

COURSE OVERVIEW HE1130

NEBOSH HSE Certificate in Process Safety Management (PSM)

Course Title

NEBOSH HSE Certificate in Process Safety Management (PSM)

Course Reference

HE1130

Course Duration/Credits

Training: Five days/2.8 CEUs/28 PDHs
Exam: As per NEBOSH Exam schedules



Course Date/Venue

Session(s)	Date	Venue
1	April 14-18, 2024	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
2	June 30-July 04, 2024	Cheops Meeting Room, Radisson Blu Hotel, Istanbul Sisli, Turkey
3	October 06-10, 2024	Jubail Hall, Signature Al Khobar Hotel, Al Khobar, KSA
4	December 09-13, 2024	Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

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.



The NEBOSH HSE Certificate in Process Safety Management qualification is designed to provide a sound breadth of knowledge and understanding that enables qualification holders to contribute to the management of process safety risks. This qualification builds on the understanding already gained by studying the NEBOSH National or International General Certificate in Occupational Health and Safety.



This qualification aims to provide holders with the knowledge and understanding of Process Safety Management to ensure that they can contribute to the effective management of process safety risks. When things go wrong in the process industry the results can be catastrophic. This has been evidenced by incidents in the past which have led to loss of life and many billions of US dollars' worth of damages. The Deepwater Horizon incident which tragically led to 11 people losing their lives and the total cost to BP was in the region of \$62 billion.

The process safety industry is high hazard so having qualified people to manage activities within the industry will lead to safer workplaces. This will help to prevent loss of life but will also help to protect valuable assets and helps organizations avoid prosecution and ultimately loss of reputation.

This course is designed to provide participants with a detailed and up-to-date overview of NEBOSH process safety management. It covers the meaning of process safety and how it differs from personal safety; the role of leadership in process safety management, the purpose of organizational learning; the benefits, limitations, types of worker participation and engagement; the purpose and importance of establishing a process safety management system and its key elements; the common risk management techniques used in process industries; asset management and maintenance strategies for process plant; and the role, purpose and features of a permit-to-work, the key principles of safe shift handover and the principles of selecting, assessing and managing contractors.

Further, the course will also discuss the purpose and requirements of standard operating procedures; the controls that shall be adopted to control the safe start-up and shutdown of process plant including the necessity for performance standards for safety critical systems, equipment and the concept of 'FARSI'; the hazards and controls associated with the use of steam and water as well as electricity/static electricity within the process industries; the physical forms of dangerous substances and how these can determine process risk; and the hazards presented by chemical reactions and the protective measures used to mitigate the consequences of a thermal runaway reaction including the hazards and controls available for the bulk storage of dangerous substances.

During this interactive course, participants will learn the fire and explosion hazards relating to process industries; the appropriate control measures to minimize the effects of fire and explosion in the process industries; how dusts have the potential to explode; the commonly used control measures adopted to prevent and minimize explosion; and the purpose and features of an emergency plan and the requirements for the implementation.

The syllabus consists of one unit (Unit PSM1) that is divided into four elements. The Unit is a taught unit assessed by 90 minutes written examination. The examination consists of 40 multiple-choice questions. All questions are compulsory. Candidate scripts are marked by external examiners appointed by NEBOSH.

Course Objectives

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

- Achieve the NEBOSH HSE Certificate in Process Safety Management
- Define the meaning of process safety and how it differs from personal safety
- Explain the role of leadership in process safety management, the purpose of organizational learning, the sharing of lessons learnt and sources of information and how 'change' shall be managed to effectively reduce risks to people and plant
- Identify the benefits, limitations, types of worker participation and engagement and what is meant by competence and its importance to process safety
- Discuss the purpose and importance of establishing a process safety management system and its key elements
- Recognize the common risk management techniques used in process industries

