



**UNITED EASTERN**  
TECHNICAL & MANAGEMENT TRAINING



# HEALTH, SAFETY & ENVIRONMENT

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# HEALTH, SAFETY & ENVIRONMENT

COURSE CODE/NO	COURSE TITLE	COURSE DURATION
UETMT- HSE- GS 100	HSE IN OIL & GAS INDUSTRY	5 days
UETMT- HSE- GS 101	TECHNICAL SAFETY	5 days
UETMT- HSE- GS 102	HSE MANAGEMENT IN OIL FIELDS	5 days
UETMT- HSE- GS 103	SAFETY IN PETROLEUM OPERATIONS	5 days
UETMT- HSE- GS 104	PLANT OPERATOR RESPONSIBILITIES	3 days
UETMT- HSE- GS 105	MEASURING HSE PERFORMANCE	3 days
UETMT- HSE- GS 106	PROCESS SAFETY	5 days
UETMT- HSE- GS 107	PROCESS SAFETY DESIGN	4 days
UETMT- HSE- GS 108	PROCESS SAFETY MANAGEMENT COMPLIANCE	5 days
UETMT- HSE- GS 109	SAFETY IN GAS PROCESSING FACILITIES	5 days
UETMT- HSE- GS 110	PROCESS SAFETY ENGINEERING	5 days
UETMT- HSE- GS 111	WORKING AT HEIGHT (WAH)	3 days
UETMT- HSE- GS 112	FALL PROTECTION	2 days
UETMT- HSE- OH 113	OCCUPATIONAL HEALTH AND SAFETY ASSESSMENT SERIES OHSAS 18001	5 days
UETMT- HSE- OH 114	OCCUPATIONAL HEALTH MANAGEMENT SYSTEM	5 days
UETMT- HSE- OH 115	INDUSTRIAL OCCUPATIONAL HEALTH MONITORING AND MANAGEMENT	5 days
UETMT- HSE- OH 116	ASSESSMENT OF RISKS TO HEALTH FROM CHEMICAL SUBSTANCES	5 days
UETMT- HSE- OH 117	GENERAL INDUSTRIAL HYGIENE	5 days
UETMT- HSE- OH 118	OCCUPATIONAL HEALTH & HYGIENIC	5 days



# HEALTH, SAFETY & ENVIRONMENT

COURSE CODE/NO	COURSE TITLE	COURSE DURATION
UETMT- HSE- OH 119	ADVANCED INDUSTRIAL HYGIENE & OCCUPATIONAL HEALTH	5 days
UETMT- HSE- OH 120	BASIC PERSONNEL HYGIENE	3 days
UETMT- HSE- OH 121	MEDICAL CONTAMINATION FOR HEALTH STAFF	5 days
UETMT- HSE- OH 122	MEDICAL WASTE MANAGEMENT SYSTEM	3 days
UETMT- HSE- ENV 123	BASIC OF ENVIRONMENT	5 days
UETMT- HSE- ENV 124	WATER QUALITY AND TREATMENT MANAGEMENT	5 days
UETMT- HSE- ENV 125	WASTE MANAGEMENT	5 days
UETMT- HSE- ENV 126	ENVIRONMENTAL MANAGEMENT AND WASTE TREATMENT FOR UPSTREAM	5 days
UETMT- HSE- ENV 127	EFFECTIVE WASTE MANAGEMENT	5 days
UETMT- HSE- ENV 128	ENVIRONMENTAL WASTE MANAGEMENT	5 days
UETMT- HSE- CER 129	INTERNATIONAL TECHNICAL CERTIFICATE IN OIL AND GAS OPERATIONAL SAFETY – IOG	5 days
UETMT- HSE- CER 130	NEBOSH CERTIFICATE IN ENVIRONMENTAL MANAGEMENT – EC	5 days
UETMT- HSE- CER 131	NEBOSH INTERNATIONAL CERTIFICATE IN CONSTRUCTION HEALTH AND SAFETY – ICC	10 days
UETMT- HSE- CER 132	IOSH MANAGING SAFELY	5 days
UETMT- HSE- CER 133	ISO 31000	5 days
UETMT- HSE- CER 134	NEBOSH INTERNATIONAL GENERAL CERTIFICATE IN OCCUPATIONAL HEALTH AND SAFETY – IGC	10 days
UETMT- HSE- CER 135	NEBOSH INTERNATIONAL DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY – IDIP	6 weeks
UETMT- HSE- CER 136	OSHA - GENERAL INDUSTRY	5 days



**HSE IN OIL & GAS INDUSTRY**

UETMT- HSE- GS 100

Program Duration: 5 days

Level: Intermediate

**PROGRAM DESCRIPTION**

This course teaches delegates the importance of safety in the workplace with special emphasis on Oil & Gas Companies plants. It presents the majority of the latest aspects in Risk Management and Accident Investigation. The course highlights how to identify safety Training needs. Near miss, incident and accident reporting is handled to show how these statistics can help to prevent losses to the company and employees. The need for formal working procedures is stressed so that all employees have conformity in their operations. A change in employee attitude is needed to improve the safety situation in a Plant. The management of hazardous materials is covered by giving full details of storage, handling and safe disposal of spills. Dangerous operations relating to confined space entry, scaffolding, hot work and gases, are discussed in detail. A number of case histories will be covered to analyze the reasons for accidents and how they could have been prevented. The types and uses of safety equipment and personal protective equipment are also discussed.

**PROGRAM OBJECTIVES**

Upon successful completion of this course, the participant should be able to:

- Discuss attitude required to improve safety conditions in the workplace.
- Discuss the importance of safety.
- Discuss the need for Process Safety Management
- Discuss the analysis of potentially dangerous conditions for risk management.
- Discuss the use of case histories to improve employee safety awareness.
- Discuss the "Permit to Work" system and how to implement it.
- Discuss the operation control in work place to prevent accident.
- Discuss emergency procedures.
- Discuss how the Safety Auditing system can gauge the Company's Safety status
- Discuss Technical Reports and Accident Investigations to reduce future risk

**TARGET AUDIENCE**

This course is applicable to Engineers and Technicians who need to improve their understanding of Workplace Safety. It is of particular importance to prevent accidents and loss to the employees and the company

**TARGET COMPETENCIES**

- Safety Conditions in the Workplace
- Process Safety Management
- Risk Management

**PROGRAM CONTENT**

**Day 1: Introduction to HSE Management Systems**

- Definitions & Abbreviations
- HSE Management System Overview
- HSE Management System Elements & Sub- Elements
- Environmental Management System



**Occupational Health Management System**

- Process Safety Management

**Day 2: Hazards & Risk reduction**

- Identification of key hazards
- Concepts of hazards and accidents
- Loss Causation Model
- Recognition & control of occupational hazards.
- Overview of the risk assessment process
- Job Safety Analysis
- Hazard identification techniques (HAZOP, ETA)
- Risk Register

**Day 3: Operation Control in Oil & Gas Plants**

- HSE Plan
- Hazards Area Classification
- Operators Routine Inspection checks in the Oil & Gas Plant.
- Contractor Safety Management
- Electric Safety
- Permit To Work System
- Management Of Change

**Day 4: HSE Auditing and Inspection**

- Effective and reliable approach to managing the audit and inspection process
- Guidelines for auditing health and safety management systems
- Types Of Audit
- Benefits of Audit
- Assess the potential losses associated with the risk.
- Assessing the emergency response plans and techniques
- Identify system strength and deficiency
- Documenting and reporting audit findings

**Day 5: Safety Systems Engineering**

- Project Engineering
- HAZOP Study
- Inherent Safety Design
- Safety Instrumented System
- Layer Of Protection Analysis
- Course Assessment



**TECHNICAL SAFETY**

UETMT- HSE- GS 101

Program Duration: 5 days

Level: Intermediate



**PROGRAM DESCRIPTION**

Audit is an Independent, Systematic and Documented Process of objectively obtaining and evaluating verifiable Evidence to determine that Business Controls:

Complete and Consistent

Safeguard the Company's Resources and promote their effective use

Provide, and protect the Integrity of required records and Information

Allow for Compliance with Policies, Chosen Standards, Laws and Regulations

HSE Inspection is the Process of Physical On-site Verification that work is performed and equipment is maintained in accordance with existing HSE Standards and Procedures.

International Standards enforce Contractors to Develop and implement an adequate HSE MS appropriate to the nature of their activities and Services.

HSE Management System for Companies shall adopt a Strategy for dealing with different Categories of Contractors with regard to HSE Management System.

**PROGRAM OBJECTIVES**

*At the end of this course the expected behavioral changes are:*

- The Ability to use different Techniques of conducting Inspection, Auditing and Sampling
- The Ability of differentiating between them and understanding when to do what.
- How to pre-design Checklist or Inspection Form
- Ability to describe findings after Completion and explain clearly how the exposure to those Hazards found can lead to Accident.
- How perform Worksite Analysis or Analyzing Data collected via sampling
- The Ability to read Statistical Data
- Have a better Understanding of people Psychology that drives badly or un-safe behavior.
- Have a better understanding of Scaffoldings Hazards, Inspections and how to ensure Control measures are in place
- How to build good relationship with Contractors
- Matters of Business conflict when dealing with Contractors
- Reporting finding your Contractors
- A better understanding of Contractor poor Management can lead to poor Health and Safety Records.
- Understanding Why Contractors should be supervised more closely and what are the signs that can predict poor Management....i.e. dealing with complex work/tasks or their staff turnarounds.
- A better understanding why contracting a job is safer for the company.
- Knowing different Scalable and achievable Promotion, Schemes, program or event that helps contractors to promote a better safety culture.

**TARGET AUDIENCE**

- HSE Engineers
- HSE Officers
- Site Supervisors
- Project Engineer

**TARGET COMPETENCIES**

- Inspection Techniques, Auditing and Sampling
- Pre-design Inspection Checklist
- Worksite Analysis

**PROGRAM CONTENT:**

**Day 1: HSE Management System**

- Evolution of HSE
- HSE Management System Cycle
- HSE MS Elements
- HSE MS Sub Elements
- HSE Critical Success Factors

**Day 2: HSE MS Audit**

- Purpose of HSE Audits
- Benefits of HSE Auditing
- Types of Audits
- Internal & External Audit
- The Audit Process
- HSEMS Audit
- Audit Checklist & Questionnaire
- Audit Reporting & Formal Closure

**Day 3: HSE Site Inspection**

- Site Survey & Inspection
- Safety Inspection
- Benefits of Inspections
- Types of Inspection
- Types of Planned Inspection
- Self-Assessment
- Follow-up on Audit & Inspection Findings

**Day 4: Contractor HSE Management**

- Classification of Contractors
- Contractors Pre- Qualification
- Contractors Selection
- HSE Requirements from Supplier & Contractors
- Contractor Audit
- Contractors Monitoring & Supervision
- Contractors Acceptable Level of Performance
- Contractor Motivation

**Day 5: Operation Controls**

- Types of Operations Controls
- Administration Control
- Engineering Control
- PTWS
- Standing Operating Procedures (SOP)



**HSE MANAGEMENT IN OIL FIELDS**

UETMT- HSE- GS 102

Program Duration: 5 days

Level: Intermediate

**SAFETY IN PETROLEUM OPERATIONS**

UETMT- HSE- GS 103

Program Duration: 5 days

Level: Intermediate

**PROGRAM DESCRIPTION**

This course was designed to focus on HSE Management system based upon ISO 14001 (2004) and OHSAS 18001, developing and implementing an HSE management system in Oil & Gas organizations;  
The course covers all main and sub elements of HSE Management System Cycle.

