TRAINING CATALOGUE

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SUMMARY

OUR TRAINING ACTIVITIES

DRILNET is specialized in the technology transfer in the petroleum and para petroleum sector. Our expertise covers all sectors of the oil industry: oil & gas and energy Project Management, Exploration, Production, Development, Refining and Logistics, but also Safety, Maintenance and Management.

Training is the first activity of our company, that has been accredited since 2000 by the French competent bodies as a training center under the number 93 13 0999613. Thus, we are entitled to offer training services: training engineering (training needs audit, training programs creation, manual editing), conventional training presentation (in premises and on site), coaching (on-the-job training), blended learning and e-learning. In addition to this, DRILNET offers the possibility to train your future trainers.

We are recognized worldwide as an expert in this domain, we train the personnel of the biggest international petroleum companies. DRILNET develops drilling training programs and trains engineers and technicians of international companies such as ADCO (UAE), BOUMERDES UNIVRSITY (Algeria), COFOR (France), DELTAWELL (Italy), DIETSMANN (Monaco), DRILLMEC (Iraq, Italy), ENI and ENI CORPORATE UNIVERSITY (UAE, Malaysia, Kazakhstan, Iraq, Italy), FORASOL (France), GAZ DE FRANCE (France), GSP (Romania), GTSC (UAE), HALLIBURTON (Algeria), OMV-PETROM (Romania), PRIDE (France, Kazakhstan), POLITECHNICO (Italy), RST GLOBAL SOLUTIONS (Singapore, Netherlands, UAE), SCHLUMBERGER (France, UK, Algeria), SONATRACH (Algeria), TNK-BP ROSNEFT (Russia), TOTAL (France, Syria) and others.

Through our partnerships and associations we provide all existing certifications: **American Safety & Health Institute, AWS, Chartered Institute of Environmental Health, Crane Certification Association of America, Croix Rouge Internationale, Emergency First Response, IADC, IASST, IMI Awards, IOSH Managing Safety, LEEA, MCA, National Safety Council, NEBOSH, NFPA, OPITO, STCW 95, UK Spill, etc.**

DRILNET is a proud Member of the **Society of Petroleum Engineers**, the **International Well Control Forum** and also the **Romanian Association of Drilling Contractors.**

The training catalogue represents an assembly of technical guide sheets. The durations and the subjects introduced can be adapted in accordance with the context and the objectives of the client.

Depending on your needs, you can choose a course in our training catalogue, and we propose to help you to adapt it in accordance with your objectives and your means.

1. PETROLEUM COURSES

You will find hereafter a list of petroleum courses covering well construction, fluids & cement, well completion & workover, production optimization, new technologies and reservoir topics, and also IADC and IWCF certified courses.

Every training can developed for different skill levels depending on client's request. The basic level training can be presented as introductory (in 3 days instead of 5 as for basic course). Also, any training program can be developed as an advanced or specialization level training to meet the client's specific needs and requirements. The duration of such training can vary from 1 to several weeks or planned out over a period.

Every training can be completed by the practical application period on site.

In addition to the courses listed hereafter, we propose general training programs. You can obtain the related catalogue upon request.

WELL CONSTRUCTION					
Course Title	**Who should attend**	**Level**		**Duration**	**Content**
Introduction to Petroleum Industry	• Operating staff beginners • Clerical and support services staff	Basic	x	5 days	**Page 16**
		Advanced			
		Specialization*			
Introduction to Drilling Theoretical Training	• Engineers and technicians interested but not involved in drilling	Basic	x	4 days	**Page 17**
		Advanced			
		Specialization*			
Introduction to Drilling Practical Training	• Drilling staff beginners before their first job experience on the onland drilling rig	Basic	x	5 days	**Page 18**
		Advanced			
		Specialization*			
Drilling Rigs & Rig Equipment	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 20**
		Advanced	x	10 days	
		Specialization*	x	15 days	
Drilling Rig & Rig Inspection	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 22**
		Advanced			
		Specialization*			
Rig Mud Equipment & Mud System	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 23**
		Advanced			
		Specialization*			
Rig Mud Equipment, Mud System & Laboratory	• Drilling supervisors • Drilling engineers • Operations engineers	Basic		15 days	**Page 23**
		Advanced	x		
		Specialization*			
Well Construction: Drilling Materials, Equipments & Operations	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 25**
		Advanced	x	10 days	
		Specialization*			
Drilling Engineering: Geology & Reservoir	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 27**
		Advanced			
		Specialization*			

WELL CONSTRUCTION					
Course Title	**Who should attend**	**Level**		**Duration**	**Content**
Well Monitoring	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 28**
		Advanced			
		Specialization*			
Well Construction: Drilling Engineering	• Drilling superintendents, • Drilling supervisors • Drilling engineers • Completion engineers • Operations engineers	Basic	x	5 days	**Page 30**
		Advanced	x	10 days	
		Specialization*	x	20 days	
Drilling Practices & Operations	• Drilling supervisors • Drilling engineers • Operations engineers	Basic		10 days	**Page 32**
		Advanced	x		
		Specialization*			
Rig Sizing	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 33**
		Advanced			
		Specialization*			
Drill String, BHA & Design	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 34**
		Advanced			
		Specialization*			
Casing Design	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 35**
		Advanced			
		Specialization*			
Borehole Instability & Common Drilling Problems (Stuck Pipe, etc.)	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 36**
		Advanced	x	10 days	
		Specialization*	x	15 days	
Fishing Tools & Operations	• Drilling supervisors • Drilling engineers • Operations engineers	Basic		5 days	**Page 38**
		Advanced	x		
		Specialization*			
Back Off & Side Track	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 39**
		Advanced			
		Specialization*			

WELL CONSTRUCTION					
Course Title	**Who should attend**	**Level**		**Duration**	**Content**
Directional Drilling	• Drilling engineers • Production engineers • Operations engineers • Drilling supervisors • Toolpushers • Managers • Technical support personnel	Basic	x	5 days	**Page 40**
		Advanced			
		Specialization*			
Drilling Bit Technologies	• Drilling engineers • Drilling supervisors • Toolpushers • Drillers • Managers • Technical support personnel	Basic		5 days	**Page 41**
		Advanced	x		
		Specialization*			
Coring Technologies	• Drilling engineers • Drilling supervisors • Toolpushers • Drillers • Managers • Technical support personnel	Basic	x	5 days	**Page 42**
		Advanced	x	10 days	
		Specialization*			
Introductory Course to Well Control	• Roughnecks • Floormen • Roustabouts • Derrick man • Fluids engineer • Drilling engineers & technicians beginners	Basic	x	5 days	**Page 43**
		Advanced			
		Specialization*			
Well Control	• Assistant driller • Driller • Toolpusher • Superintendents & supervisors (Drilling / Fluids & Cement / Production / HSE) • Technicians & engineers	Basic		5 days	**Page 44**
		Advanced	x		
		Specialization*			
Well intervention	• Engineers and technicians who are involved in the planning and realization of well intervention operations as wireline, coiled tubing, snubbing	Basic		5 days	**Page 46**
		Advanced	x		
		Specialization*			

FLUIDS & CEMENT					
Course Title	**Who should attend**	**Level**		**Duration**	**Content**
Drilling Fluids Technologies	• Drilling engineers • Fluids & cement engineers • Drilling supervisor • Fluids & cement supervisor • Toolpusher	Basic		10 days	**Page 48**
		Advanced	x		
		Specialization*			
Drilling Fluids Technologies & Laboratory	• Drilling engineers • Fluids & cement engineers • Drilling supervisor • Fluids & cement supervisor • Toolpusher	Basic		15 days	**Page 48**
		Advanced	x		
		Specialization*			
Drilling Fluids & Solids Control	• Drilling engineers • Fluids & cement engineers • Drilling supervisor • Fluids & cement supervisor • Toolpusher	Basic	x	5 days	**Page 50**
		Advanced			
		Specialization*			
Cementing Technologies	• Drilling engineers • Fluids & cement engineers • Drilling supervisor • Fluids & cement supervisor • Toolpusher	Basic	x	5 days	**Page 52**
		Advanced	x	10 days	**Page 54**
		Specialization*			
Cementing Technologies & Laboratory	• Drilling engineers • Fluids & cement engineers • Drilling supervisor • Fluids & cement supervisor • Toolpusher	Basic		15 days	**Page 54**
		Advanced	x		
		Specialization*			
Drilling Fluids & Cement Technologies & Practices	• Senior technicians • Mud engineers • Any other personnel involved in operations	Basic		17 weeks	**Page 55**
		Advanced			
		Specialization*	x		

PRODUCTION OPTIMIZATION					
Course Title	**Who should attend**	**Level**		**Duration**	**Content**
Well Testing	• Production supervisor • Production engineer • Any other personnel involved in E&P operations as a coordinator	Basic	x	5 days	**Page 58**
		Advanced			
		Specialization*			
Artificial Lift: Gas Lift	• Reservoir engineers • Petroleum engineers	Basic	x	5 days	**Page 59**
		Advanced			
		Specialization*			
Water Injection Operations	• Oil & Gas technicians	Basic	x	1 day	**Page 60**
		Advanced			
		Specialization*			
Introduction to Hydraulic Fracturing	• Oil and gas industry executives, managers, and directors • Legal personnel • Financial institutions • Engineers in energy extraction and production • Governmental and community affairs executives, managers, and directors	Basic		2 days	**Page 61**
		Advanced	x		
		Specialization*			
HP/HT Well Drilling	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 63**
		Advanced			
		Specialization*			
Pore Pressure Determination	• Drilling supervisors • Drilling engineers	Basic		5 days	**Page 64**
		Advanced	x		
		Specialization*			
Daily Monitoring of Wells	• Production engineers • Production technicians	Basic	x	5 days	**Page 65**
		Advanced			
		Specialization*			

NEW TECHNOLOGIES

Course Title	Who should attend	Level		Duration	Content
Managed Pressure Drilling (MPD)	• Drilling Engineers • Mud Engineers • Superintendents • Supervisors • All professionals involved in well planning and operations	Basic		5 days	**Page 66**
		Advanced	x		
		Specialization*			
Under Balanced Drilling	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	5 days	**Page 67**
		Advanced			
		Specialization*			
Coil Tubing Technologies	• Drilling engineers • Production engineers • Operations engineers • Drilling supervisors • Production supervisors • Toolpusher • Managers • Technical support personnel	Basic	x	5 days	**Page 68**
		Advanced			
		Specialization*			
Casing While Drilling	• Drilling supervisors • Drilling engineers • Operations engineers	Basic	x	2 days	**Page 69**
		Advanced			
		Specialization*			

COMPLETION & WORKOVER

Course Title	Who should attend	Level		Duration	Content
Well Completion	• Drilling engineers • Production engineers • Operations engineers • Drilling supervisors • Production supervisor • Toolpusher • Managers • Technical support personnel	Basic	x	5 days	**Page 70**
		Advanced			
		Specialization*			
Well Testing -	• Production engineers	Basic	x	5 days	**Page 71**

COMPLETION & WORKOVER					
Course Title	**Who should attend**	**Level**		**Duration**	**Content**
DST	• Operations engineers • Drilling supervisors • Production supervisor • Toolpusher • Managers • Technical support personnel	Advanced			
		Specialization*			
Wireline Logging & Slickline Operations	• Production engineers • Operations engineers • Drilling supervisors • Production supervisor • Toolpusher • Managers • Technical support personnel	Basic	x	5 days	**Page 73**
		Advanced			
		Specialization*			
Well Completion Engineering	• Production engineers • Operations engineers • Drilling supervisors • Production supervisor • Toolpusher • Managers • Technical support personnel	Basic		10 days	**Page 74**
		Advanced	x		
		Specialization*			

RESERVOIR					
Course Title	**Who should attend**	**Level**		**Duration**	**Content**
Reservoir	• Petroleum engineers • Reservoir engineers • Production engineers • Geologists	Basic	x	5 days	**Page 76**
		Advanced			
		Specialization*			

**Specialization courses are organized on the client's request according to their training specifications.*

CERTIFIED COURSES					
Course Title	**Who should attend**	**Level**	**Duration**	**Certification**	**Content**
Introductory Course to Well Control	Any personnel working on the rig who needs an introductory training in well control	L2	5 days	**IWCF**	**Page 78**
Well Control	Anyone involved in drilling and/or well control operations in a non-supervisory position: all positions from floorman to driller inclusive	L3	5 days	**IWCF**	**Page 79**
Well Control	Anyone involved in drilling and/or well control operations: all positions from driller inclusive	L4	5 days	**IWCF**	**Page 81**
Introductory Course to Well Intervention	Any personnel working on the rig who needs an introductory training in well intervention	L2	5 days	**IWCF**	**Page 82**
Well Intervention	Engineers and technicians who are involved in the planning and realization of well intervention operations as wireline, coiled tubing, snubbing	L3	5 days	**IWCF**	**Page 83**
Well Intervention	Engineers and technicians who are involved in the planning and realization, and supervising of well intervention operations as wireline, coiled tubing, snubbing	L4	5 days	**IWCF**	**Page 84**
Introductory Course to Well Cap	Any personnel working on the rig who needs an introductory training in well control	L2	5 days	**IADC**	**Page 85**

CERTIFIED COURSES					
Course Title	**Who should attend**	**Level**	**Duration**	**Certification**	**Content**
Well Cap	Anyone involved in drilling and/or well control operations in a non-supervisory position: all positions from floorman to driller inclusive	L3	5 days	**IADC**	**Page 86**
Well Cap	Anyone involved in drilling and/or well control operations: all positions from driller inclusive	L4	5 days	**IADC**	**Page 87**
Introductory Corse to Well Intervention	Any personnel working on the rig who needs an introductory training in well intervention	L2	5 days	**IADC**	**Page 88**
Well Intervention	Engineers and technicians who are involved in the planning and realization of well intervention operations as wireline, coiled tubing, snubbing	L3	5 days	**IADC**	**Page 89**
Well Intervention	Engineers and technicians who are involved in the planning and realization, and supervising of well intervention operations as wireline, coiled tubing, snubbing	L4	5 days	**IADC**	**Page 90**

INTRODUCTION TO PETROLEUM INDUSTRY

Duration: 5 days

Objectives

This 5-day introductory course is designed to provide non-technical personnel in the petroleum industry with fundamental understanding of the upstream and the downstream petroleum industry.

The participants will have a condensed presentation of various activities within these two sectors. The course explains the business, operations, processes and technologies in the exploration, production, refining and transportation of hydrocarbons. The course will teach the structure and dynamics of the industry and will also provide the basic fundamentals as well as the terminology used.

Upon completion of this course the trainees will have a good approach to challenges, constraints and methods used in upstream and downstream petroleum sectors. They will also be familiar with the various actors involved in these sectors. Your staff will feel sufficiently familiar with the industry to function more effectively with their co-workers and, due to increased confidence and knowledge, their productivity will improve

Who should attend

- Operating staff beginners
- Clerical and support services staff (secretariat, management, logistics, legal, communication, etc.).

Prerequisite

None

Programme

- Introduction to geology
- Exploration
- Exploration drilling
- Development
- Production
- Well design
- Drilling Rig Crew organisation
- Refining
- Transportation of Petroleum
- Trade

INTRODUCTION TO DRILILING THEORETICAL TRAINING

Duration: 4 days

Objectives

To provide a comprehensive overview of drilling techniques and operations:

- To acquire the vocabulary specific to drilling
- To review drilling operations and equipment
- To learn about roles and responsibilities of different professionals involved in drilling

Who should attend

Engineers and technicians interested but not involved in drilling: geologists, geophysicists, reservoir engineers, completion, production and process staff, platform designers, economists, etc.

Prerequisite

None

Programme

ORGANIZATION OF DRILLING OPERATIONS

- Drilling principle
- Cost, duration of a drilling job
- Different people involved, types of contracts
- Safety

WELL ARCHITECTURE

- Reservoir notions
- Functions of different casings
- Parameters to be taken into account to determine well architecture
- Examples of architectures

DRILLING PRINCIPLES - EQUIPMENT

- Different types of bits
- Drilling string
- Drilling rig
- Hoisting function and equipment
- Pumping function and equipment
- Rotating function and equipment
- Power function
- Mud and solid treatment
- BOP

SPECIAL OPERATIONS

- Cementing operations
- Wellhead
- Directional drilling
- Well control
- Fishing
- Wireline logging, well test (DST)

OFFSHORE DRILLING OPERATIONS

- Different types of rigs
- Problems related to their use

WELL COMPLETION

- Reservoir-wellbore interface
- Equipment for flowing wells
- Well intervention

INTRODUCTION TO DRILILING PRACTICAL TRAINING

Duration: 5 days

Objectives

This 5-day introductory course is designed to Drilling staff beginners with fundamental understanding of the drilling and with a first job experience on the well site.

Upon completion of the course, participants:

- know the drilling equipment and corresponding well techniques,
- know the different operations,
- know the functions of the different people involved in drilling,
- have acquired the specific drilling vocabulary,
- are ready to join the rig floor team as a floorman beginner

Who should attend

Drilling staff beginners before their first job experience on the onland drilling rig

Prerequisite

None

Programme

THEORETICAL TRAINING: 4 days

- Hydrocarbons
- On site Crews organization
- Drilling team
- HSE considerations
- Security on a well site
- How to be on a drilling rig
- Drilling rig
- Drill string
- Drill string equipment
- Drill bit
- Problems while drilling
- Fishing
- Casing and Cementing - General
- The wellhead
- The Packers
- Drilling fluids
- Pumping equipment
- Mud circuit and mud equipment
- Coring

- Evaluation

PRACTICAL TRAINING: 1 day

Visit and practice on the drilling rig site to acquire a first experience on the rig floor and from the monkey board, going through the power and pump equipment and discovering real material and equipments used for tripping and drilling a well.

DRILLING RIGS & RIG EQUIPMENT

Duration: 10 days*

Objectives

This 10-day training course is designed to drilling supervisors, drilling engineers and operations engineering staff to provide with an advanced knowledge on the drilling rig and the rig equipment.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

A basic knowledge on the drilling rig and the rig equipment is required.

Programme

DRILLING RIGS

- History and principles of the rotary drilling
- Rig types – classification
- Drilling mast and derricks
- The substructures
- Power installed
- The lifting system

THE DRILLING STRING

- Drill string introduction
- Drill pipe
- Heavy weight drill pipe (HWDP)
- The drill-collars (DC)
- The stabilizers
- Near bit
- Sub et crossover
- The reamers

ROTATING SYSTEMES AND EQUIPMENTS

- Rotary table (RT)
- Kelly bushing & slips
- Kelly
- Swivel

RIG FLOOR TRIPPING EQUIPMENTS

- Introduction
- Tongs for tubular materials
- Tripping procedures

INTRODUCTION TO DRILLING BITS

- Roller bits
- Bits with natural diamonds
- Synthetic diamonds tools

INTRODUCTION TO CASING (Architecture of the well) and Cementing

- Introduction
- Casings
- Cementing

INTRODUCTION TO WELLHEAD - BOP & AUXILIARY EQUIPMENT

- Wellhead
- Well control equipment

PUMPING EQUIPMENT

- Introduction
- The duplex pumps
- The triplex pumps
- Pumps maintenance
- Pump accessories

MEASUREMENTS

- Nature of measurements
- Reasons for measuring
- Measures users
- Measurements presentation
- Other

INTRODUCTION TO THE DRILLING FLUIDS - MUD MEASURING DEVICE

- Introduction
- Drilling fluids functions
- Mud types
- Main mud products: role and use
- Main measuring instruments of the mud

HIGH AND LOW PRESSURE MUD CIRCUITS - MUD PIT EQUIPMENT AND TREATMENTS

- High pressure circuit
- The valves
- Low pressure circuit

INTRODUCTION TO HYDROSTATIC – HYDRODYNAMIC AND KICKS CONTROL

- Necessary concepts of physics for kicks control
- The pressures
- Causes of kicks
- Kick detection while drilling
- Kicks detection while tripping
- Principle of a kick control

SAFETY ON RIG SITE

- Introduction
- Safety equipment for the drillers
- Safety while working
- Handling – lifting – transports
- Gas emanations – H2S, CO2, C4, etc
- Fire protection
- First aid

The same course can be delivered in 5 days with less detail on each topic, and inversely in 15 days with a closer look at each theme according to client's needs and requirements.

DRILLING RIG & RIG INSPECTION

Duration: 5 days

Objectives

This 5-day course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with a basic knowledge on the drilling rig and the rig inspection.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

DRILLING RIGS

- History and principles of the rotary drilling
- Rig types – classification
- Drilling mast and derricks
- The substructures
- Power installed
- The lifting system

DRILLING STRING

- Drill string introduction
- Drill pipe
- Heavy weight drill pipe (HWDP)
- The drill-collars (DC)
- The stabilisers
- Near bit
- Sub et crossover
- The reamers

ROTATING SYSTEMES AND EQUIPMENTS

-
- Rotary table (RT)
- Kelly bushing & slips
- Kelly
- Swivel

RIG FLOOR TRIPPING EQUIPMENTS

-
- Introduction
- Tongs for tubular materials
- Tripping procedures

RIG MUD EQUIPMENT & MUD SYSTEM

Duration: 5 days

Objectives

This 5-day course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with a basic knowledge on the rig mud equipment and the mud system.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

INTRODUCTION

DRILLING FLUIDS FONCTIONS

- Cleaning Of the Well
- Cuttings Suspension
- Sedimentation of Fine Cuttings on Surface
- Lubrication and Cooling Of the Drilling Assembly
- Stability of the Hole
- Formation of Impermeable Mud Cake
- Control of Formation Pressure
- Increase of Rate Of Penetration (ROP)
- Hydraulic Energy Transmission to Tools and Bit
- Downhole Information
- Damage Minimization of Formations
- Control of Corrosion
- Control of Safety and Toxicity

MUD TYPES

- Water Based Mud
- Oil-Based Fluids

MAIN MUD PRODUCTS: ROLE AND USE

- Colloidal Clays
- Organic Colloids
- Thinners and Anti-Flocculants
- Mineral Additives
- Special Organic Products
- Weighting Materials
- Plugging Agents

MAIN MEASURING INSTRUMENTS OF THE MUD

- The Marsh Funnel Viscometer
- Mud Density Scale
- API Filter Press
- Sand
- Ph Measuring Methods
- Level Measurements (And Mud Volumes in the Pits)
- Daily Report of the Derrick-Man (A Derrick-Man Responsibility)

HIGH PRESSURE CIRCUIT

- The pump discharge lines
- The rig floor manifold
- The stand pipe
- The kelly hose
- Connecting elements

THE VALVES

- High pressure (HP) valves
- Low pressure valves

LOW PRESSURE CIRCUIT

- The shale shaker
- The decantation
- Mud degassing
- The hydrocyclones
- Special treatments for solids elimination
- Mud fabrication
- Transfer – pump boosting
- Measures

Two weeks laboratory can be added to the course if the training is done on field or base camp having a mud laboratory.

WELL CONSTRUCTION: DRILLING MATERIALS, EQUIPMENTS & OPERATIONS

Duration: 10 days*

Objectives

This 10-day course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with an advanced knowledge on the drilling materials, equipments and operations.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

A basic knowledge on the the drilling materials, equipments and operations is required.

Programme

RIG EQUIPMENT AND CALCULATIONS

- Driving power and transmission
- The drawworks
- The drilling line
- The reeving
- The usage of drilling pumps

BHA STABILIZATION - VERTICAL DRILLING

- Drilling objective in vertical hole
- Deviation phenomena while drilling dipped and interbedded formations
- BHA selection
- Stabilizations
- Conclusion

BHA – AUXILIARY EQUIPMENTS

- Hole openers
- The shock subs
- The drilling jars
- The safety equipment
- The turbines and downhole motors

BHA – TOTCO INCLINOMETER

- Description of the standard “TOTCO” inclinometer
- Assembly and operation principle of the TOTCO
- Various run-in methods
- Determination of the time setting
- “Directional double recorder” TOTCO

INTERACTIONS BITS / ROCKS

- Introduction
- Inter-actions bit / rock

ROLLER CONE BITS

- Introduction
- Mode of work of tricone bits
- Description and manufacturing
- Tricone characteristics
- Rock bit metallurgy
- Improvement of rock bit technology
- Rock bit classification

FIXED CUTTER BITS (Natural and synthetic diamond bits)

- Introduction
- Mode of work of fixed cutter drill bits

- Diamond bits
- Fixed cutter bits

CORING TECHNOLOGY

- Introduction
- The standard core barrels
- Coring solutions
- Oriented coring
- Core bits
- Coring procedures
- Other coring techniques
- Core analysis

DRILL STRING CALCULATIONS

- Remind of the archimedes' principle
- Buoyancy factor
- Determination of number of drill collars / WOB

CASING

- Purpose of casing
- Casing specification and classification
- Preparation of the casing
- Running in hole operations
- The liner

WELLHEAD

- Introduction
- Basic design concepts of wellhead
- Casing heads housing
- Casing head spool
- Sealing arrangements between casings
- Tubing head spools
- Valves
- Auxiliary wellhead equipment

BOP AND AUXILIARY EQUIPMENT

- Roles
- Types of bops
- Choice of bops
- Ram type bops
- The annular bop
- Diverter
- Rotating bop
- Choke manifold, kill and choke lines
- Inside bop valve
- Recommendations
- Different bop stack configurations
- Hydraulic control of the BOPs

WELL CONTROL

- International system of units (SI)
- Introduction
- Necessary pressure notions needed for well control
- Causes of kicks
- Kicks detection
- Shut-in procedures in fixed rig (rig equipped with a surface bop)
- Kick calculations
- Kill methods of well control

The same course can be delivered in 5 days with less detail on each topic.

DRILLING ENGINEERING: GEOLOGY & RESERVOIR

Duration: 5 days

Objectives

This 5-day course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with a basic knowledge on the drilling engineering.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

GEOLOGY

- Introduction
- Geology of your region
- Oil fields and gas fields system
- Marginal marine environments
- Tectonic: folds and faults
- Seismic and logging
- Logging
- Integrated study

INTRODUCTION TO PETROPHYSICS

- Introduction
- Porosity
- Permeability
- Wettability
- Capillary pressure
- Pressures

INTRODUCTION TO HYDROCARBONS

- Introduction
- Requirements for petroleum accumulation
- Kerogen types
- Temperature and time
- Crude oil classifications
- Migration processes
- Petroleum chemistry and thermodynamical analysis
- Subsurface pressure
- Conclusion

INTRODUCTION TO RESERVOIR & DRIVE MECHANISMS

- Introduction
- Original hydrocarbons in place in the reservoir
- Reserves
- Drive mechanisms
- Reservoir study

WELL MONITORING

Duration: 5 days

Objectives

This course is designed to provide trainees with an overview of the well monitoring techniques.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

WELL PLANNING ISSUES

- Geological analysis and evaluation
- Engineering data
- H_2S / CO_2 / mercaptans
- Casing design criteria
- Casing design
- Cementing programme
- Wellhead and BOP
- Directional drilling and well survey programme
- Bottom hole assemblies and drillstring design
- Bit selection
- Drilling fluid programme
- Rig selection
- Wellbore evaluation
- Well production testing
- Completion objectives and design
- Well intervention / well killing

DOCUMENTS REQUIRED FOR DRILLING A WELL

WELL COSTING

- Reasons For Costing

FACTORS AFFECTING WELL COSTS

DRILLING TIME ESTIMATE

TIME ESTIMATE

DETAILED TIME ESTIMATE

ELEMENTS OF WELL COSTING

- Rig Costs
- Operations costs
- Services
- Total Well Costs

NON PRODUCTIVE TIME (NPT)

- Classification of NPT
- Calculation of NPT

RISK ASSESSMENT IN DRILLING COST CALCULATIONS

- Estimating the P10 value
- Estimation of P50 Value
- Estimation of P90 Value

LEARNING CURVES

- Learning Rate
- Types of Learning Curves

TECHNICAL LIMIT DRILLING

- Basis of TLD

COST REDUCTION

DRILLING CONTRACTING STRATEGIES

- Conventional Contract
- Integrated Services (IS)
- Integrated Project Management (IPM)
- Turn Key Contract

CURRENT AND FUTURE TRENDS IN DRILLING CONTRACTS

WELL CONSTRUCTION: DRILLING ENGINEERING

Duration: 10 days*

Objectives

This 10-day course concerns drilling engineering knowledge. At the end of the session, the trainees acquired the necessary knowledge to prepare a drilling program and completion program.

Who should attend

Drilling superintendents, drilling supervisors, drilling engineers, completion engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

A basic knowledge on drilling technologies and on drilling engineering calculations is required.

Programme

WELL PLANNING

- Introduction
- Well planning

PORE PRESSURE & TEMPERATURE

- Introduction
- Pressure and gradient definitions
- Abnormal pore pressure detection
- Temperature prediction

CASING DESIGN and BOP PRESSURE RATING

- Introduction – casing design process
- Data collection
- Formation integrity tests
- Fracture gradient determination
- Casing setting depth and sizes
- Casing design
- Pressure rating of bop equipment

DRILLSTRING DESIGN

- Drill pipe properties – review
- Drill pipe stress and deformations
- Drilling strings calculations

RIG SIZING

- Introduction
- Capacity and power required for the hoisting system
- Rotary table power requirements
- Power required for pumping
- Mud system evaluation

BIT SELECTION

- Introduction
- Programme
- Drilling bit classification (review)
- Bit selection
- Critical rotary speeds
- Drilling optimization
- Bit hydraulics
- General considerations

FLUID HYDROLICS CONSIDERATIONS

- Introduction
- Hydraulics program preparation
- Design of the hydraulics program

CEMENTING CONSIDERATIONS

- Introduction
- Cement (review)
- Slurry selection
- Cement placement
- Well control
- Job design

The same course can be delivered in 5 days with less detail on each topic, and inversely in 20 days with a closer look at each theme according to client's needs and requirements.

DRILLING PRACTICES & OPERATIONS

Duration: 10 days

Objectives

The two-week course is designed for engineers and field personnel involved in planning and implementation of drilling programs. The course covers all aspects of drilling technology. Drilling is a complex operation requiring the marriage of different technologies and disciplines. The course provides all the fundamentals necessary to drill a well whether it is a shallow well or a complex, high pressure well.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

A basic knowledge on the drilling technologies is required.

