Haward Technology Middle East

Certified HAZID Leader
Hazard Identification, Analysis and Risk-Based Decisions

Course Title
Certified HAZID Leader: *Hazard Identification, Analysis and Risk-Based Decisions*

Course Reference
HE0632

**Course Duration/Credits**
Five days/3.0 CEUs/30 PDHs

3.0 CEUs (30 PDHs) AWARD

H-STK© INCLUDED

Course Date/Venue

Session(s)	Date	Venue
1	January 21-25, 2024	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
2	March 04-08, 2024	Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
3	June 02-06, 2024	Al Aziziya Hall, The Proud Hotel Al Khobar, Al Khobar, KSA
4	September 01-05, 2024	Boardroom, Warwick Hotel Doha, Doha, Qatar

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.

A Hazard identification (HAZID) study is the method of identifying hazards to prevent and reduce any adverse impact that could cause injury to personnel, damage or loss of property, environment and production, or become a liability. HAZID is a component of risk assessment and management. It is used to determine the adverse effects of exposure to hazards and plan necessary actions to mitigate such risks.
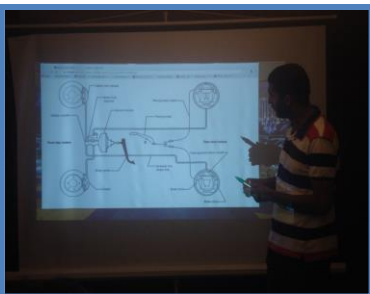
HAZID study takes into account all of the process and non-process hazards. It helps to design and organize the health, safety and environmental issues in an organization. HAZID involves machine or equipment designers, management and end users, and ensures a full identification of hazards and safeguard procedures in a workplace.

This course is designed to provide participants with a detailed and up-to-date overview of hazard identification, analysis and risk-based decisions. It covers the hazard and risk, accident model, physical and process hazards, the benefits of hazards identification and hazards types by industry; and the hazards through concept of recognition, basic human senses, relationship between senses and higher order processes and what causes hazards?

By the end of the course, participants will be able to recognize the influence of human capabilities and limitations on hazard identification by applying visual detection, sound detection, odor detection, touch detection and hazard recognition; determine explosion hazards, chemical hazards, electrical hazards, weather phenomena hazards and other types of hazards; evaluate hazards covering field surveys, pre-job assessments, facility assessments, incident and near-miss reporting, hazard identification and analysis training; carryout HAZID study, HAZID process, HAZID recording and raising effective corrective actions; implement other hazard identification techniques, HAZOP, failure modes and effects analysis (FMEA), plant walkdowns/audits, what if analysis and task analysis/job hazard analysis (JHA); employ risk-based decisions and risk ranking procedure; follow-up and call to action; and recognize the importance of managing change, published accident databases and resources, revitalized lessons learned, transfer knowledge and learn from incidents.

Course Objectives

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

- Get certified as a "*Certified HAZID Leader*"

- Discuss the hazard and risk, accident model, physical and process hazards, the benefits of hazards identification and hazards types by industry

- Identify hazards through concept of recognition, basic human senses, relationship between senses and higher order processes and what causes hazards?

- Recognize the influence of human capabilities and limitations on hazard identification by applying visual detection, sound detection, odor detection, touch detection and hazard recognition

- Determine explosion hazards, chemical hazards, electrical hazards, weather phenomena hazards and other types of hazards

- Evaluate hazards covering field surveys, pre-job assessments, facility assessments, incident and near-miss reporting, hazard identification and analysis training

- Carryout HAZID study, HAZID process, HAZID recording and raising effective corrective actions

- Implement other hazard identification techniques, HAZOP, failure modes and effects analysis (FMEA), plant walkdowns/audits, what if analysis and task analysis/job hazard analysis (JHA)

- Employ risk-based decisions and risk ranking procedure

- Follow-up and call to action as well as recognize the importance of managing change, published accident databases and resources, revitalized lessons learned, transfer knowledge and learn from incidents

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 an overview of all significant aspects and considerations of HAZID study and leadership for safety/environment professionals, production and facilities managers, design engineers, process engineers, facilities engineers, instrumentation and control engineers, regulatory/enforcement and compliance officers, process and plant operators and maintenance personnel. Further, the course is also beneficial for directors and senior managers with responsibility for implementing systems of effective corporate governance and management of risk; internal auditors involved in assessing systems of internal control across all the functions of their organisations; and those with operational responsibilities who need to appreciate risk management in more detail.

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

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.
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.
Doha	**US$ 6,500** per Delegate. 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)   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 "*Certified HAZID Leader*". 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:-

Haward Technology Middle East

(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 Middle East

Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date:	14-Nov-21
HTME No.	3558-6717-5364-9527
Participant Name:	Abdulsatar Al Otaibi

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE0632	Certified HAZID Leader: Hazard Identification, Analysis and Risk-Based Decisions	10 Nov-14 Nov, 2021	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date	3.0

TRUE COPY

Maricel De Guzman
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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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.