**PROGRAM OBJECTIVES**

Providing participants with the necessary knowledge and skills to:

- Develop and implement HSE Management System
- Provide hands-on experience on the application of advanced risk assessment techniques relevant to the oil, gas and process industries.
- Create and maintain a safe and a conducive work environment,
- Prevent or reduce the probability of incidence and injuries occurrence.

**TARGET AUDIENCE**

Quality, health & safety, and environmental managers, Environmental engineers, Staff responsible for compliance with laws and regulations, Human resource managers and staff involved in health, safety and environmental management, in organizational improvement, and performance evaluation

**TARGET COMPETENCIES**

- HSE Management System
- Risk Assessment Techniques
- Safe Work Environment

**PROGRAM CONTENT**

- **Setting HSE Management System Policies And Objectives**
  - Overview of health and safety hazards and environmental impacts, and management's interest in addressing them
  - Introduction to ISO 14001:2004 standard and the OHSAS 18001:1999 specification
  - Setting Direction: Establishing an organization's HSE policy
  - Hazard identification, risk assessment and risk control; environmental aspects and impacts
- **Implementation and Operations and Checking and Corrective Action**
  - Structure and responsibility, training and communication
  - Documentation and document control
  - Operational control
  - Emergency preparedness and response
  - Monitoring and measurement
  - Nonconformity and corrective and preventive action
  - Internal audit and management review
- **Establishing and /Or Improving The Management System**
  - Conducting an initial review
  - Documenting an HSE management system
  - Improving processes by mapping inputs, outputs and information flows
  - Using flowcharts to write effective management system documents.
- **Auditing The HSE Management System**
  - Establishing a management system audit program.
  - Scheduling and performing management systems audits.
  - Investigating the root causes of nonconformities and taking effective corrective and/or preventive action
- **Preparing the organization for a successful third-party certification audit**

**PROGRAM OBJECTIVES**

This course is intended to teach proper to provide and maintain a safe and healthful work environment for all personnel. Employees from the hazards and prevent or reduce the incidence and injuries to protect them

**TARGET AUDIENCE**

Engineers and staff involved in oil industry and operations.

**TARGET COMPETENCIES**

- Plant Operations and Safety
- Hazard in Oil Industry
- Health Hazard

**PROGRAM CONTENT**

- Introduction
- The goals of healthy, safety & environments
- Plant Operations And Safety
- Hazard in oil industry
- Health hazard
- Fire and explain hazard
- Hazard of common material
- Steam hazard
- Air hazard
- Water hazard
- Inert gas hazard
- Hot oil hazard
- Safety In Process Operations
- Hazard Analysis In Design And Operations
- Basic concepts; hazards rating
- Basic techniques used: check lists, HAZAN, what if, HAZOP,
- Process Safety Management
- Case study
- Flixborough
- Bhopal



**PLANT OPERATOR RESPONSIBILITIES**

UETMT- HSE- GS 104

Program Duration: 3 days

Level: Intermediate

**MEASURING HSE PERFORMANCE**

UETMT- HSE- GS 105

Program Duration: 3 days

Level: Intermediate

**PROGRAM DESCRIPTION**

Health and Safety Technology and Procedures are very important Aspects of Health and Safety Management. The cause of most workplace Accidents and Incidents is directly related to Human Failure. Three thousand people are killed each day worldwide. Over 90% of these deaths are caused by unsafe behaviors of people in management and in the workforce. In this program you will look in-depth at the factors that impact on Human Failure:

- Organizational Aspects that Influence Human Failure
- Task factors that will increase or decrease Human Failure
- Individual factors that will impact on Human Failure
- How to develop a positive Safety Culture

**PROGRAM OBJECTIVES**

Provide Plant Operators with knowledge and Skills to create and maintain a Safe working condition, and consequently reduce the probability of incident, illness and injuries occurrence through providing them with tools to:

- Set their HSE Duties and Responsibilities.
- Identify & recognize all Hazards & Safety Control measure of Plant & different Tasks.
- Understand the Critical Equipment, Activities & Systems & Proactive Safety Tools and apply the same at Workstations

**TARGET AUDIENCE**

Plant Operator/ Control Room Operator

**TARGET COMPETENCIES**

- Incident Probability
- HSE Duties and Responsibilities
- Hazards & Safety Control Measures
- Safety Tools

**PROGRAM CONTENT**

- Organization HSE Duties & Responsibilities
- The Operator's Role
  - Daily Activities
  - Problem Resolution
  - HSE
  - Accidents and Emergencies
  - Communication
  - Prohibited Actions
- HSE Critical Equipment, Activities & Systems
- Work Equipment Hazards and Control
- Site HSE Inspection
- Measuring Plant Operator Performance
- Plant Operators Responsibilities
- Outside Operators Responsibilities
  - Inspections
  - Routine Duties and Maintenance
  - Safety and Communication
- Control Room Operators Responsibilities
  - Managing Process Variables
  - Other Activities
    - Weather Considerations

**PROGRAM DESCRIPTION**

Health and safety technology and procedures are very important aspects of health and safety management. The cause of most workplace accidents and incidents is directly related to human failure. Three thousand people are killed each day worldwide. Over 90% of these deaths are caused by unsafe behaviors of people in management and in the workforce. In this program you will look in-depth at the factors that impact on human failure.

- Organizational aspects that influence human failure
- Task factors that will increase or decrease human failure
- Individual factors that will impact on human failure
- How to develop a positive Safety Culture

**PROGRAM OBJECTIVES**

Provide participants with knowledge and skills to create and maintain a Safe working condition, and consequently reduce the probability of incident, illness and injuries occurrence through providing them with tools to:

- Describe the main elements of international standards for HSE Management System
- Set HSE Duties and Responsibilities for all organizations
- Identify & Recognize all hazards & safety Control measure of different Tasks.
- Understand the proactive Safety Tools/Systems and apply the same at workstations
- Implement the last techniques and Tools for Modern HSE

**TARGET AUDIENCE**

HSE Engineers / Team Leaders / Supervisors

**TARGET COMPETENCIES**

- Safe working condition
- Modern HSE Techniques and Tools

**PROGRAM CONTENT**

**Day 1**

- HSE Management System frame work
- Environment Management System based on ISO 14001
- Occupational Health & Safety Management system based on OHSAS 18001

**Day 2**

- Organizing for Health and Safety
- HSE Responsibilities
- HSE Leadership
- Management Commitment
- Promoting a positive health and safety culture

**Day 3**

- Leading HSE Indicators
- Lagging HSE Indicators
- Active & Reactive Monitoring
- Review and Audit
- Key Performance Indicators (KPIs)
- Measuring HSE Performance



**PROCESS SAFETY**

UETMT- HSE- GS 106

Program Duration: 5 days

Level: Advanced

**PROGRAM OBJECTIVES**

*At end of the program the delegate will:*

- Explain monitoring and optimizing procedures.
- Recognized symptoms and identify the associated faults.
- Explain basic procedures-commissioning, changeover, isolating.
- Explain how the systems interface with other systems.
- Explain the parameters to be monitored in operation to assure performance
- Explain the common faults or failure modes associated with the equipment
- Demonstrate the safe use and application of hand tools and test equipment in support of loop testing and set up of fire and gas systems inputs and outputs
- Discuss and provide understanding of the role and management on contractors on site
- Understand and can explain the procedures for the application and removal of overrides to allow testing
- Explain the operating principles of the fire fighting systems used on process installations.
- Explain the normal operating procedures associated with the firefighting equipment and systems
- Explain how the fire fighting system interacts with personal and plant safety
- Understand the use of the various permit systems typically found on site
- Understand the importance of planning for major incidents and how incident investigations are carried out

**PROGRAM DESCRIPTION**

This course can help personnel to manage safety in process plant and associated equipment operations. The course will cover all major aspects of the plant safety management system and help staff analyze hazards and prepare for the systems and processes they will face as part of their duties and responsibilities.

**TARGET AUDIENCE**

Any Person responsible for the Safety of Plant and Equipment Operations

**TARGET COMPETENCIES**

- Process Safety Monitoring
- Process Safety Optimizing
- Commissioning, Changeover and Isolating Procedure

**PROGRAM OUTLINE**

- Introduction
- HSE-MS
- Process Safety Information
- Understanding the concept of Process Hazard Analysis and typical HSE responsibilities as part of the pre-start up process
- Incident Investigation



**PROGRAM CONTENT**

**Process Hazards & Risk Management Alternatives**

- Hazards that Concern us
- What Increases the Potential for Industrial Facilities to Become More Hazardous?
- How is Process Risks Analyzed?
- Principle and Practice of Risk Analysis via Risk Assessment
- Risk versus Safety: a Comparative View
- Group Work

**Identification of Hazards and Structured Hazards Analysis Tools**

- How do we identify Hazards?
- Widely Used Methodologies to Identify Hazards
- Preliminary Hazards Analysis (PHA)
- Hazards And Operability Analysis (HAZOP)
- Failure Mode and Effects Analysis (FMEA)
- Job hazard analysis (JHA)
- What If Analysis
- Checklist Analysis
- Use of Risk Matrix With Hazards Identification
- Case study
- Group work

**HAZARD AND OPERABILITY STUDIES (HAZOP)**

- What did we do before HAZOP Came Along?
- How Do We Know If a Plant Is Safe?
- HAZOP Methodology
- Methodology for Generating Deviations
- What Type of HAZOP Should You Use?
- HAZOP Case study.
- Group Work





## PROCESS SAFETY DESIGN

UETMT- HSE- GS 107

Program Duration: 4 days

Level: Intermediate

### PROGRAM INTRODUCTION

Anyone involved with process or equipment design sooner or later faces the problem of choosing among alternative designs with differing process efficiency, safety, and environmental control, cost, and schedule implications. To accomplish this, the formation of a multidisciplinary design team is required at the beginning of a project in order to obtain total integration of process safety with process design and environmental protection considerations

### PROGRAM DESCRIPTION

This course begins with this brief introductory model-1, followed by model-2, which presents a practical and systematic technique for selecting the design bases for process safety systems. A series of "equipment" follows, presenting known failure scenarios for the specific equipment in question alongside associated design solutions. Finally comprised of two worked examples

### PROGRAM OBJECTIVES

A broad objective of this course is to help in the design and evaluation of specific types of process equipment, from a process safety standpoint. The overall goal is to help reduce process safety related incidents and resulting downtime. More specific objectives include:

- Providing a risk-based and cost-based technique for selecting the design bases for process safety systems
- Listing known process safety failure scenarios associated with different categories/types of process equipment
- Identifying known design solutions that prevent or mitigate risks associated with the various failure scenarios
- Illustrating application of the risk-based technique with worked examples

### TARGET AUDIENCE

- Process design engineers
- Plant operations and maintenance engineers,
- Process hazard analysis leaders and teams

### TARGET COMPETENCIES

- Process Safety Design
- Process Equipment
- Process Safety Failure

### PROGRAM CONTENT

**MODEL-1:** Introduction

**MODEL-2: Technique for Selecting the Design Bases for Process Safety Systems**

- The Concept of Risk
- Identify Failure Scenarios
- Estimate the Consequences
- Determine Tolerability of Consequences
- Estimate Likelihood and Risk
- Determine Tolerability of Risk
- Consider Enhanced and/or Alternative Designs

- Evaluate Enhancements and/or Alternatives
- Determine Tolerability of Risk and Cost
- Document Results
- Potential Process Safety Systems Design Solutions
- Locking Open a Valve
- Selecting the Relief System

### **MODEL-3: EQUIPMENT**

- Vessels
- Past Incidents
- Failure Scenarios and Design Solutions
- Use of Potential Design Solutions Table
- Heat Transfer Equipment
- Past Incidents
- Failure Scenarios and Design Solutions
- Use of Potential Design Solutions Table
- Fluid Transfer Equipment
- Past Incidents
- Failure Scenarios and Design Solutions
- Use of Potential Design Solutions Table
- Fired Equipment
- Past Incidents
- Failure Scenarios and Design Solutions
- Use of Potential Design Solutions Table
- Piping and Piping Components
- Past Incidents
- Failure Scenarios and Design Solutions
- Use of Potential Design Solutions Table

### **MODEL-4: TWO WORK EXAMPLES**





**PROCESS SAFETY MANAGEMENT COMPLIANCE**

UETMT- HSE- GS 108

Program Duration: 5 days

Level: Intermediate

**PROGRAM INTRODUCTION**

- Most Process Organizations have implemented an integrated approach to managing health, safety and environmental 'HSE' risks through an HSE Management System. This program aims to highlight the benefits of such a system and its elements, based on industry best practice. This program is designed to help delegates to demonstrate compliance with the organization HSE Management System, special focus is on risk management and promoting positive safety culture. In this program you will learn to:
- Appreciate your role and responsibilities within the HSE Management System
- Enhance your knowledge of elements, sub-elements and expectations of the HSE- MS
- Gain necessary skills in carrying out practical risk assessment and incident investigation and analysis
- Develop a plan for promoting positive safety culture

**TARGET AUDIENCE**

- All HSE personnel
- Managers and supervisors responsible for HSE Management System
- Individuals responsible for enhancing/implementing the Company HSE - MS

**TARGET COMPETENCIES**

- HSE Management Systems
- Process Safety Management Compliance
- Risk Assessment
- Incident Investigation and Analysis

**PROGRAM OBJECTIVES**

- Describe the company's HSE Management Systems
- How to demonstrate compliance with elements, sub-elements and expectations of the HSE- MS
- Understand the role of risk management in terms of risk assessment and incident investigation and analysis
- Appreciate the role of human error in risk assessment and contribution to incidents
- To identify weaknesses in the HSE- MS through analysis of root-causes for incidents
- Be familiar with the requirements of HS(G)65, BS 8800, OHSAS 18000, ISO 9000 and ISO 14000
- Be able to prepare action plans, setting targets and measuring performance
- Appreciate the value of promoting positive safety culture within your organization

**TRAINING METHODOLOGY**

Participants will learn by active participation during the program through the use of exercises, questionnaire, syndicate and group discussion, training DVDs and discussions on 'real life' issues in their organizations.

**PROGRAM CONTENT**

**DAY 1 - Introduction into HSE Management Systems**

- Introduction to course objectives and contents
- Why we need HSE Management System and what it is
- Individual and organizational roles responsibilities
- What should HSE Management System cover
- Standards for HSE Management
- Integrating OHSAS 18000, ISO 14000 and ISO 9000
- The role of safety culture

**DAY 2 - Elements of HSE Management Systems**

- Types of HSE Management Systems:
- Elements of HSE - Management Systems
- Sub-elements and expectations
- Leadership and commitment
- HSE Policy and Strategic Objectives
- Organization, resources and competence
- Risk Evaluation and Management
- Planning, standards and procedures
- Implementation and monitoring
- Audit and management review

**DAY 3 - Risk Management - 1 (Risk Assessment)**

- Hazard, risk and risk assessment
- Hazards identification techniques
- Evaluation of HSE risks
- Risk assessment techniques
- Work equipment/workplace risk assessment
- Task-based risk assessment
- Occupational health risk assessment

**DAY 4 - Risk Management - 2 (Incident Investigation)**

- Organizational learning from incidents
- Case study: BP Texas Refinery explosion and fire
- Human contribution to incidents
- Active errors, preconditions and latent failures
- Identification and analysis of root-causes to incidents
- Framework for incident investigation and analysis

**DAY 5 - Promoting Positive Safety Culture**

- Motivation and employee involvement
- Development of positive safety culture
- What is safety culture
- How to promote safety culture
- How to measure safety culture
- Behavioral Safety and employee's involvement
- Selection of outcome indicators



**SAFETY IN GAS PROCESSING FACILITIES**

UETMT- HSE- GS 109

Program Duration: 5 days

Level: Intermediate

**PROGRAM DESCRIPTION**

Safety is a complex mechanism at Gas Plant. Necessary Risk Management System has to be developed and implemented, Hazards Identification, Evaluation & Control to be established using all the applicable tools of HAZID and a System has to be designed to ensure implementation of all Safety Procedures and Practices. Safe work practices should provide for Safe Procedures of Operating, Maintenance and Modification Activities.

**PROGRAM OBJECTIVES**

- The course is designed to provide attendees with a high level comprehensive understanding of planning safety requirements of gas plant. This course looks at various aspects of General& Specific safety rules at gas plant and facilities foundation. This is advanced safety training for employees in the gas plant, which will cover all safety aspects of a Gas Plant.
- Provide attendees with high level comprehensive understanding of planning Safety requirements.
- Look at various aspects of General Safety Rules at Gas Plant.
- Formulate clear ideas and to conduct precise and more professional discussions on risk of gas plant.
- Obtain a better understanding for the design and engineering Safety features of the Gas Plant.

**TARGET AUDIENCE**

Gas Plant field Personnel, Operation and Maintenance Supervisors, Technicians, Support Engineers and Engineering Trainees, Safety and other Support Staff.

**TARGET COMPETENCIES**

- Risk Management System
- Hazards Identification, Evaluation & Control
- Safe Work Practices

**PROGRAM CONTENT**

**Day 1**

- Introduction& Course Objectives
- Definition & Abbreviation
- HSE Management System Overview
- Risk Management Tools
- General Safety Rules at Gas Plant
- Lower Explosive Limits, Threshold Limit Value- Minimum reading for Carbon Monoxides, Oxygen, H<sub>2</sub>S, etc

**Day 2**

- Hazards at Gas Plant Station.
- Hazards Area Classification
- Operators Routine Inspection checks in the Gas Plant
- Gas Detection& Control
- Electric Safety in Gas Plant

**Day3**

- Chemical Hazards in Gas Plant
- Mechanical Hazards in Gas Plant
- LPG & LNG
- Vapour Cloud Explosion
- Inspection Check in Gas Plant
- Work Permit System

**Day 4**

- Gas Plant Operation Risk Mitigation/Management
- Gas Plant Fire Detection& Fire Alarm
- Gas Plant Fire Fighting System
- Safety during Project Commissioning & Start up of Gas Plant

**Day 5**

- Gas Plant Safety Audit & Inspection as a key Identification Technique
- Preparation of action Plans, Planning and Implementing
- Gas Plant Emergency Preparedness
- Case Study (Texas City Refinery Explosion)

**PROCESS SAFETY ENGINEERING**

UETMT- HSE- GS 110

Program Duration: 5 days

Level: Intermediate

**PROGRAM DESCRIPTION**

- Successful Companies view Process Safety as an integrated course of action that not only uses Technology, but also includes Management Activities both setting the tone for a Process Safety Culture and Monitoring ongoing application and use of Process Safety principles when making Operational and Technical Decisions.
- Organisations are responsible to protect workers with regard to explosive atmospheres through a Process Safety Management System
- Assess the Risks
- Hazardous area Classification
- Mitigation & or removal of Risks
- Preparation of an Explosion Protection System
- Provision of suitable Process Safety Engineering approach

**PROGRAM OBJECTIVES**

By end of the course attendees will be have full knowledge about:

- Types of Equipment and Process Systems that have historically been problematic in the Upstream Oil & Gas Industry
- Basics of Risk Analysis
- Thinking in Terms of Inherently Safer Design
- Most commonly used Process Hazards Analysis methods and where they are used
- Layers of Protection concept - what the different layers are and how they are applied
- Detection and Mitigation methods for different Types of Hazards

**TARGET AUDIENCE**

- Chemical/Process Engineers
- Senior Engineers
- Plant Designers
- HSE Engineers

**TARGET COMPETENCIES**

- Equipment and Process Systems
- Risk Analysis
- Process Hazards Analysis

**PROGRAM CONTENT**

**Day One:**

- Introduction
- Process Safety Management (PSM)
- Risk Analysis Basics
- Process Hazards Analysis Techniques – Overview

**Day Two:**

- HZOP Study
- Quantitative Risk Assessment
- Layers of Protection

**Day Three:**

- Inherently Safer Design
- Hazards Associated with Process Fluids
- Plant Layout & Equipment Spacing
- Area Classification

**Day Four:**

- Pressure Relief and Disposal Systems
- Corrosion & Materials Selection
- Process Monitoring and Control
- Safety Instrumented Systems

**Day Five:**

- Management of Change
- Fire Protection Principles
- Explosion Protection
- Case Studies



**WORKING AT HEIGHT (WAH)**

UETMT- HSE- GS 111

Program Duration: 3 days

Level: Intermediate

**FALL PROTECTION**

UETMT- HSE- GS 112

Program Duration: 2 days

Level: Basic



**PROGRAM OBJECTIVES:**

Work at Height can expose workers to particularly severe risks to their health & safety and continues to be a major cause of death and serious injury. Employers and duty holders have a duty to protect anyone who might be exposed to these risks by ensuring that any form of work at height is planned, supervised and carried out safely.

**WHO SHOULD ATTEND?**

This training course is ideal for facilities managers, supervisors, employees and employers who have a responsibility for or are involved in work at height.

