Introduction to the Oil & Gas Industry

INTRODUCTION

This two-day Introduction to the Oil & Gas Industry training course is extremely popular course that provides a wide-ranging and practical industry overview.

Aimed at those new to the oil & gas industry, and non-technical personnel, the course covers each key phase of the exploration and production industry.

The course is designed to provide oil and gas professionals the opportunity to gain a technical and commercial understanding of the industry fundamentals.

On attending this Introduction to the Oil and Gas Industry training course you will learn:

- The scientific origins of oil and gas
- The commercial issues underpinning hydrocarbon exploration and development
- The role of government and its agencies
- Oil and gas terminology
- The technological process of exploration
- The technological process of drilling
- The technological process of production
- The challenges of decommissioning

Training Course Content

- History of the Earth
- Petroleum Geology
History and Geopolitics of the oil industry
Uses for Oil and Gas
The Big Picture
Upstream
Midstream
Downstream
Exploration and Production
Exploration
Appraisal
Development
Production
- Drilling an Exploration Well
- Directional Drilling
- Offshore Drilling
- Well Testing & Completion
- Well Simulation & Workover
- Rock & Fluid Properties
- Oil & Gas Production
- Reservoir Simulation
- Pressure Maintenance
- Enhanced Oil Recovery
Economics
Safety, Health & Environment
Unconventional Reservoirs

Duration of course: 5 days

Day one

Petroleum geology - the origins of hydrocarbons
- The formation of petroleum
- Oil and gas reservoirs
- Reservoir rock and fluid properties

World energy supply and demand
Oil and gas supply and demand
Classification of reserves
Oil pricing and market issues
Non-conventional oil, gas and renewables

Day Two
Ownership and exploitation of reserves
- Licensing/concessions
- Joint-venture agreements
- Production-sharing contracts

Exploration and appraisal
- Geological and commercial factors necessary for successful exploration and appraisal
  - Seismic surveys

Drilling
- Drilling rigs
- Equipment and processes involved in drilling a well
- Completing a well and preparing it for production
- Horizontal drilling
- Well workover operations

Day Three
Field development
- Onshore/offshore developments
- Shallow/deep water developments
- Gas field developments
- Aspects of well and facilities design
Day Four
Petroleum economics
- Field development decision-making
- Key economic indicators and their uses

Health, safety and the environment
- Safety
- The environment

Petroleum production and treatment
- Reservoir production mechanisms
- Artificial lift systems
- Well stimulation - fracturing, acidising and sand control
- Production and treatment of reservoir fluids
- Processing the production from oil and gas fields

Day Five
Maintenance and logistics
- Well and facility maintenance
- Reliability-centred maintenance
- Corrosion and how it is controlled
- Transportation of personnel and materials

Decommissioning
- Possible decommissioning solutions
- Scope of decommissioning obligations

Future issues and challenges
- Meeting future energy demand
- Environmental sustainability
- Security of supply
Who should attend?

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.

The course is especially valuable for newcomers to the industry and non-technical personnel working in areas like HR, finance, IT, contracts and administration who feel they could benefit from gaining a wider appreciation of the big picture.