COURSE OVERVIEW HE2330
HSE Tools and Techniques/Permit to Work

Course Title
HSE Tools and Techniques/Permit to Work

Course Date/Venue
Session 1: July 05-09, 2026/Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
Session 2: October 04-08, 2026/ Sur Meeting Room, Royal Tulip, Muscat, Muscat, Oman

Course Reference
HE2330

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

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.

This course provides participants with a comprehensive understanding of health, safety, and environment (HSE) tools, techniques and permit-to-work (PTW) systems used in high-risk industries such as oil & gas, petrochemicals, energy, construction, manufacturing, utilities and mining. The course focuses on hazard identification, risk assessment, work authorization processes, control of hazardous activities and implementation of internationally recognized HSE management practices.

Participants will learn how to effectively apply HSE tools and techniques to prevent incidents, ensure regulatory compliance, improve operational safety and establish robust permit-to-work systems that protect personnel, assets and the environment.

Further, the course will also discuss the HSE management systems and legal and regulatory HSE requirements; the hazard identification techniques, risk assessment methodologies and HSE tools for risk management; the incident prevention and safety culture, permit-to-work systems and types of work permits; the PTW risk assessment requirements, permit authorization and approval process; and the isolation and lockout/tagout (LOTO), permit monitoring and closure, job safety analysis (JSA) and sjob hazard analysis (JHA).

Course Objectives/Outcomes & Benefits for the Participants

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

- Apply and gain an in-depth knowledge on HSE tools and techniques/permit to work
- Discuss HSE management systems and legal and regulatory HSE requirements
- Carryout hazard identification techniques, risk assessment methodologies and HSE tools for risk management
- Apply incident prevention and safety culture and recognize permit-to-work systems and types of work permits
- Identify PTW risk assessment requirements and apply permit authorization and approval process
- Carryout isolation and lockout/tagout (LOTO), permit monitoring and closure as well as job safety analysis (JSA) and job hazard analysis (JHA)
- Employ confined space entry management, hot work safety management and working at height safety controls
- Implement excavation and ground disturbance safety, simultaneous operations (SIMOPS) management and hazard and operability study (HAZOP)
- Apply hazard identification (HAZID), bow-tie risk analysis, layer of protection analysis (LOPA) and management of change (MOC)
- Carryout contractor safety management, permit-to-work auditing and assurance and incident investigation techniques
- Employ emergency preparedness and response as well as HSE performance monitoring and reporting as well as
- Describe digital PTW and modern safety technologies and build a sustainable HSE and PTW culture

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 HSE tools and techniques for engineers, operations managers, project managers, technical specialists, asset managers, HSE professionals and other non-financial personnel who need to understand financial concepts and their impact on business performance.

Course Fee

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 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

Haward's certificates are accredited by the following international accreditation organizations:

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). 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.

- 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.

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. Ron Jansen is a **Senior HSE Consultant** with **over 20 years** of experience within the **Oil & Gas** industry. His broad expertise widely covers in the areas of **HSE Tools & Techniques**, Controlled-Substance Units (**SATCU**) Operations, Workplace **Substance Abuse** Prevention Strategies, **Substance Abuse** Policy Development for Employers, **Substance Abuse** Testing Unit Management, Controlled **Substance** Identification and Recognition, **HAZMAT**, **HAZCOM**, Process Hazard Analysis (**PHA**), Process Safety Management (**PSM**), **Process Risk** Analysis, **Occupational Health**, Effective Tool Box Talks, **Disaster** Management, **Firefighting & Fire Safety**, **Fire Detection & Suppression** Systems, **Fire Risk** Assessments, **General Health and Safety**, **Job Observation**, **Fire Rescue**, **Fire Protection**, **Fire Prevention**, **Rescue** Operations, **Firefighting** Techniques, **Accident/Incident Investigation**, **HAZOP & HAZID**, Permit to Work (**PTW**) System, **Working at Height**, Behavioral Based Safety (**BBS**), Hazard identification and Risk Assessments (**HIRA**), **HSE Risk** Assessment & Management Concepts, **HSE Management** Policy & Standards, **HSSE Emergency Response & Crisis Management** Operations, **Authorized Gas Testing**, **Quantitative & Qualitative** Analysis, **Fall Protection & Rescue**, **Defensive Driving**, **Hazardous Materials & Chemicals** Handling, **Pollution Control**, **Environmental & Pollution** Management, **HSE Industrial Practices**, **Emergency Response & Crisis** Management Operations, **Waste** Management, Job Safety Analysis (**JSA**), **Confined Space Entry**, **Confined Space Entry**, **First Aid & SCBA** Management, **Manual Handling**, **Permit-to-Work & Risk** Assessment, **Crane & Lifting** Operation, **Forklift** Maintenance, Mobile Elevated Work Platform (**MEWP**), **Mobile & Gantry Crane**, **Banksman/Slinger**, **Scaffolding**, **Rigging** & **Slinging**, **Overhead** & **Gantry Crane Safety**, **Lifting & Rigging**, **Machinery & Hydraulic Lifting** Equipment, **Rigging & Slinging** Operation, **Scaffolding** Inspection, **ISO 9001**, **OSHAS 18001**, **19011**, **Rigging Safety Rules**, **Machinery & Hydraulic Lifting Equipment** and **Excavation & Trenching**.

