

1. INTRODUCTION TO OIL & GAS INDUSTRY

ABOUT THE PROGRAM

Building from an introduction to the role of oil and gas in modern societies, this course develops an understanding of the current state of the sector and the key players. The second day of the course considers the future opportunities and challenges, both within the sector and external to it.

LEARNING OBJECTIVES

After completing this course, the participants will be able to:

- Understand how hydrocarbons were created, trapped and formed in hydrocarbon reservoirs.
- Be familiar with the various geological and geophysical exploration methods.
- Be familiar with all engineering and development aspects of the industry.
- Understand the role and contribution of the various disciplines in petroleum development and production projects.
- Be able to explain the principal objectives and some key challenges facing most sectors of the petroleum industry.
- Be able to define the meaning of common petroleum industry vocabulary with the use of diagrams as appropriate.
- Be able to apply their knowledge and problem solving skills to industry-related exercises, such as the calculation of original oil in place, OOIP

TARGET AUDIENCE: This Introduction to the Oil & Gas Industry training course is suitable for personnel from all sectors of the oil and gas industry – government agencies, authorities, operators, contractors and service companies. Also, Professionals from a range of disciplines seeking to gain an overview and practical knowledge of the modern Oil and Gas sector are suitable for the same.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 2 days.

2. FUNDAMENTALS OF OFFSHORE DRILLING TECHNOLOGY

ABOUT THE PROGRAM

The topics like preparation for drilling operations, Offshore drilling platform types, Rig equipment, Drilling operations, Marine operations, safety and regulations, Semi submersible ancillary equipment, etc. forms the part of Offshore Drilling Technology course.

LEARNING OBJECTIVES

To provide an in-depth appreciation of offshore drilling equipment, marine drilling practices and the specific operational requirements for working in an offshore environment.

TARGET AUDIENCE: This short course is intended for Personnel requiring a comprehensive understanding of offshore drilling equipment and operations.

DURATION: 2 days

3. DRILLING IN A HIGH PRESSURE HIGH TEMPERATURE ENVIRONMENT

ABOUT THE PROGRAM

In this training program, the in-depth knowledge of Composition and properties of drilling fluids, kick composition and properties, Gas solubility in drilling fluids, Gas behavior in the wellbore. Kick detection and associated equipment, Bubble point pressures of kicks, Well control methods, Kicks while off bottom, Rig equipment, Jack-ups and permanent completions in gas condensate reservoirs, Temperature effects on well control equipment, Surface equipment problems, Planning high pressure high temperature wells, Recommendations and codes of practice for the drilling and testing of high pressure offshore wells, Well control flowcharts, etc. will be provided.

LEARNING OBJECTIVES

To provide a comprehensive study of how to deal with drilling high pressure, high temperature wells.

TARGET AUDIENCE: This short course is comprehensive and detailed intended for all personnel involved in or associated with drilling deep hot wells.

VENUE: Rudra Training Centre or at vendor's facilities.

4. WELL PLANNING AND PROGRAMMING

ABOUT THE PROGRAM

Candidate taking up this course will be filled up with the knowledge of subjects like Consent to drill, Statutory requirements, Well types, Mud/log data, RFT/DST data, Casing, Cement, Bit and hydraulics, Deviation, Survey requirement, Wire line logging, Wellhead and BOP equipment, Other third party services, etc.

LEARNING OBJECTIVES

This course is designed to provide a comprehensive approach to Well Planning and Programming.

TARGET AUDIENCE: This short course is intended for personnel responsible for Drilling activities and its management.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 3 days

5. CASING AND CEMENTING

ABOUT THE PROGRAM

This program will deliver an in-depth training of Casing design, Designing combination strings, Casing handling equipment and running procedures, Cementing materials and additives, Rheology and displacement, Primary cementing, Liner applications and liner cementing, Liner calculations, Drillable and retrievable packers, Tool hydraulics, Squeeze cementing, Plug cementing guides and procedures, Cement bond logs, Cement equipment, etc.

LEARNING OBJECTIVES

To provide a comprehensive approach to casing design and practice, cementing methods and operations.

TARGET AUDIENCE: This short course is intended for personnel responsible for Drilling activities and its management.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 3 days

6. STUCK PIPE PREVENTION

ABOUT THE PROGRAM

This program would cover the topics like: The problem of stuck pipe, General stuck pipe prevention, Bottom hole assemblies, Tripping, Drilling, Warning signs of stuck pipe, Hole cleaning procedures, Mud properties, The causes of stuck pipe, Predicting stuck pipe, Wellbore stability, Freeing stuck pipe, Economics of stuck pipe, etc. This program would provide a

practical understanding of the preventive measures to implement while drilling to avoid having a pipe stuck

LEARNING OBJECTIVES

- To illustrate the extent of stuck pipe problems and to equip all members of the Drilling Team with the skills and knowledge to recognize the signs of a potential Stuck Pipe situation.
- To identify and specify actions to be taken by the drilling team to avoid this costly and time-consuming problem.
- To develop a team approach to prevention and resolution of stuck pipe problems.

