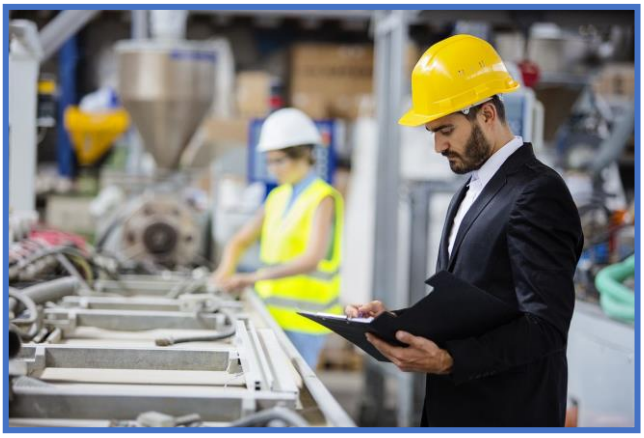
COURSE OVERVIEW HE1151
HSSE
(E-Learning Module)



Course Title
HSSE
(E-Learning Module)

Course Reference
HE1151

Course Format & Compatibility
SCORM 1.2. Compatible with IE11, MS-Edge, Google Chrome, Windows, Linux, Unix, Android, IOS, iPadOS, macOS, iPhone, iPad & HarmonyOS (Huawei)

Course Duration
30 online contact hours
(3.0 CEUs/30 PDHs

Course Description

This E-Learning course is designed to provide participants with a detailed and up-to-date overview of HSSE. It covers the basic concepts of the HSSE practices, standards and regulations including the general aspects regarding safety; the vulnerability, risk, incident and accident; the evaluation of risks; the occupational (work) accident and work accident models; the safety training, PPE (personal protective equipment), safety devices and OHS management; the HSSE tools and systems available within the organization; and the workplace inspection, competence of inspectors, checklists and the requirements for effective report writing.

Further, the course will also discuss the health and safety performance, health and safety performance report and the role of senior management team; the audit process; the purpose of auditing health and safety management systems; the advantages and disadvantages of external and internal audits; the general principles of controlling hazards and reducing risk; avoiding risks, evaluating unavoidable risks and controlling hazards at source; adapting work to the individual and technical progress; replacing the dangerous by the less/non-dangerous; developing a coherent prevention policy; and prioritizing collective protective measures over individual protective measures.

Moreover, the course will cover the appropriate training, information and supervision to employees; the categories and features of safety signs including general hierarchy of control; the elimination/substitution, reducing/time limiting exposure, isolation/segregation, engineering control and safe systems of work; the fundamental principles of occupational health and safety; the employers' responsibilities and governments' duties; the safety supervision, supervisor safety leadership, safety enforcement, supervisor commitment, employee involvement and recommended actions; managing systems administrative enforcement; the reasons of failing to comply with safety procedures; how to reduce risk-taking behavior and how to increase safe behavior; and the job safety analysis, process safety management (PSM) and risk management

During this interactive course, participants will learn the bird accident triangle, some statistics, process safety management, purpose of the PSM standard and PSM elements; the employee participation, process safety information and process hazard analysis (PHA); the operating procedures, pre-startup safety review, mechanical integrity and quality assurance; the hot work permit and management of change, incident investigation, emergency planning and response and compliance audits; the risk management, classical risk management process and risk assessment stages; the risk concepts, principle of economics, ALARP, levels of risk, the importance of engineering control and hierarchy of control; committing to developing people; the importance of HSSE training and development; the process safety and asset integrity, prevention of major incidents and process hazard analysis; the benefits and elements of process hazard analysis; and the risk-based approach.

Course Objectives

After completing the course, the employee will:-

- Apply and gain a comprehensive knowledge on HSSE
- Describe basic concepts of the HSSE practices, standards and regulations
- Gain understanding of the HSSE management system
- Describe the key technical areas in HSSE (safety, industrial hygiene, environment, security and fire) and the standard practice implemented to ensure safety across the oil & gas sector
- Identify the importance of the key HSSE practices at the workplace and the criticality of adhering to standards, regulations and overall industry protocols
- Define the key roles and responsibilities as for HSSE employees and other stakeholders within the organization
- Discuss the basic concepts of the HSSE practices, standards and regulations including the general aspects regarding safety
- Startup OHS in a professional manner and discuss vulnerability, risk, incident and accident
- Evaluate risks and discuss occupational (work) accident and work accident models