Programme

INTRODUCTION TO GEOLOGY
- The earth
- The rocks
- Tectonics
- Stratigraphy
- Petroleum geology
- The reservoir (pore pressure, fluids)
- Oil prospecting

DRILLING BITS
- Bit optimization – drill off test
- Mechanical and hydraulic parameters
- IADC bit wear classifications, study of bit wears

DRILLING JARS
- Types, positioning and calibration

BOREHOLE STABILITY AND COMMON DRILLING PROBLEMS
- Borehole stability
- Stuck pipe
- Lost circulation
- Corrosion

FISHING
- Causes, prevention
- Equipments, tools and procedures
- Typical fishing string
- Free point indicator
- Back-off – side track

BOP AND WELLHEAD TESTS
- BOP and accumulators tests (capacity calculations and tests)
- Wellhead test procedures

CASING AND FORMATION TESTS
- Casing test
- Shoe bond test
- Leak off test

DIRECTIONAL DRILLING AND EQUIPMENTS
- Directional well planning
- Horizontal wells

SAFETY DRILL (KICK DRILL)

EVALUATION AND CORRECTION

RIG SIZING

Duration: 5 days

Objectives

This 5-day course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with a basic knowledge on the rig sizing.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

INTRODUCTION

CAPACITY AND POWER REQUIRED FOR THE HOSTING SYSTEM

- Hoisting capacity
- Derricks, masts and substructures
- Power required for the hoisting system

ROTARY TABLE POWER REQUIREMENTS

POWER REQUIRED FOR PUMPING

- Review - characteristics of the mud pumps
- Theoretical and practical flow rate
- Discharge pressure
- Power

MUD SYSTEM EVALUATION

- Volume requirements
- Mixing systems
- Solids control needs
- Special requirements as per prognosis

DRILL STRING, BHA & DESIGN

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the drill string, BHA and design.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

THE DRILLING STRING

- Drill String introduction
- Drill Pipe
- Heavy Weight Drill Pipe (HWDP)
- Drill Collar (DC)

BHA STABILIZATION-VERTICAL DRILLING

- Drilling objective in vertical hole
- Deviation phenomena while drilling dipped and interbedded formations
- BHA Selection
- Common Stabilizations
- Conclusion

BHA – AUXILIARY EQUIPMENTS

- Hole Openers
- Shock Subs
- Drilling Jars
- Safety equipment
- Turbines & Downhole Motors

BHA – TOTCO INCLINOMETER

- Description of standard TOTCO inclinometer
- Assembly & operating principle of TOTCO
- Various run-in methods
- Determination of time setting
- Directional double recorder TOTCO

DRILLSTRING DESIGN

- Drill pipe properties- review
- Drill pipe stress & deformation
- Drilling strings calculations

CASING DESING

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the casing design.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

INTRODUCTION – CASING DESIGN PROCESS

DATA COLLECTION

FORMATION INTEGRITY TESTS

FRACTURE GRADIENT DETERMINATION

- Factors Influencing Fracture Gradient
- Theory of wellbore breakage
- FIT Interpretation
- Hubbert and Willis method

CASING SETTING DEPTH AND SIZES

- Casing Profiles
- Casing seat recommendations
- Example: Casing Seat Selection
- Casing and Hole Sizes
- API Casing Classification

CASING DESIGN

- Purpose of Casing
- Factors Influencing Casing Design
- Design Criteria
- Design Criteria

PRESSURE RATING OF BOP EQUIPMENT

BOREHOLE INSTABILITY & COMMONG DRILLING PROBLEMS

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the reasons of the borehole instability and other common drilling problems and the methods to resolve them.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

INTRODUCTION

REASONS OF BOREHOLE INSTABILITY
- Shale instability
- Unconsolidated formation
- Fractured formation
- Mobil formation
- Thermal reaction – evaporate deposits
- Bad hole-cleaning

STUCK PIPE
- Introduction
- Definitions
- Causes

MECHANISMS
- Definitions
- Hole pack-off causes
- Hole bridge causes

SETTLED CUTTINGS
- Settled cuttings, near vertical wellbore (<35°)
- Settled cuttings, high angle wellbore (>35°)
- Indications of settled cuttings
- Preventive actions
- Minimum flow rate (gpm) versus hole size and hole angle
- Maximum rate of penetration (rop) versus hole size and hole angle
- Minimum circulating strokes factor (csf) to clean hole
- High angle hole cleaning guidelines (>35°)

SHALE INSTABILITY
- Chemically stressed
- Mechanically stressed

UNCONSOLIDATED FORMATION
- Indications of unconsolidated formation
- Preventive actions for unconsolidated formation

FRACTURED FORMATION
- Indications of fractured formation
- Preventive actions for fractured formation

CEMENT BLOCKS

SOFT CEMENT

JUNK

DIFFERENTIAL STICKING
- Definition
- Differential sticking conditions

WELLBORE GEOMETRY

LOSS CIRCULATION
- Definitions
- Adverse effects on drilling operations
- Loss circulation mechanism

PRESSURE INDUCED FRACTURE
- Causes of lost circulation
- Warning
- Indications
- First actions (total loss)
- Preventive actions

NATURALLY EXISTING FRACTURE / HIGH PERMEABILITY
- Causes of lost circulation
- Warning
- Indications
- First actions (total loss)
- Preventive actions

LOSS SEVERITY CLASSIFICATIONS
- Seepage loss
- Partial loss
- Total loss

METHODS FOR LOCATING LOSS DEPTH
- Survey methods
- Practical methods
- Considerations for survey methods

RESTORING CIRCULATION
- Guidelines for lost circulation solutions
- Guidelines for successful lost circulation materials (lcm) results
- Seepage loss solutions (< 3 m3/hr)
- Partial loss solutions (> 3 m3/hr)
- Total loss solutions (no return)
- Sealing materials used for lost circulation
- Spotting procedures for lost circulation materials (lcm)
- Spotting procedures for specially pill
- Spotting procedures for gunk pill (cement/bentonite/diesel)
- Spotting procedures for cement

LOSS CIRCULATION PREVENTION GUIDELINES

PRECAUTIONS WHILE DRILLING WITHOUT RETURNS

The same course can be delivered in 10 or 15 days with a closer look at each topic according to client's needs and requirements.

FISHING TOOLS & OPERATIONS

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the fishing tools and operations.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

INTRODUCTION

- Definitions
- Causes

PREVENTIONS AND PROCEDURES

- Deficiency of equipments
- Human error or human negligence
- Inadequate programme
- Borehole stability
- Fundamental rules

DECISIONS

- Decision parameters
- Decision tree

FISHING TOOLS

- Minimum equipment required on rig site
- Repairing tools
- Impression Block
- Junk Fishing Tools
- Milling Tools
- Washover Tools
- External Catch Tools
- Internal Catch Tools
- Releasing Spear
- Safety Joints
- Jarring System
- Internal Pipe Cutting Tools
- External Pipe Cutting Tools
- Cable Fishing Tools
- Back-Off Tools

FISHING BHA

- BHA for Milling Operations
- BHA for Junk Basket Operations
- BHA for Releasing Spear
- BHA for Internal or External Catch tools
- BHA with jar Intensifier
- BHA for Washover Operations
- BHA for Washover Operations

BACK OFF & SIDE TRACK

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the back off and side track.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

INTRODUCTION

STUCK POINT DETERMINATION

- Elongation Measurement or Free-Pointing
    - Method
- The Free Point Indicator (FPI)

BACK OFF

- Back off with explosive
- Mechanical back off

SIDE TRACK

- Introduction
- Kick off zone selection
- Side track procedures in openhole
    - Setting of cement plug method
    - An alternative to openhole side track: whipstock
- Side track procedures in cased hole
    - Side track through a casing window
    - Side track with the whipstock

DIRECTIONAL DRILLING

Duration: 5 days

Objectives

This 5-days introductory course is designed to provide a comprehensive introduction to directional drilling and horizontal applications. With theory and practice, attendees will learn the benefits of directional and common methods adapted to design, drill, survey and monitor deviated wells.

Who should attend

Drilling, production and operations engineers, drilling supervisors, toolpushers, managers and technical support personnel, and also services companies staff.

Prerequisite

None.

Programme

INTRODUCTION

- History
- Applications Of Directional Drilling

DIRECTIONAL WELL PLANNING

- Positioning And Coordinate Systems
- Survey Calculation Methods
- Basic Well Planning

SURVEYING

- Magnetic Declination Angle
- Magnetic Interference
- Survey Instruments

DEFLECTION METHODS

- Whipstock
- Jetting
- Down Hole Motor With Bent Sub
- Steerable Positive Displacement Motor
- Toolface Orientation

DOWNHOLE MOTORS

- Positive Displacement Motor
- Steerable Displacement Motor
- Drilling Fluid Requirements With Pdms

DRILL STRING, BHA SELECTION & DESIGN ROTATE/NON ROTATE ASSEMBLIES

HORIZONTAL WELLS

DRILLING BIT TECHNOLOGIES

Duration: 5 days

Objectives

This course module is designed to provide a large overview of the drilling bits and their use. On completion of the course, the attendees will be able to describe the concept of the different drilling bits, to cope with the drilling performance following the bit choice and to describe the bit wear.

Who should attend

Drilling engineers, drilling supervisors, toolpushers, drillers, managers and technical support personnel engaged in drilling and workovers.

Prerequisite

A basic knowledge on the drilling technologies is required.

Programme

INTER-ACTION BIT / ROCK

- Characteristics of the rock as material to be destroyed
- Attack of the rock by the bit
- Attack of the bit by the rock
- Bit optimization

ROLLER CONE BITS

- Mode of work
- Description and manufacturing
- Tricone characteristics
  - Cutting structure
  - Bearings and Seals
  - Hydraulic system
- Rock bit metallurgy
- Improvement of rock bit technology
- IADC Rock bit classification

DIAMOND AND FIXED CUTTER BITS

- Introduction – Type of diamonds used
- Mode of work
- Diamond bits
  - Manufacturing
  - Application
  - Design
  - Selection
- Fixed cutter bits
  - Manufacturing
  - Design
- IADC Classification

BIT OPTIMIZATION

- The drilling parameters
  - Mechanical parameters
  - The drill off test
  - Hydraulic parameters
  - Design
- Bits choice
  - Based on the wear analysis
  - The break even method

STUDY OF WEAR ON ROLLER CONE BIT

- Roller cone bit IADC dull grading system
- Dull condition evaluation

STUDY OF WEAR ON FIXED CUTTER BITS

- Fixed cutter bit IADC dull grading system
- Dull condition evaluation

CORING TECHNOLOGIES

Duration: 5 days

Objectives

This course module is designed to provide an overview of the coring equipments and operations. On completion of the course, the attendees will be able to describe the coring process and to choose the equipment accordingly to the operational objectives and constraints.

Who should attend

Drilling engineers, drilling supervisors, toolpushers, drillers, managers and technical support personnel engaged in drilling and workovers.

Prerequisite

None

Programme

INTRODUCTION

THE STANDARD CORE BARRELS

CORING SOLUTIONS

- Conventional coring
- Fiberglass inner tubes
- Aluminum inner tubes
- Long barrel coring
- Gel coring
- Unconsolidated formation coring
- Oriented coring
- Horizontal well coring
- Pressure well coring
- Sponge coring (DBS)
- Clean core (DBS)
- Coregard concept (BHI)

ORIENTED CORING

CORE BITS

CORING PROCEDURES

- The planning phase
- Rig site location
- Picking up the coring equipment
- Running in the hole
- Cutting of the core
- Making a connection
- Operating parameters

OTHER CORING TECHNIQUES

- Sidewall coring
- Wireline coring
- Slimhole coring

CORE ANALYSIS

The same course can be delivered in 10 days with a closer look at each topic according to client's needs and requirements.

INTRODUCTORY COURSE TO WELL CONTROL

Duration: 5 days

Objectives

To provide the personnel working on the drilling rig with a general training on the well control techniques and equipments.

Who should attend

- Roughnecks
- Floormen
- Roustabouts
- Derrick man
- Fluids Engineer
- Drilling engineers & technicians beginners
- Any personnel working on the drilling rig who need a basic training in well control

Prerequisite

None

Programme

- Familiarization with the phenomena of abnormal pressure during operations
- Primary Well Control
- Causes of kicks
- Kicks indications
- Basic calculations
- Normal & ubnormal formation pressure
- Hydrostatic exercises
- Hydrostatic pressure losses due to the defective filling of wells
- Pressure systems losses & equivalent circulation density
- Leaks back tests & détermination
- Equivalent mud losses
- Maximum mud weight - fracturing pressure
- Introduction to the kill sheet
- Introduction to the well control equipment

WELL CONTROL

Duration: 5 days

Objectives

The course is intended for Drilling technicians, drilling engineers and drilling supervisors to enable them to understand origins, detection and many of the well control issues that can adversely impact their company's drilling operations, particularly possible responses to the phenomena of formation pressure variation during drilling operations.

This course provides the participants with theoretical and practical knowhow and techniques to handle well control situations in drilling environments on both surface and subsea locations.

Who should attend

- Assistant Driller
- Driller
- Toolpusher
- Superintendents & Supervisors (Drilling / Fluids & Cement / Production / HSE)
- Technicians & Engineers

Prerequisite

None

Programme

INTRODUCTION: DEFINITION OF KICK AND BLOWOUT – TERMINOLOGY

WELL CONTROL NOTIONS

- Basic Concepts
    - o Hydrostatic Pressure
    - o Formation Pressure
    - o Overburden Pressure
    - o Fracture Pressure
    - o Maximum Pressure allowable
    - o Bottom-Hole Pressure
    - o Pump Pressure
    - o Surge and Swab Pressure
    - o Shut-In Drill Pipe Pressure
    - o Shut-In Casing Pressure
- Basic Calculations
    - o Capacity
    - o Displacement
    - o Pump outputs
    - o Fluid weight up
    - o "U" tube / others

KICK INFORMATION

- Causes - Detection during drilling and during tripping
- Importance of the type and volume of effluent
- Driller's procedure for well control
- Safety equipment periodic test and safety drill

KILLSHEET NOTIONS AND USAGE

- Taking readings
- Strokes to bit
- Kill weight mud
- Initial circulating pressure
- Final circulating pressure
- Decline schedule

DRILLER'S METHOD

- Control principle - calculations and kill graph
- Application: case story / equipment incidents / risk of losses above the kick zone

WEIGHT AND WEIGHT METHOD

- Applications

WELL CONTROL EQUIPMENT

- B.O.P
- Diverter
- Closing units and accumulator
- Choke and standpipe manifolds
- Inside B.O.P & safety valve....

EVALUATION AND CORRECTION

Practical exercises on simulator are added if the training is followed by IWCF certification session.

WELL INTERVENTION

Duration: 5 days

Objectives

To provide an understanding of well intervention and pressure control techniques, with the skills to plan, supervise and carry out well intervention:

- To understand the behavior of a producing well,
- To learn about the equipment used in wire line, coiled tubing and snubbing,
- To grasp safety barrier principles,
- To learn about the equipment, and acquire the methods used to control well pressure,
- To pass the IWCF “Well Intervention” Test.

Who should attend

Engineers and technicians, who have to plan, supervise or carry out well intervention

Prerequisite

None

Programme

BASIC PRINCIPLES AND WELL FUNDAMENTALS

- Physics applied to the well
- Hydrostatic pressures
- Specific gravities
- Densities
- Pressure gradient
- Pore pressure
- Over/underbalance

COMPLETION EQUIPMENT

- Different types of completion
- Specific equipment as
- Packers
- SCSSV
- Side pocket mandrels
- Casing, tubing
- Tubing hanger
- Xmas tree

DIFFERENT TYPES OF INTERVENTION WITH THEIR RESPECTIVE EQUIPMENT

- Wire line intervention
- Slick line
- BOP
- Lubricator
- Stuffing box
- Tool trap
- Braided line, e-line
- Double BOP
- Grease injection system
- Tool trap, tool catcher
- Coiled tubing
- Different types of BOP, strippers
- Problem during the interventions, interpretation and decision
- Snubbing
- BOP, types and stacks
- Specific constraints
- Problem during the interventions, interpretation and decision

PRESSURE CONTROL APPLIED TO COMPLETION AND WELL INTERVENTION

- Barriers, pressure tests

- Well calculation (pressure, volume, kill fluid, pumping time, balancing the pressure at the circulating device…)
- Shut in procedures
- Kill methods (direct or reverse circulation, bull heading, lubricate and bleed…)
- Specific problems linked to producing wells (thief zones, losses, plugging, migration, hydrates…)
- Responsibilities, decision making

DRILLING FLUIDS TECHNOLOGIES

Duration: 10 days*

Objectives

This course module is designed to provide an overview of the drilling fluids techniques and operations.

Who should attend

- Drilling Engineers
- Fluids & Cement Engineers
- Drilling Supervisor
- Fluids & Cement Supervisor
- Toolpushers from drlling and production sectors

Prerequisite

A basic knowledge on drilling fluids technologies is required.

Programme

DRILLING FLUIDS FUNCTIONS

- Introduction
- Drilling fluid functions
- Summary

BASIC CHEMISTRY

- Introduction
- Classification of matter
- Atomic structure
- Valence
- Electron shell
- Ionic bonding
- Ionic bonding
- Compounds
- Formula
- Stoichiometry – stoichiometric reactions
- Equivalent weight
- Balancing and equation
- Solubility
- Ph and alkalinity
- Acids, bases ans salts
- Concentrations of solutions
- Mixtures – solutions – emulsions – dispersions

COMMON CHEMICAL REACTIONS IN THE MUD CHEMISTRY

- Introduction
- Gyp or anhydrite contamination
- Cement contamination
- Seawater
- Carbon dioxide gas contamination
- Carbonate and bicarbonate contamination
- Hydrogen sulfide (h2s) contamination
- Removal of oxygen with oxygen scavenger
- Acid treatments
- Phosphates
- Effect of lignite on calcium

CONTAMINATION AND TREATMENT

- Introduction
- Anhydrite or gypsum contamination
- Cement contamination
- Carbonate contamination
- Salt contamination
- Salt water flow
- Hydrogene sulfide (h2s) contamination
- Quick reference for recognizing and treating contaminants

DRILLING FLUIDS - CALCULATIONS

- Introduction
- Us oilfield and metric units
- General wellbore calculations
- Pumps output
- Annular velocity
- Circulation time
- Hydrostatic pressure
- Example calculations
- Weight increase using mud materials
- Weight reduction using water or oil
- Volume increase using mud materials
- Mixing liquids of different densities

RHEOLOGY

- Introduction
- Rheology
- Flow regimes

CLAY CHEMISTRY

- Introduction
- Type of clay
- Cation exchange capacity (cec)
- Composition of clay-water mud
- Principles of chemical treatment

TESTING Equipments and PROCEDURES

- Introduction
- Density of fluid (or mud weight)
- Viscosity
- Filtration
- Sand content
- Liquid and solid content
- Hydrogen ion concentration (ph)
- Chemical analysis of water drilling fluids

NON INHIBITIVE WATER BASED MUD SYSTEMS

- Introduction
- Non-inhibitive fluid

INHIBITIVE WATER BASED MUD SYSTEMS

- Introduction
- Calcium-based muds
- Lime muds
- Gyp muds
- Salt-based muds
- Potassium-based muds
- Polymer fluids

OIL BASED MUDS

- Introduction
- Oil mud applications
- Disadvantages of oil mud
- Oil mud products description
- Types of base oils used
- Oil mud formulations
- Mixing procedures
- Oil mud properties
- Trouble shooting oil muds
- Oil mud calculations
- Gas solubility in oil mud

SOLIDS CONTROL

- Introduction
- Characteristics of solids
- Methods for solids controls
- Principles of mechanical solids separation
- Sequence of solids control devices
- Solids removal devices
- Dewatering and zero-discharge solids control

DRILLI-IN FLUIDS

- Introduction
- Formation damage mechanisms
- Drill-in fluids types and applications

One week laboratory can be added to the course if the training is done on field or base camp having a laboratory.

DRILLING FLUIDS & SOLIDS CONTROL

Duration: 5 days

Objectives

This course module is designed to provide an overview of the drilling fluids and the solids control.

Who should attend

- Drilling Engineers
- Fluids & Cement Engineers
- Drilling Supervisor
- Fluids & Cement Supervisor
- Toolpushers from drilling and production sectors

Prerequisite

None

Programme

DRILLING FLUIDS AND HYDRAULICS

DRILLING FLUIDS

- Make-up of a drilling fluid
- Normal drilling fluids
- Special drilling fluids
- Lime base muds
- Lime-treated muds
- Emulsion muds - oil in water
- Inhibited muds
- Gypsum base muds
- Oil based muds
- Inverted emulsions
- Salt water muds
- Silicate muds
- Low solids muds
- Drilling fluid classification systems
- Drilling fluid additives

MATERIAL BALANCE EQUATIONS

OIL-BASED DRILLING FLUIDS

- Electrical Stability
- Oil: Water Ratio
- Aniline Point

DRILLING FLUID ECONOMICS

DRILLING FLUID PROPERTIES

PRESSURE

- Hydrostatic pressure
- Hydraulic pressure
- Imposed pressure
- Pressure imposed by the pump
- Pressure imposed by the formation
- Pascal's law

DRILLING FLUID REPORTING PARAMETERS

- Density
- Plastic viscosity
- Yield point
- Gel strength
- Ph
- Filtrate/water loss
- Alkalinity, mud pm alkalinity, filtrate
- Salt/chlorides
- Calcium
- Sand content
- Solids content
- Funnel viscosity

HYDRAULICS

- Bingham plastic model
- Power law model

HYDRAULIC CALCULATIONS

- Surface pressure losses
- Pressure loss in the drillstring
- Drillstring pressure losses
- Annular pressure losses
- Reynolds number and critical velocity

CUTTINGS TRANSPORT

- Cuttings slip velocity

SWAB AND SURGE PRESSURE

- Swab and surge analysis report

MUD HYDRAULICS ANALYSIS REPORT

SOLIDS CONTROL INTRODUCTION

CHARACTERISTICS OF SOLIDS

- Types of solids
- Classification of particles sizes
- Shape of solids
- Concentration and size distribution of solids

METHODS FOR SOLIDS CONTROLS

- Dilution method
- Gravity settling method
- Mechanical separation method
- Chemical-mechanical separation method

PRINCIPLES OF MECHANICAL SOLIDS SEPARATION

- Processing in sequence
- Total flow processing
- No bypassing

SEQUENCE OF SOLIDS CONTROL DEVICES

- Solid removal region
- Addition region
- Mud check (suction) region

SOLIDS REMOVAL DEVICES

- Shale shakers
- Hydrocyclones
    - Desanders
    - Desilters
    - Mud Cleaners
- Centrifuges

DEWATERING AND ZERO-DISCHARGE SOLIDS CONTROL

CEMENTING TECHNOLOGIES
BASIC
Duration: 5 days

Objectives

This 5-days course is designed to provide a basic knowledge on the cementing technologies. This session will cover cement standards, cement materials, primary cementing, plug cementing, squeeze cementing, cement evaluation, and good cementing practices.

Who should attend

- Drilling Engineers
- Fluids & Cement Engineers
- Drilling Supervisor
- Fluids & Cement Supervisor
- Toolpushers from drlling and production sectors

Prerequisite

None

Programme

CEMENTING-GENERAL

- Introduction
- Casings
    - Types of casing strings
- Cementing
    - Cementing objectives
    - Cement slurry volume
    - Displacement volume
    - Cements usage
    - Cementing job process
    - Cementing equipment for single stage column
    - Cementing for multiple stage column

CEMENT SLURRY PROPERTIES

- Introduction
- Cement slurry properties
    - Slurry properties as defined in laboratory testing

LABORATORY TESTING

- Introduction
- Slurry preparation
- Slurry tests
    - Density measurement
    - Fluid-loss testing
    - Rheology testing
    - Thickening-time tests
    - Compressive strength testing
    - Transition time testing
    - Slurry contamination testing
    - Free fluid testing
    - Slurry stability/settling test
- Other tests

CEMENTING EQUIPMENT

- Introduction

- Bulk cement handling equipment
- Cement mixing equipment
- Auxiliary equipment

MUD REMOVAL-SLURRY DISPLACEMENT

- Introduction
    - Importance of mud displacement
    - Mud-removal process
    - Factors affecting mud-displacement efficiency
- Well preparation
    - Mud conditioning before running casing
    - Running casing
    - Conditioning the drilling fluid
- Displacement techniques
    - Problem analysis
    - Turbulent-flow technique
    - Effective laminar-flow technique
- Displacement fluids or preflushes
    - Purpose of chemical washes and spacers
    - Chemical washes
    - Spacers
    - Preflush volumes for turbulent-flow displacement
    - Preflush volumes for effective laminar-flow displacement

CEMENTING TECHNOLOGIES ADVANCED

Duration: 10 days*

Objectives

This 10-days course is designed to develop and deepen the basic knowledge on cementing. This session will cover cement standards, cement materials, primary cementing, plug cementing, squeeze cementing, cement evaluation and good cementing practices

Who should attend

- Drilling Engineers
- Fluids & Cement Engineers
- Drilling Supervisor
- Fluids & Cement Supervisor
- Toolpushers from drlling and production sectors

Prerequisite

A basic knowledge on the cementing technologies is required.

Programme

- Primary cementing & casing hardware
- Cement manufacturing and additives
- Cement slurry properties
- Laboratory testing
- Cementing equipments
- Mud removal – Slurry displacement
- Gas migration
- Foam cement
- Special cements
- Well analysis and slurry selection
- Horizontal well cementing
- Cementing failure – Causes and Solutions
- Remedial cementing
- Introduction to cementing evaluation

One week laboratory can be added to the course if the training is done on field or base camp having a cement laboratory.

DRILLING FLUIDS & CEMENT TECHNOLOGIES & PRACTICES

Duration: 17 weeks

Objectives

The purpose of this training course is to train future drilling fluid supervisors or anyone else responsible for Fluid engineering projects in the company.

At the end of the training, the trainees acquired the necessary knowledge to analyse a drilling fluids program (mud and cement). They are able to prepare and to follow the operations while drilling and to converse efficiently with the specialists.

Who should attend

- Senior technicians
- Mud engineers
- Any other personnel involved in operations

Prerequisite

- Basic knowledge of physics and chemistry,
- Training as a Derrickman and Asistant Driller in a contractor drilling company
- Drilling knowledge: level Assistant driller of the "Drilling supervisor training program"

Programme

If the pre-requisites are respected, the training start with the module "Basic Fluids & Cements" courses named "BFC". If the trainees have no experience in drilling, they must follow the module "Basic Drilling Training (BDT)" before to start "BFC".

I. BASIC DRILLING TRAINING PROGRAM (3 weeks)

INTRODUCTION TO PETROLEUM GEOLOGY (5 days)

- Introduction - The Earth
- The Rocks
- Tectonic
- Stratigraphy
- Reservoir characterization
- Exploration : geology, geophysics
- Cartography (theory and practice on)
- Rig site geology

INTRODUCTION TO DRILLING (10 days)

- Drilling rigs
- Drilling rig functions
- Drill string and equipments
- Architecture of a well
- Casing and equipment
- Well head
- Bop and Auxiliary equipment
- Drilling bit technology
- Coring technology and core bit
- Directional drilling
- Well control
- DST (introduction)
- Completion (introduction)
- Safety on rig site
- Knowledge Evaluation

II. BASIC FLUIDS & CEMENTS (BFC) (14 weeks)

BASIC DRILLING FLUIDS (8 weeks)

- Drilling Fluid Functions, types and properties of the drilling fluids.
- Basic Chemistry
- Chemical dosages
- Common Chemical reaction in mud chemistry
- Use of the control material
- Basic Engineering calculations
- Rheology
- Hydraulic
- Clays chemistry, structures and properties
- Shale caused problems
- Solid content
- Calculations on LGS/HGS
- Filtration, Darcy's law
- Water-based mud systems
- Testing water based mud system
- Contamination
- Polymer mud system
- Gypsum mud system
- Saturated salt water mud.
- KCL, PHPA mud system
- Borehole Stability
- Oil based mud system
- Solids removal - Solids analysis
- Drill-in Fluids, damaging fluids
- Service Companies presentation: Systems & Produces
- Elaboration of a drilling fluid program
- Drilling fluid reports and well reports

WORKOVER/COMPLETION FLUIDS (5 days)

- Completion/Workover Fluid Functions, types and properties.
- Characteristics and usage limits (engineering).
- Application and fluid design.
- Formation damage

BASIC CEMENT (5 weeks)

Theoretical Training (20 days)

- Primary cementing
- Casing hardware
- Cement manufacturing and cement chemistry Cement laboratory introduction
- Properties and characteristics of slurries
- Cementing additives
- Calculation on slurries: definition of the different terms
- Rheology: models, calculations, application to slurry rules displacement
- Spacers
- Mechanism of fluids displacement: mud/spacer/slurry
- Application to Primary cementation
- Cementing equipments : cementing unit, batch mixer, cementing head, visit on yard
- Primary cementing: calculations
- Liner cementing: method and calculations
- Special systems: Saturated salty slurries, Thixotropic, Lightweight slurry system
- Introduction to horizontal well cementing
- Gas migration
- Criteria for successful cementing
- Reasons of failures of the cementing operations and remedies
- Plug cementing and placement
- Remedial cementing
- Cementing job evaluation: during the job, after the job
- Cementing job evaluation: during the job, after the job
- Service Companies presentation: Systems & Products

Laboratory (5 days)

- Laboratory facilities and equipments
- Procedures & Normalisation of API tests
- Realisation and mixing of a cement slurry
- Density design and Rheological characteristic
- Filtration test
- Thickening time test - Compressive strength test spacer scavenging capabilities determination
- Mixing spacer : rheology and compatibilities
- Laboratory cement report
- Application Computer Aid

*__*There are two possibilities for on-the-job training:*__

- *Organised by the client without Drilnet*
- *Organised by the client with the "On job training" process from Drilnet*

WELL TESTING

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the well testing allowing the production optimization.

The aim of the course is to provide trainees with sufficient knowledge to understand the importance of the planning and programming stage in defining the requirements of the well test.Upon completion of this course, the participants will have a better understanding of the factors in planning and preparing a successful well programme.

Who should attend

- Production Supervisor
- Production Engineer
- Any other personnel involved in E&P operations as a coordinator

Prerequisite

None

Programme

- Introduction
- Aims And Objectives
- Introduction To Well Testing
- Types Of Well Tests
- Formation Damage & Skin Effect
- Reservoir Fluid Sampling
- Surface Sampling
- Safety Planning
- Responsibilities
- Defined Responsibilities For The Well Test Programme
- The Well Test Design
- Operations Design
- Offsite Checklists
- Onsite Checklists
- Examples Of Well Test Programmes/Procedures
- End Of Well Test Operations

ARTIFICIAL LIFT: GAS LIFT

Duration: 5 days

Objectives

The aim of this course is to explain how a gas lifted well is working and how to design it.

This course covers all the aspects of a gas lift installation from the reservoir aspect up to the surface installation and trouble shooting.

Who should attend

This course is intended primarily for reservoir engineers and petroleum engineers beginners or experienced.