- Carryout asset management and maintenance strategies for process plant
- Explain the role, purpose and features of a permit-to-work, the key principles of safe shift handover and the principles of selecting, assessing and managing contractors
- Identify the purpose and requirements of standard operating procedures
- Implement the controls that shall be adopted to control the safe start-up and shutdown of process plant including the necessity for performance standards for safety critical systems, equipment and the concept of 'FARSI'
- Recognize the hazards and controls associated with the use of steam and water within the process industries as well as the hazards and controls associated with electricity/static electricity within the process industries
- Discuss the physical forms of dangerous substances and how these can determine process risk
- Illustrate the hazards presented by chemical reactions and the protective measures used to mitigate the consequences of a thermal runaway reaction including the hazards and controls available for the bulk storage of dangerous substances
- Explain fire and explosion hazards relating to process industries and employ the appropriate control measures to minimize the effects of fire and explosion in the process industries
- Recognize how dusts have the potential to explode and commonly used control measures adopted to prevent and minimize explosion
- Identify the purpose and features of an emergency plan and the requirements for the implementation

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, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.

Who Should Attend

This course provides a wide understanding and deeper appreciation of process safety management for supervisors, newly appointed managers, junior managers, safety representatives and newly qualified health and safety advisors within the process industries.

Examination Schedule

NEBOSH requires minimum 30 working days to schedule an exam. Students must submit their complete applications minimum 15 working days prior to the scheduled exam date. We recommend that students submit their applications one or two weeks earlier than the above NEBOSH deadline.

Training Methodology

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Workshops & Work Presentations
- 30% Case Studies & Practical Exercises
- 20% Software, Simulators & Videos

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

Course Fee

Dubai	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.
Istanbul	US\$ 6,000 per Delegate + VAT . This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Al Khobar	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.
Abu Dhabi	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

Course Certificate(s)

- (1) NEBOSH HSE Certificate in Process Safety Management will be issued to participants who have successfully passed the written examination.




- (2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.




Certificate Accreditations

Haward Technology is accredited by the following international accreditation:-

- 

NEBOSH: The National Examination Board in Occupational Safety and Health

Haward Technology is an **Accredited Course Provider** and **Learning Partner** of The National Examination Board in Occupational Safety and Health (**NEBOSH**) with **Learning Partner Number 931 Bronze**. NEBOSH is the awarding body approved by Scottish Qualifications Authority (SQA). Haward Technology is authorized to offer NEBOSH's comprehensive range of globally-recognized qualifications designed to meet the health, safety, environmental and risk management needs of all places of work.
- 

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 **2.8 CEUs** (Continuing Education Units) or **28 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.

- 

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.

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. John Burnip, EHS, SAC, STS, NEBOSH-ENV, NEBOSH-IGC, NEBOSH-IFC, NEBOSH-PSM, NEBOSH-IOG, TechIOSH, is a **NEBOSH Approved Instructor** and a **Senior HSE Consultant** with over **50 years** of practical **Offshore & Onshore** experience within **Oil, Gas, Refinery, Petrochemical** and **Nuclear** industries. His wide experience covers **NEBOSH** International General Certificate in Occupational Health & **Safety**, **NEBOSH** National Certificate in Construction Health & Safety, **NEBOSH** Certificate in Process Safety Management, **NEBOSH** Environmental Management Certificate, **NEBOSH** Certificate in Fire Safety, **NEBOSH** International Oil & Gas Certificate, **HSSE Audit & Inspection**, **HSSE Management System**,