- 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, CSA, SMT, PSS, EHS, SAC, STS, IOSH, OSHA, NEBOSH-ENV, NEBOSH-IGC, NEBOSH-IFC, NEBOSH-PSM, NEBOSH-IOG, TechIOSH, is a **NEBOSH Approved Instructor** and a **Senior HSE Consultant** with over **45 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** Environmental Management, Hazardous Materials & Chemicals Handling, **PHA**, **HAZOP**, **HAZCOM**, **HAZMAT**, **HAZID**, **Hazard & Risk Assessment**, **Emergency Response Procedures** Behavioural Based Safety (**BBS**), **Confined Space Entry**, **Fall Protection**, **Emergency Response**, H_2S, Safety Management System (**ISO 45001**), **Accident/Incident Investigation** System and Report PSM, **Risk Assessment**, **SCE FMEA Failure Investigations**, Site Management Safety Training (**SMSTS**), **Occupational Health & Safety and Industrial Hygiene, Crisis Management & Damage Control** in Oil & Gas Industry, **Enhancing HSSE Safety Performance & Effectiveness**, **Overhead & Gantry Crane Safety**, **HSSE Principles & Practices Advanced**, **Lifting & Rigging Equipment** Lifting Tackles Inspection License/Relicense, **API 780 Security Risk Assessment Methodology** for Petroleum & Petrochemical, **Advanced Process Safety Management** with PHA, **Quantitative and Qualitative Risk Assessment**, IADC/API **Mobile Drilling Rig Inspections**, **Maintenance and Audits**, **H2s Training and Rescue with Respiratory Equipment**, Job Safety Analysis (**JSA**), **Work Permit & First Aid**, 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, 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, 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 Delta Offshore Group, Solvay Asia Pacific, 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**, **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 – 0815	*Welcome & Introduction*
0815 – 0830	**PRE-TEST**
0830 – 0930	**Introduction** *Hazard and Risk • Accident Model • Physical and Process Hazards • Benefits of Hazards Identification • Hazards Types by Industry*
0930 – 0945	*Break*
0945 – 1100	**Identify Hazards** *Concept of Recognition • Basic Human Senses • Relationship Between Senses and Higher Order Processes • What Causes Hazards?*
1100 – 1230	**Influence of Human Capabilities & Limitations on Hazard Identification** *Visual Detection • Sound Detection • Odor Detection • Touch Detection • Hazard Recognition*
1230 – 1245	*Break*
1245 – 1420	**Explosion Hazards** *Reactive Explosion Hazards • Flammable Explosion Hazards • Physical Explosion Hazards*
1420 – 1430	**Recap** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	**Chemical Hazards** *Toxic Chemical Hazards • Fire Hazards • Corrosive Chemical Hazards*
0930 – 0945	*Break*
0945 – 1100	**Electrical Hazards** *Shock/Short Circuit • Fire • Lightning Strikes • Static Electrical Discharge • Loss of Power*
1100 – 1230	**Weather Phenomena Hazards** *Temperature Extreme Hazards • Hurricane • Flood • Wind*
1230 – 1245	*Break*
1245 – 1330	**Other Types of Hazards** *Excavation Hazards • Asphyxiation Hazards • Elevation Hazards • Thermal Hazards • Vibration Hazards • Mechanical Failure Hazards • Mechanical Hazards*
1420 – 1430	**Recap** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	**Other Types of Hazards (cont'd)** *Corrosion Hazards • Noise Hazards • Radiation Hazards • Impact Hazards • Struck Against Hazards • Visibility Hazards*
0930 – 0945	*Break*
0945 – 1100	**Evaluate Hazards** *Field Surveys • Pre-Job Assessments • Facility Assessments • Incident and Near-Miss Reporting • Hazard Identification and Analysis Training*
1100 – 1230	**HAZID Study** *The HAZID Team • The HAZID Process • Example HAZID Checklists*
1230 – 1245	*Break*
1245 – 1420	**HAZID Study (cont'd)** *Recording the HAZID (the Hazard Register/Fault Schedule/Hazard Log) • Raising Effective Corrective Actions*
1420 – 1430	**Recap** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4

0730 – 0930	**Other Hazard Identification Techniques** *HAZOP • Failure Modes and Effects Analysis (FMEA) • Plant Walkdowns/Audits • What If? Analysis • Task Analysis/Job Hazard Analysis (JHA)*
0930 – 0945	*Break*
0945 – 1100	**Make Risk-Based Decisions** *Hazard Ranking • Understanding Risk • Risk Ranking*
1100 – 1230	**Risk Ranking Procedure** *Severity • Hierarchy of Safeguards or Layers of Protection • Likelihood • Risk Ranking • Example 1 – Flammable/Explosive Hazard • Example 2 – Flammable Hazard • More Detailed Matrices • Similarities between More Sophisticated Process Hazard Evaluation Techniques*
1230 – 1245	*Break*
1245 – 1420	**Follow-up & Call to Action** *Safety Culture • Management Commitment • Employee Ownership • Implement an Effective Hazard Management Program • Hazard Communication • Call to Action*
1420 – 1430	**Recap** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

Day 5

0730 – 0930	**Learning & Continuous Improvement** *Importance of Managing Change • Published Accident Databases & Resources • Revitalizing Lessons Learned • Transfer of Knowledge • Learning from Incidents*
0930 – 0945	*Break*
0945 – 1100	**Practical HAZID Study – Oil Refinery Fire, 2007**

1100 – 1230	*Practical HAZID Study – Oil Refinery Fire, 2007 (cont'd)*
1230 – 1245	*Break*
1245 – 1300	*Practical HAZID Study – Oil Refinery Fire, 2007 (cont'd)*
1300 – 1315	*Course Conclusion* *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1315 – 1415	***COMPETENCY EXAM***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Simulator (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 our state-of-the-art "Haward PHA/HAZOP", "QRA", "BlackBox" and "Workplace Risk Assessment" simulators.

Haward PHA/HAZOP Simulator

QRA System Simulator

BlackBox Software Tool

Workplace Risk Assessment

Course Coordinator
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