**PROGRAM CONTENT:**

- Introduction (What is Working at Height)
- Construction hazards
- Risk Assessment
- Hierarchy of Control
- Height Safety Equipment selection
- Safe Use of Associated Equipment
- Maintenance & Checking of Equipment
- Protection against falls from work at height
- Protection against falling objects
- Ladders and Step Ladders
- Review of topics covered and objectives

**PROGRAM INTRODUCTION:**

The risk of falls in the workplace is one that cannot be taken lightly. In recent years, accidental falls have accounted for more than 10% of workplace fatalities and almost 300,000 work-related injuries. Causes of these incidents are complex but include unstable working surfaces, misuse of fall protection equipment, and human error.

This course teaches employees how to recognize fall hazards and use a variety of safety devices.

Fall protection systems and industry standards. Ideal for persons who are going to be using fall protection systems and for safety managers to gain a general understanding

**PROGRAM OBJECTIVES:**

- To provide information about workplace hazards that may result in falls
- Explain the risks associated with falling, and outline the measures that can be taken to prevent and reduce the frequency of falls and the injuries that can result from them.

**PROGRAM CONTENT:**

- Introduction
- Fall Protection Standard
- Fall Protection Measures
- Workplace Falls
- The Fall Protection Plan
- Personal Fall Arrest Systems
- Connecting Devices and Lifelines



**OCCUPATIONAL HEALTH AND SAFETY ASSESSMENT SERIES OHSAS 18001**

UETMT- HSE- OH 113

Program Duration: 5 days

Level: Intermediate

**PROGRAM OBJECTIVES**

*By Attending this 5-day program Participants will:*

- Understand the occupational health and safety system documentation process
- Understand the vocabulary of OHSAS 18001: 2007
- Understand relationship of OHSAS 18001: 2007 to other quality and environmental management systems
- Develop working knowledge of roles and responsibilities of an OHSAS 18001:2007 Internal Auditor.
- Learn how to implement and manage an occupational
- Health and safety management system to the OHSAS 18001 requirements

**TARGET AUDIENCE**

- Occupational Health and Safety Professionals, Safety Officers, Operating and Staff Managers, Loss Prevention Managers, Engineers

**TARGET COMPETENCIES**

- OHSAS 18001
- Health and Safety Management System
- Loss Causation and Control

**PROGRAM CONTENT**

**Day 1:**

- Course objectives, agenda and evaluation forms
- Introduction to OHSAS 18001
- Managing risk through effective occupational health and safety management system

**Day 2**

- Understanding loss causation and control in OH&S management system
- The structure of the OHSAS 18001 standard
- OH&S Policy and exercises

**Day 3**

- Daily review
- Planning
- Risk assessments

**Day 4:**

- Training, awareness and competence
- Consultation and communication
- Documentation, document and data control, records and record management
- Operation Control

**Day 5**

- Emergency preparedness and response
- Performance measurement and monitoring
- Audit
- Accident, incidents, non-conformance and corrective and prevention action
- Management review
- OHSAS Implementation Guidelines

**OCCUPATIONAL HEALTH MANAGEMENT SYSTEM**

UETMT- HSE- OH 114

Program Duration: 5 days

Level: Intermediate

**PROGRAM DESCRIPTION**

Occupational Health is defined as the promotion and maintenance of the physical, mental and social well-being of the workforce. It is a multidisciplinary field concerned with preventing people from becoming ill because of their work. Occupational Health (OH) Management is the management process, through which corporate resources are organised and used to promote well-being and prevent, or minimise, the adverse health impact of work on personnel and contractors

**PROGRAM OBJECTIVES**

Attendees will gain the knowledge and competence

- Use the primary methods for classification of the level of occupational health risk
- How to identify all health hazards to which personnel may be exposed while at work
- Setting of control implementation priorities
- Basics of Health Risk Assessment as systematic identification of health hazards in the workplace and subsequent evaluation of health risks
- How & When they take existing control measures into account and
- Identifies and recommends further preventive or control actions where appropriate

**TARGET AUDIENCE**

- Safety Engineer
- Medical staff
- Loss prevention Engineer
- Emergency Team

**TARGET COMPETENCIES**

- Occupational Health Management System
- Chemical Hazards
- Physical Hazards
- Biological Hazards
- OH Risk Management
- First Aid and Medical Management

**PROGRAM CONTENT**

- Occupational Health Management System
- Chemical Hazards
- Physical Hazards
- Biological Hazards
- OH Risk Management
- First Aid and Medical Management
- Medical Support
- Food Safety
- Public Health and Welfare
- Heat Management & Heat Related Illnesses
- Stress Management
- Ergonomics
- Lighting
- Noise Pollution, Hearing Conservation and Vibration
- Display Screen Usage
- Hazardous Substances



**INDUSTRIAL OCCUPATIONAL HEALTH MONITORING AND MANAGEMENT**

UETMT- HSE- OH 115

Program Duration: 5 days

Level: Intermediate

**PROGRAM OBJECTIVES**

Participants attending the program will:

- Understand the dual concerns of work on health and of health on work.
- Explain the role of different health professionals and their contribution to the prevention of ill health effects.
- Understand classification of hazards and concepts of risk assessment and management.
- Explain the uses and limitations of occupational exposure limits.
- Understand occupational health management models.
- Be able to assess the need for health surveillance, pre employment assessment and fitness for work
- Explain techniques and instrumentation used to measure exposure levels.

**TARGET COMPETENCIES**

- Risk Assessment and Management
- Occupational Health Management Models

**PROGRAM CONTENT**

**DAY 1 – Work and Health**

- Principles of occupational health & occupational hygiene
- Occupational hazard types
- Role of occupational health professionals & occupational health services
- Work related diseases and ill health data
- The occupational history

**DAY 2 – Exposure data – measurement, interpretation and use**

- Requirements for monitoring exposure to pollutants
- Sampling strategies
- Techniques for monitoring exposure
- Collecting exposure data
- Calculation and interpretation of exposure data
- Use of exposure data in the assessment of health risks

**DAY 3 – Monitoring Health - Techniques, purpose and effective use**

- Pre-employment assessment
- Fitness for the job
- Health surveillance
- Biological monitoring
- Sickness absence and rehabilitation

**DAY 4 – Characterization of Risks and Health Risk Reduction**

- Occupational exposure limits - Types, philosophy and compliance
- Outcome of risk assessment and decision-making
- Methods for controlling exposure –types, selection, effectiveness
- Engineering controls, personal protective equipment and administrative controls
- Problems with control measures

**DAY 5 - Risk Management & Case Studies**

- Conducting risk assessments in practice
- Risk communication
- Risk management models
- Writing reports and reporting accidents and diseases
- Case studies and problem solving

**ASSESSMENT OF RISKS TO HEALTH FROM CHEMICAL SUBSTANCES**

UETMT- HSE- OH 116

Program Duration: 5 days

Level: Intermediate

**PROGRAM OBJECTIVES:**

- Focus on four key elements; how to measure exposure levels, how to select control measures, how to assess the performance of control used and how to assess effect on health. Examples of controls measures for chemical substances include ventilation systems, personal protective equipment and administrative controls
- Delegates will learn techniques for measuring exposure and how to assess whether the exposure data is reliable for making decisions on health risks
- The delegates will be able to advise on the development of industry wide chemical risk assessment programs and the data requirements
- The delegates will also be able to review and develop policies on control methods within industry and systems for monitoring their performance
- The delegates will also learn how information on exposure and the performance of control measures should be used when assessing health risks

**TARGET COMPETENCIES**

- Monitoring Exposure
- Exposure Data
- Assessment of Engineering Controls
- Personal Protective Equipment (PPE)

**PROGRAM CONTENT**

**Monitoring Exposure - Theory and Practice**

- Terminology
- Legal requirements for monitoring exposure
- Principles of air monitoring and biological monitoring
- How to plan for monitoring and designing exposure surveys
- Instrumentation and techniques for measuring exposure level

**Interpretation and use of exposure data**

- Basic calculations – exercise
- Making sense of exposure data
- Air exposure standards
- Writing reports and presentation of results
- Assessing risk from chemicals

**Assessment of engineering controls**

- Need for prevention and control of hazards
- General control hierarchy and good industrial hygiene practice
- Legal requirements
- Ventilation systems types & design features
- Maintenance and examination

**Personal Protective Equipment (PPE)**

- Legal requirements for use
- Types (respiratory protection, gloves, hearing protectors)
- Selection and applications
- Assessment,
- Storage and maintenance
- 

**Health Surveillance & Case Studies**

- Health surveillance techniques and their effective use
- Management of control systems and checking performance
- Use of data in risk assessment
- Organizational requirements
- Record keeping



**GENERAL INDUSTRIAL HYGIENE**

UETMT- HSE- OH 117

Program Duration: 5 days

Level: Basic

**PROGRAM OBJECTIVES**

Delegates will learn by active participation through inspiring presentation tools and interactive techniques presented in a lively, enthusiastic and interesting style. Delegates will take part in practical case studies and open discussions, as related to their own organization's operational activities.

**TARGET COMPETENCIES**

- Industrial Hygiene and Occupational Health
- Occupational Health Management System
- Occupational Health Risks

**PROGRAM CONTENT**

**DAY 1:**

**Introduction to Industrial Hygiene and Occupational Health**

- What is Industrial Hygiene and Occupational Health?
- Identifying Health Risks to employees and Contractors
- Understanding Health Risk effects on the Human body and it's organs
- Global Strategies and Trends
- Work Organization and work-related Stress
- Case Study and Video

**DAY 2:**

**Occupational Health Management System**

- Occupational Health Management System Element
- Chemical Hazards
- Physical Hazards
- Biological Hazards
- OH Risk Management
- First Aid and Medical Management
- Medical Support
- Food Safety
- Public Health and Welfare
- Heat Management & Heat Related Illnesses

**DAY 3:**

**Occupational Health Risks**

- Occupational Health Elements and their Health Risk Effects
- Occupational Diseases and Infections
- Occupational Toxicology (Chemicals, Gases, Vapours and Fibres)
- Musculoskeletal Disorders and Prevention Solutions

**DAY 4:**

**Principles of Industrial Hygiene**

- Principles of Health Risk Assessment
- Design of exposure measurement Surveys and Analysis
- Retrospective exposure Assessment
- Biological Monitoring

**DAY 5:**

**Occupational Health Management**

- Occupational Health Monitoring and Surveillance Programs
- Noise, Vibration, Thermal and Lighting Management
- Personal Protective Equipment and its Limitations in Protecting Health
- Understanding Global, Regional and Local Environmental Issues
- Implement an Occupational Health Management Program

**OCCUPATIONAL HEALTH & HYGIENIC**

UETMT- HSE- OH 118

Program Duration: 5 days

Level: Basic

**PROGRAM OBJECTIVES**

The promotion and maintenance of the physical, mental and social wellbeing of the workforce, this is achieved by:

- The prevention of departures from health due to working conditions.
- The protection from risks resulting from factors adverse to health.
- This can be summed up by the expression "The adaptation of work to man, and of each man to his job"

