

COURSE OVERVIEW HE0280 Product Storage, Loading & Transport (Petroleum) - Basics

Course Title

Product Storage, Loading Transport (Petroleum) - Basics

Course Date/Venue

Session 1: February 24-28, 2025/Fujairah Meeting Room, Grand Millennium Al Wahda, Abu Dhabi, UAE

Session 2: September 21-25, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE



Course Reference

HE0280

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.

Hazardous materials are used in many processes in the industry all over the world. Due to the nature of hazardous materials every production, storage, and transportation activity related to the use of these materials inherits many risks for both society and environment. Despite this fact, the use of hazardous material has been justified by the economical revenue, which is generated by their use. In order to avoid the risks turning into real events it is necessary to integrate risk mitigation and prevention measures into the transport management.

The very nature of the bulk and containerised transportation of hazardous material dictates that unforeseen and varied emergency situations can occur and accidents when they occur are likely to have greater impact. These emergencies when they happen are unpredictable can happen quickly, unexpectedly and invariably require immediate response. Therefore, the United States Department of Transportation (DOT) has established a series of regulations governing the transportation of hazardous material (Hazmat 49 CFR 171-173, Hazmat HM-181, Hazmat HM-126, Hazmat HM-232 etc).











Petroleum products such as LPG, LNG, CNG, Propane, Hydrogen, Gasoline, Diesel and MTBE are the most commonly transported hazardous material, with approximately 2,000,000 petrol tankers on the roads worldwide carrying some 10,000 million tonnes of petroleum products. Further, more than 1000 million tonnes of petroleum products are moved by rail worldwide each year.

This state-of-the-art course is designed to address the Hazmat regulations and procedures in general and the Petroleum Products in particular. During the duration of this interactive course, participants will be exposed to the Loading, Unloading, Storing, and Transportation of Petroleum Products such LPG, LNG, CNG, Propane, Hydrogen, Gasoline, Diesel and MTBE.

Course Objectives

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

- Apply and gain an advanced knowledge on transportation fuels
- Recognize the general considerations related to the petroleum industry, upstream and downstream petroleum industry, petroleum refining and apply the appropriate petroleum transportation methods
- Enumerate and describe the major petroleum products
- Explain the hazard, risk, quantitative assessment, hazard identification, evaluation and control related to the handling and transportation of petroleum products
- Recognize the need for risk assessment including the application of the proper assessment process, training and evaluation
- Implement the principles of HSE management systems and standards which includes OHSA 18001 & ISO 14001 as well as the OSHA Regulations for OSHA 29 CFR Part 1910 (PSM) & HAZCOM
- Define HAZMAT, apply DOT regulations and explain the different modules related to the transportation of petroleum products
- Employ the appropriate HAZMAT application for loading petroleum products, for unloading petroleum products, for storing petroleum products and for the transportation of petroleum products

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 advanced knowledge on petroleum products handling and transportation for transportation and fleet managers, supervisors and foremen; operations managers, engineers, supervisors and foremen; environmental managers, engineers and officers; safety managers, engineers and officers; HSE managers, engineers and officers; and governmental/regulatory authorities.















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: -

• *BAC

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.

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.







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. Hesham Abdou, PhD, MSc, BSc, is a Senior Health, Safety & Environmental (HSE) Consultant with over 35 years of practical experience in various industrial fields. His specialization widely covers in the areas of Management, Safety Monitoring & Audits, Management, Accident Investigation, Risk Assessment & Fire Safety, Safety Awareness, Safety Legislations & Regulations, Process Hazard Analysis (PHA), Process Safety Management (PSM), Hazardous Materials & Chemicals

Handling, Pollution Control, Environment, Health & Safety Management, Process Risk Analysis, Effective Tool Box Talks, Construction Sites Safety, HSSE Management System, HSSE Audit & Inspection, HSEQ Procedures, Authorized Gas Testing, Confined Space Entry & Rescue, Risk Management, Quantitative & Qualitative Risk Assessment, Rigging Safety Rules, Machinery & Hydraulic Lifting Equipment, Warehouse Incidents & Accidents Reporting, Incident & Accident Investigation, Task Risk Management, Task Risk Analysis, Risk Assessment Facilitation, Confined Space Safety, Basic First Aid, Rescue Operations in Hazardous Locations, Gas Emergencies & Gas Escape, **Environmental** Awareness.

