

<u>COURSE OVERVIEW HE0091(GA2)</u> Certified Process Safety Management (PSM) - Advanced

Course Title

Certified Process Safety Management (PSM) -Advanced

Course Reference HE0091(GA2)

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs

Course Date/Venue



Session(s)	Date	Venue
1	April 28-May 02, 2025	Glasshouse Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
2	July 13-17, 2025	Crowne Meeting Room, Crowne Plaza Al Khobar, an IHG Hotel, Al Khobar, KSA
3	October 19-23, 2025	Safir Meeting Room, Divan Istanbul, Taksim, Turkey
4	December 14-18, 2025	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE

Course Description







This practical highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.

Unexpected releases of toxic, reactive, or flammable liquids and gases in processes involving highly hazardous chemicals have been reported for many years in various industries that use chemicals with such properties. Regardless of the industry that uses these highly hazardous chemicals, there is a potential for an accidental release any time they are not properly controlled, creating the possibility of disaster.

To help ensure safe and healthful workplaces, OSHA has issued the Process Safety Management of Highly Hazardous Chemical standards (29 CFR 1910.119), which contains requirements for the management of hazards associated with processes using highly hazardous chemicals.

Process safety management (PSM) is addressed in specific standards for the general and construction industries. OSHA's standard emphasizes the management of hazards associated with highly hazardous chemicals and establishes a comprehensive management program that integrates technologies, procedures and management practices.

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HE0091(GA2) - Page 1 of 12



This is an advanced course for Process Safety Management as applicable to process industry. The course provides an in-depth study of each PSM element of HSEMS PSM program and how the overall architecture applies to each. The course introduces each PSM element and the specific guidelines for integrating PSM element requirements into their corporate program (such as quality and reliability programs) and evaluating program compliance throughout the implementation phase. This course also covers how to expand PSM program to include RBPS (Risk Based Process Safety) elements as proposed by the CCPS (Center for Chemical Process Safety), Aiche, PSM program.

Course Objectives

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

- Apply and gain an advanced knowledge on OSHA Process Safety Management (PSM) Standard 29 CFR 1910.119
- Interpret the performance-based requirements of the US OSHA PSM and EPA risk management standards mentioned above, as well as learn about related industry standards
- Discuss the elements of process safety that are missing from typical PSM systems, including Human Factors elements (communication, human system interface, work environment, staffing and fitness for duty), Facility Siting element, Project Risk Management, Senior Leadership & Accountability.
- Review the Risk-Based Process Safety (RSPS) guide (2007) from CCPS/AIChE in order to understand how to close critical gaps
- Implement multiple options and an effective need-specific program
- Employ specific guidelines for developing cost effective written programs tailored for each PSM elements, whether for a single facility or a corporation
- Avoid costly implementation mistakes
- Identify the jargon for communicating PSM requirements to others throughout the organization
- Apply for each element as per the following:
 - How to develop written programs to meet PSM requirements
 - > How to incorporate and integrate the PSM element requirements into other corporate programs (other corporate management systems)
 - > Key performance indicators
 - How to evaluate program compliance throughout implementation
 - How to begin implementation at the company
 - Additional training necessary for implementation of specific elements.
- Illustrate interpretations of PSM requirements and demonstrate developing an effective PSM program that can be adapted for their facility using actual and generic case studies



HE0091(GA2) - Page 2 of 12



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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 process safety management for corporate executives, directors, process and operation managers, shift controllers and assistant shift controllers, maintenance and engineering managers, all section heads, HSE managers, supervisors, safety engineers and officers.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, Stateof-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

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.
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.
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.
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.



HE0091(GA2) - Page 3 of 12 HE0091(GA2)-04-25|Rev.292|01 May 2025

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Course Certificate(s)

(1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-







Middle East P.O. Box 26070 Abu Dhabi, UAE Tel: +971 2 30 91 714 Fax: +971 2 30 91 716 http://www.haward.org

CC7590

Process Safety Management (PSM) -Advanced

Certification Program

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This program is designed to assist companies in identifying professionals who have satisfied the minimum competencies specified in HE091(GA2). Haward Technology does not warrant or guarantee the performance of any professional certified under this program.