TARGET AUDIENCE: This short course is intended for comprehensive coverage of stuck pipe possible problems and resolutions.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 2 days

7. DRILLING OPERATIONS OVERVIEW.

ABOUT THE PROGRAM

This program provide an overview of fundamental knowledge in drilling and completion (with a review of geology, formations and well pressure) as an introduction to the intensive training program "Drilling and Completion Engineering"

LEARNING OBJECTIVES

- To learn about different types of rock
- To understand the process of hydrocarbon formation and trapping
- To carry out well pressure calculations
- To assess uncertainties with regard to pressure measured while drilling

TARGET AUDIENCE: Young engineers involved in drilling and completion, supervisors, tool pushers.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 5 days

8. ROUSTABOUT INDUCTION TRAINING

ABOUT THE PROGRAM

This program will give a General Introduction to drilling industry, Drilling Concept & Rigs Type, Rig Components (Hoisting System, Circulating System, Rotating System, Power System), Tubular & Drill String components, Introduction to Drilling Operations (Drilling & tripping, Running casing, Cementing, Rig Move), Roustabout's Role and duties within the drilling crew, Basic Math and calculation (level – 1)

LEARNING OBJECTIVES

- To provide participants with the theoretical, practical and technical knowledge required to work safely and effectively on an offshore drilling rig.
- To provide the basic knowledge to Roustabouts about drilling activities, and helping them to comprehend the fundamentals of operations that are carried out on a drilling rig along.

TARGET AUDIENCE: Roustabout and all drilling green Hands

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 5 days

9. HELICOPTER UNDER WATER ESCAPE TRAINING

ABOUT THE PROGRAM

This program provides passengers and aircrew with the knowledge and skills necessary to react to and survive a helicopter ditching and to be able to care for themselves in a sea survival situation.

LEARNING OBJECTIVES

On completion, participants will be able to demonstrate competence in theory and practice of the Surface Abandonment , Pre ditching checks, Ditching–aircraft capsize, Lifejackets, Life rafts, EPIRB's & ELT's , Safe use of pyrotechnics , Search & Rescue (SAR), Recovery , Sea Survival , Helicopter Safety.

TARGET AUDIENCE: Newly hired roustabouts

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 1 day

10.RIGGERS TRAINING

ABOUT THE PROGRAM

This program helps the person to plan and prepare work and hazard control strategies, fibre rope Splicing/Bends and Hitches, fully understand construction/safe use/care maintenance and inspection of synthetics, wire rope, graded chain, manufacture of slings, develop the knowledge of slinging methods load factors and limitations placed on slings, Use of terminal fittings with slings i.e. shackles, eye splices, metal fittings, wedge and sockets, Chain blocks and chain pullers used as slings, Interpret crane load charts, Ground bearing pressures in relation to stabilizers, Calculation of load mass (weight), Signaling and working with the crane operator, Assisting the crane operator to move and set up the crane and Deck management (offshore), etc.

LEARNING OBJECTIVES

The program will provide participants with the theoretical and practical knowledge and skills to carry out slinging practices in the movement and placement of loads with the use of a crane.

TARGET AUDIENCE: Personnel with a responsibility to carry out rigging and lifting operations whether routine or complex lifts. The course is also beneficial to personnel such as supervisors and HSE advisors with a responsibility for proper planning and appropriate supervision of lifting operations and persons with a responsibility for issue and control of lifting equipment and accessories.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 2 days

11.BEST SCAFFOLDING PRACTICES TRAINING

ABOUT THE PROGRAM

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

- Understand knowledge of all scaffold components.
- Determine loadings for the light/medium/heavy duty scaffolds
- Safely build scaffolds from the ground up to fit for purpose
- Safely dismantle scaffoldings

- Safely use and maintain equipment
- The content of Basic Scaffolding
- Determine loading and forces in the hung and suspended scaffolding from Existing structures
- Safely erect suspended and hung scaffolds
- Safely dismantle suspended and hung scaffolds
- Safely use fall arrest equipment.