- Employ safety training, use PPE (personal protective equipment) and apply safety devices and OHS management
- Identify the HSSE tools and systems available within the organization as well as use and operate their functionalities
- Carryout workplace inspection, review the competence of inspectors, use checklists and identify the requirements for effective report writing
- Review health and safety performance, report health and safety performance and discuss the role of senior management team
- Illustrate audit process and recognize the purpose of auditing health and safety management systems as well as the advantages and disadvantages of external and internal audits
- Discuss the general principles of controlling hazards and reducing risk
- Avoid risks, evaluate unavoidable risks and control hazards at source
- Adapt work to the individual and technical progress, replace the dangerous by the less/non-dangerous and develop a coherent prevention policy
- Prioritize collective protective measures over individual protective measures
- Provide appropriate training, information and supervision to employees
- Describe the categories and features of safety signs including general hierarchy of control
- Avoid risks as well as employ elimination/substitution, reducing/time limiting exposure, isolation/segregation, engineering control and safe systems of work
- Explain the fundamental principles of occupational health and safety and the employers' responsibilities and governments' duties
- Provide safety supervision, supervisor safety leadership, safety enforcement, supervisor commitment, employee involvement and recommended actions
- Manage systems administrative enforcement and recognize the reasons of failing to comply with safety procedures, how to reduce risk-taking behavior and how to increase safe behavior
- Employ job safety analysis, process safety management (PSM) and risk management
- Discuss the bird accident triangle, some statistics, process safety management, purpose of the PSM standard and PSM elements
- Apply employee participation, review process safety information and carryout process hazard analysis (PHA)
- Implement operating procedures, pre-startup safety review, mechanical integrity and quality assurance
- Review hot work permit and carryout management of change, incident investigation, emergency planning and response and compliance audits

- Illustrate risk management, the classical risk management process and risk assessment stages
- Discuss risk concepts, principle of economics, ALARP, levels of risk, the importance of engineering control and hierarchy of control
- Commit to developing people and discuss the importance of HSSE training and development
- Employ process safety and evaluate asset integrity, prevent major incidents and apply process hazard analysis
- Identify the benefits and elements of process hazard analyses and apply risk-based approach

Who Should Attend

This course provides an overview of all significant aspects and considerations of HSSE for those who needs to understand the principles of health and safety as part of their job including team leaders and supervisors, HR professionals, facilities managers and those training young people in a working environment.

Training Methodology

This Trainee-centered course includes the following training methodologies:-

- Talking presentation Slides (ppt with audio)
- Simulation & Animation
- Exercises
- Videos
- Case Studies
- Gamification (learning through games)
- Quizzes, Pre-test & Post-test

Every section/module of the course ends up with a Quiz which must be passed by the trainee in order to move to the next section/module. A Post-test at the end of the course must be passed in order to get the online accredited certificate.

Course Fee

As per proposal

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course.

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- USA International Association for Continuing Education and Training (IACET)

  Haward Technology is an Authorized Training Provider by the International Association 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 1-2013 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 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 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 Contents

- Basic Concepts of the HSSE Practices, Standards & Regulations
- General Aspects Regarding Safety
- Starting Up OHS
- Vulnerability, Risk, Incident, Accident
- Risk
- Hazard – Risk – Accidents
- Evaluating Risks
- The Occupational (Work) Accident
- Work Accident
- Work Accident Models
- Safety Training
- Organization
- PPE (Personal Protective Equipment)
- Safety Devices
- Safety Devices - Examples
- OHS Management
- Case study #1
- Quiz #1
- HSSE Tools & Systems Available within the Organization - Use & Operate Their Functionalities
- Workplace Inspections
- Role of Workplace Inspections
- Competence of Inspector
- Use of Checklists
- The Requirements for Effective Report Writing
- Review of Health and Safety Performance
- Inspections
- Absences and Sickness
- Surveys, Tours and Sampling
- Sampling - Extract from Audit 123 Level 3 Section 1 Workbook