**TARGET AUDIENCE**

- Cleaners

**TARGET COMPETENCIES**

- Occupational Health Management System
- Health Risk Assessment

**PROGRAM CONTENT**

**DAY 1**

- Introduction to the basic principles of occupational health and hygiene
- The effects of work on health
- Review of roles and functions of occupational health and safety professionals
- Occupational Safety and Hygiene management
- The fundamental principles of establishing a safe system of work

**Day 2**

- Introduction to health risk assessment
- Health screening and surveillance -Basic principles
- Identification of occupational hygiene control strategies

**Day 3**

- Health Screening
- Contamination
- Food Safety
- Hazards Review( Physical / Chemical / Biological)
- Examples of Personal Hygiene( Skin/Hair/ Body Odor / Teeth)

**Day 4**

- Heat Stress
- Personal Protective Equipment
- Control of Hazardous Substances
- Common Occupational Diseases / Conditions

**Day 5**

- Identify the care needed for different body parts (hair, skin, teeth, hands, nails, feet, etc)
- Identify the disease conditions occurring due to the lack of Personal Hygiene.
- Identify applications of personal hygiene for Cleaners.
- Identify ways to tell your coworkers that they have a hygiene problem.
- Hygiene Management Plan



**ADVANCED INDUSTRIAL HYGIENE & OCCUPATIONAL HEALTH**

UETMT- HSE- OH 119

Program Duration: 5 days

Level: Advanced

**PROGRAM OBJECTIVES**

*By the end of the course, attendees will:*

- Understand and apply concepts of Industrial Hygiene
- Know Industrial Hygiene regulatory trends and guidelines
- Be able to perform hazard identification tasks
- Be able to perform qualitative IH risk assessments
- Understand exposure assessment strategies & methods
- Understand hierarchy of controls & control methods
- Be familiar with some of the most critical IH issues of today
- Be able to make informed decision to protect employee health

**TARGET AUDIENCE**

- Company EHS Managers and Engineers
- H&S Professionals
- Human Resource Managers
- Occupational Health Nurses and Physicians
- Risk and Insurance Managers, Legal professionals
- Any other individuals with responsibility for employee well-being, labor relations or employee productivity

**TARGET COMPETENCIES**

- Industrial Hygiene
- Occupational Health and Hygiene
- Chemical Agents

**PROGRAM CONTENT**

**Day 1**

**Introduction to Occupational Health and Hygiene**

- Introduction to the basic principles of occupational health and hygiene
- The effects of work on health
- Review of roles and functions of occupational health and safety professionals
- Occupational Safety and Health management
- The fundamental principles of establishing a safe system of work
- Introduction to health risk assessment
- Health screening and surveillance -Basic principles
- Biological monitoring

**Day 2**

**Chemical Agents**

- Chemical Hazards at work
- Introduction to toxicology
- Control of substances hazardous to health
- Assessment and monitoring of hazardous substances
- Occupational exposure limits

**Day 3**

**Physical Agents**

- Noise - Its measurement, evaluation and control
- Vibration - its measurement, evaluation and control
- Heat Stress and Strain

**Day 4**

**Radiation, Biological Agents and Ergonomics**

**Day 5**

- Promoting occupational health programs
- Development of action plans
- Extended exercise - case study

**BASIC PERSONNEL HYGIENE**

UETMT- HSE- OH 120

Program Duration: 3 days

Level: Basic

**PROGRAM OBJECTIVES**

The promotion and maintenance of the physical, mental and social wellbeing of the workforce, this is achieved by:  
The prevention of departures from health due to working conditions.  
The protection from risks resulting from factors adverse to health.  
This can be summed up by the expression "The adaptation of work to man, and of each man to his job"

**TARGET AUDIENCE**

- This course will be of interest to Occupational Health Professionals including Occupational Health Doctors and Nurses, including Industrial First Aiders.
- It would also be of interest to any other medical /Para-medical personnel working in an industrial environment i.e. Oil / Gas industry medics.
- Other Professionals operating in Occupational Risk Management would benefit from this course such as Health & Safety Managers / Operatives, Loss Control Officers, Safety Representatives, Personnel and General Management.

**TARGET COMPETENCIES**

- Occupational Health and Hygiene
- Occupational Safety and Health Management
- Health Risk Assessment

**PROGRAM CONTENT**

**DAY 1**

**Introduction to Occupational Health and Hygiene**

- Introduction to the basic principles of occupational health and hygiene
- The effects of work on health
- Review of roles and functions of occupational health and safety professionals
- Occupational Safety and Health management
- The fundamental principles of establishing a safe system of work
- Introduction to health risk assessment
- Health screening and surveillance -Basic principles
- Identification of occupational hygiene control strategies

**Day 2**

- Health Screening
- Contamination
- Food Safety
- Hazards Review( Physical / Chemical / Biological)
- Examples of Personal Hygiene( Skin/Hair/ Body Odor / Teeth)
- Heat Stress
- Personal Protective Equipment
- Control of Hazardous Substances
- Common Occupational Diseases / Conditions

**Day 3**

- Identify the care needed for different body parts (hair, skin, teeth, hands, nails, feet, etc)
- Identify the disease conditions occurring due to the lack of personal hygiene.
- Identify applications of personal hygiene for food handlers.
- Identify ways to tell your coworkers that they have a hygiene problem





**MEDICAL CONTAMINATION FOR HEALTH STAFF**

UETMT- HSE- OH 121

Program Duration: 5 days

Level: Advanced

**PROGRAM OBJECTIVES**

- To advise attendees about system which should be in place to ensure as far as reasonably practicable that all reusable medical devices are properly decontaminated prior to use and that the risks associated with decontamination facilities and processes are adequately managed.
- Also to provide the attendees with the following:
  - Hazards associated with medical & hospitals activities
  - Techniques of disinfection and sterilisation
  - Equipment decontamination directive for people/staff who use multi – user equipment
  - Hospital hygiene plans is every days business
  - Hazardous waste management
  - Pathogens linked to transmissions
  - Patient contact precaution
  - Patient contact discontinuation precaution
  - Hospital Isolation system and procedures
  - Hospital keyboards helps prevent cross contamination (Medigenic infection control keyboards)
  - Prevent of needle stick / sharps injuries
  - Use of PPE
  - Hospital outbreak diseases
  - Droplet transmission and precaution
  - Prevent cross-contamination in endoscope process
  - Cohorting procedures and infection controls
  - Prevent cross-contamination in hospital with Ozone
  - Braking the chain of infection and preventing cross-contamination

**TARGET AUDIENCE**

Hospital Staff

**TARGET COMPETENCIES**

- Decontamination and infection control
- Electrical Safety in Medical Devices
- Disinfection and Sterilisation

**PROGRAM CONTENT**

- Introduction
- Definitions
- Current decontamination methods
- Decontamination and infection control
- Electrical Safety in Medical Devices
- Techniques of disinfection and sterilisation
- Sterilization and decontamination of medical devices
- Range of activity of disinfectants
- Disinfection
- Chemical disinfectant solutions
- Use of Chemical and biological indicators
- Sterilisation
- Decontamination Procedures
- Re-Usable Medical Device Life Cycle

**MEDICAL WASTE MANAGEMENT SYSTEM**

UETMT- HSE- OH 122

Program Duration: 3 days

Level: Intermediate

**PROGRAM OBJECTIVES**

Attendees will:

- Know the general categories of regulated medical waste;
- Be aware of regulations in their state that address medical waste management;
- See how the weaknesses in current waste management strategies; and
- Understand the importance of on-site treatment in a bioterrorism era
- Specific Hazardous waste streams assessment and planning process
- Hospital waste generated from any hospital or healthcare including (cafeteria – patient food – office and construction waste)
- Medical waste generated as a result of patient diagnosis – treatment immunization of human beings
- Potentially infection waste (subset of medical waste – portion of medical waste that has the potential to transmit an infectious disease)
- Health and safety during waste handling through training – education and disposal
- 3 rd party contractor for medical waste treatment and disposal
- Required plans and polices or directives
- How to develop infra-structure for the safe disposal and recycling for universal hazardous materials (chemical – mercury - batteries)

**TARGET AUDIENCE**

Hospital staff (medical staff for patient and non-patient s – nurse staff – EHS & security staff – laboratory staff – ministry of health – clinical centers)

**TARGET COMPETENCIES**

- Medical Waste
- Waste Management Regulation
- Waste Management Program Optimization
- Medical Waste Treatment & Disposal

**PROGRAM CONTENT**

- Definitions, Classification of Medical Waste
- Generation rates of Medical Waste
- Guidance on Regulated Medical Waste
- Epidemiology of Medical Waste
- General Categories of Medical Waste
- Basic Components of Medical Waste Management
- Waste Management Regulation
- Waste Management Program Improvements & Optimization
- Medical Waste Treatment & Disposal Alternatives
- Off-site disposal vs. On-site treatment
- Waste management as part of a comprehensive Environmental Compliance Program
- Microbiological Aspects
- Hospital environmental compliance challenges



**BASIC OF ENVIRONMENT**

UETMT- HSE- ENV 123

Program Duration: 5 days

Level: Basic

**PROGRAM OBJECTIVES**

*By the end of this program delegates will be able to:*

- Plan and carry out an Environmental Impact Assessment (EIA) on processes and projects
- Understand the Key Elements of an Environmental Management System (EMS)
- Identify all the waste stream types and, the opportunities for recycling of waste

**TARGET AUDIENCE**

- All line professionals, supervisors and those who are involved with environmental matters
- Production, maintenance and process engineers and all environmental personnel
- All personnel involved in purchasing and managing hazardous substances

**TARGET COMPETENCIES**

- Environmental Impact Assessment (EIA)
- Environmental Management System (EMS)

**PROGRAM CONTENT**

**Day 1: Introduction and Overview of EIA**

- Purpose and aims of EIA
- Nature and scope of environmental issues and impacts
- Principles of EIA administration and practice
- Key elements of the EIA process
- Building and improving EIA practice
- Video: Bhopal Gas Disaster

**Day 2: Environmental Aspects and Impacts**

- Identifying Environmental Aspects
- Determining Significant Environmental Impacts
- Mitigation and Impact Management Techniques
- Analyzing the EIA Findings
- Exercise: SASOL Plant Modification – EIA Review

**Day 3: EIA Process**

- Screening the Need for an EIA
- Setting Objectives and Targets
- Preparing for an EIA Assessment
- Carrying out an EIA
  - o Screening and Scoping the EIA
  - o Impact Analysis and Mitigation Management
  - o EIA Reporting & Review
  - o Implementation and Follow-up
- Video: Environmental Disaster

**Day 4: EIA Review and Reporting**

- Review and Verification of EIA Report Findings
- Preparing an EIA Report
- Decision Making Process of Findings and Recommendations
- Risk Control Measures Implementation and Follow-Up
- Exercise: Writing an EIA Report

**Day 5: Environmental Management Systems**

- Environmental Management Systems (EMS) Elements
- Summary of Program Key Points
- Award of Program Attendance Certificates

**WATER QUALITY AND TREATMENT MANAGEMENT**

UETMT- HSE- ENV 124

Program Duration: 5 days

Level: Advanced

**PROGRAM OBJECTIVES**

The participants will have the basic understanding of water quality management and water treatment facilities.

