

Oil and Gas Management

Short course; designed in the United Kingdom by
The Institute for Professional and Executive Development - IPED



Specification

Course Title	Oil and Gas Management
Category	Short (Executive) Course; Continuing Professional Development (CPD) course
Entry Requirement	None
Mode of Delivery	The course can be delivered: <ul style="list-style-type: none"> o through educational workshops, seminars or events o using online or e-learning methods
Language of delivery	English
Assessment and Certification	No formal assessment such as written examination is required. A learner is deemed to have successfully completed the course through active participation during the delivery of the course.
Total Learning Hours	Flexible. Can be completed in any amount of hours; dependent on learner's circumstances. It is however recommended that the total number of hours should not exceed 30, if actively delivered.
Grading System	None
Study manual	A comprehensive learning material is provided by IPED to support the delivery of this course.
Course Monitoring	The course will be regularly reviewed by the Academic Advisory Board (AAB) to ensure that it remains fit for purpose. The IPED Suggestion and Feedback System will be used to collect information from users of the course to make informed decision on quality improvement.



Course contents



Oil and Gas Value Chain >>

- Explanation of oil and gas value chain.
- Description of the upstream, midstream and downstream parts of the value chain.

Deformation of Rocks >>

- Examination of rock types:
 - Igneous rocks (plutonic and volcanic).
 - Sedimentary rocks (clastic sedimentary rocks, organic sedimentary rocks, chemical or crystalline sedimentary rocks).
 - Metamorphic rocks (foliated and non-foliated).
- Discussion on deformation of sedimentary rocks:
 - Explanation of the cause of distortion(s) in the earth's structure.
 - Description of the characteristics of monoclines, anticlines, synclines and domes.
 - Explanation of why anticlines and domes are of greater interest to petroleum prospectors.
 - Examination of the phenomenon of faulting and description of the various types of faults.
 - Description of how an unconformity is formed.
 - Examination of an angular unconformity and a disconformity.
 - Discussion on the evolution of a sedimentary basins.

Petroleum Systems Processes >>

- Examination of the conditions necessary for the accumulation of petroleum.
- Explanation of what a kerogen is, and examination of the types of kerogen.
- Examination of the stages of petroleum maturation (Diagenesis, Catagenesis, Metagenesis).
- Examination of the essential features that a reservoir must possess for it to be effective.
- Description of the characteristics of carbonate and sandstone (or clastic) reservoirs.
- Discussion on primary and secondary migration of petroleum.
- Examination of how petroleum traps are formed.
- Description of structural, stratigraphic, combination and hydrodynamic traps.

Techniques Used in Petroleum Prospecting >>

- Discussion on the use of geological surveys in petroleum prospecting:
 - Examination of the forms of remote sensing (Satellite imagery and Aerial photography).
 - Description of how satellite imagery and aerial photography have been used in petroleum prospecting.
 - Examination of the useful information geological surveys present to petroleum prospectors.
- Discussion on how geochemistry is applied to petroleum prospecting:
 - Explanation of what geochemistry is.
 - Analysis of the application of geochemistry to the petroleum prospecting.
- Discussion on the use of geophysical techniques in petroleum exploration:
 - Examination of how gravity surveys are conducted.
 - Examination of the equipment used in gravity surveys and the relevant unit(s) of measurement.
 - Examination of the use of magnetic surveys in petroleum exploration.
 - Examination of the equipment used in magnetic surveys and the relevant unit(s) of measurement.
 - Description of how seismic exploration is conducted both on sea and on land.
 - Description of the acquisition, processing, display and interpretation of data from a seismic reflection survey.

Contracts and Agreements Used in Drilling Operations and Petroleum Production >>

- Examination of: Authority for Expenditure (AFE), Pooling, Nonparticipation, Nonconsent, Unitization, Perpetuation and termination of a lease.
- Examination of a drilling contract.
- Description of the contents of a drilling contract.
- Description of common types of drilling contracts.
- Examination of the types of contracts that may exist between a multinational oil company and the government of a host country.
- Explanation of what joint operating agreements and support agreements are.

Features and Functions of the Systems in a Rotary Drilling Rig >>

- Examination of the parts (and their respective functions) of the following systems of the rotary drilling rig:
 - Hoisting system,
 - Rotating system,
 - Powering system,
 - Circulating system.

Offshore Drilling Basics >>

- Description of the platforms used for offshore drilling (such as submersible, jack up, semisubmersible, drillship).
- Examination of the factors that influence the choice of type(s) of mobile offshore drilling unit (MODU) used.

Well Testing and Completion Basics >>

- Evaluation of the significance of testing and completing an oil and gas well.
- Examination of the different types of well testing techniques.
- Description of how oil and gas wells are completed.

Management of Health and Safety Risks in the Oil and Gas Industry >>

- Examination of chemical, physical, biological, ergonomic and psychological hazards associated with the oil and gas industry.
- Analysis of the principles that can be used in the management of occupational health issues.
- Examination how workforce involvement and commitment contributes to the success of any health and safety programme.

Project Risk Management >>

- Explanation of what project risk is.
- Evaluation of the importance of risk management.
- Discussion on the risk management process.
- Analysis of the key considerations in selecting tools and techniques for risk management.

Enquiries to:
Short courses@
Institute for Professional &
Executive Development
England
United Kingdom
www.iped-uk.com
info@ipeduk.com