LEARNING OBJECTIVES

This course provides participants with the technical and hand on skills to erect modular scaffolder's systems and tube and coupler scaffolds from the ground up to an accepted International standard. As well as incorporating skills acquired in the Basic Scaffolding Course, the participants will now erect scaffolds that are hung or suspended from existing structures.

TARGET AUDIENCE: Employees who assemble, use or dismantle scaffolding

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 3 days

12. INDUSTRIAL PAINTING

ABOUT THE PROGRAM

This training program enables the participants to understand the history of painting and surface applications. It also explains advantages of paint, the classification and specialized painting for oil& gas industry. Paint inspection, maintenance and use of painting accessories are also covered. Special focus is given on safety measures along with technological up gradation. The course also covers sandblasting techniques. The participants will be able to take the responsibility of rig painting program.

LEARNING OBJECTIVES

The program is specifically designed to provide a broad understanding of the concepts of sustainable paint technology and products.

TARGET AUDIENCE: Staff involved in painting operations of offshore rigs and equipments.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 3 days

13.FABRICATION FUNDAMENTALS

ABOUT THE PROGRAM

This course covers introduction & importance of metal fabrication. Various processes, equipments, machineries and hand tools along with inspection techniques are covered. The participants would be able to calculate and set parameters using advance fabrication techniques. Safety measures are also covered during the course.

LEARNING OBJECTIVES

This program will enable the candidates to understand the essential tools for metal works and metal fabrication, Procedures for metal fabrication, Techniques of Marketing Metal fabrication products and Innovativeness in metal works.

TARGET AUDIENCE: Staff involved in fabrication work of offshore rigs equipments

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 30 days

14.TECHNIQUES OF ELECTRIC ARC WELDING

ABOUT THE PROGRAM

This program covers basics of arc welding & electric arc welding processes, electrodes for welding mild steels & alloy steels, Filler metals for stainless steel, carbon & low alloy steel filler metals – GMAW, GTAW, and SAW. It also covers flux cored arc electrodes carbon low alloy steels and hard surfacing electrodes. The participants are enables to estimate and compare weld metals cost.

LEARNING OBJECTIVES

Industrial Welding Training helps plant maintenance workers develop a working knowledge of and learn the theory behind gas and arc welding techniques and equipment, and the cutting of iron, steel, pipe, and nonferrous metals.

Trainees receive an overview of basic mathematics, print reading, and safety, followed by the fundamentals of metallurgy, electricity and weld inspection. Since welding demands repeated hands-on practice, make sure your employees have easy and frequent access to oxyacetylene and shielded metal arc (stick electrode) welding equipment.

TARGET AUDIENCE: Marine Engineers, Fitters, Pump men, Repair team members and any other ranks as per client's requirements.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 4 days

15.WELDING 3G & 4G

ABOUT THE PROGRAM

The training plan is based on a Unit of Competency from the Metals Engineering Training Package within the Australian Qualification Framework (AQF):

MEM5.16AB – Perform Advanced Welding using Manual Metal Arc welding process upon successful completion of this training the participant should be competent to-

- Prepare materials for welding
- Select welding machine settings and electrodes
- Carry out advanced SMAW – 3G position (vertical butt weld) and 4G position (overhead butt weld)
- Inspect for and correct defects
- Maintain weld records

LEARNING OBJECTIVES

By the end of the course, participants will be competently trained as a Welder and prepare them for further trends so that they can readily transfer their technical skills to the shop floor.

TARGET AUDIENCE: Workmen who are required to acquire 3G, 4G or 6G skill level and work in Construction/Marine industries

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 6 days

16.WELDING 6G & 6GR

ABOUT THE PROGRAM

The training program for 6G and 6GR SMAW is designed to improve and develop the manipulation competencies of the welder that could meet the standard requirement for X-Ray quality welding in the Oil refineries and modern industries. This course covers various electrodes and filler metals for welding processes. The participants are able to estimate and compare welding metal cost ensuring reliability of welding filler metals.

LEARNING OBJECTIVES

At the end of the program, the participants should be able to:

1. Apply and observe the safety rules and regulation in welding.
2. Describe the principles and operation of SMAW process and accessories.
3. Describe the principles and operation of GTAW process and accessories.
4. Explain the advantages and disadvantages of SMAW and GTAW processes.
5. Identify the welding consumables as per job requirement.
6. Understand the basic welding metallurgy and heat treatment of metals.
7. Read and interpret the welding symbol.
8. Understand the method of welding testing and inspection and its application.
9. Understand the welding codes and standards requirement related to welder qualification.
10. Read and interpret the welding procedure specification (WPS).
11. Produce an acceptable weld quality meeting code and standard requirement.