**TARGET AUDIENCE**

Chemical Engineers, Chemists and Senior Laboratory Technicians

**TARGET COMPETENCIES**

- Plant Automation
- Purification Processes
- Waste Water Treatment

**PROGRAM CONTENTS**

**Day 1**

**Principles Aims of Plant Automation**

- Water physical and chemical
- Water quality
- Classification of natural water
- Chemical and Physical Analysis**
  - PH
  - ALKALINITY
  - Biological oxygen demand (B.O.D)
  - Chemical oxygen demand (C.O.D)
  - Oxygen content
  - Sodium sulphite content
  - Sodium phosphate content
  - Carbon dioxide content (steam)

**Day 2:**

**Purification Processes**

- Removal of insoluble particles
- Distillation vapour compression distillation
- Ion exchange

**Biological and Chemical Water Quality**

- Physical parameter
- Chemical parameter
- Bacteriological parameter
- Water quality definitions
- Feed water quality analysis
- Industrial of Water Treatment
- Coagulation and Flocculation

**Day 3**

**Uses of water in petroleum industry**

**Waste Water Treatment**

**Day 4:**

**Boiler feed water preparation and chemicals**

**Day 5:**

**Corrosion caused by Effluent Water in Refinery**

- General corrosion
- Oxygen pitting
- Galvanic corrosion
- Concentration - cell corrosion
- Stress - corrosion
- Erosion - corrosion
- Condensate grooving - Control of corrosion



**WASTE MANAGEMENT**

UETMT- HSE- ENV 125

Program Duration: 5 days

Level: Intermediate

**PROGRAM DESCRIPTION**

Organisation shall establish system is to ensure that wastes generated its activities are managed in compliance with applicable regulations and guidelines and to minimize the risk of harm to the environment by proper waste handling practices.

**Wastes covered by this System include:**

Non-Hazardous and Hazardous wastes generated from all activities which are disposed offsite, by reduction, reuse, recycling, recovery or other waste treatment processes.

Non-Hazardous and Hazardous wastes generated from its activities which are temporarily stored onsite.

**PROGRAM OBJECTIVES**

*On completing this Program the participant will*

- Understand the necessity for undertaking a Waste Types, Characterization, minimization program
- Be competent in planning and implementing an internal waste minimization program

**TARGET AUDIENCE**

- Personnel with limited previous knowledge or experience of waste issues,
- Inspectors in Governorates
- Who Wish to gain an understanding of the elements of waste minimization, Management, 3 R, Recycling Importance
- Need to undertake a waste minimization program

**TARGET COMPETENCIES**

- Environmental Management System
- ISO 14001( EMS)
- Waste Management System

**PROGRAM CONTENT**

- Environmental Management System
- ISO 14001( EMS)
- Waste Management System
- Waste Generation
- Waste Types
- Waste Segregation
- Waste Storage and Labeling
- Waste Transportation
- Waste Disposal

**ADDITIONAL INFO**

Video Films / Cade Studies

**ENVIRONMENTAL MANAGEMENT AND WASTE TREATMENT FOR UPSTREAM**

UETMT- HSE- ENV 126

Program Duration: 5 days

Level: Intermediate

**PROGRAM OBJECTIVES**

**To assist delegates:**

- in addressing the implications of International Environmental Protocols
- in reviewing their waste disposal practice in the context of growing environmental awareness
- in obtaining performance improvement through the implementation of an environmental management system
- by introducing new developments in waste management practice
- in considering contaminated land and its impact on waste management activity
- by reviewing the application of the Waste Hierarchy

**TARGET AUDIENCE**

- Quality, Health & Safety and Environmental Managers;
- Staff responsible for setting up Waste Management Systems;
- Staff wishing to reduce risk and liability for their organization through sound Waste
- Management practices, principles and procedures;
- All managers and staff involved in Waste Management and who need an appreciation of the techniques and principles involved in Waste Management, waste minimization, material re-use, recovery and recycling

**TARGET COMPETENCIES**

- Waste Management
- Environmental Auditing and Waste Disposal

**PROGRAM CONTENT**

**Introduction to Waste Management**

- Global environmental issues
- International legislation
- the Concept of 'Duty of Care'
- Definition of Special & Other Wastes
- Waste Management in industry

**Environmental Auditing and waste disposal**

- Introduction to ISO 14001, a specification for an Environmental Management System
- Auditing Environmental Management Systems using ISO 19011
- Responsibilities in managing waste
- Transport of Waste by Road
- Special Waste Regulations

**Waste Collection**

- Landfill Tax - the environmental costs of waste
- Administration requirements of waste collection
- Waste segregation
- Waste collection
- Waste transfer stations and materials recycling facilities

**Operational Controls for Waste disposal**

- Containment systems for landfill sites
- Landfill gas control and utilization
- Site aftercare
- Control of incinerator emissions and residues
- Food waste disposal

**Environmental Management & Waste disposal facilities**

- Policy development
- Identification of Environmental Aspects



**EFFECTIVE WASTE MANAGEMENT**

UETMT- HSE- ENV 127

Program Duration: 5 days

Level: Advanced

**PROGRAM OBJECTIVES**

- Be aware of the principal national and international background issues relating to the environment management in the oil and gas industry.
- Have formed a considered view on the significance of waste management environmental issues for the industry.
- Be aware of the effects of the principal relevant environmental legislation and sustainable development policy affecting the industry and how to interpret changing legislation into practical responses.
- Have considered the key means by which the industry can begin to enhance performance through environmental efficiency.
- Have considered the competitive advantage that might be brought through giving attention to environmental management.

**TARGET COMPETENCIES**

- Managing Waste and energy to improve efficiency

**PROGRAM CONTENT**

**Sustainable business thinking**

- How and why do environmental and social issues impact on the industry?
- Why is it important to build waste and environmental issues into the business process?
- What are the driving forces to respond to environmental and social issues?

**Legislation and policy for action**

- What and how does legislation and global policies affect industry?
- What are the building blocks of a management system that controls waste and environmental issues?

**Tools for the assessment and interpretation of Environmental and social performance**

- What is the purpose and nature of the initial environmental review?
- How is an environmental management review conducted?
- How are significant environmental impacts of the organizations identified?
- How is an environmental audit carried out and how does it differ from a waste audit

**Managing Waste and energy to improve efficiency**

- How do I keep track of changing waste management legislation and policy?
- What is the role of energy efficiency management and renewable energy in business management?
- What is the role of improved resource and waste management in achieving competitive advantage?
- How does the oil and gas industry addresses some of these issues

**Management and Reporting Systems**

- What are the key elements of an environmental management and reporting system?
- How is management systems employed to improve business efficiency, ensure compliance and respond to environmental, social and environmental challenges, and communicate these to stakeholders?
- What are the key elements of ISO14001?
- What are the structure and controls mechanisms within management systems?

**ENVIRONMENTAL WASTE MANAGEMENT**

UETMT- HSE- ENV 128

Program Duration: 5 days

Level: Intermediate

**PROGRAM OBJECTIVES**

***To assist delegates:***

- in addressing the implications of International Environmental Protocols
- in reviewing their waste disposal practice in the context of growing environmental awareness
- in obtaining performance improvement through the implementation of an environmental management system
- by introducing new developments in waste management practice
- in considering contaminated land and its impact on waste management activity
- by reviewing the application of the Waste Hierarchy
- by encouraging dialogue with like-minded individuals on specific issues of concern in their organizations;
- by providing options for delegates in developing their organization's Waste Management practice

**TARGET AUDIENCE**

- Quality, Health & Safety and Environmental Managers;
- Staff responsible for setting up Waste Management Systems;
- Staff wishing to reduce risk and liability for their organization through sound Waste
- Management practices, principles and procedures;
- All managers and staff involved in Waste Management and who need an appreciation of the techniques and principles involved in Waste Management, waste minimization, material re-use, recovery and recycling

**TARGET COMPETENCIES**

- Environmental Auditing and Waste Disposal
- Waste Collection

**PROGRAM CONTENT**

**DAY 1 – Introduction to Waste Management**

- Global environmental issues
- International legislation
- Waste Management in industry

**DAY 2 – Environmental Auditing and Waste Disposal**

- Introduction to ISO 14001, a specification for an Environmental Management System
- Auditing Environmental Management Systems using ISO 19011
- Responsibilities in managing waste
- Transport of Waste by Road

**DAY 3 – Waste Collection**

- Landfill Tax - the environmental costs of waste
- Administration requirements of waste collection
- Waste segregation

**DAY 4 – Operational Controls for Waste Disposal**

- Containment systems for landfill sites
- Landfill gas control and utilization
- Site aftercare

**DAY 5 – Environmental Management & Waste Disposal Facilities**

- Policy development
- Identification of Environmental Aspects
- Operational Control
- Setting up the environmental audit



**INTERNATIONAL TECHNICAL CERTIFICATE IN OIL AND GAS OPERATIONAL SAFETY - IOG**

UETMT- HSE- CER 129

Program Duration: 5 days

Level: Certified

**TARGET COMPETENCIES**

- HSE Management System
- Hydrocarbon Process Safety
- Fire Protection and Emergency Response
- Logistics and Transport Operations

**1. Introduction**

The NEBOSH International Technical Certificate in Oil and Gas Operational Safety is suitable for supervisors, managers, safety representatives and newly qualified health and safety advisors within the oil and gas industries, both within and outside the UK and is designed to provide a sound breadth of underpinning knowledge that enables them to manage oil and gas operational risks effectively. This qualification builds on the understanding already gained by studying the NEBOSH National or International General Certificate.

**2. Benefits for Employers**

The importance of effective health and safety training in the oil and gas industry is highlighted by extensively reported examples of major process safety incidents including the 2010 Deepwater Horizon oil rig explosion in the Gulf of Mexico, the Burchfield oil storage depot explosion (2005), the 1988 Piper Alpha oil platform explosion (both occurring in the UK) and the Gas Plant explosion at Longford, Australia in 1998.

The International Association of Oil and Gas Producers (OGP) reported 99 fatalities in 2009 and over 1,500 reported injuries resulting in at least one day off work or an average of 28 such injuries every week of the year. Approximately 260 person-years were lost by reporting companies and their contractors as a result of injuries.

The NEBOSH International Technical Certificate in Oil and Gas Operational Safety is designed specifically for industry specialists with day-to-day safety responsibilities including managers, supervisors and health and safety advisers. It focuses on operational process safety and is intended to enable candidates to apply and implement effective process safety management across all areas of their operation and throughout the world.