During his career life, Mr. Jansen has gained his practical and field experience through his various significant positions and dedication as the **SHEQ Manager**, **SHEQ System Auditor**, **Safety Practitioner**, **Safety Officer** and **Senior Instructor/Consultant** from various international companies such as the WI Corporation, ISO Internal Auditors SHEQ Management Systems, Truibuilt Engineering, TCS Hydraulic Engineering, OR Thambo Airport, Eskom Transmission Section and Aquarius Mine Kroondal Rustenburg.

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.

Learning Design & Customization

This course can be customized to the exact requirements of clients. Haward Technology is so proud of our huge capabilities in tailoring our courses to the training needs of our valued clients.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop 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 to HSE Management Systems*** *Principles and Objectives of HSE Management • Elements of an Effective HSE Management System • Roles and Responsibilities in HSE • International HSE Standards and Best Practices*
0930 – 0945	*Break*
0945 – 1030	***Legal & Regulatory HSE Requirements*** *Occupational Health and Safety Regulations • Environmental Protection Requirements • Industry-Specific Safety Standards • Compliance Monitoring and Enforcement*
1030 – 1130	***Hazard Identification Techniques*** *Types of Workplace Hazards • Hazard Identification Processes • Workplace Inspections and Safety Surveys • Hazard Registers and Documentation*
1130 – 1215	***Risk Assessment Methodologies*** *Risk Assessment Principles • Likelihood and Consequence Evaluation • Risk Matrix Development and Application • Risk Prioritization Techniques*
1215 – 1230	*Break*
1230 – 1300	***HSE Tools for Risk Management*** *Job Safety Analysis (JSA) • Job Hazard Analysis (JHA) • Task Risk Assessment (TRA) • What-If Analysis Techniques*
1300 – 1345	***Incident Prevention & Safety Culture*** *Human Factors in Safety Performance • Behavioral Safety Concepts • Safety Leadership and Accountability • Building a Positive Safety Culture*

1345 – 1420	***Practical Workshops & Simulations*** *Hazard Identification Workshop • Risk Assessment Matrix Development • JSA/JHA Preparation Exercise • Safety Culture Assessment*
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 – 0830	***Basics of Permit-to-Work Systems*** *Purpose and Objectives of PTW Systems • PTW Roles and Responsibilities • Permit Lifecycle and Workflow • Benefits and Limitations of PTW Systems*
0830 – 0930	***Types of Work Permits*** *Hot Work Permits • Cold Work Permits • Confined Space Entry Permits • Excavation and Ground Disturbance Permits*
0930 – 0945	*Break*
0945 – 1100	***PTW Risk Assessment Requirements*** *Hazard Identification Prior to Permit Issuance • Risk Control Verification • Permit Risk Evaluation Process • Linking PTW with JSA/JHA*
1100 – 1215	***Permit Authorization & Approval Process*** *Permit Request Procedures • Roles of Issuing and Receiving Authorities • Approval Hierarchies and Responsibilities • Permit Acceptance and Handover Procedures*
1215 – 1230	*Break*
1230 – 1300	***Isolation & Lockout/Tagout (LOTO)*** *Energy Isolation Principles • Mechanical and Electrical Isolation Methods • Lockout/Tagout Procedures • Verification of Zero Energy State*
1300 – 1345	***Permit Monitoring & Closure*** *Worksite Monitoring Requirements • Permit Extension and Revalidation • Permit Suspension and Cancellation • Permit Closeout and Documentation*
1345 – 1420	***Practical Workshops & Simulations*** *Permit-to-Work Preparation and Authorization Simulation • Isolation and LOTO Practical Exercise • Permit Review and Approval Workshop • PTW Documentation Exercise*
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 – 0830	***Job Safety Analysis (JSA) & Job Hazard Analysis (JHA)*** *JSA Development Process • Hazard Identification by Task Step • Risk Control Selection • JSA Documentation and Communication*
0830 – 0930	***Confined Space Entry Management*** *Confined Space Hazard Identification • Atmospheric Testing Requirements • Entry Permit Procedures • Rescue and Emergency Preparedness*