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HE0091(GA2) - Page 4 of 12

HE0091(GA2)-04-25|Rev.292|01 May 2025



(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.

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Haward Technology *	Page 1 of 1 CEU Official Transcript of Records	* Haward Technology
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Haward Technology * CEUs * Hawar	Haward Technology is an Authorized Training Provider by the International Association for Continuing Education and Training (IACET), 11136 Mustice Valuey Drive, Suite 350 Reston, VA 20181, USA in obtaining this approval, Haward Technology has demonstrated that it completes with the Mustice Yace 2013 Standard which is without and the rule of grading of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2013 Standard. Haward Technology's courses meet the professional certification and continuing education for participants seeking Continuing (IACET), 12(5) Extensional certification and continuing education for continuing dividentions. The CEU is an international authority that evaluates programs according to strict, research-based orienta and guidelines. The CEU is an international authority that evaluates programs according to strict, research-based orienta and guidelines. The CEU is an international authority that evaluates programs according to strict, research-based orienta and guidelines. The CEU is an international according uniform unit of measurement in qualified courses of continuing education. Motional Developed uniform unit of measurement in qualified courses of continuing education. The CEU is an international authority that evaluates programs according to strict, research-based orienta and guidelines. The CEU is an international according to gram according to strict, research-based orienta and guidelines. The CEU is an international according to gram according to strict. Haward Technology is authorized to gram according to gram according to strict. Experimental content according to gram according to gram according to strict. Haward Tech	otop * CEUS * Manual Technology
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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.

• ACCREDITED PROVIDER (IAC

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.



HE0091(GA2) - Page 6 of 12 HE0091(GA2)-04-25|Rev.292|01 May 2025

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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. Raymond Tegman is a Senior HSE Consultant with extensive experience within the Oil & Gas, Petrochemical and Refinery industries. His broad expertise widely covers in the areas of Rigging Safety Rules, Machinery & Hydraulic Lifting Handling Hazardous Equipment, Chemicals. Spill Containment, Fire Protection, Fire Precautions, Incidents & Accidents Reporting, HSEQ Audits & Inspection, HSEQ Procedures, Environmental Awareness, Waste Management

Monitoring, Emergency Planning, Emergency Management, Working at Heights, Root Cause Analysis, HSE Rules & Regulations, Process Safety Management (PSM), Process Hazard Analysis (PHA), Techniques, HAZOP, HSE Risk, Pre-Startup Safety Reviews, HSE Risk Identification, Assessments & Audit, HSE Risk Assessment & Management Concepts, HSE Management Policy & Standards, HSSE Emergency Response & Crisis Management Operations, Confined Space Entry, Quantitative Risk Assessment (QRA), Hazardous Materials & Chemicals Handling, Safety Precaution & Response Action Plan, Hazard & Risk Assessment, Task Risk Assessment (TRA), Incident Command, Accident & Incident Investigation, Emergency Response Procedures, Job Safety Analysis (JSA), Behavioural Based Safety (BBS), Fall Protection, Work Permit & First Aid, Lock-Emergency Response, Construction out/Tag-out (LOTO), Supervision, Scaffolding Inspection, HAZCHEM, Manual Material Handling, Road Traffic Supervision, ISO 9001 and OHSAS 18001.

During his career life, Mr. Tegman has gained his practical and field experience through his various significant positions and dedication as the **Operations Manager**, Safety & Maintenance Manager, Safety Manager, Road/Traffic Supervisor, Assessor/Moderator, Safety Consultant, Safety Advisor, Safety Officer and Liaison Officer from Zero Harm, SHRA Training & Services (Health & Safety), Road Crete, Balwin Property Development, DEME International, Gladstone Australia, Godavari Gas Pipeline and New Castle NCIG.