Prerequisite

None

Programme

- Flowing gradients -Tubing performances curves
- Inflow performances
- Well representation
- Reservoir performances
- Nodal analysis
- Outflow performances
- Vertical pressure gradients curves for diphasique flow
- Introducing gas lift
- Principles, main parameters
- Characteristics, advantages and limitations.
- Gas lift downhole equipment
    - Valves- type and functions
    - Casing operated valves, buting operated valves
    - Miscellaneous valves
    - Valve calibration at workshop
    - Design of gas lift installation
    - Positioning side pocket mandrels
    - Valve selection
    - Gas lift design
    - Completion designs
- Special gas lift system
    - Close-circuit gas lift.
    - Intermittent gas lift.
    - High-pressure gas lift, high IP,
    - Dual gas lift
- Analysing and monitoring a gas lift operation
    - Surface equipment
    - Start up procedures and recommendations.
    - Trouble shooting.

WATER INJECTION OPERATIONS

Duration: 1 day

Objectives

This 1-day course is designed to provide oil & gas technicians with knowledge and understanding of water injection operations.

Who should attend

Oil & Gas Technicians

Prerequisite

None

Programme

- Principles of water injection
- Principles of deaeration
- Principles of oxygen scavenging
- Deaeration and filtration plant
- Types of water injection filtration plant available
- Water injection wells, downhole completions and reservoir formation
- Water injection operations and monitoring
- Hazards associated with water injection operations

INTRODUCTION TO HYDRAULIC FRACTURING

Duration: 2 days

Objectives

The course is designed to give a broad overview of how fracturing works, the terminology used, and the processes that are incorporated into hydraulic fracturing. The attendees will be presented an in-detail tour of the various processes, history, requirements, and issues surrounding hydraulic fracturing. On the completion of the course the attendees will be able to identify the processes of hydraulic fracturing and articulate the various challenges and issues associated with this drilling technique.

Who should attend

- Oil and gas industry executives, managers, and directors
- Project managers and directors
- Operational directors and managers
- Environmental, health, and safety managers and directors
- Regulators from local, state, and federal levels of government
- Legal personnel involved with the oil and gas industry
- Financial institutions involved in oil and gas activities
- Engineers in energy extraction and production
- Governmental and community affairs executives, managers, and directors
- Individuals new to the oil and gas industry

Programme

PERSPECTIVE

HYDRAULIC FRACTURING IN OIL & GAS ACTIVITIES

GEOLOGY

- Classification of rocks
- Formation
- Porosity
- Permeability
- Geological mapping
- Creation of oil and gas
- Brief history of oil and gas production

DRILLING

- What it takes to drill (people, equipment, money, time, etc.)
- History of drilling: from water to oil and gas
- Differences in drilling techniques
- Vertical and horizontal
- Casing in drilling
- Problems with drilling
- Well completion

FRACTURING

- History of hydraulic fracturing
- Action of fracturing
- Frac design
- Shale plays = differences in fracturing
- Onshore vs. offshore fracturing
- Post-treatment reports
- Well bore diameter
- Fracturing horizontal wells

TRUTHS AND MYTHS

- Groundwater contamination
- Water used for fracturing
- Fracturing causing earthquakes
- Emissions stemming from fracturing

- EPA's Pavillion, Wyoming, report
- Current issues facing fracturing

FUTURE OF HYDRAULIC FRACTURING

- Regulations and transparency
- "Super fracturing": How deep? How far?
- Technology development

HP/HT WELL DRILLING

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the drilling of high pressure and high temperature wells.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

DEFINITION

RIG SELECTION

MUD SELECTION

- Comparison between Water Based and SBM muds
- Well control issues
- FIT considerations
- Thermal effects on fracture gradient
- Pressure to break gel
- Pipe speed
- Breathing and/or Ballooning
- Barite sagging in HPHT Wells

CASING DESIGN

- Example casing design for HPHT Wells

TEMPERATURE EFFECTS ON CASING STRENGTH

- Example Reduced Burst Strength Due to High Temperature

DRILLING STRING CONSIDERATIONS

- Drilling components
- Measurement tools

WELL TESTING CONSIDERATIONS

- Mud as a test fluid
- Kill weight brine as a test fluid
- Sea water as a test fluid
- Consequences for testing with sub kill or kill weight fluid
- Typical test string design

CEMENTING CONSIDERATIONS

TRAPPED ANNULUS PRESSURE

- Cause
- Mathematical analysis
- Differential pressures

PORE PRESSURE DETERMINATION

Duration: 5 days

Objectives

This 5-day course is designed to provide drilling supervisors and drilling engineers with an advanced knowledge on the pore pressure determination.

Who should attend

- Drilling Supervisors
- Drilling Engineers

Prerequisite

A basic knowledge on the pore pressure determination is required to follow this course.

Programme

DEFINITIONS

HYDROSTATIC PRESSURE

- Overburden Pressure
- Matrix Stress

PORE PRESSURE

- Normal Pore Pressure
- Abnormal Pore Pressure
- Subnormal Pore Pressure

CAUSES OF ABNORMAL PORE PRESSURE

- Depositional Effects
- Diagenetic Processes
- Tectonic Effects
- Structural Causes
- Reservoir Structure
- Thermodynamic Processes
- Abnormal Pore Pressure Evaluation

MUD LOGGING METHODS

- Rate of Penetration (ROP)
- Corrected D Exponent
- Pore Pressure Calculation From DC Exponent Data
- Limitations of the D Exponent
- Drag, Torque and Fill
- Gas Levels
- Temperature Data
- Flowline Temperature
- Cuttings Parameters

LOGS

- Gamma Ray
- Resistivity
- Sonic Logs
- Theory Of Sonic Logging
- Resistivity Logs
- Formation Density Logs

DAILY MONITORING OF WELLS

Duration: 5 days

Objectives

This 5-day basic course is designed to provide production engineers and technicians with knowledge on the daily monitoring of wells.

Who should attend

Production engineers & technicians from petroleum and services companies.

Prerequisite

None

Programme

PRESENTATION : "FROM RESERVOIR TO SEPARATOR"

BASIC KNOWLEDGE

- The effluent
- The reservoir
- The effluent and the reservoir

TUBING ARCHITECTURE

- Types of completion
- Discussion of a typical completion
- Pressure drops
- Hydrostatic pressure loss
- Effects of friction
- Pressure loss in the installations
- Representation of pressure loss

ACTIVATION

- Selection of an activation means
- Gas lift activation
- Reciprocating rod pumping
- Electrical submersible pumping
- Progressing cavity pumping
- Hydraulic reciprocating pumping
- Hydraulic jet pumping

WIRE-LINE AND MAINTENANCE OPERATIONS

- Plugs, SCSSV, injection valves
- Bottom hole measurements, simultaneous surface measurements
- Other wire-line operations
- Coiled tubing, Swabbing
- Reservoir treatment

MEASUREMENTS AND RECORDINGS

- Definitions
- Location
- Procedures
- What for?
- Which record types?

THE WELL AND ITS DRAWBACKS

- Deposits
- Hydrates
- Corrosion

THE WELL AND ITS CONTROL

- Wells monitoring
- Wells kick off
- The collapse
- The trouble shooting

MANAGED PRESSURE DRILLING (MPD)

Duration: 5 days

Objectives

This 5-day course is designed to provide drilling supervisors and drilling engineers with an advanced knowledge on the managed pressure drilling. The purpose of this training is to provide a comprehensive and practical knowledge of non-conventional techniques used in advanced drilling and completion processes to enhance drilling performance and oil recovery

Who should attend

- Drilling Engineers
- Mud Engineers
- Superintendents
- Supervisors
- All professionals involved in well planning and operations

Prerequisite

A basic knowledge on drilling and well control is required to follow this course.

Programme

BASIC PRINCIPLES OF MANAGED PRESSURE DRILLING

- History, objectives and definitions
- Occurrence and implications of narrow pore and fracture pressures windows on well design and well control
- Dynamic factors affecting bottom hole pressure
- Mathematics and examples

MUD CAP DRILLING

- History of mud cap drilling
- Pressurized and floating mud cap
- Mud cap operation

MANAGED PRESSURE DRILLING EQUIPMENT

- Rotating control devices
- Chokes
- Drill pipe non return valves and down-hole annular valves
- ECD reduction tools
- Coriolis flow-meter, friction pump

MANAGED PRESSURE DRILLING USING PRESSURE AS PRIMARY CONTROL

- Introduction, open and closed back pressure systems
- Automated back pressure system technology
- Continuous circulating system technology

MANAGED PRESSURE DRILLING USING FLOW AS PRIMARY CONTROL

- Process description
- Equipment and technology
- Applications

CONCLUSION

- Advantages of managed pressure drilling
- Potential and limitations
- Typical applications

UNDER BALANCED DRILLING

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the under balanced drilling.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

NTRODUCTION TO UBD

- Why the UBD?
- Well Candidate for UBD, the criteria
- Misunderstandings on UBD

UBD FLUID TYPES

- Liquid drilling Fluids
- Gaseous drilling Fluids
- Mist Drilling
- Foam Drilling
- Aerated Fluid Drilling

UBD TECHNIQUES

- Gas Injection through Standpipe
- Gas Injection through Parasitic String
- Gas Injection through Parasitic Liner

SYSTEM REQUIREMENTS

- Surface equipment
- Downhole equipment
- Coiled Tubing drilling

DRILLING ENGINEERING

- Fluid mechanics
- Torque & Drag
- Hole Stability

SPECIAL CONSIDERATIONS

- Safety
- Regulation Requirements
- Environmental issues
- Corrosion of Drillstring
- Erosion of Tubulars
- Downhole Fire
- Vibrations

COIL TUBING TECHNOLOGIES

Duration: 5 days

Objectives

This 5-days course is designed to provide a comprehensive introduction to coil tubing equipments and operations.

Who should attend

Drilling, production and operations engineers, drilling and production supervisors, toolpushers, managers and technical support personnel engaged in drilling, completions and workover.

Prerequisite

Drilling technologies knowledge's are necessary to better understand the program content.

Programme

- CT Unit types
- CT Components
- CT Auxiliary Equipments
- CT Tools
- Nitrogen Equipments
- CT Application
    - o Gas Lift, Fill Removal, Jetting, Stimulation, etc.
    - o Milling, Drilling, Cementing, Fishing, Sand Control, etc.
- N2 Calculations

CASING WHILE DRILLING

Duration: 2 days

Objectives

This 2-days course is designed to provide trainees with an overview of the casing while drilling techniques.

Who should attend

Drilling supervisors, drilling engineers and operations engineers of petroleum companies, drilling contractors and services companies.

Prerequisite

None

Programme

- General view
- Advantages and Disadvantages
- Types of CwD, Scenarios for CwDapplications
- Operational aspects of CwD
- Rig and downhole tool equipment design and applications
- Hydraulics
- Drilling fluids for CwD
- Well control while drilling with asing
- Surface-hole casing while drilling
- Drilling efficiency optimization
- New technology development and application
- Successful implementation of the technology around the world
- Drilling feasibility analysis
- HPHT, deepwater
- Review of benefits, challenges and limitations
- Cost comparisons and risk management

WELL COMPLETION

Duration: 5 days

Objectives

This course module is designed to provide an overview of the completion design process, and a fundamental explanation of the well and service equipment and operations. On completion of the course, the attendees will be able to describe a completion process, to cope with the completion operations and with the use of selected equipments.

Who should attend

Drilling, production and operations engineers, drilling and production supervisors, toolpushers, managers and technical support personnel engaged in drilling, completions, and workovers.

Prerequisite

The course requires a good understanding of basic well construction and operations.

Programme

INTRODUCTION TO THE TOPIC AND PROGRAMME

COMPLETION OBJECTIVE AND FUNCTIONS

COMPLETION DESIGN
- Reservoir
- Mechanical considerations
- Safety

COMPLETION CONFIGURATION
- Single completion method and scheme
- Single selective characteristics
- Intelligent completions
- Dual completion
- Gravel pack completion

TUBING
- Classification
- API's nomenclature
- Tubing thread and size
- Tubing API

PACKERS
- Packer functions
- Main elements of the packer
- Different type of packer
- Tubing-packer connection

SAFETY VALVE
- General
- Surface controlled safety valve
- Control lines

AUXILIARY EQUIPMENT
- Landing nipples - Circulating valve
- Flow coupling

COMPLETION FLUID
- Definition - Characteristics
- Well gradient - Type of completion fluid

CASING PERFORATION
- Objective
- shaped charge perforating
- Casing' s perforating mechanism
- Charge performance

WELLHEAD AND CHRISTMAS TREE

GATE VALVE

WELL UNLOADING (DISPLACEMENT FLUID AND DISPLACEMENT SYSTEM)

WELL TESTING - DST

Duration: 5 days

Objectives

This course module is designed to provide an overview of the well test process during drilling or after completion, and a fundamental explanation of the formation testing technologies, service providers, tool/gauge types, measurement principles.

On completion of the course, the attendees will be able to describe a well test process, to cope with the well testing operations and with the use of selected equipments.

Who should attend

Drilling, production and operations engineers, drilling and production supervisors, toolpushers, managers and technical support personnel engaged in drilling, completions, and workovers.

Prerequisite

Drilling technologies knowledge's are necessary to better understand the program content.

Programme

INTRODUCTION TO WELL TESTING

TYPES OF WELL TESTS

FORMATION DAMAGE & SKIN EFFECT

RESERVOIR FLUID SAMPLING

- Definition , Importance of reservoir fluid sampling
- Sampling procedures design

SURFACE SAMPLING

- Introduction, Well conditioning
- Gas surface sampling methods
- Oil surface sampling methods
- Special surface sampling cases
- Wellhead sampling, Safety

SAFETY PLANNING

RESPONSIBILITIES FOR THE WELL TEST PROCESS

WELL TEST DESIGN

OPERATION DESIGN

- General process
- Electronic gauge guidelines & design
- Data acquisition
- Sampling programme design

OFF-SITE CHECKLIST

- Electronic gauges checklist
- Surface test equipment checklist
- Sampling checklist

ON-SITE CHECKLIST

- Well-site preparation
- General preparation checklist
- Electronic gauges checklist
- Sampling checklist

EXAMPLE OF WELL TEST PROGRAMME AND PROCEDURE

GLOSSARY

DST PRINCIPLE

- Historic of DST
- DST environment and operating conditions, DST advantages

DST BASIC CONCEPT

- Downhole pressures
- Operation sequences
- DST string and components

EXAMPLE OF DST APPLICATION (PROGRAMME AND OPERATION)

WIRELINE LOGGING & SLICKLINE OPERATIONS

Duration: 5 days

Objectives

This 5-day basic course is designed to provide drilling supervisors, drilling engineers and operations engineering staff with knowledge on the wireline logging and the slickline operations.

Who should attend

Drilling, production and operations engineers, drilling and production supervisors, toolpushers, managers and technical support personnel engaged in drilling, completions and workover.

Prerequisite

None

Programme

WIRELINE LOGGING

- General guidelines
- Preparations
- Quality control
- Witnessing wireline logging runs
- Handling explosives
- Handling radioactive sources

WRELINE LOGGING APPLICATIONS

CCL-CBL-VDL-USIT
- Calipers
- Gamma-Ray (Gr)
- Resistivity
- Temperature & pressure
- Sonic
- Density
- Neutron
- Spontaneous potential

OTHER WL OPERATIONS

- Wireline set inflatable bridge plug
- Wireline set packers
- Logging tool fishing

SLICK LINE OPERATIONS

- Introduction
- Slickline equipment
- Slickline applications
- Slickline issues

WELL COMPLETION ENGINEERING

Duration: 10 days

Objectives

This course module is designed to provide an overview of completion techniques and operations. On completion of the course, the attendees will be able to define the material needed to equip an oil/gas well, to understand a completion programme and to follow the rig operations.

Who should attend

Drilling, production and operations engineers, drilling and production supervisors, toolpushers, managers and technical support personnel engaged in drilling, completions, and workovers.

Prerequisite

The course requires a good understanding of basic well construction and operations.

Programme

COMPLETION DESIGN ASSUMPTIONS AND CONSIDERATIONS

- Planning
- Concept
- Type and Classification
- Wellbore and reservoir interface
- Completion configuration
- Equipments

FROM PRE-FEASIBILITY TO INSTALLATION

- Pre-feasibility
- Feasibility, Detail and Dedicated study
- Special project – Gas storage
- Nodal analysis a few more details
- Tubing design

WELL PREPARATION AND COMPLETION GENERAL PROCEDURE

- Well control equipment overview
- Barriers concept and configuration
- Well preparation
- General procedures

FORMATION DAMAGE - COMPLETION FLUIDS

- Formation damage, mechanism and classification
- Completion fluids
- Reason to prevent damage
- Brines - Fluid displacement
- Fluids properties & selection
- Brine selection versus type of operation
- Packer fluid definition and function
- Additives type and purposes
- Stimulation
- Potential safety hazard in acidizing
- Acids used in well stimulation
- Carbonate acidizing
- Acidizing techniques for carbonate formation
- Sandstone acidizing

PERFORATION

- Process
- Charge case functions and characteristics
- Perforating mechanism
- Gun performance data
- Type of guns and perforation methods
- Perforating conditions
- Gun selection and perforating techniques

TUBULAR GOODS

- Manufacturing process
- Nomenclature
- Type of connection and selection criteria
- Tubing specifications and definition
- Tubular damage
- Tubing handling, transportation and storage
- Ancillary equipment for storing and running tubular
- Tubular expandable technology

PRODUCTION PACKERS AND ACCESSORIES
SUBSURFACE SAFETY VALVES

- Function, Types and Categories
- Installations
- Controlled safety valve and SSD
- Lubricator valve

COMPLETION EQUIPMENT ACCESSORIES

- Communication devices
- Landing nipple
- Flow control equipment
- Additional auxiliary completion tools
- Down hole pressure and temperature transmitter

TUBING MOVEMENT AND PACKER FORCES

- Mechanical properties and failure of the material
- Design factor overview
- Factors governing tubing movement
- Tubing stress analysis outline
- Tubing to packer connection
- Load cases for production and injection wells

CORROSION & EQUIPMENT SELECTION

- Corrosion causes and effects
- Metallurgy typology & definition
- Non metallic sealing material classification
- Elastomer types
- Seal material selection criteria
- Effects of down hole environment
- Failure mechanism
- Plastic material

WELL HEAD EQUIPMENT AND CHRISTMAS TREE

RESERVOIR

Duration: 5 days

Objectives

This 5-day basic course is designed to provide reservoir engineers and other staff involved in reservoir operations with knowledge on the characteristics of the reservoir and reservoir fluids, reservoir classification and behavior, and also production tests.

Who should attend

Petroleum & reservoir engineers, geologists, production engineers.

Prerequisite

None

Programme

INTRODUCTION

GENERAL CHARACTERISTICS OF A HYDROCARBONS RESERVOIR

- Formation of oceans
- Formation of mountain chains

CHARACTERISTICS OF RESERVOIR

- General remarks
- Porosity
- Permeability
    - o Relative Permeability
    - o Distribution Of Fluids In The Reservoir
- Wettability
- Capillary pressure
- Distribution of fluid

CHARACTERISTICS OF THE RESERVOIR FLUIDS

- Dry gas
    - o Composition
    - o Specific Gravity
    - o Compressibility factor
- Gas condensate (CO2)
- Oil
    - o Composition
    - o Specific gravity
    - o Viscosity
    - o Substances Present In the Crude
    - o Gas Oil Ratio
- Water
    - o Salt Content and salinity
    - o Water oil ratio

RESERVOIR CLASSIFICATION

- Rocks
- Sedimentary rocks
- Igneous rocks
- Aquifer

RECOVERY

- General remarks
- Drive mechanism
    - o Depletion
    - o Dissolved gas drive
    - o Gravity Segregation drive

  - Gas Cap Drive
  - Water drive
  - General conclusions

- Primary and enhanced recovery

  - Water Injection
  - Gas injection

RESERVOIR BEHAVIOUR

- Dynamic condition

  - Flow type (Single phase and multiphase flows)
  - Drainage Area - Drainage Radius
  - Losses of pressure
  - Volumes
  - Pressure
  - Temperature

- Static conditions
- Routine test and periodic test

PRODUCTION TEST

- General remarks
- Type of test
- Use of data

  - Problems of a disorderly production
  - Rate limitation

INTRODUCTORY COURSE TO WELL CONTROL (L2 IWCF)

Duration: 5 days

Objectives

Theoretical & practical course for surface installations at introductory level. The course is designed to enhance the understanding of the fundamentals of well control that can be applied at most well control operations, and to prepare candidates for IWCF testing.

Who should attend

Any personnel working on the rig who needs an introductory training in well control.

Prerequisite

None

Programme

At the end of the training the delegates will be able to understand the followings:

SURFACE PRINCIPLES & PROCEDURES

- Overview
- Introduction to Well Control
- Barrier Concept
- Risk Management
- Causes of kicks
- Kill Warning Signs and Indicators
- Circulating Systems
- Fracture Pressure and Maximum Surface pressure
- Influx Characteristics and Behaviour
- Shut In Procedures
- Well Control Methods

SURFACE EQUIPMENT

- Blowout Preventers
- Associated Well Control Equipment
- Choke Manifold and Chokes
- Auxiliary Equipment
- Barriers
- Testing
- BOP Control Systems

WELL CONTROL
(L3 IWCF)
Duration: 5 days

Objectives

Theoretical & practical course for surface installations at the driller level. The course is designed to enhance the understanding of the fundamentals of well control that can be applied at most well control operations, and to prepare candidates for IWCF testing.

Who should attend

Anyone involved in drilling and/or well control operations in a non-supervisory position: all positions from floorman to driller inclusive.

Prerequisite

Starting from September 1st, 2014 every new candidate must pass the L2 IWCF, Introductory Course to Well Control, to access to this training. Dispensation can be given to candidates who have undergone industry accepted vocational training.

Programme

At the end of the training the delegates will be able to understand the followings:

SURFACE PRINCIPLES & PROCEDURES

- Overview
- Introduction to Well Control
- Barrier Concept
- Risk Management
- Causes of kicks
- Kill Warning Signs and Indicators
- Circulating Systems
- Fracture Pressure and Maximum Surface pressure
- Influx Characteristics and Behaviour
- Shut In Procedures
- Well Control Methods
- Well Control during Casing and Cementing Operations.
- Well Control Management
- Contingency Planning

SURFACE EQUIPMENT

- Blowout Preventers
- Associated Well Control Equipment
- Choke Manifold and Chokes
- Auxiliary Equipment

- Barriers
- Testing
- BOP Control Systems

WELL CONTROL
(L4 IWCF)
Duration: 5 days

Objectives

Theoretical & practical course for surface installations at supervisory level. The course is designed to enhance the understanding of the fundamentals of well control that can be applied at most well control operations, and to prepare candidates for IWCF testing.

Who should attend

Anyone involved in drilling and/or well control operations: all positions above driller.

Prerequisite

Starting from September 1st, 2014 every new candidate must pass the L3 IWCF, Well Control, to access to this training. Dispensation can be given to candidates who have successfully completed an appropriate in-house graduate training programme.

Programme

SURFACE PRINCIPLES & PROCEDURES
- Overview
- Introduction to Well Control
- Barrier Concept
- Risk Management
- Causes of kicks
- Kill Warning Signs and Indicators
- Circulating Systems
- Fracture Pressure and Maximum Surface pressure
- Influx Characteristics and Behaviour
- Shut In Procedures
- Well Control Methods
- Well Control during Casing and Cementing Operations.
- Well Control Management
- Contingency Planning

SURFACE EQUIPMENT
- Blowout Preventers
- Associated Well Control Equipment
- Choke Manifold and Chokes
- Auxiliary Equipment
- Barriers
- Testing
- BOP Control Systems

INTRODUCTORY COURSE TO WELL INTERVENTION (L2 IWCF)

Duration: 5 days

Objectives

Theoretical & practical course providing candidates at introductory level with an understanding of pressure control methods relating to the various well servicing operations, and to prepare candidates to IWCF testing.

Who should attend

Any personnel working on the rig who needs an introductory training in well intervention.

Prerequisite

None

Programme

- Overview of completions
- Well control methods
- Reasons for well interventions
- Overview of well intervention services (wire line/coiled tubing/ snubbing)
- Pressure basics
- Production well kill fundamentals
- Well kill simulation and verification
- Equipment and operating procedures
- Hydrates (formation & prevention)
- Flanges and gaskets
- Failures and effects (wireline/coiled tubing/snubbing)

WELL INTERVENTION (L3 IWCF)

Duration: 5 days

Objectives

Theoretical & practical course providing candidates at the driller level with an understanding of pressure control methods relating to the various well servicing operations, and to prepare candidates to IWCF testing.

Who should attend

Engineers and technicians who are involved in the planning and realization of well intervention operations as wireline, coiled tubing, snubbing.

Prerequisite

Starting from September 1st, 2014 every new candidate must pass the L2 IWCF, Introduction to Well Intervention, to access to this training. The dispensation can be given to candidates who have undergone industry accepted vocational training.

Programme

- Overview of completions
- Well control methods
- Reasons for well interventions
- Overview of well intervention services (wire line/coiled tubing/ snubbing)
- Pressure basics
- Production well kill fundamentals
- Well kill simulation and verification
- Equipment and operating procedures
- Hydrates (formation & prevention)
- Flanges and gaskets
- Failures and effects (wireline/coiled tubing/snubbing)

WELL INTERVENTION
(L4 IWCF)
Duration: 5 days

Objectives

Theoretical & practical course providing candidates at supervisory level with an understanding of pressure control methods relating to the various well servicing operations, and to prepare candidates to IWCF testing.

Who should attend

Engineers and technicians who are involved in the planning and realization, and supervising of well intervention operations as wireline, coiled tubing, snubbing.

Prerequisite

Starting from September 1st, 2014 every new candidate must pass the L3 IWCF, Well Intervention, to access to this training. The dispensation can be given to candidates who have successfully completed an appropriate in-house graduate training programme.

Programme

- Overview of completions
- Well control methods
- Reasons for well interventions
- Overview of well intervention services (wire line/coiled tubing/ snubbing)
- Pressure basics
- Production well kill fundamentals
- Well kill simulation and verification
- Equipment and operating procedures
- Hydrates (formation & prevention)
- Flanges and gaskets
- Failures and effects (wireline/coiled tubing/snubbing)

INTRODUCTORY COURSE TO WELL CAP (L2 IADC)

Duration: 5 days

Objectives

Theoretical & practical course for surface installations at introductory level. The course is designed to enhance the understanding of the fundamentals of well control that can be applied at most well control operations, and to prepare candidates for IADC testing.

Who should attend

Any personnel working on the rig who needs an introductory training in well control.

Prerequisite

None

Programme

At the end of the training the delegates will be able to understand the followings:

- Blowout Prevention Selection
- Diverter Systems – Purpose
- Classification of Blowout Preventers
- BOP Operational Characteristic Tests
- Choke Manifolds – Purpose
- Kill Lines
- Control Systems
- Remote Control Panels
- Closing-in Kicks (Soft & Hard)

WELL CAP
(L3 IADC)
Duration: 5 days

Objectives

Theoretical & practical course for surface installations at driller level. The course is designed to enhance the understanding of the fundamentals of well control that can be applied at most well control operations, and to prepare candidates for IADC testing.

Who should attend

Anyone involved in drilling and/or well control operations in a non-supervisory position: all positions from floorman to driller inclusive.

Prerequisite

Starting from September 1st, 2014 every new candidate must pass the L2 IADC, Introductory Course to Well Cap, to access to this training. Dispensation can be given to candidates who have undergone industry accepted vocational training.

Programme

At the end of the training the delegates will be able to understand the followings:

- Blowout Prevention Selection
- Diverter Systems – Purpose
- Classification of Blowout Preventers
- BOP Operational Characteristic Tests
- Choke Manifolds – Purpose
- Kill Lines
- Control Systems for Purpose Mounted
- Remote Control Panels
- Closing-in Kicks (Soft & Hard)

WELL CAP
(L4 IADC)
Duration: 5 days

Objectives

Theoretical & practical course for surface installations at supervisor level. The course is designed to enhance the understanding of the fundamentals of well control that can be applied at most well control operations, and to prepare candidates for IADC testing.

Who should attend

Anyone involved in drilling and/or well control operations: all positions from driller inclusive.

Prerequisite

Starting from September 1st, 2014 every new candidate must pass the L3 IADC, Well Cap, to access to this training. Dispensation can be given to candidates who have successfully completed an appropriate in-house graduate training programme.

Programme

At the end of the training the delegates will be able to understand the followings:

- Blowout Prevention Selection
- Diverter Systems – Purpose
- Classification of Blowout Preventers
- BOP Operational Characteristic Tests
- Choke Manifolds – Purpose
- Kill Lines
- Control Systems for Purpose Mounted
- Remote Control Panels
- Closing-in Kicks (Soft & Hard)

INTRODUCTORY COURSE TO WELL INTERVENTION (L2 IADC)

Duration: 5 days

Objectives

Theoretical & practical course providing candidates on the introductory level with an understanding of pressure control methods relating to the various well servicing operations, and to prepare candidates to IADC testing.

Who should attend

Any personnel working on the rig who needs an introductory training in well intervention.

Prerequisite

None

Programme

- Overview of completions
- Well control methods
- Reasons for well interventions
- Overview of well intervention services (wire line/coiled tubing/ snubbing)
- Pressure basics
- Production well kill fundamentals
- Well kill simulation and verification
- Equipment and operating procedures
- Hydrates (formation & prevention)
- Flanges and gaskets
- Failures and effects (wireline/coiled tubing/snubbing)

WELL INTERVENTION
(L3 IADC)
Duration: 5 days

Objectives

Theoretical & practical course providing candidates on the driller level with an understanding of pressure control methods relating to the various well servicing operations, and to prepare candidates to IADC testing.

Who should attend

Engineers and technicians who are involved in the planning and realization of well intervention operations as wireline, coiled tubing, snubbing.

Prerequisite

Starting from September 1st, 2014 every new candidate must pass the L2 IADC, Introduction to Well Intervention, to access to this training. Dispensation can be given to candidates who have undergone industry accepted vocational training.

Programme

- Overview of completions
- Well control methods
- Reasons for well interventions
- Overview of well intervention services (wire line/coiled tubing/ snubbing)
- Pressure basics
- Production well kill fundamentals
- Well kill simulation and verification
- Equipment and operating procedures
- Hydrates (formation & prevention)
- Flanges and gaskets
- Failures and effects (wireline/coiled tubing/snubbing)

WELL INTERVENTION
(L4 IADC)
Duration: 5 days

Objectives

Theoretical & practical course providing candidates on the supervisor level with an understanding of pressure control methods relating to the various well servicing operations, and to prepare candidates to IADC testing.

Who should attend

Engineers and technicians who are involved in the planning and realization, and supervising of well intervention operations as wireline, coiled tubing, snubbing.

Prerequisite

Starting from September 1st, 2014 every new candidate must pass the L3 IADC, Well Intervention, to access to this training. Dispensation can be given to candidates who have successfully completed an appropriate in-house graduate training programme.