**CONTENT:**

**Unit IOG1: Management of international oil and gas health and safety**

- Element 1: Health, safety and environmental management in context
- Element 2: Hydrocarbon process safety 1
- Element 3: Hydrocarbon process safety 2
- Element 4: Fire protection and emergency response
- Element 5: Logistics and transport operations

**NEBOSH CERTIFICATE IN ENVIRONMENTAL MANAGEMENT - EC**

UETMT- HSE- CER 130

Program Duration: 5 days

Level: Certified

**TARGET COMPETENCIES**

- HSE Management System
- Environmental Impact Assessments
- Air Emissions Control
- Water Sources Contamination Control

**INTRODUCTION**

The NEBOSH Certificate in Environmental Management is designed for managers, supervisors and employee who have responsibility for managing environmental issues as part of their work focusing on assessing Environmental Management System. The Qualification is designed to benefit companies in all industries who are seeking to implement effective Environmental Management Systems and to provide line managers with a sound understanding of the principals of managing Environmental risks.

**BENEFIT FOR EMPLOYERS**

The importance of the effect of business activities on the environment has long been acknowledged. Until relatively recently, business activities were generally thought to be in conflict with environmental constraints, but many companies, irrespective of size or type of business, now recognize that a more efficient use of resources can bring sustainable cost saving (e.g., raw material, waste disposal, energy and transport).

Planning ahead to take account of new environmental standards and legislation can minimize the costs of modeling or replacing equipment and updating work practices.

The business impact of environmental accidents is also compelling: in addition to the direct cost of sick pay and absence, employers can find themselves dealing with criminal prosecution, claims for compensation, adverse publicity and harm to both business reputation and profitability.

**PROFESSIONAL MEMBERSHIP**

The NEBOSH Certificate in Environmental Management is accepted by the Chartered Institute of Water and Environmental Management (CIWEM) as meeting the requirements of Technician Membership (Tech CIWEM) OF the Chartered Institute of Water and Environmental Management (CIWEM).

**Content:**

**Unit EC1: Management and Control of Environmental Hazards**

- Element 1: Foundations in Environmental Management
- Element 2: Environmental Management Systems
- Element 3: Environmental Impact Assessments
- Element 4: Control of emissions to air
- Element 5: Control of contamination of water sources
- Element 6: Control of Wastes and Land use
- Element 7: Sources and use of energy and energy efficiency
- Element 8: Control of environmental noise
- Element 9: Planning for and dealing with environmental emergencies

**Unit EC 2: Environmental Practical Application**



**NEBOSH INTERNATIONAL CERTIFICATE IN CONSTRUCTION HEALTH AND SAFETY - ICC**

UETMT- HSE- CER 131

Program Duration: 10 days

Level: Certified

**TARGET COMPETENCIES**

- HSE Management System
- Hazards and Risk Control Management
- Risk Management

**1. Introduction**

The International Certificate in Construction Health and Safety is suitable for supervisor's and managers within the construction industry outside of the UK and is designed to provide a sound breadth of underpinning knowledge that enables them to manage construction risks effectively.

The NEBOSH International Construction Certificate is also suitable for those embarking on a career in health and safety, providing a valuable foundation for further professional study (such as the NEBOSH International Diploma).

**2. Benefits for Employers**

The vast majority of construction injuries, accidents and ill-health are avoidable by good health and safety management. By saving money, improving productivity and raising workforce morale, effective health and safety management should be recognized as an essential element of a successful management strategy.

Many larger organizations choose the NEBOSH qualifications as a key part of their supervisors' or management development program. By ensuring that line managers have a sound understanding of the principles of risk management they build an effective safety culture in the organization.

**3. Professional Membership**

Holders of NEBOSH National Certificate in Construction Health and Safety are entitled to Associate Membership (AIOOSH) of the Institution of Occupational Safety and Health (IOSH).

The qualification also meets the academic requirements for Technical membership (TechIOSH) of the Institute of Occupational Safety and Health (IOSH – [www.iosh.co.uk](http://www.iosh.co.uk)).

The NEBOSH National Certificate in Construction Health and Safety meets the headline entrance criteria requirements for Construction Safety Associate membership (AaPS) of the Association for Project Safety (APS - [www.aps.org.uk](http://www.aps.org.uk)).

Holders of the NEBOSH National or International Diploma in Occupational Health and Safety *and* the NEBOSH National or International Certificate in Construction Health and Safety meet the headline entrance criteria requirements for Registered Construction Safety Practitioner (RMaPS) membership of the Association for Project Safety (APS).

Holders of this qualification are also entitled to associate membership (AIIRSM) of the International Institute of Risk and Safety Management (IIRSM – [www.iirsm.org](http://www.iirsm.org)).

**CONTENT:**

**Unit IGC1: Management of international health and safety**

- Element 1: Foundations in health and safety
- Element 2: Health and safety management systems - Plan
- Element 3: Health and safety management systems - Do
- Element 4: Health and safety management systems - Check
- Element 5: Health and safety management systems - Act

**Unit ICC1: Managing and controlling hazards in International construction activities**

- Element 1: Construction management
- Element 2: Construction site – hazards and risk control
- Element 3: Vehicle and plant movement – hazards and risk control
- Element 4: Musculoskeletal – hazards and control
- Element 5: Work equipment – hazards and risk control
- Element 6: Electrical safety
- Element 7: Fire safety
- Element 8: Chemical and biological health – hazards and risk control
- Element 9: Physical and psychological health – hazards and risk control
- Element 10: Working at height – hazards and risk control
- Element 11: Excavation work and confined spaces – hazards and risk control
- Element 12: Demolition and deconstruction – hazards and risk control

**Unit ICC2: International construction Health and Safety practical application**



**IOSH MANAGING SAFELY**

UETMT- HSE- CER 132

Program Duration: 5 days

Level: Certified

**PROGRAM OBJECTIVES**

*On successful completion of the course delegates should be able to:*

- Explain “working safely”
- Explain the component parts of a recognised safety management system such as HSG65 or BS8800 and appreciate the role of risk assessment within the system
- Compare safety management systems with other management systems and describe how to integrate systems successfully if appropriate;
- Identify the data and techniques required to produce an adequate record of an incident and demonstrate the procedure for an accident investigation, recognising the human factors involved.
- Describe statutory requirements for reporting and procedures for checking for a non-reporting;
- Describe methods of basic trend and epidemiological analysis for reactive monitoring techniques;
- Define hazards and risks and describe the legal requirements for risk assessment;
- Demonstrate a practical understanding of a quantitative risk technique and the data required for records;
- Identify workplace precaution hierarchies and the criteria for types of workplace precautions and controls;
- Prepare and use active monitoring checklists and implement schedules for active monitoring, recording results and analysing records;
- Explain the purposes and techniques of a health and safety audit

**TARGET AUDIENCE**

**Managing Safety’s** target audience is people in an organisation who have to manage risk and resources. The course’s aim is to provide these people with the competencies they require.

**TARGET COMPETENCIES**

- HSE Management System
- Risk Assessment and Risk Control
- HSE Review and Audit
- Health and Safety Legislation

**PROGRAM CONTENT**

**Managing Safety** comprises seven core modules and one organisation-specific one requiring a total direct input period of at least 24 hours plus assessment time. The delivery timetable is flexible; the course can be in a one week block, on a one day a week basis or over two weeks. Other options are available:

- MODULE 1** Safety management
- MODULE 2** Reactive monitoring
- MODULE 3** Risk assessment and risk control
- MODULE 4** Active monitoring
- MODULE 5** Review and audit
- MODULE 6** Health and safety legislation
- MODULE 7** Hazards – general
- MODULE 8** Hazards – organisation-specific

**MANAGING SAFELY CERTIFICATION**

In order for an IOSH **Managing Safely** certificate to be issued, the delegate should successfully complete the Institutions approved assessment procedure. Course providers may elect not to use the Institutions training materials. If this is the case, trainers own materials should be submitted for approval before courses are delivered.

**ISO 31000**

UETMT- HSE- CER 133

Program Duration: 5 days

Level: Certified

**PROGRAM OBJECTIVES**

- Know the key requirements of the new ISO 31000:2009
- Understand the new ISO 31000:2009 risk management framework
- Know how to conduct gap analysis of current risk management arrangements
- Know how to identify, analyze and evaluate risks
- Understand the risk treatment control process
- Understand how to develop an integrated risk management program

**TARGET AUDIENCE**

- Individuals who have responsibilities for assessing and controlling an organization's risks from their business operations
- Production, process, maintenance, health, safety and environment personnel
- All personnel involved in planning and/or implementing the organization's risk management program and business risk objectives

**TARGET COMPETENCIES**

- ISO 31000:2009 Risk Management Framework
- Risk Management Policy
- Risk Management Program and Organizational Processes Integration

**PROGRAM CONTENT**

**DAY 1 - ISO 31000: 2009 Overview**

- Scope and application of ISO 31000:2009
- Understanding key ‘Risk Terms’ and ‘Definitions’ in the new standard
- Key changes introduced by the New ISO 31000:2009 standard
- New ISO 31001:2009 Framework of managing risk

**DAY 2 - ISO 31000: 2009 Requirements**

- Mandate and commitment for risk management
- Design framework for managing risk in accordance with ISO 31000:2009
- Understanding the organization and its risk context
- Risk Management Policy
- Integration of risk management program into organizational processes

**DAY 3 - ISO 31000: 2009 Implementing Risk Management**

- Establishing management and individual accountability and resources
- Internal and external risk communications and reporting mechanisms
- Implementing the risk management framework
- Implementing the risk management process
- Monitoring and review of risk management framework

**DAY 4 - ISO 31000: 2009 Process for Managing Risk**

- Establishing the risk context and developing the risk acceptance criteria
- Risk identification - list of causes and sources of risk
- Risk analysis - factors affecting probability and consequences
- Risk Evaluation - level of risk Vs risk acceptance criteria
- Risk treatment - selecting and implementing risk reduction measures

**DAY 5 - ISO 31000:2009 Monitoring and Review**

- Analyzing and learning lessons from events, changes and trends
- Ensuring risk treatment controls are effective
- Identifying emerging risks



**NEBOSH INTERNATIONAL GENERAL CERTIFICATE IN OCCUPATIONAL HEALTH AND SAFETY - IGC**

UETMT- HSE- CER 134

Program Duration: 10 days

**Level:** Certified

**TARGET COMPETENCIES**

- HSE Management System
- Workplace Hazards and Risk Control
- Transport Hazards and Risk Control

**1. Introduction**

The International General Certificate in Occupational Health and Safety is suitable for managers, supervisors and staff based outside the UK from all types of organizations making day-to-day decisions at work that need a broad understanding of health and safety issues and be able to manage risks effectively. Over 45,000 people having achieved this qualification since it was introduced in 2004.

The NEBOSH International General Certificate is also suitable for those embarking on career in health and safety, providing a valuable foundation for further professional study (such as the NEBOSH International Diploma in Occupational Health and Safety).

**BENEFITS FOR EMPLOYERS**

The vast majority of workplace injuries, accidents and ill-health are avoidable by good health and safety management. By saving money, improving productivity and raising workforce morale, effective health and safety management should be recognized as an essential element of a successful management strategy.

