

COURSE OVERVIEW HE0171
Certified Process Safety Professional (CPSP)
(CCPS Exam Preparation Training)

Course Title

Certified Process Safety Professional (CPSP) (CCPS Exam Preparation Training)

Course Date/Venue

December 15-19, 2024/Club B Meeting Room,
 Ramada Plaza by Wyndham Istanbul City Center,
 Istanbul, Turkey

Course Reference

HE0171

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Introduction



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 American Institute of Chemical Engineers (AIChE) is a professional organization for chemical engineers which has over 45,000 members, comprising of members from 100 countries worldwide. Center for Chemical Process Safety (CCPS) is a corporate membership organization within AIChE that addresses process safety within the chemical, pharmaceutical and petroleum industries. It is a technological alliance of manufacturers, government agencies, consultants, academia and insurers dedicated to improving industrial process safety.



CCPS has developed over 100 publications as guidelines for process safety management, notably a framework for next generation process safety management, ie. Risk Based Process Safety which has 20 elements.

This course will raise the awareness and understanding of employees to recognize the importance of process safety and how it influences day-to-day work activities. This course will provide the foundation to achieve a proactive risk based process safety culture which is essential to operations and work ethics. Also, to provide an effective training to operations, maintenance and technical services engineers.

Further, the course is expected to improve the competency of the engineers in all process safety aspects that affect their daily work; to develop and enhance the risk based process safety knowledge of targeted employees; and to improve the overall organizational capability and performance through competent workforce.

By the end of the course, participants are expected to achieve the following:-

Leaders shall:-

- a. Understand their roles and responsibility in supporting successful implementation of Risk Based Process Safety systems
- b. Demonstrate ownership and commitment to process safety lead by example and gain buy-in from the team
- c. Set expectations and proactively drive compliance to process safety requirements
- d. Support the effort to imbed RBPS (Risk Based Process Safety) within work processes by providing required resources
- e. Be able to make risk based decisions
- f. Become champion to selected process safety element

Engineers shall:-

- a. Understand the principles and essential features of process safety elements
- b. Understand their roles and responsibility in successful implementation of Process Safety Systems
- c. Get involved in the development and implementation of RBPS safety system
- d. Become risk averse when dealing with daily work activities
- e. Be able to participate in and provide meaningful inputs during process safety activities/studies; and as required lead the studies
- f. Be able to prioritize work activities based on associated risk

Course Objectives

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

- Get prepared for the next CCPS and have enough knowledge and skills to pass such exam in order to get the CPSP certification
- Apply and gain a comprehensive knowledge on risk based process safety (RBPS) based on the approach developed by the Center for Chemical Process Safety (CCPS)
- Identify strategic approaches to process safety management and risk based process safety design and improvement criteria
- Identify RBPS management system foundational blocks
- Commit to process safety covering process safety culture, compliance with standards, process safety competency, workforce involvement and stakeholders outreach
- Recognize hazards and risks including process knowledge management and hazard identification and risk analysis
- Manage risk including operating procedures, safe work practices, asset integrity and reliability, contractor management, training and performance assurance, management of change, operational readiness, conduct of operations and emergency management
- Acquire knowledge from experience which includes incident investigation, measurements and metrics, auditing, management review and continuous improvement

Who Should Attend

This course provides an overview of all significant aspects and considerations of risk based process safety for employees from operations, maintenance and technical services.

Exam Eligibility & Structure

Exam candidates shall have the following minimum prerequisites:

Educational Background	Employment History Experience relevant to Process Safety	Education History	References
<p>Five-year experience with a degree from accredited college or university in science, technology, engineering or math (STEM)</p> <p>OR,</p> <p>Ten-year experience for non-STEM degree or no degree</p>	<ul style="list-style-type: none"> • Employer information (company, location) • Role title and dates in role • Percent of time devoted to process safety activities while in each role 	<ul style="list-style-type: none"> • University name and country, graduation year and type of degree • If you don't have at least one STEM degree, prepare an experience summary that demonstrate how you developed the competencies and knowledge required for process safety 	<ul style="list-style-type: none"> • Name, email address and telephone number • Company where you worked with reference • Number of years worked with reference • Application is not complete until all references are received • Once reference are received it could take up to 4 weeks to review the application

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 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.

