

**COURSE OVERVIEW OE0409(AD4)**  
**Liquefied Gas Tankers & Jetty Operations**

**Course Title**

Liquefied Gas Tankers & Jetty Operations

**Course Date/Venue**

September 22-26, 2024/Boardroom, Warwick Hotel Doha, Doha, Qatar

**Course Reference**

OE0409(AD4)

**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.***

Safety in all types of operations is the key factor in ensuring that a company always maintains its position about the profit line, both efficiently and ethically. It is critical to the well-being and reputation of the tanker and terminal industry. In today's global oil and gas markets, terminal, offshore, tank and transport operators are faced with increasing risk constraints and challenges stemming from complex cargo and terminal operations coupled with tighter safety, security and environmental regulations.

This course is required to provide sufficient competence for regulatory HID inspectors involved in carrying out inspections at jetties associated with ship-to-shore transfer of hazardous substances, whilst ensuring their personal health and safety within a hazardous environment. Those parts of the course covering issues of regulation policy and practice will be presented by HSE staff. The participants to the course will consist of gas & pipeline specialist regulators and chemical industry regulatory inspectors who deal with refinery/fuel storage facilities linked to tanker jetties, plus small number of specialist in the fields of process safety, human factors, etc.

The course will provide the technical fundamentals of liquefied gas and its safe carriage on marine tank vessels. It will describe the parties involved, equipment, procedures and documentation applicable across the entire process of tanker berthing, loading and unloading as well as the health, safety and environmental aspects, and their applicability to the different products handled.

Participants of the course will have the technical knowledge required to serve on a tanker and be assigned specific duties and responsibilities related to cargo or cargo equipment. Further, participants will be able to gain sufficient knowledge of the practical application of the basic principles and concepts of safe tanker operations in order to carry out these duties.

### Course Objectives

This course will provide the technical fundamentals of liquefied gas and its safe carriage on marine tank vessels. Upon the successful completion of this course, each participant will be able to:-

- Apply and gain a good working knowledge on liquefaction gas tankers and jetty operations
- Discuss the technical fundamentals of liquefied gas and its safe carriage on marine tank vessels
- Define and discuss terminology, regulations and codes of practice
- Explain the design and equipment of LNG tankers, ship/shore emergency shutdown system, power emergency release system (PERC system) and ship maneuvering system
- Recognize loading arms and demonstrate proper arrangements for handling, care and carriage of equipments and tank ventilation
- Discuss pumps and pump theory, tank gauging systems, level arms, environmental protection systems and pollution prevention
- Carryout tanker operations through calculations, loading and discharge plans, loading arms and discharge procedures, tank cleaning, purging and gas freeing
- Identify toxicity and health hazards associated with oil and flammability hazards as well as control the hazard
- Employ safety equipment and protection of personnel and use emergency procedures

### 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 is intended for marine terminal managers, superintendents, supervisors and engineers, facility managers and facility training coordinators, safety & environmental managers, engineers and officers, spill management team members, transfer supervisors, marine shipping coordinators and dock maintenance planners.

### 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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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.

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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.

### 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 Mohamed Ghanem**, MSc, BSc, is a **Senior Master Marine Engineer** with extensive experience in **Marine Engineering** within **Oil & Gas, Refinery** and **Marine** industry. His expertise widely covers in the areas of **Global Maritime Distress Safety System (GMDSS)**, **Marine Operations**, **International Maritime Conventions & Codes**, **International Ship and Port Facility Security Code (ISPS) Code**, **Buoyage System & International Code of Signals**, **Oil & Gas Marine Terminals**, **Port Terminals Crisis Management & Major Emergency Response**, **Marine Hazards Prevention & Control**, **Single Buoy Mooring System (SBM)**, **Emergency Response Procedure**, **Oil Spill Management & Recovery**, **Oil Spill Management & Response**, **Oil Spill Prevention & Control**, **Oil Spill Combating Operations**, **Oil Spill Awareness**, **Oil & Gas Marine Terminals**, **Offshore Marine Operation Management**, **International Maritime Conventions & Codes**, **Vessel Hull & Machinery Survey**, **Oil & Gas Fields Offshore Survey**, **Oil & Gas Terminals Loading & Discharging**, **Marine Engineering**, **Terminal Operations**, **Seamanship**, **Shipping Overview**, **Marine Fire Fighting Equipment**, **Life Saving**, **Safety Process**, **Major Emergency Management & Control**, **Crisis Management during Oil Spill and Firefighting**. He is currently the **Jack Up Barge Engineer & Captain** of **ADNOC Drilling** wherein he oversee all the operations onboard the vessel including navigation, maintenance and compliance with local regulations.