TARGET AUDIENCE: Workmen who are required to acquire 6G or 6 GR skill level and work in Construction/Marine industries

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 6 days

17.ARGON WELDING TECHNIQUES:

ABOUT THE PROGRAM

This course covers history, importance and classification of argon welding techniques including modern welding methods. It also covers equipments used in argon welding, welding calculations, inspection and safety measures followed during argon welding.

LEARNING OBJECTIVES

Through this program, the participant will understand:

- Principles of Argon welding
- The Argon welding machine
- Heat ranges and polarity needed for welding various metals
- Types of welding electrodes used for each material welded
- Welding positions; overhead, horizontal, vertical
- Shop safety
- Also, through classroom lecture and hands on lab work, the participant will learn the safe and practical applications of Argon welding.

TARGET AUDIENCE: All technical and not technical people trainers, welders, universities, welding school, consultant, and safety organization.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 5 days

18.GAS CUTTING AND WELDING

ABOUT THE PROGRAM

This course covers safety procedures, use & applications of welding equipment and applications of blue prints in welding. It describes mathematical calculations in welding, safety techniques for storing & handling cylinders along with use of oxy fuel cutting equipment. Special focus is given on proper personal protection during welding.

LEARNING OBJECTIVES

Upon completing this course, the trainee will be able to:

- Prepare metal for arc welding and gas welding joints producing welds with a good penetration and no undercutting on sides and of good pattern
- Brazing of metals to produce a good quality joint with good strength
- Gas cutting producing dean straight line cuts and using trammels to cut arcs and circles

TARGET AUDIENCE: All technical and not technical people moving first steps in Oxy-gas welding, brazing and cutting, trainers, welders, universities, welding school, consultant, safety organization

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 10 days

19. MOTORMAN FAMILIARIZATION

ABOUT THE PROGRAM

This course covers IC engines, fuel systems and gears, cooling and air systems. Compressed air & exhaust gas compressors, diesel engine and its operating systems, turning gears and movers including thrust bearing. Description of cargo handling gear, ship pumps and ship welding operations.

LEARNING OBJECTIVES

Engineers on-board your vessels should have in-depth knowledge of all the different pumping, lubricating, cooling, electrical and other vital systems on-board. Ensuring this will ensure that your vessel stays at sea and reduces the risk off mechanical breakdowns. Engineers need to maintain the vessel and ensure that it runs mechanically efficient. Courses offered include: Marine Motorman Grade 1 Higher Grade, Marine Motorman Grade 1 and Marine Motorman Grade 2.

TARGET AUDIENCE: People who want to execute routine checks of the machinery, tanks, bilge and pump-rooms along with the daily operation and maintenance of the machinery. Also a person with mechanical background with knowledge about diesel engines can opt for the course

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 4 days

20. FORKLIFT TRAINING

ABOUT THE PROGRAM

This course covers driving a forklift, hazards involved in forklift operations, forklift maintenance & inspection and safety tips as per OSHA standards, checklist for maintenance inspection, fork attachment details and conversion truck training.

LEARNING OBJECTIVES

After completion of the course, the participant will have the theory and practical understanding of the following:

- Relevant Legislation Safety responsibilities of an operator
- Pre-shift inspection Forklift Stability
- Battery care / Refueling for battery /diesel , gas powered lift trucks
- Safe operation of a forklift truck:
- Load handling Racking systems
- Irregular loads
- Vehicle loading
- Weight assessment

TARGET AUDIENCE: Participants wanting to learn basic forklift operation skills, to understand the equipments capabilities and requirements, to operate the equipment safely.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 7 days

21.KITCHEN SAFETY

ABOUT THE PROGRAM

This training course explains detailed sanitation procedure, knife skills, benefits of kitchen sanitary, food poisoning, cleaning practices. Focus on first aids with respect to burns, cuts and food poisoning. It describes slip hazard, near misses, use of fire extinguisher, falling objects. Disinfecting kitchen drains and separate raw meats from fruits & veggies.

LEARNING OBJECTIVES

- To provide individuals with an understanding of the duties of a cook associated with the marine environment on board ships.
- To develop the knowledge, skills and attitudes necessary to achieve success and gainful employment as a ships' cook.

TARGET AUDIENCE: Any person who wants to perform the duties of Marine Cook on ships of any size in any operating area.

VENUE: Rudra Training Centre or at vendor's facilities.

DURATION: 15 days

22. SESSION BY SUBJECT MATTER EXPERT

Rudra brings need based Subject Matter Experts (SMEs) from the drilling industry who will share their experiential learning, enabling the participants to know the in-depth practicality of the industry.