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 - 08150	Welcome & Introduction
08150 - 0830	PRE-TEST
0830 0930	Introduction
0850 - 0950	OSHA PSM Standard 29 CFR 1910.119
0930 - 0945	Break









0045 1200	Performance-Based Requirements of the US OSHA PSM & EPA Risk
0945 - 1200	Management Standards
1200 1215	Performance-Based Requirements of the US OSHA PSM & EPA Risk
1200 - 1213	Management Standards (cont'd)
1215 – 1330	Break
1330 – 1420	Related Industry Standards
1420 – 1430	Recap
1430	Lunch & End of Day One

Day 2

	The Elements of Process Safety that are Missing from Typical PSM System	
0730 – 0930	Human Factor Element (Communication, Human System Interface, Work	
	Environment, Staffing and Fitness for Duty)	
0930 - 0945	Break	
	The Elements of Process Safety that are Missing from Typical PSM System	
0945 – 1030	(cont'd)	
	Facility Siting Element • Project Risk Management • Senior Leadership &	
	Accountability	
1020 1220	The Risk-Based Process Safety (RBPS) Guide (2007) from CCPS/ AIChE to	
1030 - 1230	Understand How to Close Critical Gaps	
1230 - 1245	Break	
1245 – 1420	Multiple Options for Implementing an Effective Need-Specific Program	
1420 – 1430	Recap	
1430	Lunch & End of Day Two	

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Day 5	
0730 - 0930	How to Avoid Costly Implementation Mistakes
0930 - 0945	Break
0945 - 1100	Jargon for Communicating PSM Requirements to Others Throughout the Organization Develop Written Programs to Meet PSM Requirements
1100 - 1230	Jargon for Communicating PSM Requirements to Others Throughout the Organization (cont'd) Develop Written Programs to Meet PSM Requirements (cont'd)
1230 - 1245	Break
1245 - 1420	Jargon for Communicating PSM Requirements to Others Throughout the Organization (cont'd) Incorporate and Integrate the PSM Element Requirements into other Corporate Programs and other Corporate Management Systems
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

	Jargon for Communicating PSM Requirements to Others Throughout the
0730 – 0930	Organization (cont'd)
	Key Performance Indicators
0930 - 0945	Break
	Jargon for Communicating PSM Requirements to Others Throughout the
0945 – 1100	Organization (cont'd)
	How to Evaluate Program Compliance Throughout the Implementation











1100 - 1200	Jargon for Communicating PSM Requirements to Others Throughout the Organization (cont'd)
1100 1200	How to Begin Implementation at the Company
1200 – 1215	Break
1215 - 1420	Jargon for Communicating PSM Requirements to Others Throughout the Organization (cont'd)) Additional Training Necessary for Implementation of Specific Elements
1420 - 1430	Recap
1430	Lunch & End of Day Four

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0730 – 0900	Case Study #1 To Illustrate Interpretation of PSM Requirements
0900 - 0915	Break
0915 – 1045	Case Study # 1 (cont'd)
	To Illustrate Interpretations of PSM Requirements (cont'd)
1045 - 1200	Case Study # 2 To Demonstrate Developing an Effective PSM Program that Can be Adapted to the Facility
1200 - 1215	Break
1215 - 1300	Discussion & Review
1300 - 1315	Course Conclusion
1315 – 1415	COMPETENCY EXAM
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course









Simulators (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using one of our state-of-the-art "Visio"; "Mindview" "Chemical Compatibility 1.1 Simulator", "Chemical Safety Database Simulator", and "CAMEO Chemicals Suite Simulator".







Auminum	Excellen
Aluminum	
Metals	Severe Effec
Bronze	
Metals	Good
Buna N (Nitrile)	
Elastomers	Excellen
Carbon graphite	
Non-metals	Excellen
Carbon Steel	
Metal	Severe Effec
Carpenter 20	
Metals	Good/2
Cast iron	
Metals	Severe Effec
Ceramic Al203	
Non-metals	Excellen
Ceramic magnet	
Non-metals	Excellen
ChemRaz (FFKM)	
Plastic	Excellen
Copper	
Metals	G000
CPVC	Eventer
Plastics	Excellen
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Course Coordinator

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