- Reporting on Health and Safety Performance
- Role of Senior Management Team
- Extract from Audit 123 Level 3 Section 1 Auditor's Guidance
- Feeding into Action and Development Plans as Part of Continuous Improvement
- Audit Process
- Auditing Scope and Purpose of Auditing Health and Safety Management Systems
- Pre-Audit Preparations
- Responsibility for Audits
- Advantages and Disadvantages of External and Internal Audits
- External
- Sample page from Audit 123 System
- Case study #2
- Quiz #2
- General Principles of Controlling Hazards and Reducing Risk
- Avoiding Risks
- Evaluating Unavoidable Risks
- Controlling Hazards at Source
- Adapting Work to the Individual
- Adapting to Technical Progress
- Replacing the Dangerous by the Less/Non-Dangerous
- Developing a Coherent Prevention Policy
- Giving Priority to Collective Protective Measures Over Individual Protective Measures
- Providing Appropriate Training, Information and Supervision to Employees
- Information
- Information Subjects
- Means of Communication
- Instruction
- Instruction Subjects
- Means of Communicating
- Training
- Training Subjects
- Means of Communicating
- Supervision

- Subjects
- Categories and Features of Safety Signs
- General Hierarchy of Control
- Avoiding Risks
- Elimination/Substitution
- Reducing/Time limiting Exposure
- Isolation/Segregation
- Engineering Control
- Safe Systems of Work
- Training and Information
- Personal Protective Equipment
- Benefits and Limitations
- Welfare
- Monitoring and Supervision
- Safe Systems of Work
- Responsibility of the Employer to Provide Safe System of Work
- Components of the System (PEME)
- People
- Equipment
- Materials
- Environment
- Case study #3
- Quiz #3
- Overview of Safety Responsibilities
- Rights & Duties
- Worker's Rights
- Fundamental Principles of Occupational Health and Safety
- Employers' Responsibilities
- Governments' Duties
- Case study #4
- Quiz #4
- Providing Safety Supervision
- OSHA: Supervisor

- The Supervisor's Responsibility under the OSHAct
- Safety Leadership
- How Can Supervisors Manage Workplace Safety Risk?
- Supervisor Safety Leadership
- Safety Enforcement
- Supervisor Commitment and Employee Involvement
- Recommended Actions
- Management Systems Administrative Enforcement
- Reasons of Failing to Comply with Safety Procedures
- How to Reduce Risk-Taking Behaviour
- How to Increase Safe Behaviour
- Case study #5
- Quiz #5
- Job Safety Analysis: Process Safety Management (PSM) and Risk Management
- Industry's Wakeup Call
- Fortunately, that is NOT Safety
- Are We (Industry) Really LEARNING from History?
- Why Do Accidents Happen?
- Group Assignment–Conduct a JSA
- Bird Accident Triangle
- Some Statistics
- Process Safety Management
- Purpose of the PSM Standard
- PSM Elements
- Employee Participation
- Process Safety Information
- Process Hazard Analysis (PHA)
- Operating Procedures
- Training
- Contractors
- Pre-Startup Safety Review
- Mechanical Integrity
- Quality Assurance

- Hot Work Permit
- Management of Change
- Incident Investigation
- Emergency Planning and Response
- Compliance Audits
- Trade Secrets
- Risk Management
- The Classical Risk Management Process
- What do We Mean by 'Risk'?
- Risk
- Risk Assessment Stages
- R.E.A.C.H
- Identify-What Can Go Wrong?
- How Big (Serious) Will the Consequences be?
- How Often (Likely) Will it Occur?
- Prevention (Safeguards)
- What Should We do?
- Is It Worth the Cost?
- Risk Concepts
- Principle of Economics
- Definition of ALARP
- Levels of Risk and ALARP
- The Importance of Engineering Control
- Hierarchy of Control
- Why is One Sign Often Ignored, the Other One Often Followed?
- Learning Outcomes
- Workplace Inspections
- Case study #6
- Quiz #6
- Commitment to Developing People
- Why is HSSE Training & Development Important?
- Effective Training
- What is Training?

- Why Manage CPD You Might Ask?
- Case study #7
- Quiz #7
- Process Safety & Asset Integrity
- Introduction
- Preventing Major Incidents
- Process Safety and Asset Integrity: Definitions
- What is a PHA?
- Process Hazard Analysis
- Benefits
- Overall, Accidents are Caused By
- PHA Review Methods
- Elements of Process Hazard Analyses
- Case study #8
- Quiz #8
- What is PHA?
- Process Hazard Analysis – Definition
- Benefits
- Elements of Process Hazard Analysis
- What do you have to do?
- To Do List
- Conclusion
- Case study #9
- Quiz #9
- Risk Based Approach
- KOC Case Study
- Challenges
- Proactive View
- The Process
- Facility Shutdown - HSE RISK-Based Approach (RBA) Process
- Conclusion & Results
- Case study #10
- Quiz #10