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 Equipment, Handling Hazardous 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-Start-up Safety Reviews, HSE Risk Identification, Assessments & Audit, Occupational Hygiene and Safety, Associate Safety Professional (ASP), Safety Professional, Process Safety Professional, Fire Protection Specialist, 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-out/Tag-out (LOTO), Emergency Response, Construction 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.

Accommodation

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

Course Fee

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.

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, 15th of December 2024

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	PRE-TEST
0830 – 0900	Overview of Risk Based Process Safety Strategic Approaches to Process Safety Management • Risk Based Process Safety Design and Improvement Criteria
0900 – 0930	Introduction to RBPS Management System Foundational Blocks
0930 – 0945	Break
0945 – 1115	Foundational Block: Commitment to Process Safety Element 1: Process Safety Culture
1115 – 1230	Foundational Block: Commitment to Process Safety (cont'd) Element 2: Compliance with Standards
1230 – 1245	Break
1245 – 1420	Foundational Block: Commitment to Process Safety (cont'd) Element 3: Process Safety Competency
1420 – 1430	Recap
1430	Lunch & End of Day One

Day 2: Monday, 16th of December 2024

0730 – 0830	Foundational Block: Commitment to Process Safety (cont'd) Element 4: Workforce Involvement
0830 – 0930	Foundational Block: Commitment to Process Safety (cont'd) Element 5: Stakeholders Outreach
0930 – 0945	Break
0945 – 1100	Foundational Block: Understanding Hazards & Risks Element 6: Process Knowledge Management
1100 – 1230	Foundational Block: Understanding Hazards & Risks (cont'd) Element 7: Hazard Identification and Risk Analysis
1230 – 1245	Break
1245 – 1420	Foundational Block: Manage Risk Element 8: Operating Procedures
1420 – 1430	Recap
1430	Lunch & End of Day Two

Day 3: Tuesday, 17th of December 2024

0730 – 0930	Foundational Block: Managing Risk (cont'd) Element 9: Safe Work Practices
0930 – 0945	Break
0945 – 1100	Foundational Block: Managing Risk (cont'd) Element 10: Asset Integrity and Reliability
1100 – 1230	Foundational Block: Managing Risk (cont'd) Element 11: Contractor Management
1230 – 1245	Break

1245 – 1420	Foundational Block: Managing Risk (cont'd) Element 12: Training and Performance Assurance
1420 – 1430	Recap
1430	Lunch & End of Day Three

Day 4: Wednesday, 18th of December 2024

0730 – 0930	Foundational Block: Managing Risk (cont'd) Element 13: Management of Change
0930 – 0945	Break
0945 – 1100	Foundational Block: Managing Risk (cont'd) Element 14: Operational Readiness
1100 – 1230	Foundational Block: Managing Risk (cont'd) Element 15: Conduct of Operations
1230 – 1245	Break
1245 – 1420	Foundational Block: Managing Risk (cont'd) Element 16: Emergency Management
1420 – 1430	Recap
1430	Lunch & End of Day Four

Day 5: Thursday, 19th of December 2024

0730 – 0930	Foundational Block: Learning from Experience Element 17: Incident Investigation
0930 – 0945	Break
0945 – 1100	Foundational Block: Learning from Experience (cont'd) Element 18: Measurements and Metrics
1100 – 1230	Foundational Block: Learning from Experience (cont'd) Element 19: Auditing
1230 – 1245	Break
1245 – 1345	Foundational Block: Learning from Experience (cont'd) Element 20: Management Review and Continuous Improvement
1345 – 1400	Course Conclusion
1400 – 1415	POST-TEST
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

MOCK Exam

Upon the completion of the course, participants have to sit for a MOCK Examination similar to the exam of the Certification Body through Haward's Portal. Each participant will be given a username and password to log in Haward's Portal for the MOCK Exam during the 7 days following the course completion. Each participant has only one trial for the MOCK exam within this 7-day examination window. Hence, you have to prepare yourself very well before starting your MOCK exam as this exam is a simulation to the one of the Certification Body.

Practical Sessions

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



Course Coordinator

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