Programme

- Overview of completions
- Well control methods
- Reasons for well interventions
- Overview of well intervention services (wire line/coiled tubing/ snubbing)
- Pressure basics
- Production well kill fundamentals
- Well kill simulation and verification
- Equipment and operating procedures
- Hydrates (formation & prevention)
- Flanges and gaskets
- Failures and effects (wireline/coiled tubing/snubbing)

2. GEOSCIENCES COURSES

Since 2009 DRILNET has offered several new training disciplines resulting from the partnership with other training centers.

New areas of training available through our offer in Geosciences Training Courses lean on the experience in this field of our partner that provides expertise to major oil companies worldwide as TOTAL, PERENCO, SHELL, ELF, EXXON, etc. developing an important date centre to provide a relevant response to Clients' needs.

Among the training courses offered:

- Geology
- Reservoir geology
- Reservoir Engineering
- Geophysics
- Petrophysics
- Interpretation software

The following tables list some items of our training courses.

Note that all training courses on basic level could be presented as Introductory Courses in 3 days (instead 5 days for basic course).

Also all the courses here bellow or other disciplines the client may require could be adapted and developed as upgrading advanced training course to answer the clients' specific needs. The duration of such training course could vary from 1 to several weeks or planned out over a period.

In addition to the courses listed hereafter, we propose general training programs. You can obtain the related catalogue upon request.

GEOLOGY				
Course Title	**Who should attend**	**Level**		**Duration**
Introduction To Petroleum Geology	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
Basic Petroleum Geology	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
Well Site Geology	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Quantitative Well Geology	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Geochemistry	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Carbonate Reservoirs Geology	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Structural Styles In Petroleum Exploration	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Compressional and Transpressional Structural Styles Analysis	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Deep Water Turbidite Depositional Structural Styles Geology	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Development Geology	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days

GEOLOGY				
Course Title	**Who should attend**	**Level**		**Duration**
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Mapping Subsurface Structures	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Operations Geology (Mud Logging)	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Production Geology For Other Disciplines	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Sandstone Reservoirs	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days

RESERVOIR ENGINEERING				
Course Title	**Who should attend**	**Level**		**Duration**
Introduction to Reservoir engineering	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
Basic Reservoir simulation	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
Gas reservoir management	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days

RESERVOIR ENGINEERING				
Course Title	**Who should attend**	**Level**		**Duration**
Horizontal and multilateral wells: analysis and design	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Integrated reservoir modeling	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Naturally fractured reservoirs: geologic and engineering analysis	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
New opportunities in old fields	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Oil and gas reserves evaluation	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Oil recovery enhancement techniques	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Reservoir characterization: a multi-disciplinary team approach	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Reservoir fluid properties	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days

RESERVOIR ENGINEERING

Course Title	Who should attend	Level		Duration
Reservoir engineering for other disciplines	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Reservoir management	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Reservoir simulation strategies	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Waterflooding A to Z	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days
Well test design and analysis	• Drilling Engineer / Superintendent / Supervisor	Basic	x	5 days
	• Reservoir & Production Engineer / Geologist / Completion Engineer	Advanced	x	10 days

RESERVOIR GEOLOGY

Course Title	Who should attend	Duration
Reservoir Characterization	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days
Reservoir Characterization from Seismic to Production and Original Hydrocarbons In Place	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	10 days
Reservoir Characterization from Seismic to Production and Logging interpretation	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	10 days

RESERVOIR GEOLOGY		
Course Title	**Who should attend**	**Duration**
3D geological Model	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	10 days
Reservoir for Petroleum Engineers	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days

GEOPHYSICS		
Course Title	**Who should attend**	**Duration**
Basic Geophysics	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days
Introduction to Seismic Stratigraphy	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days
Stratigraphy and basin analysis	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days
Seismic acquisition and processing	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days
Seismic imaging of subsurface geology	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days
2D / 3D seismic interpretation	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*

** According to the level*

PETROPHYSICS		
Course Title	**Who should attend**	**Duration**
Applied rock mechanics	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
Capillarity in rocks	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*

PETROPHYSICS		
Course Title	**Who should attend**	**Duration**
Applied rock mechanics	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
Coring and core analysis	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
Foundations of Petrophysics	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
Integration of rock, log and test data	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
Structural and stratigraphic interpretation of dipmeters and borehole imaging logs	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
Well log interpretation	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
Wireline formation testing and interpretation	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*

INTERPRETATION SOFTWARE		
Course Title	**Who should attend**	**Duration**
Log scanning and vectorizing using Neuralog	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3 days
Seismic scanning and vectorizing using Sphynx	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	5 days
Well data management in Geolog6	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3 days
Geosciences data base organization – Introduction (3 days) and coaching	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3 days

INTERPRETATION SOFTWARE		
Course Title	**Who should attend**	**Duration**
Introduction to Well log quantitative evaluation on Geolog6	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3 days
Advanced well log interpretation on Geolog6	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3 days
Seismic / Petrophysics on Geolog6	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3 days
2D seismic data QC and interpretation on Kingdom suite	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
3D seismic data QC and interpretation on Kingdom Suite	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*
3D modeling	• Drilling Engineer/Petroleum Engineer/Production Supervisor & Engineer	3/5/10 days*

** According to the training level.*

Software resources: GEOLOG6 / SURFER / GEOTOP / KINGDOM / GOCAD / SOFT de VECTORISATION

3. HEALTH, SAFETY & ENVIRONMENT COURSES

3.1 MARITIME SAFETY, MARITIME & HELICOPTER

DRILNET offers SAFETY training courses for offshore and maritime operational staff in accordance with STCW95 international standards.

What is STCW?

This is the Standards of Training, Certification & Watchkeeping (STCW) Convention which was drafted in 1978. The Convention prescribes minimum standards relating to training, certification and watchkeeping for seafarers which countries are obliged to meet or exceed.

Since 1995 the amendments completely re-wrote enforcement related to the Convention, and more importantly created an STCW Code that set stringent standards for mariners to meet.

Unlike the original 1978 Convention, the 1995 Amendments required a separate piece of paper to certify that the mariner met the requirements. The STCW Certificate was the result. People get confused about these certificates because there is a 1978 Certificate and a 1995 Certificate. Both of these certificates were created at the same time!!!

The STCW 1978 Certificate means that a mariner was working aboard ship before August 1, 1998 and hasn't completed all of the grandfather requirements, yet. New mariners (1st day aboard ship after Aug. 1, 98) cannot get an STCW 1978 Certificate. They have to comply with all of the Convention requirements! STCW 1995 Certificates are issued to grandfathered mariners after they do the "gap closing" training.

The STCW 95 certificates are registered at the Inspection of Maritime Affairs (France) which is working with the European and International Maritime Organizations.

The Manila amendments to the STCW Convention and Code were adopted on 25 June 2010, marking a major revision of the STCW Convention and Code. The 2010 amendments are set to enter into force on 1 January 2012 under the tacit acceptance procedure and are aimed at bringing the Convention and Code up to date with developments since they were initially adopted and to enable them to address issues that are anticipated to emerge in the foreseeable future.

Among the training standards according to the STCW 95 Certificate there are following training courses:

BST/ Basic Safety Training:

- Proficiency in Elementary First Aid Training Certificate
- Personal Survival Techniques Training Certificate (Rule A-VI/1-1 of STCW 95)
- Personal Safety and Social Responsibility Training Certificate (Rule A-VI/1-4 of STCW 95)
- Basic Fire Fighting Training Certificate

BAEERS / Vocational Certificate for Operations of Boats and Life Rafts (STCW 95 Ch. VI, rule VI/2 §1, section A-VI/2, resolution A891)):

- Proficiency in Elementary First Aid Training Certificate
- Personal Survival Techniques Training Certificate (Rule A-VI/1-1 of STCW 95)
- Personal Safety and Social Responsibility Training Certificate (Rule A-VI/1-4 of STCW 95)
- Introductory Basic Fire Fighting Training Certificate

Other training courses are useful and even compulsory but not certified by STCW 95:

- HUET (Helicopter Underwater Escape Training)
- MES (Marine Escape System Training Certificate)

All certificates STCW 95 have 5-year validity. They could be refreshed during the 4th year after the date of certificate delivery.

The following table gives an example of the training required depending on the qualification level and the type of the staff concerned:

LEVEL	MARITIME STAFF	OFFSHORE STAFF
BASIC	**BAEERS** **HUET** **Marine Escape System**	**BST** **HUET** **Marine Escape System**
ADVANCED	**Basic Fire Fighting** **Advanced Fire Fighting** **Medical Level 2** **Medical Level 3** **Fast Rescue Boat** **General Radio Operator Certificate**	**BAEERS** **Advanced Fire Fighting** **Medical Level 2** **Medical Level 3** **Fast Rescue Boat** **General Radio Operator Certificate**
WITHOUT STCW 95 CERTIFICATION	**Marine Escape System** **HUET** **Helicopter Landing Officer** **Helideck Assistant** **Helicopter Refuelling** **Team Member 1st Response** **Team Member 2nd Response** **Team Leader**	**Marine Escape System** **HUET**
MORE	**Management of Maritime Fire Fighting (STCW 95)**	

MARITIME SAFETY				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Basic Safety Training (BST)	• Offshore and maritime operational staff	STCW 95	5 days	**Page 109**
Personal Survival Techniques	• Offshore and maritime operational staff	STCW 95	2 days	**Page 111**
Sea Survival	• Offshore and maritime operational staff	IASST	1 day	**Page 112**
Personal Safety & Social Responsibility	• Offshore and maritime operational staff	STCW 95	1 day	**Page 113**
Proficiency in Survival Craft & Rescue Boat	• Offshore and maritime operational staff	STCW 95	5 days	**Page 114**
Fast Rescue Boat	• Offshore and maritime operational staff	STCW 95 / IASST	3 days	**Page 115**
Offshore Lifeboat Coxswain	• Offshore and maritime operational staff	IASST / OPITO	4 days	**Page 116**
Boat Bilge Rescue & Evacuation Training	• Offshore and maritime operational staff		3 days	**Page 117**
Proficiency in Elementary First Aid	• Offshore and maritime operational staff	STCW 95	1 day	**Page 118**
Medical Training 1	• Offshore and maritime operational staff	STCW 95	2 days	**Page 119**
Medical Training 2	• Offshore and maritime operational staff	STCW 95	5 days	**Page 120**
Medical Training 3	• Offshore and maritime operational staff	STCW 95	10 days	**Page 121**
Basic Fire Fighting	• Offshore and maritime operational staff	STCW 95 / IADC DIT	3 days	**Page 123**
Advanced Fire Fighting	• Offshore and maritime operational staff	STCW 95 / IADC DIT	5 days	**Page 124**
Fire Team Leader	• Offshore and maritime operational staff	STCW 95	3 days	**Page 125**

MARITIME SAFETY				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Fire Team Member	• Offshore and maritime operational staff	STCW 95	3 days	**Page 126**
Offshore Emergency ResponseTeam Leader (OERTL)	• Offshore and maritime operational staff	OPITO	4 days	**Page 127**
Offshore Emergency Response Team Member (OERTM)	• Offshore and maritime operational staff	OPITO	5 days	**Page 128**
Basic Offshore Safety Induction and Emergency Training (BOSIET)	• Offshore and maritime operational staff	OPITO	3 days	**Page 129**
Tropical Basic Offshore Safety Induction and Emergency Training (T-BOSIET)	• Offshore and maritime operational staff	OPITO	3 days	**Page 130**
Further Offshore Emergency Training (FOET)	• Offshore and maritime operational staff	OPITO	1 day	**Page 131**
Tropical Further Offshore Emergency Training (T-FOET)	• Offshore and maritime operational staff	OPITO	1 day	**Page 132**
Accident & Incident Investigation	• Offshore and maritime operational staff		1 day	**Page 133**
Risk Assessment & Management	• Offshore and maritime operational staff		1 day	**Page 134**
Crisis Management & Human Behaviour	• Maritime operational staff	STCW 95	1 day	**Page 135**
Dangerous, Hazardous & Harmful Cargoes	• Industry and Oil staff		5 days	**Page 136**

MARITIME				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Ship Security Officer (SSO)	• Offshore and maritime operational staff	STCW 95	3 days	**Page 137**
Company Security Officer (CSO)	• Offshore and maritime operational staff	STCW 95	5 days	**Page 138**
Port Facility Security Officer (PFSO)	• Offshore and maritime operational staff	STCW 95	3 days	**Page 139**
General Radio Operator	• Offshore and maritime operational staff	STCW 95	10 days	**Page 140**
Restricted Radio Operator	• Offshore and maritime operational staff	STCW 95	1 day	**Page 141**
Basic Nautical Training	• Offshore and maritime operational staff		4 days	**Page 142**
Water Ways Stability	• Offshore and maritime operational staff		2 days	**Page 143**
Dynamic Positioning Operator	• Offshore and maritime operational staff		5 days	**Page 144**
Dynamic Positioning Induction - Basic	• Offshore and maritime operational staff		4 days	**Page 146**
Dynamic Positioning Simulator - Advanced	• Offshore and maritime operational staff		4 days	**Page 148**
Practical Seagoing Dynamic Positioning	• Offshore and maritime operational staff		3 days	**Practical Training**
Training on Dynamic Positioning Vessels	• Offshore and maritime operational staff		6 months	**Practical Training**

HELICOPTER				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Helideck Assistant (HDA)	• Offshore and maritime operational staff		1,5 days	**Page 150**
Helicopter Landing Officer (HLO)	• Offshore and maritime operational staff		2 days	**Page 151**
Helicopter Refuelling	• Offshore and maritime operational staff		2 days	**Page 152**
Helideck Fire Fighting (HDFF)	• Offshore and maritime operational staff		1 day	**Page 153**
Helideck Rescue	• Offshore and maritime operational staff		3 days	**Page 154**
Helicopter Underwater Escape Training (HUET)	• Offshore and maritime operational staff	OPITO	1 day	**Page 155**
Tropical Helicopter Underwater Escape Training (T-HUET)	• Offshore and maritime operational staff	OPITO	1 day	**Page 156**
Helicopter Underwater Escape Training and EBS (HUET & EBS)	• Offshore and maritime operational staff	OPITO	1 day	**Page 157**
Tropical Helicopter Underwater Escape Training and EBS (T-HUET & EBS)	• Offshore and maritime operational staff	OPITO	1 day	**Page 158**

The following pages give a non exhaustive list of training programmes.

BASIC SAFETY TRAINING (BST)

Duration: 5 days

Objectives

The 5 days provide an overview of first aid, fire prevention and firefighting, sea survival and some general information about life at sea.

Who should attend

The course will benefit all personnel whose position will include seafaring.

Prerequisite

Physical fitness to perform practical exercises.

Programme

This five day training package comprises four separate accredited courses:

Personal Survival Techniques

- Abandonment and survival
- Types of life-saving appliances carried on ships
- Personal life-saving equipment
- Survival crafts and survival crafts equipment
- Helicopter safety

Basic Fire Fighting

- Properly don a fire suit
- Properly don and use a Self-Contained Breathing Apparatus (SCBA)
- Using portable fire extinguishers, put out class A, B, and C class fires (this exercise is conducted three times: once for each class of fire)
- Use an all-purpose nozzle for protection and extinguishing fires
- Advancement of hose teams with the team leader giving commands
- Enter an internal space with S.C.B.A. and extinguish fire with fire hose
- Properly enter a watertight door with a fire behind door
- Rescue a victim (165lb. mannequin) from a smoke-filled room wearing an S.C.B.A.
- Take immediate action upon encountering an accident or medical emergency
- Perform an emergency drill in accordance with a station bill
- Identifying what extinguishers to use on what class fire
- Properly ventilate a fire
- Correctly overhaul a fire
- Effectively contain a fire using a suppression system

Elementary First Aid

- Using barriers
- Ensuring scene is safe setup
- Calling EMS
- Primary Assessment of patient
- Checking airway, breathing, circulation, and shock
- Positioning the patient
- CPR
- Stop Bleeding
- Procuring vital signs
- Identifying signs and symptoms for heart problems, stroke, allergic reactions, asthma, poisoning, diabetic, epileptic, and injury assessments
- Treating fractures, head, neck and back injuries

- Treating wounds
- Properly bandaging patient
- Caring for heat and cold exposure
- Treating for burns, scalds, and electrical injuries
- Treat and manage amputations
- Treat and manage bites and stings (marine, animal, human, insects)

Personal Safety and Social Responsibilities

- Understand types of Emergencies and actions to take
- Recognize emergency signals in station bill and use of safety
- equipment
- Know the values of drills and training
- Understand importance of working safely
- Use appropriate escape routes
- Understand effective communication
- Understand importance of precautions prior to entering a confined space
- Recognize when to use Lock-Out/Tag-Out
- Recognize duties regarding pollution prevention
- Understand policies regarding drug and alcohol abuse
- Know the importance of maintaining appropriate employee relations

Certification

Course certificate STCW95 / Table A-V1/1

PERSONAL SURVIVAL TECHNIQUES

Duration: 2 days

Objectives

This course is designed to give all persons intending to go to sea, in merchant or fishing vessels, the essential basics knowledge and experience of personal survival principles and techniques that can be applied to maximize their chances of survival in the event of a marine incident.

Who should attend

The course will benefit all personnel whose position will include seafaring

Prerequisite

Seafarers are required to be medically fit a regulation STCW 95.regulation I/9

Programme

The syllabus focuses on:

- Emergency signals
- Mustering of personnel
- Use of lifejacket
- Use of immersion suits
- Lifeboat procedures
- Modes of evacuation
- Boarding life rafts or buoyant apparatus
- Water survival techniques
- Deployment of life rings and associated equipment

Certification

Course certificate STCW95 / Table A-V1/1

SEA SURVIVAL

Duration: 1 day

Objectives

To understand how to use the equipment and how to help yourself. It is a well-proven fact that, in the event of an emergency at sea, people with training are more likely to survive.

Who should attend

Personnel working at sea

Prerequisite

None

Programme

An important part of the course is a practical session in a swimming pool. Experience first hand the problems of entering an uncooperative liferaft and assisting others while fully kitted out in wet weather gear and a lifejacket.

- Liferafts and the equipment they contain
- Survival techniques
- The design of lifejackets
- Medical aspects of sea survival
- Search and rescue techniques

Certification

IASST

PERSONAL SAFETY& SOCIAL RESPONSIBILITY

Duration: 1 day

Objectives

To provide seafarers with the knowledge and skills needed to maintain a safe working environment while successfully relating and responding to others in a social manner.

Who should attend

The course will benefit all personnel whose position will include seafaring

Prerequisite

None

Programme

- Knowledge of shipboard contingency plans
- Emergency signals, muster station, use of personnel equipment.
- Action to take for potential emergency, fire, collision, ingress of water, hearing emergency signal
- Knowledge of escape routes and internal communication
- Value of training
- Effects of pollution of the marine environment
- Basic environmental protection procedures
- Safe working practices.
- Safety protective devices
- International measures concerning accident prevention
- Ability to understand orders and communicate
- Importance of maintaining good human and working relationships
- Individual rights and obligations, dangers of drug and alcohol abuse

Certification

Course certificate STCW95 / Table A-V1/1 -4

PROFICIENCY IN SURVIVAL CRAFT & RESCUE BOAT

Duration: 5 days

Objectives

On completion of the training, the delegates will have knowledge of the construction and function of different types of survival craft, rescue boats and associated equipment and be able to:

- Take charge of a survival craft or rescue boat during and after launch and upon recovery. manage survivors and survival craft after abandoning ship
- Manage injured persons, including the control of bleeding and shock.

Who should attend

This training is intended for seafarers that are required to take charge of a survival craft or a rescue boat in emergency situations during and after launch

Prerequisite

Seafarers are required to be medically fits per Regulation 1/9 of STCW95

Programme

- Construction and outfit of survival craft and rescue boats and individual items of their equipment
- Particular characteristics and facilities of survival craft and rescue boats
- Various types of device used for launching survival craft and rescue boat
- Methods of launching survival craft into a rough sea
- Methods of recovering survival craft
- Action to be taken after leaving the ship
- Methods of launching and recovering rescue boats in a rough sea.
- Radio life-saving appliances carried in survival craft, including satellite EPIRBs and SARTs
- Pyrotechnic distress signals
- Use of the first-aid kit and resuscitation techniques
- Management of injured persons, including control of bleeding and shock.

Certification

Course certificate STCW95 / Table A-VI/2-1

FAST RESCUE BOAT

Duration: 3 days

Objectives

This course provides a " hand-on " experience in the launch and operation of a typical fast rescue boat, the conduct of effective search patterns, and the recovery of victim in various weather and sea conditions. This course meets all the STCW'95 requirements.

Who should attend

- Person in charge of the search & rescue team.
- According the minimum safe manning scales

Prerequisite

- A certificate in proficiency of survival Craft & Rescue boat.
- A basic training.

Programme

- Construction and outfit of survival craft and rescue boats and individual items of their equipment
- Particular characteristics and facilities of survival craft and rescue boats
- Various types of device used for launching survival craft and rescue boat
- Methods of launching survival craft into a rough sea
- Methods of recovering survival craft
- Action to be taken after leaving the ship
- Methods of launching and recovering rescue boats in a rough sea.
- Radio life-saving appliances carried in survival craft, including satellite EPIRBs and SARTs
- Pyrotechnic distress signals
- Use of the first-aid kit and resuscitation techniques
- Management of injured persons, including control of bleeding and shock

Certification

STCW 95 / IASST

OFFSHORE LIFEBOAT COXSWAIN

Duration: 4 days

Objectives

The training programme consists of theoretical and practical initial training including coaching to prepare the delegates to take up duties as an offshore lifeboat coxswain, then continue their learning process with installation specific training.

Who should attend

This OPITO / IASST approved training programme is designed to meet the OPITO / IASST guidelines for safetyand contingency training for personnel designated to undertake coxswains duties on an installation survival craft (TEMPSC). After completing the course delegates should be able to prepare rescue craft equipment for use, organise boarding, safely operate lower and release equipment, manoeuvre and lead the recovery operation on the water, then continue with further offshore installation specific training.

Prerequisite

Delegates must have attended either a Basic Offshore Safety Induction & Emergency Training (BOSIET) or Further Offshore Emergency Training (FOET), and be in possession of a valid certificate.

Programme

- Maintain operational readiness of the craft
- Contribute to drills and exercises
- Preparation of self and craft
- Boarding and launching of craft
- Safe launching procedures
- Handling and moving the craft to a safe location
- Personal safety & Equipment
- Communications
- Stay in lifeboat
- Recovery of people from the sea
- Relevant life support and first aid
- Rescue and recovery

Certification

IASST / OPITO

BOAT BILGE RESCUE & EVACUATION TRAINING

Duration: 3 days

Objectives

To make known to firefighters and seafarers different types of evacuation of injured persons from the boat's bilge or in unsafe environment.

Who should attend

All companies and institutions staff

Prerequisite

None

Programme

- Injured persons evacuation from hardly accessible places such as boat's bilge, slipway, etc
- Casualty movement using the Besllile stretcher
- Rescue of casualties using ropes, straps, rescue kit
- First Aid equipment use
- Preparation for winching up the helicopters
- Reminders of first aid definitions

PROFICIENCY IN ELEMENTARY FIRST AID

Duration: 1 day

Objectives

This course is a combination of theory and practical training for basic first aid and life-saving skills. It is designed to provide trainees with a basic knowledge of the immediate action to be taken upon encountering an accident or other medical emergency aboard ship.

Who should attend

The course will benefit all personnel whose position will include seafaring

Prerequisite

None

Programme

- Taking immediate action upon encountering an accident or other medical emergency
- Knowledge, understanding and proficiency in basic first aid
- Assessing the needs of the casualty and threats to your own safety
- Appreciation of body structure and functions
- Understanding the immediate measures to be taken in case of an emergency
- Positioning a casualty
- Applying resuscitation techniques
- Controlling bleeding
- Basic shock management
- Applying appropriate measures in event of burns and scalds
- The rescue and transport of a casualty
- Improvising bandages and using your emergency kit

Certification

Course certificate STCW95 / Table A-VI/3

MEDICAL TRAINING - LEVEL 1

Duration: 2 days

Objectives

To train seafarers in accordance with 1st level instruction.

Who should attend

All Companies and Institutions staff

Prerequisite

None

Programme

- Drawing up a balance sheet
- Blood pressure
- Controlling a haemorrhage
- Put an injured person in the lateral safe position
- Treating wounds and burns
- Stopping a haemorrhage
- Treating a drowning, an hypothermia in emergency
- Clearing the breathing ducts free
- Making an arterial ventilation with the equipment, oxygenotherapy, inhalation, insufflation
- Making an external cardiac massage
- Carrying out immobilizations (scarves, casts, cervical collar)
- Picking up a casualty (the “Dutch bridge”, the simple bridge, the improved bridge)

STRETCHERING

- Using emergency evacuation mattress
- Using a “Bellisle” stretcher (portoire corset)
- Preparing an injured person to a helicopter transport

MEDICAL TRAINING - LEVEL 2

Duration: 5 days

Objectives

To provide staffs working on board of armed merchant ships and yachts with a 2nd level of medical training.

Who should attend

All companies and institutions

Prerequisite

None

Programme

SE I

- Respecting the asepsis rules
- Cleaning wounds and using an antiseptic
- Putting narrow bandages or stitches
- Dressing wounds

SE 2

- Measuring blood pressure
- Taking body temperature
- Making an urinalysis with urine dipsticks
- Making a glycemia test with reactive narrow bandage

SE 3

- Administering medicines by oral pulverization, inhalation, nebulation
- Preparing a parenteral injection
- Making a subcutaneous injection, an intramuscular injection

CT I CARES ABOARD

- Medical assistance organization on sea
- Role of the captain who is responsible of cares
- Role of the maritime medical consultations centre
- Operational procedures of medical assistance on sea
- Cares aboard ships and medical teleconsultation
- Management and use of medical donations
- Use of the “ship medical guidebook”
- Draft of medical files
- Procedures of the medical teleconsultation

MEDICAL TRAINING - LEVEL III

Duration: 10 days

Objective

L'objectif de ce stage est de donner aux marins désignés comme responsables des soins médicaux les connaissances leur permettant d'effectuer, dans leur situation d'isolement et sous le contrôle du médecin consultant du CCMM, les gestes de soins d'urgence, normalement effectués par un infirmier diplômé, de manière à sauvegarder la vie des marins malades ou blessés, en attendant une évacuation vers une structure médicalisée ou l'intervention d'un médecin.

Who should attend

Toute personne désignée pour assurer la responsabilité des soins médicaux à bord des navires de jauge brute de plus de 500 UMS ou séloignant à plus de 200 milles des côtes.

Prerequisite

- Etre titulaire De l'Enseignement Médical II (EMII) de moins de 5 ans
- Avoir l'aptitude médicale des gens de mer à jour de moins de un an

Programme

UV-PSEM (revalidation)

UV-HPR

- HPR 1 Prévention des risques professionnels maritimes,
- HPR 2 Hygiène :
  - hygiène individuelles et collective
  - prévention du tabagisme, de l'alcoolisme, de la consommation de drogue à bord
- HPR 3 Prévention des risques spécifiques (notamment coupe de chaleur, hypothermie, accident d'exposition au sang, animaux marins venimeux

UV-SM Sémiologie Médicale

- SM 1 Savoir effectuer l'examen d'un malade
- SM 2 Savoir effectuer l'examen d'un blessé
- SM 3 Savoir examiner un patient présentant des troubles du comportement et connaître les situations à l'origine d'un traumatisme psychologique
- SM 4 Connaître les techniques particulières d'examen clinique et para-clinique
- SM 5 Connaître les aspects administratifs, réglementaires et médico-légaux

UV-PI 2 heures

- Connaître les principales maladies parasitaires et infectieuses et/ou sexuellement transmissibles (VIH, hépatite, accidents d'exposition au sang …)

UV-SI Soins Infirmiers

- Assurées par un Institut de Formation aux Soins Infirmiers (IFSI)
- Travaux pratiques au sein d'un service d'urgences hospitalier

UV-AMM Aide Médicale en Mer

- AMM 1 Aide médicale en mer
- AMM 2 Travaux pratiques sur la prise en charge d'un blessé, d'un malade

UVUV-HPI Hygiène et Pathologie Infectieuse

- HPI 1 Connaître les principales maladies parasitaires et infectieuses
- HPI 2 Hygiène alimentaire et conservation des denrées alimentaires

Certification

STCW 95 / Table A-VI/4-1 & A-VI/4-2

BASIC FIRE FIGHTING

Duration: 3 days

Objectives

To be able to carry out an investigation and extinguish a starting fire;

Who should attend

All Companies and Institutions staff

Prerequisite

- Medical clearance
- Medical approval for wearing a self-contained breathing apparatus
- Practice of fire exercises on real fire

Programme

THEORETICAL TRAINING

- Fires and explosions
- Combustion
- Extinguishing agents
- Fire prevention
- Fire-fighting detectors
- Fixed equipments
- Self-Contained Breathing Apparatus (ARI)
- General operations running

PRACTICAL TRAINING

- Log equipment
- Cloud smoke / heat course
- Deep fryer fire extinction
- Extinction of a tub fire in teams using a diffused jet fire hose
- Handlings of fire hoses
- Course with a life line
- Fire fighting using ARI in smoky space
- Rescue exercises using a stretcher

ADVANCED FIRE FIGHTING

Duration: 5 days

Objectives

To provide participants with the skills and knowledge required to respond effectively as a key member of the on board command fire fighting team and manage shipboard fire prevention, co-ordinate tactical fire fighting and use and maintain fire fighting and fire detection equipment carried on merchant ships.

Who should attend

All Companies and Institutions

Prerequisite

- Medical clearance
- Medical approval for wearing a self-contained breathing apparatus
- Practice of fire exercises on real fire
- BFF certificate obtained

Programme

THEORETICAL TRAINING

- On-board safety principles
- Review of theory of fire
- Operations organisation
- Safety organisation exercise
- General Operations Progress
- Management of attack places
- Settlement of calling role
- Tactical reasoning exercise
- Management of stability and smokes

PRACTICAL TRAINING

- Urgent cares review
- Casualty movement using stretchers exercise
- Command exercise
- On-board exercises
- Rescue team organization
- Management of command

FIRE TEAM LEADER

Duration: 3 days

Objectives

The purpose of the course is to qualify the course participant in such a way that he/she will be able to act as fire chief during fire fighting on vessels.

Who should attend

Maritime personnel who shall be part of the fire chief preparedness.

Prerequisite

Valid health certificate (maximum 1 year old) is required.

Programme

- Special conditions in relation to fire on vessels
- Managerial functions during fire and in daily life
- Communications paths during fire fighting
- Plan, carry out and evaluate a minor fire drill
- Smoke-helmeted fireman technique/-tactic
- Chief during a fire service drill during a fire on vessel

Certification

STCW-95 / Table A-VI/1-2

FIRE TEAM MEMBER

Duration: 3 days

Objectives

To give the course participant necessary knowledge and appreciation to be able to be part of the fire fighter/smoke-helmeted fireman preparedness on vessels.

