COURSE OVERVIEW HE1152
HSSE Framework in O&G
(E-Learning Module)

Course Title
HSSE Framework in O&G (E-Learning Module)

Course Reference
HE1152

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 framework in the oil and gas. It covers the HSSE management system, system approach, the key elements of HSSE management system HSE model and standardization; the management systems according to ISO standards; the practical aspects of HSSE management system; the policy, HSSE management planning, implementation and operation; the training and competence; and the proper documentation, operational control and measuring performance.

Further, the course will also discuss the active and reactive measuring systems; the key requirements of auditing; the leadership in HSE management system; promoting HSE standards by leadership and example; providing safety supervision; the supervisor's responsibility under the OSHact; the principles of risk control including the principles of controlling hazards and reducing risk; the evaluation of unavoidable risks; the control of hazards at source; adapting work to the individual and 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; and providing appropriate training, information and supervision to employees.

During this interactive course, participants will learn the categories and features of safety signs; the hierarchy of risk control; the elimination/substitution, reducing/time limiting exposure, isolation/segregation, engineering control and safe systems of work; the personal protective equipment; the risk-based approach, risk management, risk planning, identification, analysis, response, action, tracking, control and communication; the process safety and asset integrity; process hazard analysis and PHA review methods; the elements of process hazard analysis; the tough caring leadership, internal audits and workplace inspections; the requirements for effective report writing; the health and safety performance; role of senior management team; the audit process, pre-audit preparations and successful HSE management; the planning cycle, benchmarking organizational safety strategy, organizational excellence and strategic leadership; and managing the strategy-culture relationship.

Course Objectives

After completing the course, the employee will:-

- Apply and gain a comprehensive knowledge on HSSE framework in O&G

- Describe basic concepts of the HSSE practices, standards and regulations

- Gain understanding of HSSE Management

- Understand HSSE Framework in O&G

- Identify the theoretical framework and leading practices of HSSE Management System framework

- Explain HSSE Management System and functional framework and its importance at the workplace

- Recognize the HSSE management system, system approach, the key elements of HSSE management system HSE model and standardization

- Carryout management systems according to ISO standards and discuss the practical aspects of HSSE management system

- Employ policy, HSSE management planning, implementation and operation

- Review the training and competence and apply proper documentation, operational control and measuring performance

- Recognize active and reactive measuring systems as well as key requirements of auditing

- Employ leadership in HSE management system and promote HSE standards by leadership and example

- Provide safety supervision and discuss the supervisor's responsibility under the OSHact

- Discuss the principles of risk control including the principles of controlling hazards and reducing risk

- Evaluate unavoidable risks, control hazards at source and adapt work to the individual and technical progress

- Replace the dangerous by the less/non-dangerous and develop a coherent prevention policy

- Give priority to collective protective measures over individual protective measures

- Provide appropriate training, information and supervision to employees
- Identify the categories and features of safety signs and discuss the hierarchy of risk control
- Avoid risks and apply elimination/substitution, reducing/time limiting exposure, isolation/segregation, engineering control and safe systems of work
- Use personal protective equipment and carryout risk-based approach, risk management, risk planning, identification, analysis, response, action, tracking, control and communication
- Analyze risks and employ process safety and asset integrity
- Prevent major incidents and apply process hazard analysis and PHA review methods
- Identify the elements of process hazard analysis as well as apply tough caring leadership, internal audits and workplace inspections
- Use checklists, recognize the requirements for effective report writing and review health and safety performance
- Discuss the role of senior management team and implement audit process, pre-audit preparations and successful HSE management
- Illustrate the planning cycle, benchmarking organizational safety strategy, organizational excellence and strategic leadership as well as manage the strategy-culture relationship

Who Should Attend

This course provides an overview of all significant aspects and considerations of HSSE framework in oil and gas 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.

Haward Technology Middle East

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: -

- **IACET** — 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.