0930 – 0945	*Break*
0945 – 1100	***Hot Work Safety Management*** *Hot Work Hazards and Risks • Fire Prevention Measures • Gas Testing Requirements • Fire Watch Responsibilities*
1100 – 1215	***Working at Height Safety Controls*** *Fall Hazard Assessment • Fall Protection Systems • Permit Requirements for Working at Height • Rescue Planning and Emergency Response*
1215 – 1230	*Break*
1230 – 1300	***Excavation & Ground Disturbance Safety*** *Excavation Hazard Identification • Underground Utility Detection • Excavation Permit Requirements • Trench Safety and Protective Systems*
1300 – 1345	***Simultaneous Operations (SIMOPS) Management*** *Identifying SIMOPS Risks • Coordination of Multiple Activities • Communication and Interface Management • SIMOPS Control Measures*
1345 – 1420	***Practical Workshops & Simulations*** *Confined Space Entry Simulation • Hot Work Permit Assessment • Working at Height Risk Assessment • SIMOPS Coordination Exercise*
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 – 0830	***Hazard and Operability Study (HAZOP)*** *HAZOP Methodology Overview • Guide Words and Deviation Analysis • Risk Identification and Assessment • HAZOP Recommendations and Follow-Up*
0830 – 0930	***Hazard Identification (HAZID)*** *HAZID Workshop Methodology • Hazard Categorization Techniques • Risk Ranking and Prioritization • Documentation and Reporting*
0930 – 0945	*Break*
0945 – 1100	***Bow-Tie Risk Analysis*** *Bow-Tie Methodology Principles • Threat and Consequence Identification • Preventive Barriers and Controls • Recovery and Mitigation Measures*
1100 – 1215	***Layer of Protection Analysis (LOPA)*** *LOPA Methodology Fundamentals • Independent Protection Layers • Risk Reduction Evaluation • Decision-Making Using LOPA*
1215 – 1230	*Break*
1230 – 1300	***Management of Change (MOC)*** *MOC Process Requirements • Identifying Change Impacts • Risk Assessment for Changes • Authorization and Implementation Controls*
1300 – 1345	***Contractor Safety Management*** *Contractor HSE Prequalification • Contractor Risk Assessments • Permit Coordination and Supervision • Contractor Performance Monitoring*

1345 – 1420	***Practical Workshops & Simulations*** *HAZOP Team Exercise • Bow-Tie Analysis Workshop • MOC Case Study • Contractor Safety Evaluation Exercise*
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 – 0830	***Permit-to-Work Auditing & Assurance*** *PTW Compliance Audits • Permit Quality Reviews • Field Verification Techniques • Corrective and Preventive Actions*
0830 – 0930	***Incident Investigation Techniques*** *Incident Reporting Requirements • Root Cause Analysis Methods • Evidence Collection Procedures • Corrective Action Development*
0930 – 0945	*Break*
0945 – 1100	***Emergency Preparedness & Response*** *Emergency Response Planning • Site Emergency Procedures • Crisis Management Fundamentals • Emergency Drills and Exercises*
1100 – 1215	***HSE Performance Monitoring & Reporting*** *Leading and Lagging Indicators • HSE Key Performance Indicators (KPIs) • Safety Observation Programs • HSE Reporting Systems*
1215 – 1230	*Break*
1230 – 1300	***Digital PTW & Modern Safety Technologies*** *Electronic Permit-to-Work Systems • Mobile HSE Applications • Digital Safety Monitoring Tools • Smart Worksite Technologies*
1300 – 1330	***Building a Sustainable HSE & PTW Culture*** *Leadership Commitment to Safety • Workforce Engagement and Participation • Continuous Improvement Strategies • HSE Excellence and Best Practices*
1330 – 1345	***Practical Workshops & Simulations*** *PTW Audit Simulation • Incident Investigation Case Study • Emergency Response Drill • HSE Improvement Action Plan Development*
1345 – 1400	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Learning Outcomes

By the end of this course, participants will be able to:

- Understand the principles and requirements of effective HSE management systems
- Conduct hazard identification and risk assessments using recognized methodologies
- Implement and manage Permit-to-Work systems for high-risk activities
- Apply HSE tools such as JSA, JHA, HAZID, HAZOP, Bow-Tie Analysis and LOPA
- Manage hot work, confined space entry, excavation, working at height and SIMOPS safely
- Implement effective isolation and Lockout/Tagout (LOTO) procedures
- Conduct PTW audits and compliance assessments
- Investigate incidents and identify root causes
- Develop emergency preparedness and response strategies
- Foster a strong safety culture and continuous improvement in HSE performance

Practical Sessions

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

Course Coordinator

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