & Coordination*
1330 – 1420	***Safety Precautions During Mooring**: Detailed Safety Precautions & Emergency Procedures to Prevent Accidents & Injuries During Mooring Operations*
1420 – 1430	***Recap***
1430	*End of Day Three*

Day 4

0730 – 0930	***Environmental Considerations**: Environmental Considerations in Mooring Operations, including Noise, Pollution Prevention, & Habitat Protection*
0930 – 0945	*Break*
0945 – 1030	***Case Studies**: Review of Case Studies Highlighting Successful Mooring Operations & Lessons Learned from Mooring Incidents*
1030 - 1130	***Single Point Mooring (SPM) Systems**: SPM Systems, including Components, Operation, & Applications in Oil & Gas Transfer*
1045 – 1230	***Dynamic Positioning Systems**: Overview of Dynamic Positioning Systems as an Alternative to Traditional Mooring, including Operational Principles & Applications*
1230 – 1245	*Break*
1245 - 1330	***Automated Mooring Technologies**: Automated Mooring Technologies, including Vacuum & Magnetic Mooring Systems, and their Benefits & Challenges*
1330 – 1420	***Mooring Analysis & Simulation**: The Use of Software & Simulation Tools for Mooring Analysis, including Predictive Modeling of Mooring Loads & Vessel Behavior*
1420 – 1430	***Recap***
1430	*End of Day Four*

Day 5

0730 – 0830	***Innovations in Mooring Equipment**: Latest Innovations in Mooring Equipment & Materials, including High-Strength Synthetic Fibers & Smart Monitoring Systems*

0830 - 0930	***Future Trends in Mooring Operations**: Future Trends in Mooring Operations, including Sustainability Practices & the Impact of Global Shipping Trends on Mooring Requirements*
0930 – 0945	*Break*
0915 – 1045	***Mooring in Special Conditions**: Strategies for Mooring in Special Conditions, such as Ice Conditions, Restricted Waters, & During Extreme Weather*
1045 – 1130	***Emergency Mooring & Unmooring**: Procedures for Emergency Mooring & Unmooring Operations, including Rapid Response Strategies*
1130 - 1230	***Incident Management & Response**: Managing Mooring Incidents, including Immediate Actions, Investigation, & Reporting*
1230 – 1245	*Break*
1245 – 1330	***Training & Competency Development**: Importance of Training & Competency Development in Mooring Operations, including Simulation-Based Training & Drills*
1330 - 1345	***Workshop on Mooring Plan Development**: Interactive Workshop Where Participants Develop a Comprehensive Mooring Plan for a Given Scenario, Incorporating Lessons Learned throughout the Course*
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*End of Course*

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