- **BAC** — 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 Fee
As per proposal

Course Contents

- HSSE Management System
- Definition
- HSSE Programs
- System Approach
- Key Elements of a HSSE Management System HSE Model (HSG65)
- Standardization
- Management Systems ISO Standards
- Standards Consist of Specifications and Guidance
- OHSAS 18001
- OHSAS 18002
- OHSAS 18001 Structure
- Practical Aspects of a HSSE Management System
- The HSSE Policy
- Planning for HSSE Management
- Examples of Types of HSSE Objectives
- Implementing Objectives
- Implementation & Operation
- Roles and Responsibilities
- Training & Competence
- Implementation and Operation
- Documentation
- Operational Control
- Measuring Performance
- Active Measuring Systems
- Reactive Measuring Systems
- Auditing
- Key Requirements of Auditing
- Audit Results
- Content of the Report
- Case study #1
- Quiz #1

- Understanding the Management System
- Leading
- What is Leadership?
- Visible Leadership is:
- What Leadership is Not
- Leadership and Management-The Two Creations
- Supervisor vs Leader
- Commitment Through Setting Examples
- Leadership in HSE Management System
- The Management Dilemma
- HSE Leadership
- Successful Health & Safety Management
- Safety Excellence Model requires
- Health & Safety Management Systems
- What Do the Best Companies Do for Safety and Health?
- Commitment, Leadership and Accountability
- Management Commitment
- Affecting Cultural Change
- Securing Management Commitment
- Safe Practice Recognition
- Promoting HSE Standards by Leadership & Example
- Activity: Priority Actions for Your Business
- Case study #2
- Quiz #2
- Providing Safety Supervision
- OSHA: Supervisor
- The Supervisor's Responsibility under the OSHAct
- Safety Leadership
- How can Supervisors Manage Workplace Safety Risk?
- Supervisor Safety Leadership
- Case study #3
- Quiz #3
- Principles of Risk Control

- General Principles of Controlling Hazards and Reducing Risk

- General Principles of Prevention (Technical, Behavioural and Procedural Controls)

- 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

- Categories and Features of Safety Signs

- Case study #4

- Quiz #4

- Hierarchy of Risk Control

- 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

- Definition of Safe System of Work (SSW)

- Components of the System (PEME)

- People, Equipment, Materials, Environment

- Case study #5
- Quiz #5
- Risk Based Approach
- Risk
- What is Risk Management?
- Risk Management
- Risk Management is Important because:
- What Risks do Projects Face?
- The Risk Impact/Probability Chart
- Risk Continuum
- Activity
- Consequence Table
- Risk Management Process
- Risk Planning
- Risk Identification
- Risk Analysis
- Risk Response
- Risk Action
- Risk Tracking
- Risk Control
- Risk Communication
- Organizing:
- Control
- Monitoring
- Review & Audit
- Who Should do Risk Assessment?
- Your Role as a Leader
- Analyzing Risks
- Risk Assessment
- Risk Assessment Map
- Risk Quantification Technique: Expected Monetary Value (EMV)
- Case study #6
- Quiz #6

- 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 #7
- Quiz #7
- What is PHA?
- **P**rocess **H**azard **A**nalysis – Definition
- Overall, Accidents are Caused By
- PHA Review Methods
- Elements of Process Hazard Analysis
- What do you have to do?
- To Do List
- Conclusion
- Case study #8
- Quiz #8
- Tough Caring Leadership & Internal Audits
- Learning Outcomes
- 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 #9
- Quiz #9
- Benchmarking Tough Caring
- Successful HSE Management
- Planning Cycle
- How is a Safety Management Plan Developed?
- Efficiency & Effectiveness
- Benchmarking Organizational Safety Strategy
- B.O.S.S: Benchmarking Organizational Safety Strategy
- Tough Caring Leadership
- Keys to Organizational Excellence
- Shaping Organizational Culture
- How Leaders Shape Culture
- Key Question
- Strategic Leadership
- Manage the Strategy-Culture Relationship
- Ending on a Positive Note
- The Power of a Smile
- Case Study #10
- Quiz #10