

COURSE OVERVIEW HE1823

Professional Process Safety Inspector (PPSI)
Module 4: Process Safety Auditing & Site Inspection

Course Title

Professional Process Safety Inspector (PPSI): Module 4: Process Safety Auditing & Site Inspection

Course Date/Venue

Session 1: August 18- 22, 2024/Club B Meeting Room, Ramada Plaza by Wyndham Istanbul City Center, Istanbul, Turkey
 Session 2: December 15-19, 2024/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE



Course Reference

HE1823

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Description



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

This certification program is designed to train delegates on Process Safety Inspection and certify them as Professional Process Safety Inspectors. The program comprises of 4 modules that shall be taken in order:-

- Module 1: Fundamentals of Process Safety
- Module 2: Process Safety Management (PSM) & Regulatory Framework
- Module 3: Human Factors & Cultural Aspects
- Module 4: Process Safety Auditing & Site Inspection



Module 4 of this program is designed to provide participants with a detailed and up-to-date overview of Process Safety Auditing & Site Inspection. It covers the process safety audit planning and developing audit checklists; the auditor's ethics and standards of conduct; the audit program design and management; conducting pre-audit activities, on-site audit activities and post-audit activities; auditing internal control systems as well as preparing, coordinating, directing, obtaining feedback and continuous improvement; the process of development of environmental health & safety regulations; and the governmental, mother company and local bodies in environmental health & safety regulations.



During this interactive course, participants will learn the regulatory requirements and enforcement policy and procedures; the audit process operations, environmental impacts and related control technology; the auditor personal qualities and communication; the site inspection, PSM audit effectiveness and continuous improvement; and the future challenges in process safety including advanced materials and their safety considerations, climate change and its impact on safety.

Course Objectives

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

- Get certified as a “Professional Process Safety Inspector”
- Apply process safety audit planning and develop audit checklists
- Discuss auditor’s ethics and standards of conduct and carryout audit program design and management
- Conduct pre-audit activities, on-site audit activities and post-audit activities
- Audit internal control systems as well as prepare, coordinate, direct, obtain feedback and apply continuous improvement
- Explain the process of development of environmental health & safety regulations including governmental, mother company and local bodies in environmental health & safety regulations
- Review regulatory requirements and enforcement policy and procedures
- Audit process operations, environmental impacts and related control technology
- Identify the auditor personal qualities and communication and employ site inspection, PSM audit effectiveness and continuous improvement
- Discuss the future challenges in process safety including advanced materials and their safety considerations, climate change and its impact on safety

Who Should Attend

This course provides an overview of all significant aspects and considerations of process safety inspection for site inspectors, safety engineers, supervisors, newly appointed managers, junior managers, safety representatives and newly qualified health and safety advisors within the process industries.

Course Prerequisite

This course has the following minimum prerequisites:-

- Certificate or proof of attendance/completion of the following Haward’s courses:-
 - ❖ HE1820: Professional Process Safety Inspector (PPSI): Module 1: Fundamentals of Process Safety
 - ❖ HE1821: Professional Process Safety Inspector (PPSI): Module 2: Process Safety Management (PSM) & Regulatory Framework
 - ❖ HE1822: Professional Process Safety Inspector (PPSI): Module 3: Human Factors & Cultural Aspects

Course Certificate(s)

- (1) Internationally recognized Wall Competency Certificates and Plastic Wallet Card Certificates 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. Successful candidate will be certified as a “Professional Process Safety Inspector”. 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:-



- (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.

* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *



Haward Technology Middle East

Continuing Professional Development (HTME-CPD)



CEU Official Transcript of Records

TOR Issuance Date: 14-Nov-22

HTME No. 74851

Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE1820	Professional Process Safety Inspector: Module 1: Fundamentals of Process Safety	October 02-06, 2022	30	3.0
HE1821	Professional Process Safety Inspector: Module 2: Process Safety Management (PSM) & Regulatory Framework	October 23-27, 2022	30	3.0
HE1822	Professional Process Safety Inspector: Module 3: Human Factors & Cultural Aspects	November 13-17, 2022	30	3.0
HE1823	Professional Process Safety Inspector: Module 4: Process Safety Auditing & Site Inspection	December 04-08, 2022	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date **12.0**

TRUE COPY



Jaryl Castillo
Academic Director

Haward Technology has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 Standard which is widely recognized as the standard 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 requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association 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 is accredited by










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* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *

Certificate Accreditations


Certificates are accredited by the following international accreditation organizations:-

- 
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.