Who should attend

Maritime personnel who shall be part of the fire chief preparedness.

Prerequisite

Valid health certificate (maximum 1 year old) is required.

Programme

- Combustion theory
- Extinguishment theory
- Function and use of extinguishing agents
- Various nozzles and foam equipment
- Portable fire extinguishers
- Breathing organs and the various conditions of the breathing functions
- Breathing poison
- Construction of the compressed air apparatus and its function
- Compressed air apparatus in relation to rescue and fire on vessels

Certification

STCW-95 / Table A-VI/1-2

OFFSHORE EMERGENCY RESPONSE TEAM LEADER (OERTL)

Duration: 4 days

Objectives

The aims and objectives of the Initial Training Programme are to equip the delegate with the necessary knowledge, understanding and skills to perform the role of Emergency Response Team Leader effectively.

Who should attend

This programme is designed to meet the initial onshore training and assessment requirements for an Offshore Emergency Response Team Leader (OERTL) in the oil and gas industry.

Prerequisite

Delegates attending this course must possess a valid Offshore Emergency Response Team Member Training (OERTM) certificate.

Due to certain aspects of the course being physically demanding and potentially stressful, delegates will be required to confirm their medical fitness & physical ability to participate on this course by completing our centre medical self-screening form prior to course commencement.

Programme

- The role of the Emergency Response Team Leader
- Offshore emergency response activities
- Elements of teamwork and leadership
- Communication requirements for offshore incidents
- How to brief and debrief team members
- The requirements to initiate servicing of equipment and to replenish stocks
- Establishing and maintaining communications including equipment and procedures
- Allocating and confirming the team's duties and tasks
- Operation and use of firefighting and rescue equipment
- Operation and use of breathing apparatus
- Monitoring the team's progress, evaluating, adjusting and communicating the response plan
- Monitoring stress in self and others
- Debriefing the team

Certification

OPITO

OFFSHORE EMERGENCY RESPONSE TEAM MEMBER (OERTM)

Duration: 5 days

Objectives

The aims and objectives of the Initial Training Programme are to equip the delegate with the necessary knowledge, understanding and skills to perform the role of Emergency Response Team Member effectively.

Who should attend

This programme is designed to meet the initial onshore training and assessment requirements for an Offshore Emergency Response Team Member (OERTM) in the oil and gas industry

Prerequisite

Attendance on this training programme is open to delegates who can provide proof of the following course prerequisites:

- A valid Basic Offshore Safety Induction and Emergency Training (BOSIET) or Further Offshore Emergency Training (FOET) / T-BOSIET/T-FOET certificate

- Due to certain aspects of the course being physically demanding and potentially stressful, delegates will be required to confirm their medical fitness & physical ability to participate on this course by completing our centre medical self-screening form prior to course commencement

Programme

- Offshore Emergency Response arrangements including the role of the Emergency Response Team Member
- Incident planning and incident monitoring activities
- Operation of fixed fire systems including extinguishing a fire and/or securing an area
- Emergency response team operations when dealing with non-fire incidents
- Preparing to enter and gaining access to the incident area using best working practices and procedures
- Locating missing personnel and handling and removing casualties
- Selecting and using portable firefighting equipment
- Selecting, operating and flushing foam firefighting equipment
- Conducting and controlling breathing apparatus operations
- Minimising damage to property and maintaining communications

Certification

OPITO

BASIC OFFSHORE SAFETY INDUCTION & EMERGENCY TRAINING (BOSIET)

Duration: 3 days

Objectives

The aim of the BOSIET is to introduce delegates to the specific safety issues and regimes relevant to offshore installations, and to equip them with the basic emergency response knowledge and skills for travelling to and from offshore installations by helicopter.

Who should attend

This training programme is designed to meet the initial offshore safety and emergency response training requirements for personnel new to the offshore oil and gas industry.

Programme

Delegates will receive theoretical and practical knowledge in the following areas:

- Safety induction: Offshore hazards, their control and consequences. Waste disposal/ environmental awareness. How offshore safety is regulated. How offshore safety is managed. Procedures for prescribed medicines. Alcohol and substance abuse policy. PPE requirements. Procedures for reporting incidents, accidents and near misses. Role of the medic.

- Helicopter safety & escape: Pre boarding. Safe boarding. In flight safety. Safe disembarkation. In flight emergency actions. Use of emergency breathing system equipment. Practical emergency escape breathing system training. Practical emergency ditching and escape training.

- Sea survival: Abandonment theory and practical sea survival training. Actions for mustering and boarding of a survival craft and actions as a passenger during launching operations. Use of helicopter rescue strops and winching procedures. Emergency First Aid including C.P.R.

- Fire fighting and self rescue: Nature and causes of fire. Fixed systems and response. Use of hand held extinguishers. Operation of fixed hose reels. Self rescue techniques in reduced visibility and completely obscured visibility. Use of escape hoods.

TROPICAL BASIC OFFSHORE SAFETY INDUCTION & EMERGENCY TRAINING (T-BOSIET)

Duration: 3 days

Objectives

The aim of the T-BOSIET is to introduce delegates to the specific safety issues and regimes relevant to offshore installations, and to equip them with the basic emergency response knowledge and skills for travelling to and from offshore installations by helicopter in a tropical environment.

Who should attend

This training programme is designed to meet the initial offshore safety and emergency response training requirements for personnel new to the offshore oil and gas industry in a tropical environment.

Programme

Delegates will receive theoretical and practical knowledge in the following areas:

SAFETY INDUCTION

- Offshore overview specific to tropical regions.
- Offshore hazards, their control and consequences.
- Waste disposal/environmental awareness. How offshore safety is regulated. How offshore safety is managed. Procedures for prescribed medicines. Alcohol and substance abuse policy.
- PPE requirements.
- Procedures for reporting incidents, accidents and near misses. Role of the medic.
- Helicopter safety & escape:
- Pre boarding. Safe boarding. In flight safety. Safe disembarkation. In flight emergency actions.
- Practical emergency ditching and escape training.

SEA SURVIVAL

- Abandonment theory and practical sea survival training. Actions for mustering and boarding of a survival craft, and actions as a passenger during launching operations. Use of helicopter rescue strops and winching procedures. Emergency First Aid including CPR.

FIRE FIGHTING AND SELF RESCUE

- Nature and causes of fire. Fixed systems and response. Use of hand held extinguishers.
- Operation of fixed hose reels. Self rescue techniques in reduced visibility and completely obscured visibility. Use of escape hoods.

FURTHER OFFSHORE EMERGENCY TRAINING (FOET)

Duration: 1 day

Objectives

The aim of the FOET is to provide the delegates with the opportunity to practise and demonstrate emergency response skills which are not possible to practise during drills, exercises and emergency training offshore.

Who should attend

This programme is designed to meet the further offshore safety and emergency response training requirements for personnel working in the offshore oil and gas industry.

Prerequisite

- In-date OPITO-approved BOSIET or T-BOSIET, or FOET or T-FOET certificate
- All delegates will be asked to complete a medical questionnaire prior to course commencement.

Programme

Delegates will receive theoretical and practical knowledge in the following areas:

HELICOPTER SAFETY & ESCAPE

- Use of Emergency Breathing System (EBS) equipment.
- Practical emergency escape training with EBS.
- Practical emergency ditching and escape training with the use of EBS.

FIRE FIGHTING AND SELF RESCUE

- Use of hand held extinguishers.
- Operation of fixed hose reels.
- Self rescue techniques in reduced visibility and completely obscured visibility.
- Use of escape hoods.

EMERGENCY FIRST AID

- Raising the alarm.
- Immediate First Aid actions including "ABC".

TROPICAL FURTHER OFFSHORE EMERGENCY TRAINING (T-FOET)

Duration: 1 day

Objectives

The aim of the T-FOET is to provide the delegates with the opportunity to practise and demonstrate emergency response skills which are not possible to practise during drills, exercises and emergency training offshore.

Who should attend

This programme is designed to meet the further offshore safety and emergency response training requirements for personnel working in the offshore oil and gas industry in a tropical environment.

Prerequisite

- In-date OPITO-approved BOSIET or T-BOSIET, or FOET or T-FOET certificate
- All delegates will be asked to complete a medical questionnaire prior to course commencement.

Programme

The course focuses on the following elements:

HELICOPTER SAFETY & ESCAPE

- Update on offshore safety specific to tropical regions. Use of emergency breathing system equipment. Practical emergency escape breathing system training. Practical emergency ditching and escape training.

FIRE FIGHTING AND SELF RESCUE

- Use of hand held extinguishers. Operation of fixed hose reels. Self rescue techniques in reduced visibility and complete obscured visibility. Use of escape hoods.

EMERGENCY FIRST AID

- Raising the alarm. Immediate first aid actions including ABC.

ACCIDENT & INCIDENT INVESTIGATION

Duration: 1 day

Objectives

To enable organisations to meet their moral and legal obligations to investigate accidents and incidents, to identify their root causes and learn from safety failure.

This one-day course will provide delegates with a broad understanding of the accident investigation process, looking at the benefits of accident prevention and putting the emphasis on practical training exercises and real-life case studies.

Who should attend

Training is suitable for line managers, supervisors, safety representatives – and anyone with the responsibility for investigating accidents.

Prerequisite

None

Programme

- Principles of accident investigation
- Benefits of accident prevention
- Basic concepts of human factors
- Accident reporting and scope of investigation
- Accident investigation techniques
- Stages of accident investigation
- Practical exercises and case study

RISK ASSESSMENT & MANAGEMENT

Duration: 1 day

Objectives

The 1 day training course provides detailed guidance and methodology on the use of risk assessment as a tool to identify, evaluate and control risks in the workplace to create safe and healthy work environment in the workplace. The objective of the course isto equip the participants with the knowledge and skills that would enable them to apply the system for the conduct of risk assessments within their workplaces and the process of managing the risk assessments.

The course programme led the participants through the process of simple risk assessment and then developed those skills through the application of risk assessment to the most common health and safety issues such as workplace risk assessment, safe working at height, machinery safety, chemical safety, etc..

Who should attend

Our course is suitable for anyone with responsibility for undertaking risk assessments a management, particularly line managers, supervisors and safety representatives.

Prerequisite

None

Programme

This one-day risk assessment training course puts the emphasis on practical exercises and covers:

- An introduction to risk assessment
- Legal requirements
- Hazards
- Risks
- Objectives of risk assessments
- The five stages of risk assessment
- Practical exercises

CRISIS MANAGEMENT & HUMAN BEHAVIOUR

Duration: 1 day

Objectives

This 1 day course is designed for any person who has responsibility for the safety of passengers in emergency situations. This course will include practical and theory training.

Who should attend

This course is suitable for masters, chief officers, chief engineer officers, second engineer officers and any person having responsibility for the safety of passengers in an emergency.

Prerequisite

None

Programme

- Shipboard emergency plans
- Ship design & layout
- Emergency plans & legislation
- Shipboard emergency procedures
- Identification of stress
- Communication
- Control methods for situations involving passengers and crew members

Certification

STCW 95

DANGEROUS, HAZARDOUS & HARMFUL CARGOES

Duration: 5 days

Objectives

Trainees successfully completing this course will thereby enabled to contribute to the preparation and execution of the safe carriage of dangerous goods and marine pollutants by sea, will understand the legal implications of and correctly apply or verify compliance with the rules in force.

Who should attend

The course is intended for:

- seafaring personnel responsible for the cargo handling of packaged dangerous, hazardous and harmful cargoes (hereafter referred to as “dangerous goods”) aboard ships

- shore based personnel (including Competent Authority and similar personnel) responsible for the transport of dangerous goods by sea and involve in any of the aspects set out below.

Prerequisite

None

Programme

The course will include but is not limited to:

- Classification
- Packaging
- Consignment procedures

Loading, segregation

SHIP SECURITY OFFICER (SSO)

Duration: 3 days

Objectives

A Ship Security Officer (SSO) is responsible for the security of the ship and for maintaining the Ship Security Plan, set out by the shipping company. To do so, he or she must have knowledge of, and have received training in a range of competencies listed in the ISPS Code Part B Article 13.1. Our SSO Course is designed to meet this requirement.

Who should attend

Ship Captains and Officers

Prerequisite

This course has been very popular with security consultants and military service leavers looking to begin a career in maritime security. It is important to highlight that only those who can prove 12 months sea service will be issued with the SSO certificate.

Programme

The aim of this training programme is to provide a Ship Security Officer with the knowledge and skills to carry out his/her duties as a designated Ship Security Officer, in accordance with the International Ship and Port Facility Code. The course includes:

- ISPS Code background & introduction
- Maritime security threats
- ISPS duties & responsibilities
- Maritime security levels
- The ship security assessment
- The ship security plan
- Security verification & certification
- Interaction with vessels, authorities & ports
- Training, drills & exercises
- Training the trainer
- Suspicious persons & behaviour & circumvention of security
- Weapons & explosives
- Practical protective measures & contingency planning (including anti piracy procedures & drills)
- Documents, records, communications & confidentiality

COMPANY SECURITY OFFICER (CSO)

Duration: 5 days

Objectives

At the end of the course, participant would be able to:

- Assume the responsibilities and perform the duties of the CSO.
- Conduct ship security assessment and use findings to develop a ship security plan.
- Conduct security internal audits and reviewing of security activities.
- Develop and ensure maintenance of the Ship's Security Manual, Security and Training Plans.
- Conduct shipboard security briefings, training, drills and exercises as a competent trainer.
- Enhance security awareness and vigilance.

Who should attend

Offshore and maritime operational staff

Prerequisite

There are no formal entry requirements however candidates are expected to have a prior knowledge of maritime operations.

Programme

- Introduction to Maritime Security Threats and Requirements of the ISPS Codes
- Security Threats and Counter-measures
- Vulnerability Assessment & Risk Management Methodology
- Operationalising Counter- Threat Security Programs & Standards
- Developing / Implementing Ship Security Manual & Security Plans
- Company Security Officers as Security Trainers

PORT FACILITY SECURITY OFFICER (PFSO)

Duration: 3 days

Objectives

This course is designed to meet the requirements for training laid out in the International Ship and Port Facility Security Code (ISPS Code) and the guidance laid out in the SOLAS Regulations 1974. The Port Facility Security Officer position was formalised under the regulations listed above and the training has become mandatory for all those wishing to fulfil the role of the Port Facility Security Officer at facilities servicing vessels involved in international transits.

Who should attend

This course is suitable for those employed in the port sector of the maritime industry seeking to engage in aspects of security, or who are seeking to become employed as a Port Facility Security Officer. It is also suitable for security professionals seeking to expand their employability or consultancy skills into the burgeoning maritime oil & gas security sectors. In particular many new entrants to the maritime security sector would be expected to possess this qualification prior to employment or contracting.

Prerequisite

There is no prior training or experience required. However, basic literacy and numeracy are required due to course content & knowledge of the maritime industry would be useful.

Programme

The course is run over 3 days and covers:

- ISPS Code background & introduction
- Maritime Security Threats
- ISPS Duties & Responsibilities
- Maritime Security Levels
- The Port Facility Security Assessment
- The Port Facility Security Plan
- Security Verification & Certification
- Interaction with Vessels
- Training, Drills & Exercises
- Training the Trainer
- Suspicious Persons & Behaviour & Circumvention of Security
- Weapons & Explosives
- Practical Protective Measures & Contingency Planning
- Documents, Records, Communications & Confidentiality

GENERAL RADIO OPERATOR

Duration: 10 days

Objectives

A trainee successfully completing this course and passing the prescribed examination will be enabled to efficiently operate the GMDSS (Global Maritime Distress and Safety System) equipment and to have primary responsibility for radio-communications during distress incidents. Training will also be provided in techniques to avoid the unintentional transmission of false distress alerts and the procedures to use in order to mitigate the effects of false distress alerts following unintentional transmission.

Who should attend

Offshore and maritime operational staff

Prerequisite

Medical fitness

Programme

- Introduction
- Principles of maritime radio communications
- GMDSS communication systems
- Other GMDSS equipment
- Distress alerting
- Operational procedures for general communications
- Assessment and discussion
- Final examination for the certification

RESTRICTED RADIO OPERATOR

Duration: 1 day

Objectives

This course represents the minimum requirement for commercial operators and users of MF/HF (SSB) radio. Its objective is to learn correct MF/HF (SSB) radio operation.

Who should attend

Offshore and maritime operational staff

Programme

ROUTINE OPERATION

- Common features & functions
- Pro-words & phonetic alphabet
- Call signs & channel allocation
- MF/HF (SSB) operation
- Frequency allocation
- Radio propagation

SAFETY

- Trip reports
- Weather information
- Security

DISTRESS & URGENCY

- "Mayday" & "Pan" calls
- EPIRB and SAR
- Alarm signal

BASIC NAUTICAL TRAINING

Duration: 4 days

Objectives

To provide offshore personnel with knowledge in Maritime legislation and skills for safe transit, station keeping and mooring of MOU. According the training matrix, Navigation, Marine regulation, dangerous goods.

Who should attend

OIM / Barge Supervisor / Barge engineer / BCO

Prerequisite

None

Programme

- Cargo and storage
- Colreg
- IMDG
- IMO
- ISM
- Load lines
- MARPOL
- MERSAR
- Weather report
- Navigation Lights
- Navigation
- Offshore
- SOLAS

WATER WAYS STABILITY

Duration: 2 days

Objectives

To provide the participants with knowledge of stability of vessels and waterways: vessels, intervention methods.

Who should attend

All companies and institutions staff

Prerequisite

None

Programme

THEORETICAL TRAINING

- Maritime environment
- Vessel building
- Vessel stability
- Intervention methods and tactics
- System of command
- Waterways

PRACTICAL TRAINING

Aboard intervention exercises on a waterway

DYNAMIC POSITIONING OPERATOR

Duration: 5 days

Objectives

After the course, the successful participants are able to:

- Define the principles of DP
- Recognise the component parts of a DP system
- Understand the relationship between vessel movement, position reference systems, sensors, computers, propulsion units and feedback.
- Understand the concept of redundancy
- Understand the DP modes of control
- Describe the operation of sensors and common position reference systems
- Describe the operation of computers
- Describe propulsion units, types and configurations
- Understand power supply, redundancy and management
- Practice communication and watch handover procedures

Who should attend

Navigators, DP operator trainees and other users of DP systems who would like to start the Nautical Institute's DP Operator Certification Scheme.

Prerequisite

With reference to NI's circular 004/2011, dated 02.12.2011.

- The Minimum qualification to be set at STCW Regulation II/1 - II/2 - II/3 Deck and Regulation III/1 - III/2 - III/3 Engine.
- Alternative appropriate marine vocational qualification will be considered on a case by case basis.
- Prospective DPOs, who are in the process of training for an STCW certificate, can start the DP scheme and complete the course and 30 days Familiarisation only.

Programme

The training will be a combination of theoretical lessons and practical exercises. During the course each participant will have his own operator station with generic DP software.

- Definition of DP, elements of the DP system, DP systems redundancy, and DnV Class Requirements
- Functions of the DP system, and DP principles
- Different types of DP vessels and DP operations, sensors and use of sensor inputs
- Introduction to position reference systems and the DP system's use of position measurements
- Vessel capability, DP consequence analysis and DP capability analysis
- Thrusters and manoeuvring systems
- Power systems and Blackout Prevention
- Operational procedures for DP operation, and procedures for operating the DP system

- Study of DP incidents
- Principal use of the DP system

DYNAMIC POSITIONING INDUCTION BASIC

Duration: 4 days

Objectives

The DP training classroom is a state of the art facility for dynamic positioning practical simulation as well as theory.

At the end of the course the student should have acquired knowledge of the principles of Dynamic Positioning, be able to set up a dynamic positioning system and have an understanding of the practical operation of associated equipment, including position reference systems. He/she should be able to recognise and respond to the various alarms, warning and information messages. He/she should also be able to relate the DP installation to the ship system, e.g. power supply, manoeuvring facility, available position reference systems and nature of work. He/she should also be able to relate DP operations to the existing environmental conditions of wind, sea state, current and vessel movement.

Who should attend

Dynamic positioning training is recommended for deck and engineering officers working on any type vessel equipped with the system and is required for vessels which are classed as DP vessels.

Prerequisite

The sea time recorded before the introduction course will be only accepted up to a maximum of 30 days. These 30 days allow employers to continue the practice of evaluating prospective DPOs prior to attending an induction course.

Candidates must hold one of the following Certificates of Competency or be in training towards the issuance of an acceptable CoC. Due to the requirement, one of the following certificates of competency or proof that you are in the process of obtaining an STCW qualification must be presented to register for the DP Course.

- II/1 Deck Officers in charge of a navigational watch on ships of 500 GRT or more.
- II/2 Deck Master and chief mate on ships of 3,000 GRT or more.
- II/3 Deck Officers in charge of a navigational watch and of masters on ships of less than 500 GRT.
- III/1 Engine Officers in charge of an engineering watch in a manned engine room or designated duty engineers in a periodically unmanned engine room.
- III/2 Engine Chief engineer officers and 2nd engineer officers on ships powered by main propulsion machinery of 3,000kw propulsion power or more.
- III/3 Engine Chief engineer officers and 2nd engineer officers on ships powered by main propulsion machinery of between 750kw and 3,000 kw propulsion.

Alternative qualifications are considered on a case by case basis.

Programme

This course involves both theory and practice on a simulated DP system and covers the following topics:

- Principles of DP
- Elements of the DP System
- Practical Operation of the DP System
- Position Reference Systems
- Environment Sensors and Ancillary Equipment
- Power Deneration / Supply / Propulsion
- DP Operations

DYNAMIC POSITIONING SIMULATOR ADVANCED

Duration: 4 days

Objectives

The DP training classroom is a state of the art facility for dynamic positioning practical simulation as well as theory.

At the end of the course the student should have acquired knowledge of the principles of Dynamic Positioning, be able to set up a dynamic positioning system and have an understanding of the practical operation of associated equipment, including position reference systems. He/she should be able to recognise and respond to the various alarms, warning and information messages. He/she should also be able to relate the DP installation to the ship system, e.g. power supply, manoeuvring facility, available position reference systems and nature of work. He/she should also be able to relate DP operations to the existing environmental conditions of wind, sea state, current and vessel movement.

Who should attend

Dynamic positioning training is recommended for deck and engineering officers working on any type vessel equipped with the system and is required for vessels which are classed as DP vessels.

Prerequisite

The sea time recorded before the introduction course will be only accepted up to a maximum of 30 days. These 30 days allow employers to continue the practice of evaluating prospective DPOs prior to attending an induction course. The time in excess of the 30 days between the Induction / Basic and the Advanced / Simulator course will normally be counted towards the required 6 months DP watch keeping experience.

Candidates must hold one of the following Certificates of Competency or be in training towards the issuance of an acceptable CoC. Due to the requirement, one of the following certificates of competency or proof that you are in the process of obtaining an STCW qualification must be presented to register for the DP Course.

- II/1 Deck Officers in charge of a navigational watch on ships of 500 GRT or more.
- II/2 Deck Master and chief mate on ships of 3,000 GRT or more.
- II/3 Deck Officers in charge of a navigational watch and of masters on ships of less than 500 GRT.
- III/1 Engine Officers in charge of an engineering watch in a manned engine room or designated duty engineers in a periodically unmanned engine room.
- III/2 Engine Chief engineer officers and 2nd engineer officers on ships powered by main propulsion machinery of 3,000kw propulsion power or more.
- III/3 Engine Chief engineer officers and 2nd engineer officers on ships powered by main propulsion machinery of between 750kw and 3,000 kw propulsion.

Alternative qualifications are considered on a case by case basis.

Programme

This course involves principally simulated DP operations including errors, faults and failures giving the participants the opportunity to apply the lessons learned in both the Induction/Basic course and the seagoing DP familiarization. It covers the following topics:

- Practical Operation of the DP System
- DP Operations
- DP Alarms, Warnings and Emergency Procedure

HELIDECK ASSISTANT (HDA)

Duration: 4 days

Objectives

By the end of this training programme delegates will be:

- Aware of the relevant regulations regarding offshore helidecks.
- Familiar with the use and limitations of emergency equipment.
- Capable of identifying different helicopter types and their specific requirements and hazards.
- Aware of helideck best practices and able to adhere to them.
- Capable of working as part of a helideck team and assist in routine and emergency situations.
- Able to use and maintain helideck equipment.
- Conversant with helideck design, markings and signaling systems.
- Able to respond to emergency situations under supervision.
- Capable of assisting in helicopter refuelling operations.

Who should attend

All personnel who are, or intend to become, part of an offshore helideck team.

Programme

The course will: train delegates in the correct procedures to be followed when involved in offshore helideck operations – in both routine and emergency response situations and in the relevant regulations. The course is a mix of theoretical and practical sessions, during which delegates will be required to demonstrate their level of knowledge and understanding of the training programme content.

HELICOPTER LANDING OFFICER (HLO)

Duration: 2 days

Objectives

This course is designed to meet the initial training requirements including emergency response, for Offshore Helicopter Landing Officers (HLO). Successful completion of the course will demonstrate the achievement of a level of competence enabling the participant to work as an offshore HLO, under the supervision of a competent HLO for further installation specific training and development.

Who should attend

This course concerns persons who have previous experience as Helideck Assistants offshore or similar experience onshore.

Prerequisite

All delegates must be in possession of an emergency Helideck Team member (or equivalent) certificate and a VHF certificate.

Programme

During this course participants will be given the opportunity to demonstrate their knowledge of shore helicopter routine operations, emergency response arrangements and the actions they are required to take as a HLO.

- Helicopter refuelling theory and practical exercises
- Legislation
- Communications
- Helicopter operations safety and emergency procedures
- Documentation and records to be maintained
- Safety from fire and electricity / fire fighting equipment

HELICOPTER REFUELLING

Duration: 2 days

Objectives

This course has been designed to give participants a basic knowledge of helicopter refuelling and quality control procedures. It will also give a greater understanding of the role and responsibility of those involved in refuelling.

Who should attend

Persons working offshore who are responsible for the duties of HLO or HDA, involved in helicopter refuelling operations on offshore platforms and mobile units

Prerequisite

Persons attending the course should be qualified as an HLO or HDA with experience in offshore helicopter operations.

Programme

- Legislation and government requirements
- A full explanation of helifuel systems
- Quality control
- Documentation and record keeping
- Various practical exercises

HELIDECK FIRE FIGHTING (HDFF)

Duration: 1 day

Objectives

To train personnel as part of incident response team to respond to an emergency landing or aborted take off of a helicopter requiring rescue and containment services.

A helicopter on fire, on an offshore major hazard facility, is classed as a Major Accident Event in the oil and gas industry. Response to this type of incident must be both immediate and assertive to prevent loss of life and further escalation to the facility. Once any fire is under control rescue of passengers and crew requires awareness of specific helicopter hazards and training in techniques that are not taught in Fire Team Member training; the HDFF course will provide the knowledge and skills required.

Who should attend

Heli Deck Fire Fighting s designed for personnel working in support of helicopter operations at a remote location or specialised helideck landing facility. In the event of an incident personnel would undertake a front line role in rescue operations and damage control.

Prerequisite

- Medical certificate
- Basic Fire Fighting Training

Programme

It is essential that competence be demonstrated throughout the duration of the course:

- Aircraft construction and hazards
- Helideck emergency procedures
- Correctly use incident response equipment (where required)
- Firefighting strategies and tactics
- Safety and/or successful recover an individual and others affected by the incident response, and afford priority in the actions taken

HELIDECK RESCUE

Duration: 3 days

Objectives

To provide participants with knowledge of different types of evacuation of casualties on Helideck or by helicopter

Who should attend

Offshore personnel

Prerequisite

None

Programme

- Injured persons evacuation from hardly accessible places such as boat's bilge, slipway, etc
- Casualty movement using the Besllile stretcher
- Rescue of casualties using ropes, straps, rescue kit
- First Aid equipment use
- Preparation for winching up the helicopters
- Reminders of first aid definitions

HELICOPTER UNDERWATER ESCAPE TRAINING (HUET)

Duration: 1 day

Objectives

This course is designed to provide personnel who travel by helicopter an understanding of helicopter escape procedures and in particular, action to be taken to evacuate or escape from a ditched/ capsized helicopter.

Who should attend

- The course is intended for any personnel who travel by helicopter over water.
- It is also suitable for personnel who have undertaken survival training, which did not include helicopter underwater escape training

Prerequisite

Participants must hold a valid and current medical certificate in accordance with: if non marine industry personnel – Industry Standards.

Programme

- Example of a sea Crash Helicopter
- How to deal with stress and other physiological reactions (Hypothermia, drowning, etc)
- Helicopter operations safety and emergency procedure
- Presentation of the means of communication and signs.
- Presentation of overalls, life jackets, life rafts and their materials
- Practical exercises of evacuation of a helicopter cabin (Normal, capsize).
- Exercises of evacuation of an helicopter with a life raft
- Helicopter emergency procedures: Injured people on stretchers
- Real shots of emergency signals

TROPICAL HELICOPTER UNDERWATER ESCAPE TRAINING (T-HUET)

Duration: 1 day

Objectives

This course is designed to provide personnel who travel by helicopter an understanding of helicopter escape procedures and in particular, action to be taken to evacuate or escape from a ditched/ capsized helicopter.

Who should attend

The target group is personnel travelling to oil and gas installations/facilities via helicopter in a tropical environment

Prerequisite

All delegates will be asked to complete a medical questionnaire prior to course commencement.

Programme

Delegates will receive theoretical and practical knowledge in the following areas Helicopter safety & escape:

- Pre boarding
- Safe boarding
- In flight safety
- Safe disembarkation
- In flight emergency actions
- Practical emergency ditching and escape training
- Abandonment theory and practical sea survival training
- Actions for mustering and boarding of a survival craft, and actions as a passenger during launching operations
- Use of helicopter rescue strops and winching procedures

HELICOPTER UNDERWATER ESCAPE TRAINING & EMERGENCY BREATHING SYSTEM (HUET & EBS)

Duration: 1 day

Objectives

Course aims at training persons flying in a Helicopter, either as crew or as passengers, in the survival techniques, in case the Helicopter ditching or landing. The course trains the person to survive from the time the Helicopter touches down in water till he/she is rescued by the rescue team. Theoretical and practical training sessions include Sea Survival techniques and Helicopter safety and escape, including the use of Emergency Breathing System.

Who should attend

The target group is personnel travelling to oil and gas installations/facilities via helicopter

Prerequisite

Physical: possess a valid, current offshore medical certificate or possess an operator approved medical certificate

Programme

The course focuses on the following elements:

- Helicopter Safety & Escape:
- Pre boarding.
- Safe boarding.
- In flight safety.
- Safe disembarkation.
- In flight emergency actions.
- Use of Emergency Breathing System equipment.
- Practical Emergency escape Breathing System training.
- Practical emergency ditching/landing and escape training

TROPICAL HELICOPTER UNDERWATER ESCAPE TRAINING & EMERGENCY BREATHING SYSTEM (T-HUET & EBS)

Duration: 1 day

Objectives

This course is designed to complement initial onshore safety and emergency response training and assessment. The THUET-EBS course can also be attended as an add-on to the T-BOSIET or T-FOET. When added to the T-BOSIET it will be integrated in the HUET module and thus no extra training day is required. Refresher training is recommended every 2 years.