During his career life, Dr. Hesham held significant positions and dedication as the General Manager, Operations Manager, Maintenance Manager, Section Head, **Process Engineer** and **Mechanical Engineer** in various companies.

Dr. Hesham has a PhD and Master's degree in Mechanical Engineering and a Bachelor degree in Process Engineering. Further, he is a Certified Instructor/Trainer and a Peer Reviewer. Dr. Hesham is a member of Egyptian Engineering Syndicate. Moreover, he has published technical papers and journals and has delivered numerous trainings, workshops, courses, seminars 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.















Accommodation

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

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

Day I	
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
	Introduction and General Considerations
0830 - 0930	Course Overview • The Petroleum Industry • Upstream & Downstream
	Petroleum Refining Petroleum Transportation Methods
0930 - 0945	Break
0045 1100	Major Petroleum Products
0945 – 1100	LPG • LNG • CNG
1100 1220	Major Petroleum Products (cont'd)
1100 – 1230	Propane • Hydrogen • Gasoline
1230 – 1245	Break
1245 - 1430	Major Petroleum Products (cont'd)
1245 - 1450	Diesel • MTBE
1430	Lunch & End of Day One

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Day 2	
HSE General	
Hazard • Risk • Quantitative Assessment • Hazard Identification • Hazard	
Evaluation • Hazard Control	
Break	
Risk Assessment	
Focus for Assessment • Record decisions • Assessment Process • Eight Step	
Process • Health Hazards • Training & Evaluating	
HSE Management Systems & Standards	
Management Systems • OHSA 18001 • ISO 14001	
Break	
OSHA Regulations	
OSHA 29CFR Part 1910 (PSM) • HAZCOM	
Lunch & End of Day Two	

Day 3

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	0720 0000	HAZMAT
	0730 – 0900	What is HAZMAT • DOT regulations (DOT 49 CFR Parts 171-180)
	0900 - 0915	Break
	0915 - 1100	HAZMAT (cont'd)
	0913 - 1100	Module-1: The Hazardous Materials Table • Module-2: Shipping Papers









1100 - 1230	HAZMAT (cont'd)
1100 - 1230	Module-3: Marking and Labeling • Module-4: Placarding
1230 - 1245	Break
1245 – 1430	HAZMAT (cont'd)
1245 - 1450	Module-5: Packaging • Module-6: Carrier Requirements
1430	Lunch & End of Day Three

Day 4

0720 0000	HAZMAT Application: Petroleum Products: Loading
0730 – 0900	LPG • LNG • CNG • Propane
0900 - 0915	Break
0915 – 1100	HAZMAT Application: Petroleum Products: Loading (cont'd)
0913 - 1100	Hydrogen • Gasoline • Diesel • MTBE
1100 – 1230	HAZMAT Application: Petroleum Products: Unloading
1100 - 1230	LPG • LNG • CNG • Propane
1230 - 1245	Break
1245 - 1430	HAZMAT Application: Petroleum Products: Unloading (cont'd)
1245 - 1450	Hydrogen • Gasoline • Diesel • MTBE
1430	Lunch & End of Day Four

Day 5

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0730 - 0900	HAZMAT Application: Petroleum Products: Storing
0730 - 0900	LPG • LNG • CNG • Propane
0900 - 0915	Break
0915 – 1100	HAZMAT Application: Petroleum Products: Storing (cont'd)
0913 - 1100	Hydrogen • Gasoline • Diesel • MTBE
1100 – 1215	HAZMAT Application: Petroleum Products: Transportation
1100 - 1213	LPG • LNG • CNG • Propane
1215 - 1230	Break
1230 – 1400	HAZMAT Application: Petroleum Products: Transportation (cont'd)
1230 - 1400	Hydrogen • Gasoline • Diesel • MTBE
1400 - 1415	POST-TEST
1415 - 1430	Presentation of Certificates
1430	Lunch & 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