During his life career, Captain Mohamed has gained his practical and field experience through his various significant positions and dedication as the **Barge Engineer & Marine Planner Onboard**, **Trainee Barge Engineer Onboard**, **Assistant Barge Master II Onboard**, **Assistant Barge Master Onboard**, **Site Engineer**, **Marine Surveyor**, **Ship Repair Engineer**, **Vessel Repairing Engineer**, **Metal Cutting & Welding Planner**, **Marine Engineer Onboard**, **Technical Manager** and **Maintenance Mechanical Engineer** from the Shelf Drilling Co, Marine & Engineering Consulting, ADMARINE III (X-GSF 103) at ADES, Oceandro Large Yacht Builder, International Inspection Company, Synchrony-Lift Works and B-Tech Company.

Captain Mohamed has **Master** and **Bachelor** degrees in **Naval Architecture & Marine Engineering**. Further, he is a **Certified Instructor/Trainer**, a **Certified Trainer**, **Assessor & Internal Verifier** by the **Institute of Leadership & Management (ILM)** and holds a certificate in **Marine III Engineer** and **OIM & Mobile Offshore Drilling Unit (MODU)**. He is an **active member** of The International Transport Workers' Federation (**ITF**), UK and has delivered numerous courses, workshops, trainings and conferences worldwide.

### 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

**US\$ 8,500** per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day

### 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: Sunday, 22<sup>nd</sup> September 2024**

0730 – 0800	<i>Registration &amp; Coffee</i>
0800 – 0815	<i>Welcome &amp; Introduction</i>
0815 – 0830	<b>PRE-TEST</b>
0830 – 0930	<b>Definitions &amp; Terminology</b>
0930 – 0945	<i>Break</i>
0945 – 1030	<b>Regulations &amp; Codes of Practice</b>
1030 – 1230	<b>Design &amp; Equipment of LNG Tankers</b>
1230 – 1245	<i>Break</i>
1245 – 1420	<b>Ship/Shore Emergency Shutdown System</b>
1420 – 1430	<b>Recap</b> <i>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</i>
1430	<i>Lunch &amp; End of Day One</i>

#### **Day 2: Monday, 23<sup>rd</sup> September 2024**

0730 – 0930	<b>Power Emergency Release System (PERC System)</b>
0930 – 0945	<i>Break</i>
0945 – 1100	<b>Ship Maneuvering System</b>
1100 – 1230	<b>Loading Arms</b>
1230 – 1245	<i>Break</i>
1245 – 1420	<b>Arrangements for Handling, Care &amp; Carriage of Equipments</b>
1420 – 1430	<b>Recap</b> <i>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</i>
1430	<i>Lunch &amp; End of Day Two</i>



**Day 3: Tuesday, 24<sup>th</sup> September 2024**

0730 – 0930	<b>Tank Ventilation Arrangements</b>
0930 – 0945	Break
0945 – 1100	<b>Pumps &amp; Pump Theory</b>
1100 – 1230	<b>Tank Gauging Systems &amp; Level Alarms</b>
1230 – 1245	Break
1245 – 1420	<b>Environmental Protection Systems &amp; Pollution Prevention</b>
1420 – 1430	<b>Recap</b> 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: Wednesday, 25<sup>th</sup> September 2024**