Who should attend

for personnel traveling to an offshore oil and gas installation by helicopter (in a warm water tropical environment) when issued with an Emergency Breathing System (EBS).

Prerequisite

Physical: possess a valid, current offshore medical certificate or possess an operator approved medical certificate

People that wish to attend this program have to be in possession of a valid TBOSIET or T-FOET certificate.

Programme

The course focuses on the following elements:

- Pre boarding
- Safe boarding
- In flight safety
- Safe disembarkation
- In flight emergency actions
- Practical emergency ditching and escape training
- Abandonment theory and practical sea survival training
- Actions for mustering and boarding of a survival craft, and actions as a passenger during launching operations
- Use of helicopter rescue strops and winching procedures
- Use of Emergency Breathing System equipment.
- Practical Emergency escape Breathing System training.

3.2 INDUSTRIAL SAFETY

INDUSTRIAL SAFETY				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
International General Certificate in Occupational Safety & Health (IGC)	• All persons concerned by hazardous working positions	NEBOSH	11 days	**Page 167**
Award in Health & Safety at Work (HSW)	• All persons concerned by hazardous working positions	NEBOSH	4 days	**Page 169**
International Technical Certificate in Oil & Gas Operational Safety (IOGC)	• Industry and Oil staff	NEBOSH	5 days	**Page 170**
International Certificate in Fire Safety & Risk Management	• Industry and Oil staff	NEBOSH	5 days	**Page 171**
Managing Safely	• Industry and Oil staff	IOSH	3 days	**Page 172**
Working Safely	• Industry and Oil staff	IOSH	1 day	**Page 173**
Industrial Hygiene	• Industry and Oil staff		4 days	**Page 174**
Permit to Work (PTW)	• Industry and Oil staff		1 day	**Page 175**
Office Health &Safety	• All staff		0,5 day	**Page 176**
Warehouse Safety	• Industry and Oil staff		0,5 day	**Page 177**
Construction Safety	• Industry and Oil staff	OSHA	4 days	**Page 178**
HSE Rig Pass	• Industry and Oil staff	IADC DIT	1 day	**Page 179**
Noise at Work	• All persons concerned by hazardous working positions	IOSH	4,5 days	**Page 180**
Hazard Communication (HAZCOM)	• Industry and Oil staff	OSHA	0,5 day	**Page 181**

INDUSTRIAL SAFETY				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Hazardous Material Awareness (HAZMAT)	• Industry and Oil staff	OSHA	1 day	**Page 182**
Hazardous Materials Training	• Industry and Oil staff		1 day	**Page 183**
Hazard & Operability (HAZOP)	• Industry and Oil staff		2 days	**Page 184**
Work at Height	• All persons concerned by hazardous working positions		2 days	**Page 185**
Fall Protection	• All persons concerned by hazardous working positions		5 days	**Page 186**
Lifting & Rigging	• All persons concerned by hazardous working positions	LEEA / IADC DIT	4 days	**Page 187**
Inspection of Lifting Equipment	• Industry and Oil staff		2 days	**Page 188**
Scissor Lift	• All persons concerned by hazardous working positions		1 day	**Page 189**
Scaffolding Awareness	• All persons concerned by hazardous working positions	IADC DIT	0,5 days	**Page 190**
Basic Scaffolding Inspection	• All persons concerned by hazardous working positions	IADC DIT	2 days	**Page 191**
Scaffolding Erection & Dismantling	• All persons concerned by hazardous working positions	IADC DIT / OSHA	2 days	**Page 192**
Scaffolding Design, Erection & Inspection	• All persons concerned by hazardous working positions		5 days	**Page 193**
Scaffolding Basic	• All persons concerned by hazardous working positions		3 days	**Page 194**
Scaffolding Auditor	• All persons concerned by hazardous working positions		1 day	**Page 195**

INDUSTRIAL SAFETY				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Forklift	• All persons concerned by hazardous working positions	CACES / OSHA	3 days	**Page 196**
Forklift Operator	• All persons concerned by hazardous working positions	IMI / IADC DIT	2 days	**Page 197**
Forklift Instructor	• All persons concerned by hazardous working positions	CACES / OSHA	15 days	**Page 198**
Crane Safety / Crane Operator	• All persons concerned by hazardous working positions	CACES / LEEA / OSHA / IADC DIT	1 day	**Page 199**
Truck Mounted Crane	• All persons concerned by hazardous working positions		1 day	**Page 200**
Overhead Crane	• All persons concerned by hazardous working positions		1 day	**Page 201**
Mobile Crane	• All persons concerned by hazardous working positions	LEEA / OSHA	1 day	**Page 202**
Banksman & Slinger	• All persons concerned by hazardous working positions	LEEA / OPITO	3 days	**Page 203**
Lockout & Tagout Procedures (LOTO)	• Industry and Oil staff		1 day	**Page 204**
Hand & Power Tools	• Industry and Oil staff	OSHA	1 day	**Page 205**
Abrasive Wheel	• All persons concerned by hazardous working positions		1 day	**Page 206**
Welding Safety	• Industry and Oil staff		1 day	**Page 207**
Electricity at Work	• Industry and Oil staff		1 day	**Page 208**
Electrical Risks	• All persons concerned by hazardous working positions		1 day	**Page 209**

INDUSTRIAL SAFETY				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Chemicals Handling	• All persons concerned by hazardous working positions		0,5 day	**Page 210**
Chemical Spill Awareness	• All persons concerned by hazardous working positions		0,5 day	**Page 211**
Chlorine Handling & Hazards	• All persons concerned by hazardous working positions		0,5 day	**Page 212**
Oil Spill Awareness	• Industry and Oil staff		1 day	**Page 213**
Gas Testing	• All persons concerned by hazardous working positions		1 day	**Page 214**
Hydrogen Sulfide (H2S)	• All persons concerned by hazardous working positions		1day	**Page 215**
H2S Awareness	• All persons concerned by hazardous working positions		0,5 day	**Page 216**
Basic H2S	• All persons concerned by hazardous working positions	OPITO	0,5 day	**Page 217**
H2S Breathing Apparatus	• All persons concerned by hazardous working positions	IADC DIT	3 days	**Page 219**

INDUSTRIAL FIRE FIGHTING				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Fire Awareness	• Industry and Oil staff		0,5 day	**Page 220**
Fire Watch	• Industry and Oil staff	OSHA	0,5 day	**Page 221**
Fire Induction	• Industry and Oil staff		0,5 day	**Page 222**

INDUSTRIAL FIRE FIGHTING				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Fire Team Member	• Industry and Oil staff		1 day	**Page 223**
Fire Team Leader	• Industry and Oil staff		5 days	**Page 224**
Team Member First Response	• Industry and Oil staff		1day	**Page 225**
Team Member Second Response	• Industry and Oil staff		1day	**Page 226**
Fire Marshall / Warden	• Industry and Oil staff		0,5 day	**Page 227**
Command & Control Fire Fighting	• Industry and Oil staff		3 days	**Page 228**
Confined Spaces	• Industry and Oil staff	OSHA	1 day	**Page 229**
Self Contained Breathing Apparatus	• Industry and Oil staff		2 days	**Page 230**
Fire Extinguisher	• Industry and Oil staff		0,5 day	**Page 231**
Fire Fighting on the Rig	• Industry and Oil staff		1 day	**Page 232**
Industrial Fires	• Industry and Oil staff		1 day	**Page 233**
Urban Fires	• Industry and Oil staff		1 day	**Page 234**
Road & Train Fires	• Industry and Oil staff		1 day	**Page 235**

FIRST AID				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
First Aid	• Industry and Oil staff	Red Cross International	3 days	**Page 236**
First Aid Renewing Course	• Industry and Oil staff	Red Cross International	2 days	**Page 237**
Basic Life Support (BLS)	• All staff	EFR	1 day	**Page 238**
Gestures & Postures (PRAP)	• All staff		1 day	**Page 239**
Casualty Movement / Stretchering	• All staff		3 days	**Page 240**
Safety Team Member	• All staff		3 days	**Page 241**

ENVIRONMENTAL				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Environmental Awareness	• Industry and Oil staff	ERWDA	1 day	**Page 242**
Environmental Auditing	• Industry and Oil staff	IEMA / ERWDA	5 days	**Page 243**
Introduction to Waste Management & Pollution Control	• Industry and Oil staff	ERWDA	1 day	**Page 244**
Waste Management on Land	• Industry and Oil staff	ERWDA	2 days	**Page 245**
Waste Management at Sea	• Industry and Oil staff	ERWDA	2 days	**Page 247**

ROAD SAFETY				
Course Title	**Who should attend**	**Certification**	**Duration**	**Content**
Desert Driving	• All persons concerned by desert driving	IMI	1 day	**Page 249**
Basic Desert Surviving Skills	• All persons concerned by hazardous working positions		2 days	**Page 250**
Defensive Driving	• All persons concerned by defensive driving	IMI / IADC DIT	0,5 day	**Page 251**
Defensive Driving – Off-Road (Heavy Goods Vehicle)	• All persons concerned by defensive driving	IMI / IADC DIT	0,5 day	**Page 251**
Defensive Driving – On-Road (Heavy Goods Vehicle)	• All persons concerned by defensive driving	IMI / IADC DIT	0,5 day	**Page 251**
Defensive Driving – Off-Road (Light Vehicle)	• All persons concerned by defensive driving	IMI / IADC DIT	0,5 day	**Page 251**
Defensive Driving – On-Road (Light Vehicle)	• All persons concerned by defensive driving	IMI / IADC DIT	0,5 day	**Page 251**

The following pages give a non exhaustive list of HSE training programmes.

INTERNATIONAL GENERAL CERTIFICATE IN OCCUPATIONAL SAFETY & HEALTH (IGC)

Duration: 11 days

Objectives

This NEBOSH International General Certificate training course has been developed for multinational organisations in all sectors, mindful of international standards or directives and at the same time adaptive to local needs. It seeks to provide an excellent underpinning knowledge of health and safety, as well as a sound basis for evaluating (and managing) potential hazards and risks.

The syllabus incorporates international, technical and other standards where they exist. In other cases, requirements and practices that represent 'good practice' are followed.

Who should attend

The NEBOSH International General Certificate in Occupational Safety & Health is designed for personnel with health & safety responsibilities, e.g. managers, supervisors, safety officers, non-safety specialists etc & who need a grounding & recognized qualification in occupational safety & health.

It is also beneficial for those wanting to further their career in the HSE field or those who wish to enhance their HSE knowledge.

Programme

The contents of the NEBOSH National / International General Certificate training course are covered in two units and their applications are practiced and tested in the third unit:

Unit N / IGC1: Management of International Health & Safety

- Foundations in health and safety
- Health and safety management systems 1 - Policy
- Health and safety management systems 2 - Organising
- Health and safety management systems 3 - Planning
- Health and safety management systems 4 - Measuring, audit and review

Unit N / IGC2: Control of International Workplace Risks

- Workplace hazards and risk control
- Transport hazards and risk control
- Musculoskeletal hazards and risk control
- Work equipment hazards and risk control
- Electrical safety
- Fire safety
- Chemical and biological health hazards and risk control
- Physical and psychological health hazards and risk control

Unit N / IGC3: International Health & Safety Practical

Certification

NEBOSH

AWARD IN HEALTH & SAFETY AT WORK (HSW)

Duration: 4 days

Objectives

NEBOSH Award in Health and Safety at Work is the first recognised qualification of its kind. Broadly comparable to level 2 on the national framework this course is aimed at all levels in order to gain a broad based awareness of the essentials of health and safety.

This course is taken over 3 days including the multiple choice assessment, with a practical application undertaken outside of the course in the candidates own workplace. The course can be offered as a 4 day option, with day 4 including revision, the multiple choice assessment and the practical application.

Who should attend

This course is ideally suited anyone who requires to understand the principles of health and safety as part of their job. This will include, managers, supervisors, teamleaders, HR professionals and trainers. Some employers are using this course as the standard for all employees. Assessments are internationally compatible.

Programme

HEALTH AND SAFETY AT WORK AWARD (HSW1)

- Foundations of health and safety
- Responsibility for health and safety
- Health and Safety Risk Assessment and Control
- Hazards and controls associated with work equipment
- Transport safety
- Hazards and controls associated with electricity
- Fire safety
- Manual handling and repetitive movement
- Hazards and controls associated with hazardous substances
- The working environment

PRACTICAL APPLICATION (HSW2)

- HSW2 is the practical element which involves a workplace risk assessment which should take around 90 mins in the candidates own workplace. Either as part of the course (4 day option) or after course completion (3 day option)

Certification

NEBOSH

INTERNATIONAL TECHNICAL CERTIFICATE IN OIL & GAS OPERATIONAL SAFETY (IOGC)

Duration: 5 days

Objectives

The qualification focuses on international standards and management systems, enabling students to effectively discharge workplace safety responsibilities both onshore and offshore. The Certificate also highlights the importance of process safety management in the oil and gas industry.

The NEBOSH Technical Certificate in Oil and Gas Operational Safety covers the principles of process safety management in the oil and gas industries. The syllabus takes a risk management approach based on best practice and international industry standards.

Who should attend

This qualification is designed specifically for those with safety responsibilities in the oil and gas industry.

Programme

- Hazards inherent in the extraction, storage and processing of raw materials and products
- Safety and environmental management in this industry
- Hydrocarbon process safety
- Fire protection and emergency response

The syllabus consists of one unit and the unit is divided in to a number of units.

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

Certification

NEBOSH

INTERNATIONAL CERTIFICATE IN FIRE SAFETY & RISK MANAGEMENT

Duration: 5 days

Objectives

The NEBOSH International Fire Safety and Risk Management Certificate is designed to equip duty holders to help their organisations to meet the legal duties placed upon them by the Regulatory Reform (Fire Safety) .

A fire can have a devastating effect on an organisation. 77% of businesses experiencing a major fire never fully recover. The updated duties under the Regulatory Reform (Fire Safety) Order 2005 place the responsibility on employers and those in control of premises to ensure that they assess fire risks and take steps to minimise those risks and safeguard people in the event of a fire.

Who should attend

Managers and supervisory staff who need to ensure that their organization meets its responsibilities under fire safety legislation. This course will equip duty holders to carry out fire risk assessments of most low risk workplaces and identify the range of fire protective and preventative measures required. It is therefore also suitable for people moving into fire safety adviser roles.

Pre-requisite

This tuition unit is the 2nd unit of the Fire Safety and Risk Management certificate course (IFC1).

The first unit (IGC1) forms part-1 of the NEBOSH International General Certificate, "Management of Health and Safety", which should be completed before undertaking this course.

Programme

This unit covers the management of health and safety in particular relation to fire safety including legal requirements. It includes principles of fire and explosion, causes and prevention of fires, fire protection in buildings and ensuring the safety of people in the event of fire. The course unit covers the following elements:

- Managing Fire Safety
- Principles of Fire and Explosion
- Causes and prevention of fires
- Fire protection in buildings
- Safety of people inthe event of a fire
- Fire Risk Assessment

Certification

NEBOSH

MANAGING SAFELY

Duration: 3 days

Objectives

Our IOSH Managing Safely training will give you a superb grounding in the practical actions you need to handle health and safety in your team.

Who should attend

Aimed at managers and supervisors in all industries

Pre-requisite

No pre-requisites or prior health and safety knowledge required

Programme

The course comprises eight modules:

- Introduction and overview
- Risk assessment
- Risk control
- Health and safety legislation
- Common hazards
- Investigating accidents and incidents
- Measuring performance
- Environmental protection

Certification

IOSH

WORKING SAFELY

Duration: 1 day

Objectives

The IOSH Working safely one-day training course is for all employees and meets the government's guidelines for introductory health and safety training and conforms to the HSE's Passport Scheme syllabus.

This course covers the responsibilities when handling resources, risk in the workplace and how safety can be improved.

Who should attend

This course is for employees from any industry sector who have no supervisory or managerial responsibilities.

Pre-requisite

No pre-requisites or prior health and safety knowledge required

Programme

- Defining hazard and risk
- Identifying common hazards
- Improving safety performance
- Introducing working safely
- Protecting our environment

Certification

IOSH

INDUSTRIAL HYGIENE

Duration: 4 days

Objectives

Fundamentals of Industrial Hygiene is an essential course to take if you are concerned about the safety, health and general well-being of your co-workers and hazards that could affect them. This is a 4 day course that develops your understanding of industrial hygiene terminology, principles and practices by examining four key processes in an effective industrial hygiene effort -- anticipation, recognition, evaluation, and control. Discussions on when to use a qualified/certified industrial hygienist are held throughout the course.

Coursework focuses on industrial hygiene hazards and controls in general industry.

Upon completion of the Fundamentals of Industrial Hygiene course, you will be able to anticipate, recognize, evaluate and control physical, chemical, ergonomic, and biological hazards within your workplace.

Who should attend

The course is designed for safety, health, environmental, and management personnel who have industrial hygiene responsibilities, but limited training or experience in industrial hygiene.

Prerequisite

None

Programme

Topics include:

- Anatomy & physiology
- Toxicology
- Recognition of chemical & physical hazards
- Recognition of ergonomic & biological hazards
- Hazard evaluation
- Evaluation of chemical & biological hazards
- Evaluation of physical & ergonomic hazards
- Hazard control
- Case study
- Program planning

PERMIT TO WORK (PTW)

Duration: 1 day

Objectives

A permit to work (PTW) system ensures that formal validation and authority is given when hazardous work is to be undertaken. It ensures that all components of a safe system of work are established before high risk work commences, thereby controlling and reducing risk to individuals and the organisation.

The permit to work is also a means of communication and control between site managers, site supervisors, contractors and those carrying out the hazardous work. Because of this, effective permit to work training is crucial for working safely when involved in high-risk activities.

Who should attend

The course is aimed at the following personnel:

- Those responsible for implementing permit to work systems
- New employees selected by the organisation for issuing and signing off permits to work
- Existing personnel in the organisation who issue and sign off permits that require formal training

Prerequisite

None

Programme

By the end of the Permit to Work course, delegates will have a detailed awareness and understanding of:

- The necessity for permits to work, including high risk activities
- The function and role of a permit to work within the overall risk control framework
- The typical contents of a permit to work
- The procedure for issuing a permit to work
- The cessation and termination of a permit
- The responsibilities of the issuer and receiver of the permit
- Potential difficulties and solutions with the permit to work system

OFFICE HEALTH & SAFETY

Duration: 0,5 day

Objectives

By law, a basic knowledge of health and safety is essential for all employees in an office environment to ensure that workplace risks are recognised and managed effectively.

This Office Health and Safety Training Course is designed to provide all office workers with adequate health and safety information to ensure safe working. Whilst working in an office environment may present less risk of injury than other sectors, the office environment can still pose a number of hazards. The objective of this course is:

- To familiarise workers with specific hazards and safe systems of work in the office environment
- To ensure a clear understanding of the responsibilities that workers should have under existing health and safety legislation
- To commit workers to the organisation's health and safety aims and objectives

Who should attend

By law, employers, self-employed people, managers, supervisors, employees and contractors all need to take sufficient and appropriate health and safety training. This course is aimed specifically at those who work in an office environment and covers all levels of employee.

Employers have a duty to provide health and safety training and implement preventive and protective control measures for all office employees. These measures must incorporate all aspects of work, including technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment.

Prerequisite

None

Programme

- Introduction to Office Safety - why office safety is important, benefits of good office safety, the legal framework and employee and employer duties
- Eliminating and Reducing Hazards - how to undertake a risk assessment and accident prevention
- Workplace Hazards 1 - slips and trips, manual handling, display screen equipment (DSE) and fire
- Workplace Hazard 2 – electricity, stress, lighting, falls from height, hazardous substances and noise

WAREHOUSE SAFETY

Duration: 0,5 day

Objectives

This course aims to:

- improve participants awareness of safety in their daily activities
- to assist in the development of appropriate attitudes and knowledge to enable employees to participate in the prevention of workplace injuries and illnesses

Who should attend

Managers, supervisors and general employees

Prerequisite

None

Programme

The content of the course covers various aspects of safety in warehouses including:

- Safety around forklifts and high traffic areas
- Safe storage practices
- Fire safety principles
- Working at heights
- General principles of risk management
- Responding to incidents

CONSTRUCTION SAFETY

Duration: 4 days

Objectives

Construction Safety course is among the most recognized initiatives of OSHA's primary worker training program. This course provides a more in-depth examination of workplace safety issues.

Who should attend

The training is designed for construction foremen, superintendents and engineers, safety professionals, construction managers, plant engineers, construction inspectors and any other personnel responsible for workplace safety.

Pre-requisite

None

Programme

- OSHA Standards
- OSHA Act
- OSHA Recordkeeping
- Multi-Employer Worksite Issues
- Lockout/Tagout
- Confined Space Entry
- Personal Protective Equipment
- Fire Protection and Prevention
- Material Handling
- Storage, Use, Disposal
- Hand and Power Tools
- Welding & Cutting
- Scaffolding
- Fall Protection
- Cranes/Derricks
- And much, much more

Certification

OSHA

HSE RIG PASS

Duration: 1 day

Objectives

The aims and objectives of the training are to ensure that the delegate understands or meets the basic safety orientation requirements defined by drilling-industry safety and training professionals.

This course is IADC accredited and is the initial safety awareness that any person needs to have before entering a rig location. It provides a basic understanding of how rigs operate, and focuses on all safety aspects (in general) that a new hire needs to consider.

Who should attend

This programme is designed to address the orientation training requirements for new personnel working in all Oil and Gas operating environment or area whether it is onshore/offshore.

Pre-requisite

All delegates will be asked to complete a medical questionnaire prior to course commencement.

Programme

Delegates will receive theoretical and practical knowledge in the following areas:

- General Safety of Employees
- Personal Protective Equipment (PPE)
- Hazard Communication and Materials Handling
- Occupational Hazard
- Specialized Work Procedures
- Fire Safety
- Materials Handling
- Health & First Aid
- Rig / Platform Environment
- Emergency Response
- Wellsite Environment Protection
- Transportation
- Water Safety
- Marine Debris
- Excavation (Trenching & Shoring)
- Pits and Ponds

Certification

IADC DIT

NOISE AT WORK

Duration: 4,5 days

Objectives

- Competency in Risk Assessment and Management of Noise at Work.
- Delegates gain the knowledge and confidence required to successfully identify their organisation's obligations under the current regulations, assess noise at work risks and take appropriate steps if required, including the ability to judge the suitability of outsourced noise assessments.
- Delegates also learn to professionally present and maintain a noise control action plan.

Who should attend

The course is designed for Health and safety professionals including officers and managers, or any other individual wishing to understand and implement noise measurement/noise control in accordance with current regulations.

Prerequisite

None

Programme

- The course explores: physical characteristics of sound and noise; occupational noise risks; noise measurement; noise control; the Control of Noise at Work Regulations 2005 and noise at work management programmes.
- A practical noise measurement session is included (delegates are shuttled to a nearby industrial/manufacturing facility to gain valuable real experience - delegates must bring safety footwear, other necessary PPE is provided).
- Each delegate is issued with a course folder containing presentation notes and useful reference materials.
- Lunches and refreshments are included. All courses begin at 9.00-9.30am.
- Each delegate is issued with a noise at work report template, as used in the field by INVC Ltd Senior Acoustic Engineering Consultants.

Certification

IOSH

HAZARD COMMUNICATION (HAZCOM)

Duration: 0,5 day

Objectives

This is a 4 hour hazard communication course that satisfies the general training requirements of OSHA's hazard communication standard 29CFR1910.1200. If this course is not tailored for participants' specific worksite, some additional training will be required at their worksite, such as what chemicals are in their work area, where Safety Data Sheets (SDSs) and the employer's written Hazcom program are located.

After completing the course, participants will be able to:

- Discuss the 5 key elements of OSHA's Hazard Communication Standard (Hazcom).
- Describe your rights under OSHA's Hazcom standard.
- Identify the new OSHA label symbols and explain what each means.
- Describe the 4 routes of entry for chemicals and give an example of a chemical known to enter the body through each.

Who should attend

All personnel

Pre-requisite

None

Programme

This course is delivered in 8 sections:

- Course introduction
- Hazard Communication Standard (HCS) overview
- Review of common health effects
- Chemical overview
- Measurement and exposure limits
- Other ways of communicating hazards
- Controlling hazards
- Emergencies and first aid

Certification

OSHA

HAZARDOUS MATERIAL AWARENESS (HAZMAT)

Duration: 1 day

Objectives

First Responder Awareness Level trained personnel are individuals who are likely to witness or discover a hazardous substance release. They are trained to initiate an emergency response sequence by notifying the proper authorities of the release. At this level, no further action beyond notifying the proper authorities of the release can be taken. First Responders at the Awareness Level shall have sufficient training or have sufficient experience to demonstrate competency.

Who should attend

Employees who work in an area (or areas) where there is a potential to witness or discover an uncontrolled release of a hazardous substance and whose response actions will be limited to initiating emergency response procedures by notifying the proper authorities, must receive First Responder Awareness level training consistent with the legal requirements. Such employees are not limited to police, hospital, or fire department personnel, but would include any employee meeting the above description.

Programme

- An understanding of what hazardous substances are, and the risks associated with them in an incident
- An understanding of the potential outcomes associated with an emergency created when hazardous
- substances are present
- The ability to recognize the presence of hazardous substances in an emergency
- The ability to identify the hazardous substances, if possible
- An understanding of the role of the First Responder Awareness individual in the employer's Emergency Response Plan, including Site Security and Control and the U.S. Department of Transportation's Emergency Response Guidebook (ERG)
- The ability to realize the need for additional resources, and to make appropriate notifications to the communication center

Certification

OSHA

HAZARDOUS MATERIALS

Duration: 1 day

Objectives

To provide the participants with necessary facts and figures and to make known the protection of the interveners.

Who should attend

All companies and institutions

Prerequisite

None

Programme

THEORETICAL TRAINING

- Necessary facts
- Flammability measurement (LIE – LSE)
- Flammability
- Toxicology (VME – VLE)
- Density / Solubility
- Reactivity
- Extinguishing agents
- Olfactory threshold
- Protection of the interveners
- Breathing (SCBA, CCBA, OCSCBA)
- Filtering cartridges
- Protective equipment wearing
- Different measuring apparatus
    - Catalotic
    - Carometric
    - EEx protection class marking
    - Oxygenometer
    - Toximeters

HAZARD & OPERABILITY (HAZOP)

Duration: 2 days

Objectives

The Hazard and Operability (HAZOP) course is well recognised as one of the best in the country. Our instructors have years of experience in the area of HAZOP studies. The DRILNET course is a must for all aspiring HAZOP chairpersons, HAZOP scribes and HAZOP attendees. The idea of the course is to train the attendees to become effective HAZOP team members. A well trained HAZOP attendee will add to the design safety inputs of the HAZOP team.

The objective of the course is to provide participants with the background of how process hazard analyses (PHA`s) are performed. The course explains the importance of PHA`s for existing plants and PHA`s / Hazard Reviews for changes to processes.

Who should attend

This training is ideal for managers, operations and maintenance staff, process reliability and quality control / assurance staff and anyone who needs a general understanding of PHA`s.

Prerequisite

None

Programme

- Course introduction
- Regulatory requirements for risk assessment (PHA`s)
- Overview of FMEA (Failure Mode Effect Analysis)
- Overview of FTA (Fault Tree Analysis)
- Overview of HRA (Human Reliability Analysis)
- The Flixborough disaster
- HAZOP Overview
- The HAZOP Process
- Case study
- HAZOP Method
- HAZOP Recording
- Application to Continuous and Batch Processes
- Team meetings and team members responsibilities
- Making risk judgements in team settings
- Hazard recording and reporting
- Hazard studies 1-6
- Workshops will be included throughout the training

WORK AT HEIGHT

Duration: 2 days

Objectives

To allow participants to use the Personnel Protective Equipments related to falls:

- The goals are to explain the necessity of dealing with safety when working at height.
- To teach the techniques and various means of preventing falls.

Who should attend

Any person being brought in an occasional or permanent way, to carry on their trade at height

Prerequisite

None

Programme

RISKS ANALYSIS SPECIFIC TO WORK AT HEIGHT

- Problems related with work at height: regulation governing the situations of work in height and material
- Physical parameters to take into account:
    - o The height of the fall
    - o Fall factor
    - o Force shock and energy absorption

THE USING RULES AND THE SAFETY PRINCIPLES OF THE DIFFERENT COMPONENTS USED

- Harness: description of the various components and analyses their functions
    - o Resistance, constitution, adjustments.
    - o Maintenance, storage.
    - o Safety harness, work positioning harness: differentiation
    - o Lanyards and fall arresters: Large range: description, characteristics, advantages, drawback of each one
    - o Connectors: carabiners snap hooks, manucroche...

- Application of these rules and practical applications on the site
    - o The harness: implementation, adjustments.
    - o Moving in the structure (horizontal and vertical)
    - o Upright work positioning
    - o Specific interventions

MAINTENANCE AND STORAGE OF MATERIALS

FALL PROTECTION

Duration: 5 days

Objectives

Nearly 20 per cent of all lost time injuries can be attributed to falls in the workplace. The majority of falls occur on the same level, while others involve falls to a lower level. The latter usually resulting in more serious injuries or death. Falls are preventable. This Fall Protection Training Course will provide participants with an understanding of their responsibilities when working in areas where fall hazards exist, the use of and inspection of the required equipment and the critical controls necessary to reduce the risk of a fall.

Who should attend

Every worker who is, or is likely to be exposed to fall hazards in the workplace.

Prerequisite

None

Programme

FALL PROTECTION AND FALL ARREST SYSTEMS

- Lost time injuries & statistics
- Fall Prevention versus Fall Arrest
- Travel restraints
- Fall arrest systems

GENERAL RESPONSIBILITIES

- Employers & Supervisors Workers General precautions & safe working procedures
- Fall Arrest Systems
- Anchorage or tie-off points, D plate body harness, CSA standards, D ring connecting devices, lifelines, shock absorbing lanyards, horizontal & vertical lifelines

FALL HAZARDS AND CONTROLS

- Hazards due to pendulum swings
- Planning guidelines, anchor points
- Rescue plans

INSPECTION OF EQUIPMENT

- Harness, buckles, nylon straps, webbing, friction buckles, self-retracting devices
- DONNING A HARNESS
- Step by step instructions
- Care, cleaning, life expectancy

LIFTING & RIGGING

Duration: 4 days

Objectives

To provide the participants awareness of lifting equipment and its correct safe usage.