HSSE Performance & Effectiveness, **HSSE Emergencies, Crisis & Incidents**, Hazardous Materials & Chemicals Handling, **PHA, HAZOP, HAZID, Hazard & Risk Assessment, Task Risk Assessment, Accident & Incident Investigation, Emergency Response Procedures**, Job Safety Analysis (**JSA**), Behavioural Based Safety (**BBS**), Process Safety Management (**PSM**), **Confined Space Entry, Fall Protection, Work Permit & First Aid, Emergency Response**, H₂S, ERP Preparation, Project HSE Management System, Health & Hygiene Inspection, PTW Control, Process Modules Fire & Gas Commissioning, MSDS, Ergonomics, Lockout/Tagout, Fire Safety & Protection, Spill Prevention & Control, **Tower & Scaffold Inspection, Scaffolding Operations, Scaffolding Equipment, Bracket Scaffolds, Scaffolding Labelling, Pre-fab Scaffolding**; Erecting, Maintaining & Dismantling **Scaffolding** in accordance with the **British Standards Code of Practice 5973; Heavy Lifting** operations, **Safe Mobile Elevating Work Platform, Safe Forklift Driving, Safe Knuckle Boom**, Cantilevered Hoists, **Offshore Operations, Offshore Construction, Basic Offshore Safety Induction & Emergency Training (BOSIET), Onshore Fabrication & Offshore Pipelaying & Hook-Up, Crane Inspection, Crane Operations, Oilfield Startup & Operation, Steel Fabrication, ISO 45001, OSHA, ISO 9001, ISO 14001, OHSAS 18001 and IMO (SOLAS) Regulations**. Mr. Burnip has greatly contributed in upholding the highest possible levels of safety for numerous International Oil & Gas projects, Generation Systems & Platform Revamp, LPG & Gas Compression, Marine, Offshore and Power Plant Construction. Currently, he is the **HSE Advisor** of Solvay wherein he is responsible in planning and implementation of the corporate safety program (OSHA codes).

During Mr. Burnip's long career life, he had successfully carried out numerous projects in **Europe, North America, South America, Southeast Asia, Middle East** and the **North Sea**. He had worked for Likpin Dubai, SADRA/DOT, **ZADCO, McDermott International (USA, Qatar, Egypt, India, Oman, Dubai and Abu Dhabi), PDO, Shell, ARAMCO**, Salman Field, Leman Offshore Gas Field, GEC, Harland & Wolff PLC Belfast in North Ireland, Howard Doris – Kishorn in Scotland, **Westinghouse Electric** in Brazil and South Korea and **Chevron Oil** in Scotland as the **Commissioning Project Engineer, Project & Safety Engineer, Estimating Engineer, Senior Instrument Engineer, Instrument Field Engineer, Lead Instrument Engineer, Instrument Engineer, Engineer, Emergency Response Training Manager, HSSE Manager, HSE Advisor, HSE Instructor, HSE Supervisor, Instrumentation Supervisor, Instrumentation Specialist, Project Coordinator, Instrumentation Technician** and **Tank Farm Instrumentation Technician**.

Mr. Burnip has a **Bachelor's** degree in **Business Studies** from the **Somerset University (UK)**. He is a **Certified/Registered Tutor** in **NEBOSH Certificate in Environmental Management, NEBOSH International General Certificate, NEBOSH International Certificate in Fire Safety & Risk Management, NEBOSH Process Safety Management Certificate** and **NEBOSH International Oil & Gas Certificate**; a **Certified Safety Auditor (SAC)**; a **Certified ISO 45001 Auditor**; an **Environmental Health and Safety Management Specialist** on Fall Protection, Elevated Structures, Material Handling, Trenching & Excavations; a **Welding Brazing Safety Technician**; a **Certified Safety Administrator (CSA) - General Industry**; a **Safety Manager/Trainer – General Industry**; a **Petroleum Safety Manager (PSM) - Drilling & Servicing**; a **Petroleum Safety Specialist (PSS) - Drilling & Servicing**; a **Safety Planning Specialist**; a **Safety Training Specialist**; a **Certified Instructor/Trainer**; a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)** and further holds a Certificate in **Mechanical Engineering Craft Practice** from the **City & Guilds of London Institute**; a **NEBOSH Level 3 Construction Certificate (UK)**; and holds a **Cambridge Teaching Certificate**. He is a well-regarded member of the **National Association of Safety Professionals**, the **Association of Cost Engineers (UK)**, **Institution of Occupational Safety & Health (TechIOSH)** and an **Associate Member of World Safety Organization**. Further, he has conducted innumerable trainings, workshops and conferences worldwide.