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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:



Mr. Peter Christian is an **International Expert** in **Safety, Health, Environmental and Quality** with over **25 years** of practical and industrial experience in **Lifting & Rigging Equipment HAZOP, HAZWOPER, HAZMAT, HAZCOM, PHA (Process Hazard Analysis), FMEA, HAZID, ISO 14001, OHSAS 18001, ISO 9001, Process Safety Management (PSM), Safety, Health, Environmental & Quality Management (SHEQ), Behavioral Safety Management, Industrial Hygiene, Human Factors Engineering, Risk Assessment, Fire Fighting, Rope Rescue Operations,**

Emergency Response within process industries. He is currently the **President of NKWE** and spearheads the companies' major projects and business ventures, where he specializes in the areas of **SHEQ solutions, ISO, Quality Control and OSHA systems**. Previously, he has had much on-hand experience in the initiation and management of projects (technical as well organizational development) including involvement in **design of process plants; the commissioning & decommissioning of process plants; the operational and financial responsibility for large process operations; risk management; operational and maintenance management, crisis and emergency management, accident investigation, risk assessment, hazard identification and emergency preparedness & response** (oil spillage and gas explosions).

Much earlier in his career, Mr. Christian was a **HAZOP Team Leader** for numerous **HAZOP** studies and he has further managed the **Health, Safety & Environmental and Quality** requirements of a large process company. This included responsibilities as an auditor for compliance against **SHEQ standards, ISO standards and the Fatal Risk Control Protocols**. He then facilitated the development and implementation of the above standards as a group and at site level as part of the SHEQ council. Moreover, he established, trained and led a Rope rescue team and a high level emergency care clinic and ambulance service for many years. He still abseils recreationally and leads adventure groups during abseiling activities and serves as a rescue team member for mountain and water emergencies.

During his career life, Mr. Christian has gained his practical and field experience through his various significant positions as the **Plant Manager, Project Metallurgist, Metallurgist, HSE Team Leader, SHEC Superintendent, Mentor, Instructor/Trainer, Acting Technical Manager, Process Plant Superintendent, Acting Project Leader, Acting Plant Superintendent, Appointed Health & Safety & Environmental Superintendent, Production Technician, Acting Senior Shiftsman, Foreman and Learner – Official Extraction Metallurgy** from various companies such as the NKWE Consulting, SAMANCOR, Middleburg Mine Services (Pty) Ltd., Koomfontein Mines, Emelo Mine Services, Gencor Group and South African Defence Force.

Mr. Christian has a **Postgraduate Studies in Advanced Executive Programme** and a **National Higher Diploma (NHD) & a National Diploma in Extraction Metallurgy**. He is also a **Certified Auditor in OHSAS 18001, ISO 14001 & ISO 9001, a Certified Instructor/Trainer, a Certified Internal Verifier/Assessor/Trainer by the Institute of Leadership & Management (ILM), a Six Sigma Black Belt Coach** and holds a Certificate in Facilitate Learning Using a Variety of Given Methodologies **NQF Level 5 (EDTP-SETA)** as a **Certified Facilitator**. He has further delivered innumerable courses, trainings, workshops and conferences globally.

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

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

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	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0815 – 0930	Introduction to Process Safety Auditing <i>Audit Types & Objectives • Process Safety Audit Planning • Audit Scope & Methodology • Audit Team Composition & Roles • Developing Audit Checklists</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Auditor's Ethics & Standards of Conduct <i>Conflict of Interest • Independence • Proficiency • Material Facts & Disclosure • Due Professional Care • Confidentiality</i>
1100 – 1230	Audit Program Design & Management <i>Audit Program Objectives & Scope • Audit Program Organization • Protocols, Checklists & Guides • Frequency of Audits & Selection of Sites • Quality Assurance Provisions • Auditor Staffing & Training • Document Management</i>
1230 – 1245	<i>Break</i>
1245 – 1420	Pre-Audit Activities <i>Establishment of Audit Scope & Objectives & their Communication to Interested Persons • Assembly & Review of Available Information Pertinent to the Audit</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day One</i>

Day 2

0730 – 0930	Pre-Audit Activities (cont'd) <i>Preparation of the Audit Plan Directed at Efficient & Effective Use of Resources to Achieve Audit Objectives • Contact with the Auditee to Exchange Information & Begin to Lay the Groundwork for a Cordial & Productive Working Relationship</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Pre-Audit Activities (cont'd) <i>Team Selection & Coordination to Assure that all Members are Capable & Prepared to Carryout their Assigned Role • Determination of Final Report Scope, Format & Distribution</i>
1100 – 1230	On-Site Audit Activities <i>Opening Meeting • Collecting Audit Evidence • Development & Review of Findings • Closing Meeting</i>
1230 – 1245	<i>Break</i>
1245 – 1420	Post-Audit Activities <i>Reporting • Documentation • Corrective Action</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Two</i>