Who should attend

Any person being brought in an occasional or permanent way, to work with the lifting equipment

Prerequisite

None

Programme

- Movement of plan and equipment
- Steel erection
- Particular hoist
- Placement of pre-cast concrete
- Safety nets and static lines
- Mast climbers
- Perimeter safety screens and shutters
- Cantilevered crane loading platforms
- Rigging cranes, conveyers dredgers excavators
- Title-slabs
- Demolition
- Dual lifts
- Rigging of gin poles and sheer legs
- Flying foxes and cableways
- Guyed derricks scaffolds and fabricated hung scaffolds

Certification

LEEA / IADC DIT

INSPECTION OF LIFTING EQUIPMENT

Duration: 2 days

Objectives

This course is designed for Operative Level employees who have a responsibility for issuing, storing, pre-use inspection, condemning or acquiring lifting equipment. "You have a duty of care to ensure your employees are competent to carry out this skill especially if you are appointing them as your responsible person.

Who should attend

The two-day course has appeal to companies, large and small, where it is realised that a trained employee to oversee lifting equipment affords economies in time and equipment and demonstrates a company's commitment to safe working practices.

Prerequisite

None

Programme

The course will cover:

- The legislation related to lifting accessories
- Materials
- Lifting Accessories
- Inspection
- Visual Inspection
- Methods of Testing
- Reporting

SCISSOR LIFT

Duration: 0,5 day

Objectives

Provide participants a general understanding of the safe and efficient operation of Power Operated Mobile Work Platforms. Participants will be able to identify specific health and safety hazards associated with operating scissor lifts.

Who should attend

Personnel involved in the work with the scissor lifts

Prerequisite

None

Programme

- Hazards associated with operating scissor lifts
- Outline fines & penalties for improper use of the equipment.
- Lifting device & mobile equipment definitions
- Complete review of "fall arrest" required, and recommended
- Pre-shift equipment inspection and work area survey requirements
- Review site specific Hazards, and controls for safe operation of a scissor lift
- Review safety decals, load capabilities, and specific equipment requirements

SCAFFOLDING AWARENESS

Duration: 0,5 days

Objectives

This Scaffolding Awareness training course is a half day course designed to provide participants with the appropriate information on the hazards and dangers of working at height on scaffolding.

Who should attend

For all persons who work involves the storage, use, erection and dismantle of all scaffold types.

Prerequisite

None

Programme

- Breakdown of the requirements of the Safety, Health and Welfare at Work Act, 2005.
- Evaluate the implications of the General Application Regulations, 2007 Part 4: Work at Height.
- Explain the principles of scaffold erection in accordance with manufacturers instructions.
- Storage and erection of scaffolds as per manufacturer's instructions.
- Practical demonstration.

Certification

IADC DIT

BASIC SCAFFOLDING INSPECTION

Duration: 2 days

Objectives

To give the attendees such knowledge so as to enable them to understand how to inspect basic scaffolding structures in accordance with the Work at Height Regulations.

Who should attend

Managers & Supervisors who are responsible for inspecting scaffolds and completing reports in accordance with the Work at Height Regulations.

Prerequisite

None

Programme

- Introduction to Scaffolding & Scaffolding Terminology
- The Work at Height Regulations 2005
- British, European and Industry Standards (NASC)
- Overview of SG4:10 Fall Arrest Equipment
- Tube, Fittings & Boards
- Safe Ladder Access and Egress
- Scaffolders Training and Working Methods
- Bracing and Tying Scaffolds
- Fan Boards and Public Protection
- Mobile, Static and Loading Towers
- Birdcage Scaffolds
- Beams and Bridging Beams
- Various Types of System Scaffolding
- How to Carry Out a Scaffolding Inspection
- Scaffold Tagging Systems
- Scaffold Inspection Exercise
- Knowledge Test

Certification

IADC DIT

SCAFFOLDING ERECTION & DISMANTLING

Duration: 2 days

Objectives

This course is designed to develop scaffold work force of safe standards. Upon completion of this course the delegates will be able to identify the hazard in working at height, erection and dismantling of scaffold. This is also suitable for supervisor and safety professionals supervising scaffold activities.

Who should attend

This is also suitable for supervisor and safety professionals supervising scaffold activities.

Prerequisite

Personnel attending this course should be in a supervisory position, with some prior experience in rigging and scaffolding

Programme

The course covers the following topics:

- Introduction to Scaffold Systems
- Scaffolding Materials & Parts
- Types of Scaffold
- Proprietary Scaffolding Requirements
- Suspended Scaffolding Requirements
- Mobile Scaffolding Requirement
- Scaffolding Regulations as per OSHA
- Erection and Dismantling
- Preparation & Formulation of Inspection Checklist
- Basic Risk Assessment on Scaffolding Safety

Certification

OSHA / IADC DIT

SCAFFOLDING DESIGN, ERECTION & INSPECTION

Duration: 5 days

Objectives

To provide delegates with theoretical and practical guidance on the safe use and construction of tube and coupling scaffolds and the inspection of said scaffolds. Pre-fabricated aluminium scaffolds can be included in this training, provided the training can be conducted on site, with aluminium scaffolding provided by the client.

Upon completion of the course the student should be able to:

- Describe the scaffold members and fittings used in scaffold construction.
- Explain the terms used in scaffold construction.
- List the common causes of accident from working with scaffolding.
- Outline the format of a scaffold inspection.
- Perform a scaffold inspection
- Practical build, inspect and disassemble a scaffold in a safe way (Erection & Inspection).
- Compile a scaffold inspection report, a remedial report

Who should attend

- The Course is designed for Site Supervisors, Managers and people who are responsible for inspecting and Design of scaffolds.
- Safety & Health practitioners who are responsible to coordinate plan and implement scaffolding work.

Prerequisite

None

Programme

- Definition of scaffolding
- Related Statutory Requirement
- Scaffold Design
- Identify the different types of basic scaffolding.
- Types of Scaffolding Independent Scaffolding (Frame, Tubular)
- Static Tower & Mobiles (Frame, Tubular)
- Putlog Scaffolding (Frame, Tubular)
- Birdcage (Frame, Tubular)
- Erection & Dismantling Requirement
- Scaffolding defects.
- Competency Requirement
- Duty, Responsibilities limitation of Competent Scaffolder.
- General Site Hazards

SCAFFOLDING BASIC

Duration: 3 days

Objectives

Providing participants with the skills and knowledge necessary for them to safely erect scaffolding to an accepted standard.

Who should attend

Those who will be in charge of the erection of a scaffolding device (Painters, deck leader, ordinary seaman).

Prerequisite

All participants must have completed a Banksman course prior to start this course

Programme

On completion of this activity, participants will be able to demonstrate a competence in the theory and practice of the following:

- Erect a secure scaffold in a variety of situation
- Understand loading and load characteristics of various scaffold types and systems
- Utilise a tag system to ensure control of scaffold systems
- Safely dismantle scaffolding systems
- Service and maintain scaffolding equipment

SCAFFOLDING AUDITOR

Duration: 1 day

Objectives

To provide supervisors with the necessary knowledge to inspect a scaffold system and determine its suitability for purpose, and safe loading characteristics.

Who should attend

Those who will be in charge of the control of the scaffolding device.

Prerequisite

Personnel attending this course should be in a supervisory position, with some prior experience in rigging and scaffolding

Programme

On completion of this activity, participants will be able to demonstrate a competence in the theory and practice of the following:

- Calculate load characteristics of various scaffold systems
- Determine the correct methods of scaffold erection
- Inspect scaffold components for suitability and serviceability
- Maintain a scaffold tagging management system.
- Knowledge and practical skill required to safety erect, independent, static tower, birdcage, hanging, truss out and scaffolds for circular structures, erected from standard tube and fittings
- Recognise safety hazards in the scaffolds listed.
- Know and take the appropriate action to prevent or remedy a hazard in the scaffolds listed.

FORKLIFT

Duration: 3 days

Objectives

This course aims at ensuring that, on completion, the trainee will be expected to have attained a level of operating skills which will comply with the applied standards.

Who should attend

- This course will be beneficial to all personnel who have to operate a forklift as part of their daily duties.
- It will be especially beneficial to those who have no previous experience or have experience but require refresher training

Prerequisite

Medical certificate and sufficient on the site job experience

Programme

- Health and Safety at Work
- Operators safety code
- Principles of lifting
- Daily checks, battery care, hydraulic systems
- Operating, manoeuvring and steering procedures
- Stacking and de-stacking loads at various height
- Loading and un-loading lorries
- Practical operations
- Assessment and correction of faults

Certification

CACES / OSHA

FORKLIFT OPERATOR

Duration: 2 days

Objectives

The forklift operator training course is designed give new forklift operators an understanding of the physics pertaining to forklifts; to give an understanding of the seriousness of operating a forklift; and to outline the responsibilities for operating a forklift. This program specifies basic knowledge and skill requirements needed for safe operation of lift trucks and their attachments. The two day, 16-hour, training course allows participants more time on the machine to learn how to safely operate the forklift.

Who should attend

New forklift operators who require additional practical time in order to achieve certification.

Programme

This program is divided into five theory sections and a practical component. The practical exercise consists of maneuvering a forklift through a predetermined obstacle course while performing several functions. Course length varies on number of students and their experience but is typically 16 hours in length. A general description of the forklift operator training course outline is as follows:

- General Requirements
- Provincial Legislation
- Company Policies & Procedures
- Operating Manuals
- Lift Truck Features & Safety Equipment
- Stability
- Capacity Plate & Location
- Pre-operational Inspection
- Start-up
- Traveling with & without a Load
- Pedestrians
- Load Handling
- Ramps & Grades
- Personnel Lifting, Lowering & Supporting
- Elevators
- Workplace Specific Hazards
- Procedures for Shutdown / Leaving the Operator’s Position
- Re-fuelling / Recharging
- Practical Skills Training on both a Class I, IV, V (sit down) Lift Truck and a Class II (stand up - narrow aisle) Lift Truck.

Certification

IMI / IADC DIT

FORKLIFT INSTRUCTOR

Duration: 15 days

Objectives

At the end of training, the participant should be able to articulate, explain and transmit the content of the training program following the reference chosen to name the techniques and methods of use of forklifts, to lead a session training, to issue an opinion on the ability of a trainee to conduct security forklift.

Who should attend

Any person called to become a forklift instructor

Prerequisite

- Experience conducting material handling / lifting.
- Ability to speak before a small group
- Sensitivity to the principles of prevention / safety

Programme

MODULE 1: TRAINING / CERTIFICATE (5 days)

- Safety: accidents, incidents, responsibilities.
- Regulation on the use of forklifts.
- Technology of the various categories of forklifts.
- Balance and capacity of forklifts.
- Regulatory audits required.
- Exercises and special handling.
- CACES ® Class 1, 2, 3, 4, 5 and 6 and / or CERTIFICAT OSHA 29 CFR 1910.178 Forklifts all categories

MODULE 2: CO ANIMATION STAGE (3 days)

- Animation theoretical and practical issues selected with the referent instructor.
- Summary with the referent instructor

MODULE 3: TECHNOLOGY AND PEDAGOGY (2 days)

- Analysis and synthesis Module 1 and 2.
- Advanced teaching:
- Deepening media.
- Teaching techniques.

MODULE 4: ANIMATION OF A STAGE (3 days)

- The applicant runs an internship under the supervision of a referent instructor.
- Analysis / Synthesis / Assessment

EVALUATION

- A continuous evaluation is conducted and a theoretical and practical sanctions issuing CACES ® R389 Cat. 1/2/3/4/5/6 and / or CERTIFICAT OSHA 29 CFR 1910.178 Forklifts all categories, a training certificate and a certificate of suitability for the forklift instructor
- Evaluation on the achievement of objectives

Certification

CACES / OSHA

CRANE SAFETY / CRANE OPERATOR

Duration: 1 day

Objectives

This Crane Operator course has been developed for those workers tasked with crane operation, and covers the knowledge needed by a worker to safely operate a variety of different crane types, including overhead, mobile, tower, and articulating cranes. The crane operator has many responsibilities and plays an integral part in the safety of a job site where cranes are in operation. This course, will help to properly prepare an operator to do their job safely and correctly.

Who should attend

A focused operations and safety training for operators.

Prerequisite

None

Programme

- Hazard Types & Recognition
- Qualifications
- Crane Components & Operations
- Construction
- Definitions
- Site Operations
- Training
- Crane Types & Classifications
- Emergency Response
- Rigging
- Inspection
- Signals
- Case Studies
- Updated Standard Subpart CC

Certification

LEEA / OSHA / IADC DIT

TRUCK MOUNTED CRANE

Duration: 1 day

Objectives

This truck mounted crane operator training program is designed to provide folding boom truck crane and stiff boom truck crane operators with a solid foundation in:

- Health & Safety Standards
- Preventative Maintenance
- Proper Procedures for Safe Operation

Who should attend

Personnel involved in the work with the truck mounted crane.

Prerequisite

None

Programme

- Safety Regulations & Standards
- Truck Mounted Crane Fundamentals
- Principles of Balance, Stability & Capacity
- Preventive Maintenance & Procedures
- Pre-Operational Inspections
- Safe Operations for Applicable Designation
- Load Control Techniques
- Rigging Orientation

OVERHEAD CRANE

Duration: 1 day

Objectives

This training module gives workers an overview of the safe operating procedures for moving loads with floor-operated overhead industrial cranes. This course covers the dangers associated with lifting and moving a load with an overhead crane, as well as safe procedures that will avoid those dangers.

Who should attend

Personnel involved in the work with the overhead cranes

Prerequisite

None

Programme

- Safety Regulations & Standards
- Overhead Crane Fundamentals & Qverview
- Crane Terminology
- Preventative Maintenance & Procedures
- Pre-Operational Inspections
- Crane Movements & Controls
- Load Control Techniques
- Brakes Overview
- Load Control Techniques
- Crane Start Up & Shut down
- Rigging

MOBILE CRANE

Duration: 1 day

Objectives

This Crane Operator course has been developed for those workers tasked with crane operation, and covers the knowledge needed by a worker to safely operate a mobile crane. The crane operator has many responsibilities and plays an integral part in the safety of a job site where cranes are in operation. This course will help to properly prepare an operator to do their job safely and correctly.

Who should attend

A focused operations and safety training for operators.

Prerequisite

None

Programme

- Crane Components
- Intro to Hydraulic Theory
- Mathematical Calculations
- Load Moment Indicator (LMI)
- Inspection Parameters
- Wire Rope
- Standard Hand Signals
- Load Charts

Certification

LEEA / OSHA

BANKSMAN & SLINGER

Duration: 3 days

Objectives

The course will train delegates in the principles of banking a crane using hand and radio signals, in the correct slinging of different types of loads, and in the safety precautions to be taken whilst working with cranes. The course is a mix of theoretical and practical sessions, during which delegates will be required to demonstrate their level of knowledge and understanding of the training programme content.

Who should attend

People who are involved in the crane banking and the loads slinging

Pre-requisite

Due to certain aspects of the course being physically demanding and potentially stressful, delegates will be required to confirm their medical fitness & physical ability to participate on this course by completing our centre medical self-screening form prior to course commencement

Programme

- Relevant regulations pertaining to lifting operations
- Loads assessment ((weight and centre of gravity)
- SWLs and colour coding
- Pre-use inspections on equipment to ensure safe lifting
- Slinging and securing loads
- Hand and radio signals
- Lifting equipment (e.g. slings, shackles and chains)
- Packing and stowage of containers, half heights and correct securing methods
- Safety precautions while working with cranes

Certification

LEEA / OPITO

LOCKOUT TAGOUT PROCEDURES (LOTO)

Duration: 1 day

Objectives

During servicing and maintenance of machines and equipment, "Contact with moving machinery or object being machined" or "Contact with electricity or electric discharge" will be the potential hazard at workplace because the power source has not been controlled correctly. Lockout / Tagout (LOTO) is the primary control measure of hazardous energy in order to ensure that there is no unexpected energization, start up of the machines or equipment or release of stored energy causing employee's injury when carrying out the maintenance work.

This course aims at improving an organisations energy control system by setting out the detailed legal requirements and best operating practices needed for an effective lockout and tag out program.

Learner objectives:

- Introduction to lockout and tag out systems – energy control systems
- Legal requirements for lockout and tag out
- Identifying energy sources requiring lockouts and tag outs
- Developing energy control systems – lockout and tag out standards and procedures

Who should attend

Target group: SHE practitioners, SHE representatives, technicians, managers and supervisors.

Prerequisite

None

Programme

- Scope and Application
- The Energy Control Plan
- Lockout/Tagout Training
- Lockout/Tagout Periodic Inspections

HAND & POWER TOOLS

Duration: 1 day

Objectives

To minimize the amount of accidents occurring with powered tools, and to reduce the severity of outcome with an incident.

Who should attend

Any department requiring their employees to use hand or portable tools

Prerequisite

None

Programme

- General Safe Work Practices
- Personal protective equipment
- Guarding
- Controls & Switches
- Hand tools
- Power tools
    - Electric power operated tools
    - Abrasive Wheels and Tools
    - Pneumatic power tools
    - Fuel powered tools
    - Hydraulic power tools
    - Power-actuated tools
    - Explosive Actuated Tools
- Medical emergency

Certification

OSHA

ABRASIVE WHEEL

Duration: 1 day

Objectives

The aim of the Abrasive wheels training course is to enable candidates to work safely, to provide an understanding of current legislation and promote awareness of the dangers and hazards of abrasive wheels, and to offer practical steps to reduce workplace accidents and encourage workers to adopt a culture that results in a safer workplace.

Who should attend

Our abrasive wheel training courses are suitable for all operators, managers and supervisors, who as part of their working duties select, mount, specify or use abrasive wheels.

Pre-requisite

None

Programme

- Provides a brief outline of the Health and Safety at Work Act
- Provision & Use of Work Equipment Regulations
- Safety in the use of abrasive wheels HSG17.
- Personal Protective Equipment Regulations
- The correct use of PPE.
- Hazards arising from use of abrasive wheels.
- Methods of marking abrasive wheels.
- Methods of storing, handling & transporting of abrasive wheels.
- Mounting procedures & precautions of abrasive wheels.
- Diamond Wheels.
- Electric and Petrol Machines.
- Safe use of the machines and equipment.
- Question papers with feedback from course delegates.
- Balancing of grinding wheels, correct method of dressing wheels.
- Adjustment of guards and rests.
- Practical exercise to include all elements of the above on bench grinders, Portable disc cutters & Grinders.
- Question papers
- Feedback from course delegates.

WELDING SAFETY

Duration: 1 day

Objectives

To minimize the amount of accidents related to the welding operations, and to reduce the severity of outcome with an incident.

Who should attend

Any personnel involved in the welding operations

Prerequisite

None

Programme

- Types of Welding
- OxyFuel Welding
- Shielded Metal Arc Welding
- Types of Cutting
- Oxygen Cutting
- Arc Cutting
- Hazards of Welding
- Fire Prevention & Protection
- Special Precaustions
- Protection of Personnel
- Ventilation
- Confined Spaces
- Basic Safety Guidelines

ELECTRICITY AT WORK

Duration: 1 day

Objectives

This 1 day electricity at work regulations course provides an insight into the use and application of the current legal requirements, to make the candidate aware of their duties under these regulations and the duties imposed on employers and employees.

Who should attend

This course is highly useful to anyone who works with electricity be that an electrician or an office manager, particularly for Facilities maintenance people, existing electrical contractors, Health and Safety officers amongst many others.

Pre-requisite

None

Programme

- The concept of 'duty holder'
- Electrical systems, work activities and protective equipment
- The strength and capabilities of electrical equipment
- Electrical equipment in adverse or hazardous environments
- The provision of insulation, barriers, etc
- Earthing, bonding and other means of protection
- The integrity of referenced conductors
- Suitability of electrical connections
- Protection from overload and short-circuit currents
- Disconnection and isolation of circuits
- Precautions for safe isolation
- Working live
- Working space, access and lighting
- The concept of 'competence' in electrical work

ELECTRICAL RISKS

Duration: 1 day

Objectives

Spark discussion with your team on effective ways to recognize, evaluate, and avoid electrical hazards. Topics covered include personal protective equipment related to electrical safety, requirements for working on equipment, and electrical injuries such as shocks, burns, electrocutions, and falls.

Who should attend

Personnel involved in the electricity works.

Prerequisite

None

Programme

- From this training session you will learn;
- What is Hazard Identification and Risk Assessment
- Who has the responsibility to perform the Hazard Identification and Risk Assessment
- Hazard Identification Process
- Risk Assessment Process
- Initial Risk Estimation
- Parameters used in Risk Estimation, (Severity, Frequency,Likelihood of Occurrence of Harm, Likelihood of Avoiding or Limiting Harm)
- Risk Reduction Strategies
- Risk Evaluation
- Risk Reduction Verification
- Documentation and Communication Process

CHEMICALS HANDLING

Duration: 0,5 day

Objectives

On completion of the workshop, participants will be able to:

- Identify personnel who are exposed to risk
- Understand the need for risk assessments recognise the hazards associated with specific chemicals
- Understand the design and function of gas cylinders
- Select appropriate personal protective equipment
- Safely handle gas cylinders and drums
- Re-assess storage facilities in line with safe working practices
- Identify unsafe working practices when working with gas control equipment
- Understand the key actions required in an emergency situation

Who should attend

The workshop is designed for managers, supervisors, workshop personnel and engineers who either use or supervise personnel working with chemicals.

This workshop complements and builds on existing levels of experience and focuses delegates on safe working practice in line with relevant Codes of Practice and Guidance Notes.

Pre-requisite

None

Programme

The course consists of seven modules, each covering different aspects of the handling and storage of chemicals:

- Introduction to gases
- Gas properties (specific to your requirements)
- Gas packages
- Personal protective equipment
- Handling cylinders and drums
- Safe gas storage
- Emergency rescue situation

CHEMICAL SPILL AWARENESS

Duration: 0,5 day

Objectives

This training course covers the knowledge required to respond and manage a chemical spill.

By completing this course it is expected that employees required to mange a chemical spill in the workplace will have the necessary knowledge to safely do so.

Who should attend

People who are required to manage chemical spills

Pre-requisite

None

Programme

- The hazards and associated risks
- Hazardous substances & dangerous goods (definitions)
- Technical terms
- Environmental impacts
- Exposure standards
- MSDS sections and their contained information
- Spill evaluation
- Notifications
- Site security
- Control, contain and clean-up
- Decontamination
- Incident investigation

CHLORINE HANDLING & HAZARDS

Duration: 0,5 day

Objectives

To instruct personnel on the chlorine dangers and necessary precautions.

Who should attend

Workers whoare involved with the use, storage or transport of chlorine

Pre-requisite

None

Programme

- Basic information about chlorine in the msds
- The hazards
- How to reduce risk
- Complying with occupational exposure limits
- The duty of suppliers
- Safe storage
- Pipework
- Chlorine container handling
- Ventilation while working with chlorine
- Responding to leaks in chlorine cylinders and systems
- First aid

OIL SPILL AWARENESS

Duration: 1 day

Objectives

Delegates will gain an understanding of pre-spill planning, the deployment and use of equipment for oil spill clean-up operations and the importance of Health and Safety.

Who should attend

This course is designed for all operational staff within ports, harbours, oil handling facilities, offshore personnel, local governmental authorities and environmental agencies who may form part of an oil spill response team.

Prerequisite

None

Programme

- Health and Safety
- Reporting procedures
- Response options
- Mechanical recovery
- Chemical dispersants
- Shoreline clean-up
- Waste segregation
- Practical deployment exercises

GAS TESTING

Duration: 1 day

Objectives

This course is designed for those who are required to work and monitor hazardous atmospheres (gas test) in the workplace. This course has theoretical and practical components that participants must successfully complete.

Who should attend

The course is designed for all those who are required to operate gas testing equipment within the workplace.

Pre-requisite

None

Programme

On completion of this course, participants should be able to:

- Prepare and plan for monitoring
- Take precautions to safeguard health
- Take atmospheric readings
- Identify TWA, STEL, Peaks, IDLH atmospheres
- Follow sampling rules
- Maintain equipment
- Change sensors in the field
- Conduct bump and calibration testing of the equipment

HYDROGEN SULFIDE (H2S)

Duration: 1 day

Objectives

This course is designed for personnel who are involved with process operations where Hydrogen Sulphide may be encountered.

Who should attend

RSTR

Prerequisite

None

Programme

- Respirator Fitness Physicals
- Hydrogen Sulfide Hazards and Properties (Characteristics)
- Hazards
- Properties (characteristics)
- Regulations and Emergency Procedures
- Special Health Problems
- H2S Detection - Electronic Detectors
- H2S Detection - Hand Operated Tube Detectors

H2S AWARENESS

Duration: 0,5 day

Objectives

This course will provide delegates with the additional skills, information and knowledge, along with the appropriate attitudes to enable them to identify and manage a H2S hazard, assess the risks and implement the appropriate control measures.

Who should attend

This short course is intended for all personnel assigned to an Oil & Gas facility where gas may be present.

Prerequisite

None

Programme

- The properties and sources of H2S
- Toxicity levels and exposure limits
- Acute and chronic effects of exposure
- H2S effects on metals, elastomers and polymers
- H2S gas detection including fixed and portable systems, their advantages and limitations
- Respiratory protection including different types of BA, mask fit testing, cascade systems, their advantages and limitations
- Practical use of Breathing Apparatus
- H2S emergency procedures during operations
- Rescue of H2S casualties
- Detection and protection equipment overview
- Practical use of gas detection
- Site requirements
- A written test

BASIC H2S

Duration: 0,5 day

Objectives

The OPITO Basic H2S Training course provides the participant with the basic knowledge, skills and attitudes to identify, act and conduct themselves in line with Industry recognised good practice in the event of an H2S hazard or emergency.

On completion of this course the candidate will be able to identify the properties and sources of H2S and Sulphur Dioxide as well as learn how to manage the risk of exposure; they will be able to operate a personal H2S monitor in accordance with the procedures; they will be able to inspect, store, don, and use the breathing apparatus supplied for training purposes, in accordance with the procedures; They will be able to identify their emergency procedures according to a management plan during an H2S emergency.

Who should attend

This short course is intended for all personnel assigned to an Oil & Gas facility where gas may be present.

Prerequisite

Emergency response training contains physically demanding and potentially stressful elements. All personnel who participate in such training must be medically fit and capable of participating fully. Therefore, prior to attendance candidates must be in possession of a valid offshore medical certificate or an in-date employer medical certificate.

Programme

- What H2S gas is, where you would find it, how its formed
- Other names used to describe H2S gas
- Properties and characteristics of H2S gas
- Parts per million (ppm) as a measurement parameter
- Occupational exposure limits and toxicity levels of H2S gas
- Factors that affect exposure to H2S gas
- Different ways of measuring and detecting H2S gas
- Acute and chronic effects H2S gas has on an individual
- The role of the emergency response team in the event of an H2S emergency
- What actions are to be taken in the event of an H2S alarm activation
- The various types of portable gas detection devices and when they would be used
- How to conduct a pre-use check and how to operate the portable gas detection equipment
- Understand the various gas detection devices limitations
- The different types of breathing apparatus and what operations they are used for
- How to conduct a pre-use check and how to operate the breathing apparatus
- Understand the various breathing apparatus' limitations
- How to connect to a breathing air cascade system
- How to disconnect from a breathing air cascade system

Certification

OPITO

H2S BREATHING APPARATUS

Duration: 3 days

Objectives

The training course aims to provide knowledge, skills, and confidence to respond appropriately to a H2S release as well as recognition of an emergency and provide the knowledge for the proper use of emergency equipment and procedures to enhance survival whenever a gas release is in place.

Who should attend

This short course is intended for all personnel assigned to an Oil & Gas facility where gas may be present.

Prerequisite

None

Programme

- Introduction
- Properties of Hydrogen Sulfide
- Hazards of Hydrogen Sulfide
- Detection and Monitoring
- Emergency Alarms
- Personal Protective Equipment
- Wind Direction Indicators
- Escape Routes And Procedures
- Handling of Breathing Apparatus (Theory/Practice)
- Safety Rules and Procedures
- Closure

Certification

IADC DIT

FIRE AWARENESS

Duration: 0,5 day

Objectives

Our fire awareness course is designed to give your staff the knowledge and confidence to act safely in the event of a fire, and to aid fire prevention in your work place.

Who should attend

Any personnel

Prerequisite

None

Programme

- Recognise the cost of fire
- The role of the fire marshal
- Liaison with the fire service
- Action on discovering a fire
- Fire safety legislation
- The chemistry of fire
- Common causes of fire
- Fire safety precautions & prevention
- Fire drills and evacuation
- How to use fire extinguishers

FIRE WATCH

Duration: 0,5 day

Objectives

Every year, many workplace fires occur as a result of hot work – cutting, welding and other work that generates heat and sparks – being done without an adequate fire watch in place. Most – if not all – hot work incidents are completely preventable. A fire watch, conducted properly, is one of the most important ways to keep workers safe during hot work and prevent damage and destruction to property.

Who should attend

This course covers the role and responsibilities of the fire watcher.

Prerequisite

None

Programme

- Where hot work is – and is not – permitted
- The safety precautions needed to prepare an area for hot work
- The role and responsibilities of a fire watcher
- Responsibilities of other individuals involved in hot work
- What emergency procedures need to be in place for hot work

Certification

OSHA

FIRE INDUCTION

Duration: 0,5 day

Objectives

This course is designed to raise awareness of fire hazards in the workplace and how to act safely in the event of an emergency fire situation, including selecting and using a fire extinguisher. On completion of the course participants will Understand the chemistry of fire, Identify fire hazards in the workplace, follow evacuation procedures and select and use appropriate fire fighting equipment.

Who should attend

This course is aimed at all employees across all industry types.

Prerequisite

None

Programme

- Fire safety legislation
- Understanding the physics and chemistry of fire.
- Development and spread of fire.
- Action in the event of fire.
- Means of raising alarm.
- Means of summoning the fire brigade.
- Action on hearing the fire alarm.
- Evacuation procedures.
- Practical demonstration in the use of foam and CO2 fire extinguishers.

FIRE TEAM MEMBER

Duration: 1 day

Objectives

This fire team member training course is designed to equip your staff members with the skills of how to safely respond to a fire emergency under the instruction and guidance of the trained fire team leader.

Who should attend

Employees that will be a member of a company's Fire Team that is responsible for fire safety and fighting fires.

Prerequisite

None

Programme

- Elements of fire – How does fire occur?
- Types of fire: There are five main types of fire namely Class A, Class B, Class C, Class D and Class K
- Fire spreads by means of Conduction, Convection and Radiation. What does that mean?
- How to extinguish a fire – Smother, Starve, Cool
- How to choose an extinguishing method – Look at the type, size and location of the fire
- What type of extinguisher to use – Dry Chemical Powder, Carbon Dioxide, Foam or Water?
- The different types of Fire hose reels
- Fire Blankets
- Safety steps before fighting a fire

FIRE TEAM LEADER

Duration: 5 days

Objectives

The aim of this course is to provide delegates with the necessary skills, knowledge and understanding required to lead an industrial fire team in an emergency fire or rescue situation. Individuals will benefit from the experience and knowledge of our expert instructors while undertaking practical training scenarios in hot, challenging, realistic scenarios and conditions.