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	Registration & Coffee
0800 – 0845	Welcome & Introduction
0845 – 0930	Unit PSM 1: Process Safety Management: Element 1: Process Safety Leadership Process Safety Management Meaning • Process Safety Leadership
0930 – 0945	Break
0915 – 1100	Unit PSM 1: Process Safety Management: Element 1: Process Safety Leadership (cont'd) Organizational Learning • Management of Change
1100 – 1230	Unit PSM 1: Process Safety Management: Element 1: Process Safety Leadership (cont'd) Worker Engagement • Competence
1230 – 1245	Break
1245 – 1420	Unit PSM 1: Process Safety Management: Element 2: Management of Process Risk Establishing a Process Safety Management System
1420 – 1430	Recap
1430	Lunch & End of Day One

Day 2

0730 – 0900	Unit PSM 1: Process Safety Management: Element 2: Management of Process Risk (cont'd) Risk Management Techniques Used Within the Process Industries
0900 – 0915	Break
0915 – 1100	Unit PSM 1: Process Safety Management: Element 2: Management of Process Risk (cont'd) Asset Management & Maintenance Strategies
1100 – 1200	Unit PSM 1: Process Safety Management: Element 2: Management of Process Risk (cont'd) Role & Purpose & Features of a Permit-to-Work System
1200 – 1215	Break
1215 – 1420	Unit PSM 1: Process Safety Management: Element 2: Management of Process Risk (cont'd) Safe Shift Handover
1420 – 1430	Recap
1430	Lunch & End of Day Two

Day 3

0730 – 0835	Unit PSM 1: Process Safety Management: Element 2: Management of Process Risk (cont'd) Contractor Management
0835 – 0930	Unit PSM 1: Process Safety Management: Element 3: Process Safety Hazard Control Operating Procedures

0930 – 0945	Break
0945 – 1100	Unit PSM 1: Process Safety Management: Element 3: Process Safety Hazard Control (cont'd) Safe Start-Up & Shut-Down
1100 – 1200	Unit PSM 1: Process Safety Management: Element 3: Process Safety Hazard Control (cont'd) Safety Critical Performance Standards
1200 – 1215	Break
1215 – 1420	Unit PSM 1: Process Safety Management: Element 3: Process Safety Hazard Control (cont'd) Utilities
1420 – 1430	Recap
1430	Lunch & End of Day Three

Day 4

0730 – 0900	Unit PSM 1: Process Safety Management: Element 3: Process Safety Hazard Control (cont'd) Electricity/Static Electricity
0900 – 0915	Break
0915 – 1100	Unit PSM 1: Process Safety Management: Element 3: Process Safety Hazard Control (cont'd) Dangerous Substances
1100 – 1230	Unit PSM 1: Process Safety Management: Element 3: Process Safety Hazard Control (cont'd) Reaction Hazards • Bulk Storage Operations
1230 – 1245	Break
1245 – 1420	Unit PSM 1: Process Safety Management: Element 4: Fire & Explosion Protection Fire Hazards
1420 – 1430	Recap
1430	Lunch & End of Day Four

Day 5

0730 – 0830	Unit PSM 1: Process Safety Management: Element 4: Fire & Explosion Protection (cont'd) Fire & Explosion Control
0830 – 0845	Break
0845 - 1035	Unit PSM 1: Process Safety Management: Element 4: Fire & Explosion Protection (cont'd) Dust Explosions • Emergency Preparedness
1035 - 1205	MOCK EXAM
1205 - 1220	Break
1220 – 1235	Course Conclusion
1235 - 1250	NEBOSH Exam Registration/Briefing
1250 - 1420	NEBOSH HSE Certificate Exam Handwriting Test (90 Questions)
1420 – 1430	Closing Ceremony
1430	Lunch & End of Course

Practical Sessions

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



Course Coordinator

Kamel Ghanem, Tel: +971 2 30 91 714, Email: kamel@haward.org