Day 3

0730 – 0930	Audit of Internal Control Systems <i>Preparing • Coordinating • Directing • Obtaining Feedback • Continuous Improvement</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Audit of Regulatory Aspects <i>Process of Development of Environmental Health & Safety Regulations • Governmental, Mother Company & Local Bodies in Environmental Health & Safety Regulations</i>
1100 – 1230	Audit of Regulatory Aspects (cont'd) <i>Regulatory Requirements • Enforcement Policy & Procedures</i>
1230 – 1245	<i>Break</i>
1245 – 1420	Audit of Process Operations, Environmental Impacts & Related Control Technology <i>Typical Environmental Health or Safety Impacts • Monitoring of Environmental Health & Safety Impacts • Control Techniques & Devices • Operation & Maintenance of Control Devices & Techniques</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Three</i>

Day 4

0730 – 0930	Auditor Personal Qualities & Communication <i>Attitude • Teamwork • Adaptability • Determination • Communications • Leadership</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Site Inspection <i>Plan & Conduct a Site Inspection • Complete Inspection Reports • Develop Recommendations & Follow-Up</i>

1100 – 1230	Site Inspection (cont'd) <i>Manage an Effective Inspection Program • Establish Pre & Post-Inspection Tasks • What to Inspect & where to Gather Information</i>
1230 – 1245	<i>Break</i>
1245 – 1420	Site Inspection (cont'd) <i>Recording Observations Accurately • Developing & Using Checklists in Continuous & Formal Inspections</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Four</i>

Day 5

0730 – 0930	Site Inspection (cont'd) <i>Handling Employee Reactions to the Inspection Process • Analyzing Data & Setting Priorities • Observation Techniques</i>
0930 – 0945	<i>Break</i>
0945 – 1100	PSM Audit Effectiveness & Continuous Improvement <i>Process Safety Performance Indicators • Tracking Audit Effectiveness Over Time • Continuous Improvement in Process Safety • Developing a Process Safety Improvement Plan</i>

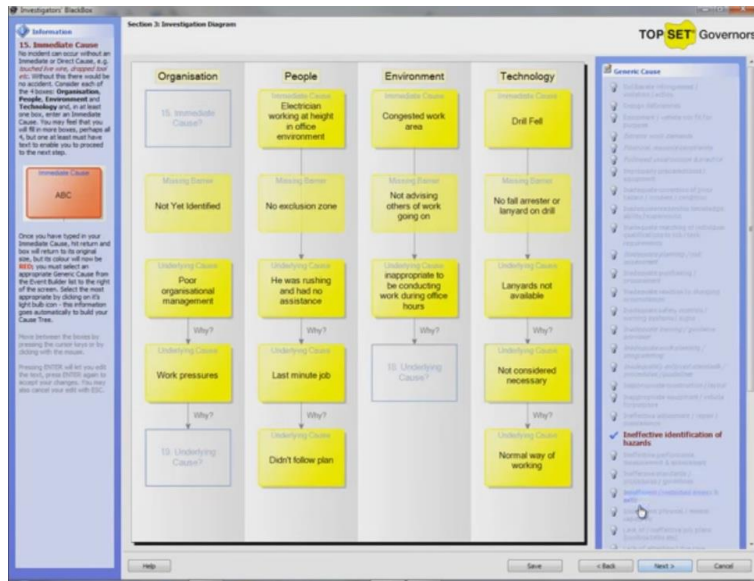
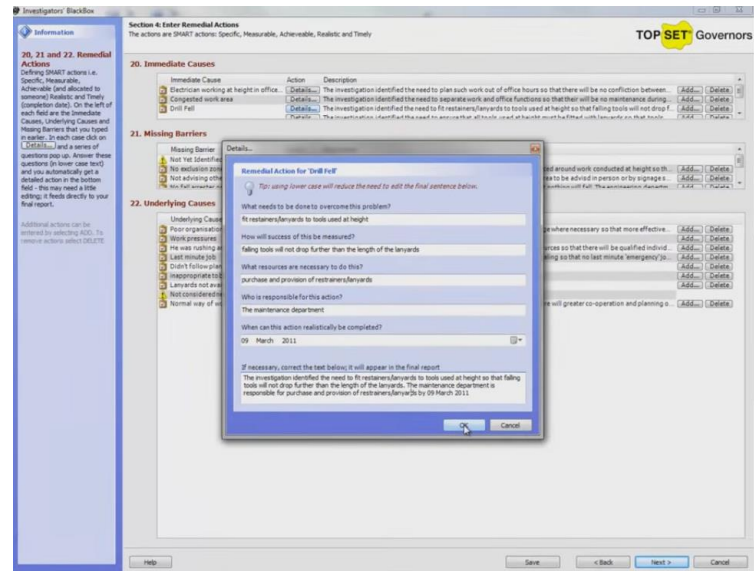
1100 – 1200	Future Trends & Closing <i>Future Challenges in Process Safety • Advanced Materials & Their Safety Considerations • Climate Change & Its Impact on Safety • Review of the Entire Course • Feedback and Q&A Session</i>
1200 – 1215	<i>Break</i>
1215 – 1300	General Discussion, Questions & Answers
1300 – 1315	Course Conclusion
1315 – 1415	COMPETENCY EXAM - Module 4
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch & End of Course</i>