Who should attend

Designed for team leaders with a requirement to respond to and lead a team in an emergency fire or rescue situation.

Prerequisite

None

Programme

- Dynamic risk assessment
- Incident assessment
- Good planning and organizing
- Effective briefing and debriefing
- Effective team leadership and mentoring
- Safe use of fire-fighting equipment

TEAM MEMBER FIRST RESPONSE

Duration: 1 day

Objectives

- Make the staff responsible with Fire Fighting Company Security Policy and First Response actions waiting Fire Fighters
- Manage trainee attitude in connection with fire starting
- Identify and use right extinguisher for each fire , have the right knowledge about company safety means

Who should attend

All companies and institutions

Prerequisite

None

Programme

THEORETICAL TRAINING

- Fire Triangle Elements
- Fire Classification
- Extinction materials
- Extinction Ways and Procedures

PRACTICAL TRAINING

- All kind of extinguishers Intervention on real fire (no pollution with our simulators)
- Domestic Fire
- Gas cylinder fire extinction

TEAM MEMBER SECOND RESPONSE

Duration: 1 day

Objectives

This course is designed to provide the student with the knowledge and training to use fire fighting equipment and operate efficiently as a unit.

Who should attend

All Companies and Institutions

Prerequisite

None

Programme

THEORETICAL TRAINING

- Classifications of fire
- Proper types of extinguishing agents
- Preparing and entering an incident area
- Locate missing personnel
- Handle and remove casualties
- SCBA
- Maintaining communications

PRACTICAL TRAINING

- Types of fire extinguishers
- Foam Systems
- Fixed fire fighting systems
- Flammable liquid fires
- SCBA
- Heat & smoke
- Evacuation techniques
- Fire security chain

FIRE MARSHAL / WARDEN

Duration: 0,5 day

Objectives

This half-day fire marshal training course covers the role of the designated fire marshal (fire warden). You will learn about preventing fires and learn about the different types of fire extinguisher and how to use them correctly. The course will present an understanding of fire regulations and general fire precautions.

Who should attend

This course is suitable for:

- those who are responsible for overseeing fire safety
- designated fire marshals
- anyone who needs to know how to use a fire extinguisher.

Prerequisite

None

Programme

- Action on discovering a fire
- Common causes of fire
- Fire drills and evacuation
- Fire safety legislation
- Fire safety precautions
- The chemistry of fire
- The role of fire marshal
- Using fire extinguishers

COMMAND & CONTROL FIRE FIGHTING

Duration: 3 days

Objectives

This course covers the strategy and tactics of fire fighting from the point of view of the senior officer.

This is an active course with theory and practical input for all leaders or potential leaders that may be required to take action in the event of fire or related incidents. Our aim is to give participants a greater awareness of leadership and the need for control on the fire ground.

Who should attend

Individuals who have responsibility to command incidents within their jurisdiction, company officers, and/or newly appointed officers. Additionally, individuals who are upwardly mobile in their organizations may be considered.

Prerequisite

Open to all but students must be physically fit and able to undertake all aspects of this training.

Programme

A mixture of practical based exercises and classroom input:

- Incident sizing and assessment
- Crew allocation and briefing
- Dynamic risk assessment
- Planning and co-ordination
- Liaison
- Leadership

CONFINED SPACES

Duration: 1 day

Objectives

The overall objective of this training is to protect those entering or working around a confined space. In this course you will learn the physical, chemical, and biological principles related to safe working with confined spaces.

Who should attend

Personnel working in or around confined spaces

Prerequisite

None

Programme

CONFINED SPACE INTRODUCTION & REGULATIONS

HAZARDS OF A CONFINED SPACE

PRE-ENTRY REQUIREMENTS

- Confined Space Program
- Hazard Assessment & the Entry Plan
- Training Requirements & Record Keeping

ENTERING A CONFINED SPACE

- The Entry Permit & On-site Rescue
- Energy / Materials Isolation & Control
- Atmospheric Safety & Ventilation

INTERACTIVE EXERCISES, TESTS

Certification

OSHA

SELF CONTAINED BREATHING APPARATUS

Duration: 2 days

Objectives

This training allows participants to maintain proficiency in using SCBA, so that its use becomes second nature when operating on the fire ground.

Who should attend

All Companies and Institutions staff

Prerequisite

None

Programme

- Breathing Apparatus presentation
- Breathing psychology
- Assessment and Prevention Professional Risk
- Debriefing
- Outside intervention without SCBA
- Confined space intervention
- In line weight transport / scaffold assembling
- Low density foam full space SCBA intervention Daily debriefing
- SCBA intervention in cloud smoke
- Incident on piping
- Work with bridle, work on leak …
- Pit Entry / Exit
- Manhole Entry / Exit
- Climb up / down escape ladder
- Hot CO2 atmosphere SCBA Intervention

FIRE EXTINGUISHER

Duration: 0,5 day

Objectives

This program provides the basic introduction to fire extinguishers. There are multiple correct ways to perform services and each company may use particular methods. Some of these include: onsite service using specially equipped service vehicles, onsite service for annual maintenance only while other service work is performed in the shop, or other than annual maintenance the extinguishers are "swapped out" using an exchange program.

Who should attend

Any personnel

Prerequisite

None

Programme

These training courses consist of both theory and practical training. The participants will have:

- Understanding of relevant state fire safety regulations
- Understanding of the theory of fire, classes of fire and fire extinguishing techniques
- Use of Fire Extinguishers, Fire Blankets and Fire Hose reels.
- Experience in extinguishing fires with fire equipment (live hot fires)

FIRE FIGHTING ON THE RIG

Duration: 1 day

Objectives

This training course helps to identify appropriate employee behavior while on the rig, the many pieces of safety equipment, safe transportation to and from a rig, operations and equipment, first aid, and the proper response to an emergency.

Who should attend

Drilling Companies staff

Prerequisite

None

Programme

THEORETICAL TRAINING

- On-the-rig fires classification
- Giving the alarm
- Organisation of safety conditions for people and goods
- Intervention tactics and methods
- Using of intervention equipment
- Safety regulations
- Work safety (first aid)
- Combustion
- Fires classification
- Extinguishers
- Evacuation rules

PRACTICAL TRAINING

- Exercises on real fires
- Fire extinguishers types
- Self-contained breathing apparatus wearing
- Practical exercises

INDUSTRIAL FIRES

Duration: 1 day

Objectives

To provide the participants with knowledge in fire fighting in industrial field: life-saving, safety regulations, reading evacuation plan, using equipment, anticipating evacuation risks.

Who should attend

All companies and institutions staff

Prerequisite

None

Programme

THEORETICAL TRAINING

- Combustion
- Fire safety chain
- Fire fighting equipment
- Fires classification
- Evacuation

PRACTICAL TRAINING

- Extinction of under-floor fire
- Detection and neutralization of gas leak
- Flares stacks fires
- Gas flanges fires
- Gutter fires
- Use of variable flow fire hoses
- Use of foam jets

URBAN FIRES

Duration: 1 day

Objectives

To provide the participants with knowledge in fire fighting in urban environment: life-saving, using equipment, anticipating evacuation risks, extinction means, rescue course, courses in smoky and hot environment.

Who should attend

All companies and institutions

Prerequisite

None

Programme

THEORETICAL TRAINING

- Combustion
- Fire safety chain
- Fire fighting equipment
- Fires classification
- Danger of vehicles

PRACTICAL TRAINING

- Fire fighting in closed premises using fire extinguishers
- Fire fighting in closed premises wearing SCBA
- Use of smog cane
- Fire fighting in technical premises
- Use of variable flow fire hoses on dry pillar
- Use of variable flow fire hoses outside
- Extinction of vehicle fire
- Use of foam jets

ROAD & TRAIN FIRES

Duration: 1 day

Objectives

To provide the participants with knowledge of road and train fires: intervention equipment, giving the alarm, organization of safety conditions for people and goods, specific risks of tank fire.

Who should attend

All Companies and Institutions staff.

Prerequisite

None

Programme

THEORETICAL TRAINING

- Combustion
- Fire safety chain
- Unconfined Vapour Cloud Explosion
- Flash over
- Boil over

PRACTICAL TRAINING

- Application on the real fires
- SCBA wearing
- Use of smog cane

FIRST AID

Duration: 3 days

Objectives

In addition to the topics covered on an emergency first aid at work course, on completion of training, successful candidates will be able to administer first aid to a casualty, recognise the presence of major illnesses and provide appropriate first aid.

Who should attend

This course is ideal for higher or advanced level hazards (e.g. construction, manufacturing or chemical plants) or where your needs assessment identifies a requirement to provide additional training, covering a broad syllabus including the recognition and treatment of a wider range of conditions.

Prerequisite

None

Programme

EMERGENCY FIRST AID AT WORK COURSE

FIRST AID TO A CASUALTY

- Injuries to bones, muscles and joints, including suspected spinal injuries
- Chest injuries
- Eye injuries
- Sudden poisoning
- Anaphylactic shock

FIRST AID WHILE ILLNESS

- Heart attack
- Stroke,
- Epilepsy
- Asthma
- Diabetes

Certification

RED CROSS INTERNATIONAL

FIRST AID RENEWING COURSE

Duration: 2 days

Objectives

- Getting knowledge to protect and rescue all company staff,
- Waiting for Medical Support in safe condition for the victim.

Who should attend

All companies and institutions staff

Prerequisite

None

Programme

GENERAL
- Accidents related with on site activities
- Prevention goals
- First Aid team member task

RISK IDENTIFICATION
- Electric risk, fire or explosion risk, collapsing risk , breathing risk
- Preventive measures implementation.

VICTIM EXAMINATION
- Victim examination
- What and how to prevent?

RESCUE
- Needed examination
- First aid and making good safety gesture
- Getting stable conditions.

SPECIFIC RISKS
- Attitude control in accident simulation:
- Knowledge examination according DRP 26/2001

Certification

RED CROSS INTERNATIONAL

BASIC LIFE SUPPORT (BLS)

Duration: 1 day

Objectives

This course can be adapted to suit a variety of audiences, from the complete novice to those who are skilled but feel their resuscitation skills need updating.

The training includes the necessary theory followed by lots of practical "hands-on" practice to build confidence.

Who should attend

Any personnel

Prerequisite

None

Programme

- The Theory of Resuscitation
- Incident Management
- Basic Life Support
- Recovery Position

Certification

EFR

GESTURES & POSTURES (PRAP)

Duration: 0,5 day

Objectives

Can back pain be efficiently prevented? Can the considerable financial loss it represents for companies be significantly reduced? Yes, by providing your employees with an ergonomic awareness training program which will teach them how to acquire correct gestures and postures.

Who should attend

This course is aimed at all employees across all industry types.

Prerequisite

None

Programme

- Back bone physiology
- The origin of back pain
- The good gestures and postures, adapted to a work station
- Exercises to strengthen the back

CASUALTY MOVEMENT / STRETCHERING

Duration: 3 days

Objectives

To make known how to move a casualty, the first step being the casualty lifting and using different types of stretchers.

Who should attend

All companies and institutions staff

Prerequisite

None

Programme

- Real-life situations exercises
- Use of the Besllile's stretcher
- Use of standard shafts
- Roll-and-lift method, or "spoon" lifting
- The Dutch bridge
- Casualty moving by 2 persons
- Casualty moving by 4 persons

Casualty moving by narrow passages

SAFETY TEAM MEMBER

Duration: 2 days

Objectives

Acquire necessary knowledge to protect and to provide first aid to any person in the company.

Who should attend

This course is aimed at all employees across all industry types.

Prerequisite

None

Programme

- Industry accidents
- Risks prevention
- Identification and cancellation of sources of risk
- Role of safety team member
- Casualty assistance
- Casualty examination
- Protect / Alert / Secure
- Simple reflexes and vital Gestures
- First aid

ENVIRONMENTAL AWARENESS

Duration: 1 day

Objectives

This one-day IEMA Environmental Awareness course will tell you why environment matters to your organisation and provide introduction to environmental legislation and how environmental management systems will meet the requirements of your customers.

Who should attend

Those that have responsibility for:

- developing the environment strategy and want to understand the resource and time requirements
- implementing environmental management at their site and want a quick introduction have responsibility for to get started before enrolling on a longer course
- are members of the environmental steering group on site
- are a direct report who manages environment
- are responsible for a specic environmental function e.g. waste or are a member of a HS&E team

Prerequisite

None

Programme

- Environmental issues
- Environmental legislation
- Environmental Management Systems

Certification

ERWDA

ENVIRONMENTAL AUDITING

Duration: 5 days

Objectives

Become a leading environmental auditor with our ISO 14001 Lead Auditor Training Course and gain a qualification which will contribute towards the auditor registration of the Institute of Environmental Management and Assessment (IEMA) or *Environmental Research & Wildlife Development Agency (ERWDA).

Get the right training to guide your organisation to environmental management excellence. As lead auditor you will remain at the forefront of EMS strategy and will drive efficiency in line with ISO 14001. You can play a pivotal role in ensuring your organisation is committed to environmental best practice. Work with EMS training professionals during this five-day course to understand how to keep pace with developments in environmental management systems. Consolidate your auditing skills through interactive sessions, role play and workshops where real life case studies make learning relevant.

Who should attend

- Those who want to lead compliance in line with ISO 14001/EMAS standards
- Existing auditors of quality systems and safety management systems
- Organisations seeking ISO 14001 certification

Prerequisite

None

Programme

- Consolidate ISO 14001 environmental management knowledge
- Conduct and lead effective audits in line with ISO 14001
- Lead and manage audit teams and processes
- Improve analytical and reporting skills

Certification

IEMA / ERWDA

INTRODUCTION TO WASTE MANAGEMENT & POLLUTION CONTROL

Duration: 1 day

Objectives

This course is designed to meet the needs of personnel who have responsibility for pollution control and waste management on construction sites. The course aims to introduce an awareness and understanding of environmental aspects and waste issues in relation to construction activities and how to approach responsible site management. The course will deal legal responsibilities for pollution control and waste management with practical advice and best practice to reduce environmental risk and manage waste arising and waste contracts. A certificate of attendance will be issued. The course provides further insight into preparing a site waste management plan and methods for pollution control.

Who should attend

The course caters for Site Managers; Foreman; Project Supervisors Construction Stage; Main Contractors, Safety Officers, who have responsibility for site management.

Prerequisite

None

Programme

- Introduction- Course Outline and Content
- Waste Arisings and Issues in Ireland
- Legal Responsibilities for Waste at Construction Sites
- Practical Site Waste Management
- Waste Management Case Study (Q&A)
- Introduction to Site Environmental Awareness
- Practical Pollution Prevention
- Legal Responsibilities for Pollution Prevention
- How to be a good Neighbour
- Overview of Site Compliance and Reporting
- Q&A Session

Certification

ERWDA

WASTE MANAGEMENT ON LAND

Duration: 2 days

Objectives

The topics presented provide with the necessary knowledge and information to successfully manage waste on land.

Who should attend

The course caters for Site Managers; Foreman; Project Supervisors Construction Stage; Main Contractors, Safety Officers, who have responsibility for site management..

Prerequisite

None

Programme

ORIENTATION, BACKGROUND AND INTRODUCTION

- Acronyms, definitions and terminology
- Legislation, regulations, by-laws and safety, health and environment
- Overview: minimum requirements

INTEGRATED PLANNING OF WASTE OPERATIONS AND SYSTEMS

- Integrated waste management planning and the IDP
- National waste management strategy and implementation
- Full cost analysis for waste management planning and operations
- Industry waste management plans
- Waste information and systems management

COLLECTION TRANSFER AND TRANSPORT OF WASTE

- Management of waste at the point of generation
- Collection of waste
- Transfer of waste
- Transportation of waste

WASTE MINIMIZATION, TREATMENT AND DISPOSAL OF WASTE

- Public participation and involvement
- Treatment options for waste management
- Thermal treatment of waste
- Volume reduction by shredding and composting
- Land filling of waste

EVALUATION AND IMPLEMENTATION OF SERVICE DELIVERY

- Different approaches towards the rendering of services
- Basic management techniques
- Central versus regional delivery of service
- Procurement and tendering

Certification

ERWDA

WASTE MANAGEMENT AT SEA

Duration: 2 days

Objectives

The topics presented provide with the necessary knowledge and information to successfully manage waste at sea.

Who should attend

The course caters for Site Managers; Foreman; Project Supervisors Construction Stage; Main Contractors, Safety Officers, who have responsibility for site management..

Prerequisite

None

Programme

ORIENTATION, BACKGROUND AND INTRODUCTION

- Acronyms, definitions and terminology
- Legislation, regulations, by-laws and safety, health and environment
- Overview: minimum requirements

INTEGRATED PLANNING OF WASTE OPERATIONS AND SYSTEMS

- Integrated waste management planning and the IDP
- National waste management strategy and implementation
- Full cost analysis for waste management planning and operations
- Industry waste management plans
- Waste information and systems management

COLLECTION TRANSFER AND TRANSPORT OF WASTE

- Management of waste at the point of generation
- Collection of waste
- Transfer of waste
- Transportation of waste

WASTE MINIMIZATION, TREATMENT AND DISPOSAL OF WASTE

- Public participation and involvement
- Treatment options for waste management
- Thermal treatment of waste
- Volume reduction by shredding and composting
- Sea filling of waste

EVALUATION AND IMPLEMENTATION OF SERVICE DELIVERY

- Different approaches towards the rendering of services
- Basic management techniques
- Central versus regional delivery of service
- Procurement and tendering

Certification

ERWDA

DESERT DRIVING

Duration: 1 day

Objectives

This is a full day Desert Driving course that will teach you how to handle a 4X4 vehicle in the breathtaking desert's of Dubai. You will be in safe hands whilst gaining your new skill; you will be at the wheel as you gain new skills and knowledge to venture safely off-road.Basic mechanical knowledge of a 4X4 vehicle is fundamental to understanding and exploiting its maximum capability and performance.

Learn about the topography of the desert and situations you are likely to find yourself in while off-roading.Deserts can be hot spots for trouble! Find out proven techniques to stay safe and keep your cool! Survival is all important in the desert and we give you hints and tips on an array of topics to ensure you stay on top of a situation you could find yourself in!

Who should attend

It is designed for drivers of all levels of experience

Prerequisite

Current valid licence is required

Programme

- Introduction
- Risks, lows & personal vehicles
- Components of the highway transportation system
- Safety equipment and transportation system
- Pre-check, driver position & mirrors
- Visual strategy & creating space
- Communication
- Basic speed law & driving emergencies

Certification

IMI

BASIC DESERT SURVIVAL SKILLS

Duration: 2 days

Objectives

This workshop will provide an introduction to desert survival basics and facets of ecology unique to the desert. Relying on classroom lecture and slideshows, students will become familiar with desert skills such as emergency shelters, water location, signal mirror practice, overview of heat-related injuries, and survival kits for car and backpack.

This comprehensive course will offer a solid foundation in the field skills involved in handling a desert survival situation. This is a non-overnight course which utilizes a combination of classroom lecture, hands-on fieldwork, and group activities.

Who should attend

Our abrasive wheel training courses are suitable for all operators, managers and supervisors, who as part of their working duties select, mount, specify or use abrasive wheels.

Pre-requisite

None

Programme

- Survival psychology
- Heat-related injuries
- Natural and improvised shelters
- Water location and procurement
- Signaling methods
- Firemaking skills
- Edible and poisonous plants
- Desert hazards such as snakes
- Scorpions
- Flash floods

DEFENSIVE DRIVING

Duration: 0,5 day

Objectives

- The principles of Defensive Driving - how to minimise risks and improve driver's safety margin
- Hazard Detection - the technique and skill of reading ahead and identifying hazards
- Understanding the limitations of relying on emergency control skills
- LOOK UP. STAY BACK - the two behaviours that will halve your crash risk
- Vehicle safety - checklist, driving position, tyres and pressures
- Practical Activities - understanding the relationship between reaction time, speed and stopping distances
- Vehicle dynamics - understanding what causes skids and vehicle instability
- Key road laws - how much can you rely on road laws to keep you safe - practical interpretation
- All practical training conducted at suburban speeds.

Who should attend

It is designed for drivers of all levels of experience

Prerequisite

Current valid licence is required

Programme

- Introduction
- Risks, lows & personal vehicles
- Components of the highway transportation system
- Safety equipment and transportation system
- Pre-check, driver position & mirrors
- Visual strategy & creating space
- Communication
- Basic speed law & driving emergencies

Certification

IMI / IADC DIT

This training can be delivered specifically for light or havy goods vehicles, off-road or on-road.

4. MANAGEMENT & LEADERSHIP COURSES

Course Title	Who should attend	Level	Duration
Introduction to Project Management	• Supervisors	Basic	2 days
Project Management	• Superintendents, Operations Managers	Advanced	5 days
Strategy for Programme Managers	• Operations Managers and Senior Management	Advanced	3 days
Framework for Programme Managers	• Operations Managers, Mid and Senior level Managers, Experienced Superintendents	Advanced	7 days
Introduction to Management	• Supervisors	Basic	1 day
Setting up of the Corporate Strategy	• Operations Managers and Senior Management	Advanced	1day
Evaluating Company Potential for Maximum Results	• Operations Managers and Senior Management	Advanced	1day
Set-up and Follow up of Budgets	• Staff with Management Responsibilities	Basic	1 days
Set-up and Follow up of Organizational Goals	• Staff with Management Responsibilities	Basic	1 day
Meeting Management	• Supervisors, Superintendents, Operations Managers	Basic	1 day
Communication & Presentation skills	• Supervisors	Basic	1 day
Negotiation	• Supervisors, Superintendents, Operations Managers	Basic	1 day
Time Management	• Supervisors, Superintendents, Operations Managers	Basic	1 day
Leadership	• Superintendents, Operations Managers	Advanced	2 days

Course Title	Who should attend	Level	Duration
Leadership Workshop	• Superintendents, Operations Managers, Senior Managers	Advanced	2 days
Team Building	• Superintendents, Operations Managers, Senior Managers	Basic	2 days
Team Building Workshop	• Teams (may include Technical Experts, Supervisors, superintendents, Operations Managers)	Advanced	2 days
Productivity & Motivation	• Supervisors, Superintendents, Operations Managers	Basic	1 day
Change Management	• Supervisors	Basic	1 day
Growth	• Superintendents, Operations Managers	Advanced	1 day
Stress Management	• Supervisors, Superintendents, Operations Managers	Basic	1 day
Crisis & Incident Management	• Supervisors, Superintendents, Operations Managers	Basic	1 day

INTRODUCTION TO PROJECT MANAGEMENT

Duration: 2 days

Objectives

Provide an in initiation into the process of Project Management so as to assume responsibility from a Superintendent or Operations Manager for a project.

Who should attend

Supervisors

Level

Basic

Programme

- Overview
- Role of a Supervisor
- Planning
- Teamwork and Communication
- Monitoring and Control

PROJECT MANAGEMENT

Duration: 5 days

Objectives

Provide an in depth study of the phases of a project and best management practices

Who should attend

Superintendents, Operations Managers

Level

Advanced

Programme

- Introduction to Process
- Setting up a Project
- Team work & Communications
- Negotiation Skills
- Controlling a Project (Risk, Issue, Dependency)
- Change Control
- Delivery of a project

STRATEGY FOR PROGRAMME MANAGERS

Duration: 3 days

Objectives

Transfer of learning between projects and alignment with organizational goals

Who should attend

Operations Managers and Senior Management

Level

Advanced

Programme

- Introduction to Process
- Business Case Creation
- Governing a programme
- Controlling Multiple Projects
- Change Management
- Benefits Realisation

FRAMEWORK FOR PROGRAMME MANAGERS

Duration: 7 days

Objectives

Provide a Renewal Training of Project and Programme Management

Who should attend

Operations Managers, Mid and Senior level Managers, Experienced Superintendents

Level

Advanced

Programme

- Introduction to Process
- Setting up a Project
- Team work & Communications
- Negotiation Skills
- Controlling a Project (Risk, Issue, Dependency)
- Delivery of a project
- Closure of a Project
- Business Case Creation
- Governing a programme
- Controlling Multiple Projects
- Change Control & Management
- Benefits Realisation

INTRODUCTION TO MANAGEMENT

Duration: 1 day

Objectives

Provide an overview of the importance of management in organizations

Who should attend

Supervisors

Level

Basic

Programme

- Overview
- What is Management?
- The Importance of Management in Human Activity
- The Management of an Organization
- Management, Efficiency and Effectiveness

SETTING UP OF THE CORPORATE STRATEGY

Duration: 1 day

Objectives

Provide an introduction to strategy and key strategic tools

Who should attend

Operations Managers and Senior Management

Level

Advanced

Programme

- Overview
- What is Strategy?
- Why is it Important?
- Strategic Frameworks
- A Simple Approach to Strategy

EVALUATING COMPANY POTENTIAL FOR MAXIMUM RESULTS

Duration: 1 day

Objectives

Provide key insights to understand the importance of resource identification and allocation for achieving the company's objectives

Who should attend

Operations Managers and Senior Management

Level

Advanced

Programme

- Overview
- Company Assessment
- Objectives
- Resources
- Matching Resources with Objectives

SET-UP AND FOLLOW UP OF BUDGETS

Duration: 1 day

Objectives

Provide an introduction to budgeting and key insights into the budgeting process

Who should attend

Staff with Management Responsibilities

Level

Basic

Programme

- Overview
- What is a budget?
- Budgeting Rules
- The importance of the Budgeting Exercise
- The budget as a Management Tool

SET-UP AND FOLLOW UP OF ORGANIZATIONAL GOALS

Duration: 1 day

Objectives

Provide key insights into the importance of Goals and Objectives in management

Who should attend

Staff with Management Responsibilities

Level

Basic

Programme

- Overview
- What are Goals?
- Why is it Important to have Goals
- Goals and Objectives
- Characteristics of the Objectives
- Setting up Objectives

MEETING MANAGEMENT

Duration: 1 day

Objectives

Improve Meeting Management skills so that meetings are not only efficient but more motivating

Who should attend

Supervisors, Superintendents, Operations Managers

Level

Basic

Programme

- Running an efficient meeting
- The Meetings Objectives
- Making the Best use of Time
- Process
- 6 Thinking Hats

COMMUNICATION & PRESENTATION SKILLS

Duration: 1 day

Objectives

Provide a better understanding of the varied aspects of improved communication.

Who should attend

Supervisors, Superintendents, Operations Managers

Level

Basic

Programme

- Getting the message across
- Writing
- Active Listening
- Speaking
- Presentations

NEGOTIATION

Duration: 1 day

Objectives

Provide an understanding of the dynamics of negotiation.

Who should attend

Supervisors, Superintendents, Operations Managers

Level

Basic

Programme

- Overview and Culture
- Bargaining
- Joint Problem Solving/Conflict
- Planning
- The actual Negotiation
- Reviewing

TIME MANAGEMENT

Duration: 1 day

Objectives

Understand how we spend our time and how to use tools and processes so as to use time more efficiently and productively.

Who should attend

Supervisors, Superintendents, Operations Managers

Level

Basic

Programme

- Overview
- Prioritizing
- Analyzing
- Filtering
- Scheduling
- Executing

LEADERSHIP

Duration: 1 day

Objectives

Provide a framework for improving Leadership awareness and performance, adapting to changing situations.

Who should attend

Superintendents, Operations Managers

Level

Advanced

Programme

- Overview and Styles
- Mission and Objectives
- Communication
- Strategy and implementation
- Decision Making
- Work-Life Balance

LEADERSHIP WORKSHOP

Duration: 1 day

Objectives

Assist leaders accurately assess their leadership skills and plan steps to improve them.

Who should attend

Superintendents, Operations Managers, Senior Managers

Level

Advanced

Programme

- 360º Feedback
- Overview of the Global Leader
- Descriptions of Leadership dimensions
- Feedback report
- In-depth examination of reports
- Group discussion about results
- Action planning and recommendation

TEAM BUILDING

Duration: 2 days

Objectives

Provide an understanding of team dynamics and how to lead a team to better achieve objectives.

Who should attend

Superintendents, Operations Managers, Senior Managers

Level

Basic

Programme

- Overview and Culture
- Mission and Objectives
- Talents and Delegation
- Planning for resource and support needs
- Operational (Communication, Decision Making, Joint Problem Solving, Conflict Resolution)

TEAM BUILDING WORKSHOP

Duration: 2 days

Objectives

Improve team performance while providing understanding of key factors for the success.

Who should attend

Teams (may include Technical experts, Supervisors, Superintendents, Operations Managers)

Level

Advanced

Programme

- Team assessment
- Building Trust
- Conflict
- Commitment
- Accountability
- Focusing on Results

PRODUCTIVITY & MOTIVATION

Duration: 2 days

Objectives

To understand the link between Productivity and Motivation and the different ways that different people respond to different kinds of stimulation.

Who should attend

Supervisors, Superintendents, Operations Managers

Level

Basic

Programme

- Overview
- Multicultural environments
- Driving factors
- Goal Setting (Accountability, Recognition, Incentives)
- Creativity

CHANGE MANAGEMENT

Duration: 1 day

Objectives

Provide an understanding of the importance of Change Management and how to implement it

Who should attend

Supervisors

Level

Basic

Programme

- Why manage change?
- Change starts at the top but happens at the bottom
- Change management aligns the daily work with the objectives
- The importance of communication
- The need to be change agents
- Implementation, culture, behaviour

GROWTH

Duration: 1 day

Objectives

Provide an understanding of Growth, the types of growth and their importance for the company's future

Who should attend

Superintendents, Operations Managers

Level

Advanced

Programme

- What is Growth?
- Types of growth
- The dangers of growing too fast, too soon
- The importance of sustainable growth
- Growth and Value

STRESS MANAGEMENT

Duration: 1 day

Objectives

Developing awareness of what tips a person from pressure into stress and how pressure works for the benefit of the organization

Who should attend

Supervisors, Superintendents, Operations Managers

Level

Basic

Programme

- What is Stress? Causes. Risks.
- Pressure and stress. Is Stress necessary for the organization? At what level?
- Exploring Stress and Pressure. The individual workload.
- Personal Pressure Awareness
- Handling Stress Tool Box
- Handling Other People's Stress

CRISIS & INCIDENT MANAGEMENT

Duration: 1 day

Objectives

Provide an understanding of managing situations of crisis and incidents, whether at a Strategic or Tactical level, solving problems and keeping up with the defined goals

Who should attend

Supervisors, Superintendents, Operations Managers

Level

Basic

Programme

- Crisis and incidents and impacts on the organisation
- How is an incident escalated and by what structures
- The crisis and incident management team – resources and action
- The crisis/incident management plan
- Managing crisis communications

Training Catalogue

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