0730 – 0930	<b>Tanker Operations</b> Calculations • Loading and Discharge Plans • Loading Arms and Discharge Procedures • Tank Cleaning • Purging and Gas Freeing
0930 – 0945	Break
0945 – 1100	<b>Safe Working Practices Specific to Maintenance &amp; Repair Work</b>
1100 – 1230	<b>Toxicity &amp; Health Hazards Associated with Oil</b>
1230 – 1245	Break
1245 – 1420	<b>Flammability Hazards</b>
1420 – 1430	<b>Recap</b> 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: Thursday, 26<sup>th</sup> September 2024**

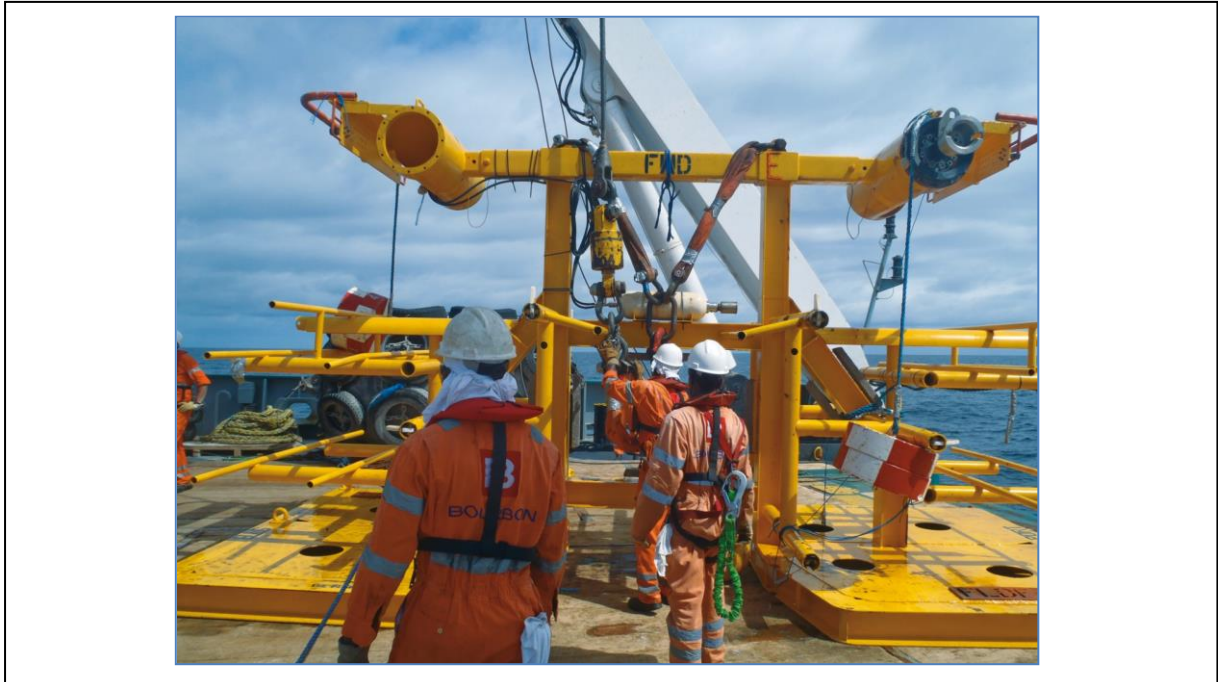
0730 – 0930	<b>Hazard Control</b>
0930 – 0945	Break
0945 – 1100	<b>Safety Equipment &amp; Protection of Personnel</b>
1100 – 1230	<b>Emergency Procedures</b>
1230 – 1245	Break
1245 – 1345	<b>Emergency Procedures (cont'd)</b>
1345 – 1400	<b>Course Conclusion</b> Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course
1400 – 1415	<b>POST-TEST</b>
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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