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 “CAMEO Chemicals Suite Simulator”, “BlackBox Simulator”; “Chemical Compatibility 1.1 Simulator” and “Chemical Safety Database Simulator”.



CAMEO Chemicals Suite Simulator

Section 4: Enter Remedial Actions

The actions are SMART actions: Specific, Measurable, Achievable, Realistic and Timely

Information

20. 21 and 22. Remedial Actions
Defining SMART actions i.e. Specific, Measurable, Achievable (and allocated to someone) Realistic and Timely (completion date). On the left of each field are the Immediate Cause, Underlying Causes and Missing Barriers that you typed in earlier. On each open click on [Details] and a series of questions pop up. Answer these questions (in lower case text) and you automatically get a detailed action in the bottom field - this may need a little editing, it feeds directly to your final report.

Additional actions can be entered by selecting ADD. To remove actions select DELETE.

20. Immediate Causes

Immediate Cause	Action	Description
Electrician working at height in office	[Details]	The investigation identified the need to plan such work out of office hours so that there will be no conflict between...
Congested work area	[Details]	The investigation identified the need to separate work and office functions so that there will be no maintenance during...
Drill Fell	[Details]	The investigation identified the need to ensure that all tools used at height must be fitted with lanyards so that tools...

21. Missing Barriers

Missing Barrier	Action	Description
No fall arrestor	[Details]	and around work conducted at height so th...
Not advising others	[Details]	can be advised in person or by signage e...
Lanyards not available	[Details]	purchase and provision of restrainers, lanyards to be greater operation and planning...

22. Underlying Causes

Underlying Cause	Action	Description
Poor organisational management	[Details]	where necessary so that more effective...
He was rushing and had no assistance	[Details]	so that there will be qualified individ...
Last minute job	[Details]	ing so that no last minute emergency jo...
Didn't follow plan	[Details]	
Inappropriate to be conducting work during office hours	[Details]	
Lanyards not available	[Details]	
Not considered necessary	[Details]	
Normal way of working	[Details]	

Remedial Action for Drill Fell

Tip: using lower case will reduce the need to add the final sentence below.

What needs to be done to overcome this problem?
Fit restrainers/lanyards to tools used at height

How will success of this be measured?
falling tools will not drop further than the length of the lanyards

What resources are necessary to do this?
purchase and provision of restrainers/lanyards

Who is responsible for this action?
the maintenance department

When can this action realistically be completed?
09 March 2011

If necessary, correct the text below; it will appear in the final report.
The investigation identified the need to fit restrainers/lanyards to tools used at height so that falling tools will not drop further than the length of the lanyards. The maintenance department is responsible for purchase and provision of restrainers/lanyards by 09 March 2011.

BlackBox Software Tool



Boric Acid Compatibilities		
Acetal (Delrin®)	Plastics	Excellent
Aluminum	Metals	Severe Effect
Bronze	Metals	Good
Buna N (Nitrile)	Elastomers	Excellent
Carbon graphite	Non-metals	Excellent
Carbon Steel	Metal	Severe Effect
Carpenter 20	Metals	Good/2
Cast iron	Metals	Severe Effect
Ceramic Al2O3	Non-metals	Excellent
Ceramic magnet	Non-metals	Excellent
ChemRaz (FFKM)	Plastic	Excellent
Copper	Metals	Good
CPVC	Plastics	Excellent
EPDM	Elastomers	Excellent

Chemical Compatibility 1.1 Simulator



Chemical Safety Database Simulator

Course Coordinator

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