Many larger organizations choose the NEBOSH qualifications as a key part of their supervisors' or management development program. By ensuring that line managers have a sound understanding of the principles of risk management they build an effective safety culture in the organization. Smaller organizations, operating in lower risk environments, often choose the NEBOSH International General Certificate in Occupational Health and Safety as the appropriate qualification for the manager taking the lead on health and safety issues.

**3. Professional Membership**

Holders of NEBOSH International General Certificate in Occupational Health and Safety are entitled to Associate Membership (AIOH) of the Institution of Occupational Safety and Health (IOSH).

The qualification also meets the academic requirements for Technical membership (Tech IOSH) of the Institute of Occupational Safety and Health (IOSH –www.iosh.co.uk) and Associate membership (AIIRSM) of the International Institute of Risk and Safety Management (IIRSM – www.iirsm.org).

**CONTENT:**

**Unit IGC1: Management of international health and safety**

- Element 1: Foundations in health and safety
- Element 2: Health and safety management systems - Plan
- Element 3: Health and safety management systems - Do
- Element 4: Health and safety management systems - Check
- Element 5: Health and safety management systems - Act

**Unit IGC2: Controlling workplace hazards**

- Element 1: Workplace hazards and risk control
- Element 2: Transport hazards and risk control
- Element 3: Musculoskeletal hazards and risk control
- Element 4: Work equipment hazards and risk control
- Element 5: Electrical safety
- Element 6: Fire safety
- Element 7: Chemical and biological health hazards and risk control
- Element 8: Physical and psychological health hazards and risk control

**Unit IGC3: Health and safety practical application**





**NEBOSH INTERNATIONAL DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY - IDIP**

UETMT- HSE- CER 135

Program Duration: 6 Weeks (2 weeks for each element)

**Level:** Certified

**TARGET COMPETENCIES**

- HSE Management System
- Managing fire safety
- Fires and Explosions Causes and Prevention
- Fire Safety Risk Assessment

**PROGRAM INTRODUCTION**

The NEBOSH International Diploma is a qualification for aspiring health and safety professionals, building directly upon the foundation of knowledge provided by the NEBOSH International General Certificate in Occupational Health and Safety. The Diploma is designed to provide students with the expertise required to undertake a career as a health and safety practitioner and also provides a sound basis for progression to postgraduate study.

The International Diploma is modelled on the NEBOSH National Diploma in Occupational Health and Safety. The key difference between the two qualifications is in the applicability of legal requirements. Rather than be guided by a specifically UK framework, the International Diploma takes a risk management approach based on best practice and international standards, such as International Labour Organization (ILO) codes of practice. Local laws and cultural factors form part of the study program where relevant and appropriate.

**BENEFITS FOR EMPLOYERS**

Despite the increasing global recognition of the importance of health and safety at work, accidents and work-related ill-health continue to affect all types of workplaces and occupations. The ILO estimates that 6,300 people die daily as a result of occupational accidents or work-related diseases - more than 2.3 million deaths worldwide per year. At least 10% of these deaths are due to the 337 million accidents at work that occur annually. There are an estimated 500 –2000 non-fatal injuries for every fatal injury (including 160 million cases of work-related disease), many of which result in lost earnings, lost jobs and permanent disability and poverty.

The vast majority of workplace injuries, accidents and ill-health are avoidable by good health and safety management; it makes good business sense. Qualified health and safety professionals are an asset to their organization; they can help to reduce costs by preventing accidents and ill health of employees, without incurring unnecessary expense by over-reacting to trivial risks. This in turn can lead to improved productivity and raising workforce morale. Effective health and safety management should, therefore, be recognized as an essential element of a successful management strategy.

Courses leading to the NEBOSH International Diploma may be taken in a variety of formats and at a pace to fit around the needs of the business. Its unitized structure recognizes success as the student progresses. Its practical approach promotes the application of the knowledge acquired on the course to problem solving in the student's own workplace.

**PROFESSIONAL MEMBERSHIP**

The qualification meets the academic requirements for application for Graduate Membership (Grad IOSH) of the Institution of Occupational Safety and Health (IOSH – www.iosh.co.uk). This is the first step to becoming a Chartered Health and Safety Practitioner as a Chartered Member of IOSH (CMIOSH).

Holders of the International Diploma are able to waive the Board of Certified Safety Professionals' Associate Safety Professional (ASP) examination so that, if they meet all other requirements, they may sit directly for the Certified Safety Professional (CSP) examination.

Holders of the NEBOSH International Diploma in Occupational Health and Safety *and* either the NEBOSH National or International Certificate in Construction Health and Safety meet the headline entrance criteria requirements for Registered Construction Safety Practitioner (RMaPS) and membership of the Association for Project Safety (APS).

The National Diploma is also accepted by the International Institute of Risk and Safety Management (IIRSM) as meeting the academic requirements for full membership (MIIRSM).

**CONTENT:**

**Unit IA: Managing health and safety**

- Element IA1: Principles of health and safety management
- Element IA2: Regulating health and safety
- Element IA3: Loss causation and incident investigation
- Element IA4: Measuring and reviewing health and safety performance
- Element IA5: The assessment and evaluation of risk
- Element IA6: Risk Control
- Element IA7: Organizational factors
- Element IA8: Human factors
- Element IA9: The role of the health and safety practitioner

**Unit IB: Hazardous substances / agents**

- Element IB1: Managing occupational health
- Element IB2: Identification, assessment and evaluation of hazardous substances
- Element IB3: The control of hazardous substances
- Element IB4: The monitoring and measuring of hazardous substances
- Element IB5: Biological agents
- Element IB6: Noise and vibration
- Element IB7: Radiation
- Element IB8: Mental ill-health and dealing with violence and aggression at work
- Element IB9: Musculoskeletal risks and controls
- Element IB10: Work environment risks and controls

**Unit IC: Workplace and work Equipment Safety**

- Element IC1: Workplace welfare requirements and specific workplace issues
- Element IC2: Fire and explosion
- Element IC3: Workplace fire risk assessment
- Element IC4: The storage, handling and processing of dangerous substances
- Element IC5: Work equipment
- Element IC6: Workplace machinery
- Element IC7: Mobile, lifting, access and work at height equipment
- Element IC8: Electrical safety
- Element IC9: Construction and works of a temporary nature - hazards and controls
- Element IC10: Workplace transport and managing work-related road risk

**Unit DNI: Application of health and safety in the workplace**



**OSHA - GENERAL INDUSTRY**

UETMT- HSE- CER 136

Program Duration: 5 days

Level: Certified

**INTRODUCTION TO OSHA - GENERAL INDUSTRY**

- The objectives of this course is to familiarize you with the basics of the Occupational Safety and Health Act and the Occupational Safety and Health Administration, referred to as OSHA.
- This course is intended for employees, Supervisors, Managers and others having interest in OSHA and OSHA compliance. The principal reference for this course is 29 CFR 1910, the general industry safety and health standards.

**TARGET COMPETENCIES**

- General Safety
- Housekeeping
- Reporting and Investigating Incidents
- Personal Protective Equipment (PPE)
- Hazard Communications and Materials Handling
- Lock-out and Tag-out
- Permit To Work System

**PROGRAM CONTENT**

**General Safety**

- Mission of HSE
- HSE responsibility
- Hazard operation
- Accident and incident
- Cost accident
- Attitude

**Tools**

- Safe Use Of Tools
- General Safety Precautions For Hand Tools
- General Safety Requirements for Power Tools

**Housekeeping**

- What is housekeeping
- Benefits of good housekeeping
- Signs of poor housekeeping
- Improve housekeeping

**Communications**

- Definition
- Type
- Chain of Command
- Operator supervisor

**Reporting and Investigating Incidents**

- Purpose of accident investigation
- General procedures
- Property damage
- Near miss event
- Uncontrolled and/or unauthorized release to the environment

**Personal Protective Equipment (PPE)**

- Head Protection
- Face and Eye Protection
- Hearing Protection
- Foot Protection

- Hand Protection
- Respiratory Protection
- Fall Protection
- Specialty PPE

**Hazard Communications and Materials Handling**

- Definitions of Terms
- Right To Know Workstations
- Material Safety Data Sheets
- Hazard Warnings and Labeling

**Occupational Health**

- Know the hazards
- Entry body
- Hydrogen sulfide (H2S)
- Noise

**Lock-out and Tag-out**

- Lockout
- Causes of Lockout/Tag out Injuries
- Hazardous Energy Sources Found in the Workplace
- Types of Lockout Devices
- Lockout Procedure
- Removal of Lockout
- Temporarily Reactivating Equipment
- Special Situations

**Permit To Work System**

- Why work permit
- Work permit requirements
- Types of permits
- Procedure for work permit
- Validity of hot work permit
- Authority of work permit
- Preparation of the equipment
- Protection measures
- Gas test for work permit
- Closing and filing of used work permits
- Case study-Piper alpha

**Materials Handling**

- The backbone construction
- Back injuries
- Improper lifting
- Good lifting methods

**Fire Safety**

- Fire chemistry
- Extinguisher theory
- Extinguisher agent
- Portable fire extinguishers
- Fire protection
- Fire prevention
- Emergency Plan

## WHY CHOOSE UETMT?



- UETMT is the Number ONE choice in the provision of Competency Management Consultancy Services
- We are innovators in providing Learning Solutions to fill identified Competence Gaps
- Our team of experts bring with them a breadth and depth of experience in successful and sustainable Competency Management
- We employ the best of the best thought-leaders committed to the improvement of Competency across the Oil & Gas Industry
- UETMT is offering Complete spectrum of Training and Competency Development
- Our training is designed to create an environment and experience where you can accelerate and LIVE THE LEARNING EXPERIENCE when training others.
- Our Instructors are world-class approved trainers, with extensive experience in the Middle East.
- Our international experience working with clients in various countries has spanned from individual course delivery to complete multi-year workforce nationalization programs. We understand the needs of our multi-cultural learners especially in the oil and gas context.
- By combining expert-led courses, in-class projects customized for your asset challenges, field and lab courses that provide hands-on learning experiences, industry leading software tools, and one-on-one mentoring, UETMT training blends a targeted skills-development program that aligns your team's abilities to your strategic objectives
- UETMT works with International bodies that provide access to global standards and certification. This ensures that our products and processes match global requirements and add a level of assurance to our clients, whilst enabling them to adopt standards that provide real business benefit to them and their employees. As an example:
  - UETMT is an Approved Center of the Scottish Qualification Authority (SQA), a UK Governmental Organization, offering Customized Award Programs (SVQ Level) credit rated onto the Scottish Credit and Qualifications Framework (SCQF). 
  - UETMT is approved by the Engineering Construction Industry Training Board (ECITB), a UK organization 
  - **UETMT is ISO Certified by QSR**
    - ISO 9001: 2008- Quality Management System (QMS)
    - ISO 14001: 2004- Environmental Management System (EMS)
    - OHSAS 18001: 2007- Occupational Health & Safety Management System (OHSAS)



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