

# Introduction to the Oil & Gas Industry

## INTRODUCTION

- This training course will provide delegates a full and comprehensive picture of Oil & Gas Industry. Professionals from Oil & Gas Industry and other relevant sectors are able to grasp clearly the critical activities at upstream, middle stream and downstream of this Industry. This training course will also offer contemporary methods in Oil & Gas Industry. A structured approach would be taken whereby delegates have opportunities to engage, relate and contextualise meaningfully the fundamentals of the Oil & Gas Industry.

## PROGRAMME OBJECTIVES

- To understand the nature, practicalities and realities of the Oil & Gas Industry and its complexities
- To critically review and appraise the Oil & Gas Lifecycle, e.g., exploration processes, reserves investigation, drilling, extraction methods, transportation, processing of crude Oil & Gas, refining and sale of products
- To be aware of typical forms of agreements between exploration and production companies, host government and other related stakeholders (partners)
- To probe the complete and integrated Oil & Gas Industry supply chain at Upstream, Middle stream and downstream

## WHO SHOULD ATTEND?

- Beginners and any new starts in the Oil & Gas Industry
- Oil & Gas professionals who are keen to attain a holistic and integrated overview of the Oil & Gas Industry in a structured approach
- Non-technical professionals who aim to understand the intrinsic of the Oil & Gas Industry
- Non-Oil & Gas professionals who are moving or seeking new career opportunities in this highly demanding and complex Industry
- Any professionals who aspire to learn the basics and fundamentals of Oil & Gas Industry

## TRAINING METHODOLOGY

- Oil & Gas Industry case studies, series of class short and long exercises, team working, presentation, video, quiz, use of visuals and snapshots, critical appraisal and rapid response assessment based on a situational analysis.

## PROGRAMME SUMMARY

- This training course is developed in response to increasing expectation for Oil & Gas professionals to be fully aware and understand the fundamentals of Oil & Gas field. This Introduction to the Oil & Gas Industry training course will also provide knowledge in various advanced surface operations and discuss range of facilities at Onshore and Offshore. There is an anticipation and demand for Oil & Gas personnel to be sufficiently skilled and competent in Oil & Gas Industry operations, activities and processes at upstream, middle stream and downstream. Benefit of doing this training course would be immediately transferable in personnel's role and day to day responsibilities. Delegates would be able to appreciate and understand clearly terminologies, concepts, requirements and scope of Oil & Gas Industry.

## PROGRAM OUTLINE

### Introduction and fundamentals to the Oil and Gas Industry

- Introduction to the Oil & Gas Industry (Hydrocarbon Terminologies)
- How Sedimentary Rocks are formed – Formation of Oil & Gas
- Hydrocarbon Traps
- Offshore and Onshore Oilfield Development Plan
- Current Market Trends in the Oil & Gas Industry

### Reservoir – Geology and Exploration

- Oil & Gas Industry Upstream, Middle Stream and Down Stream Phases, Deliverables and Activities
- What is an Oil and Natural Gas Reservoir?
- Geology, Surface Mapping and Surveys
- Geophysics and Basement Rocks
- Seismic Exploration and The Seismic Survey
- Exploration Methods

### Ownership and Drilling Operations

- Acquiring Petroleum Rights
- Surface Rights vs Petroleum Rights
- Drilling the Well and Drilling Technology
- Casing and Logging the Well
- The Drill Stem Test
- The Blowout Preventer

## Well Completion and Offshore Structures

- The Technology of Offshore Drilling
- Types of Offshore Drilling Rigs
- Development Wells
- Completing a Well
- Crude Oil Treatment
- Offshore Structures and Production

## Production of Oil and Gas, Middle Stream and Downstream Activities

- Separation Process
- Pumping Equipment for Liquids
- Compressor, Valves, Heat Exchangers and Pipelines
- Downstream – Oil Refinery Operation
- Petrochemicals Products and Distribution methods
- Transportation and Sales

