Introduction to the Oil and Gas Industry

Course Description:

Who is the course for?
This eLearning course is aimed at new recruits starting work in the oil and gas industry who require an overview of the industry and its various processes and activities.

Is previous experience required?
You do not need prior knowledge or experience to complete this course as it is designed for those new to the industry.

How will the course benefit me?
The oil and gas industry contains a huge array of processes, workplaces and job roles. This course will give you a comprehensive overview of the entire oil and gas lifecycle: from the formation of oil and gas, to surveying and developing a field, to processing and refining hydrocarbons.

The knowledge gained in this course will help you to become familiar with the terminology and processes used in the industry. It will also provide an insight into what it is like to work offshore.

How will the course benefit my company?
By ensuring you understand the different stages of oil and gas production, you will have a greater awareness of the work that your company does and where you fit into the lifecycle.

What standards are referenced in the course?

Product ID: ATL001_01_120_2_L1_ENG_002
Price Band: D
Provider: Atlas Knowledge
Category: Safety
Sub Category: Introductory
Accreditation:
Assessment Model: Standard – Assessment at the end of the course, with a percentage pass mark
System requirements:
Internet Access - Users will need a computer or device with a web browser and an internet connection.
System - Runs on desktop computers and tablets. Microsoft Windows 7, 8 and 10 and MAC OS. Apple Tablets running IOS 11.
Browser - Runs on Edge, IE11, Chrome, Firefox and Safari, no plug-ins required
Minimum browser size - 1024x672
Audio – Requires speaker or headphones.
Notes - Not suitable for smartphones.
This course does not refer to specific legislation but is written to current industry standards and best practice.

Is there an assessment?

Once you have completed the course, you will be asked a series of questions to check your knowledge and understanding. These are based on the learning objectives for the course and have a pass mark of 80%.

Learning Objectives:

• Explain how oil and gas were formed
• Describe the main historic events that led to the start of the Oil and Gas Industry
• Identify the main types of company in the Oil and Gas Industry
• Identify the main locations worldwide where oil and gas is produced
• Explain the history and role of OPEC
• Identify future global trends within the Oil and Gas Industry
• Describe the main features and challenges associated with extracting unconventional sources of oil and gas
• Describe the five main phases in the lifecycle of an oil field
• Identify where oil companies start to look for oil
• Describe survey methods
• Describe seismic activities
• Describe field studies
• Describe methods of drilling
• Describe the types of drilling rigs
• Describe the drilling derrick, drill bit and drilling mud
• Explain the role of the blowout preventer
• Describe spudding the well
• Describe the requirement for logging
• Describe the process of casing the well
• Describe the process of appraising the discovery
• Explain how the performance of a reservoir is predicted
• Describe how a cost and production estimate is made
• Explain how the economic viability of a project is determined
• Describe construction and installation
• Describe construction and installation of jacket platforms
• Describe construction and installation of concrete leg platforms
• Describe construction and installation of subsea installations
• Describe construction and installation of onshore installations
• Explain the purpose of an EPIC contract
• Explain the main functions of a production platform
• Explain drilling and completion of production wells
• Explain how production from the reservoir flows to the surface
• Describe how fluids are separated in the process facility
• Explain how produced water is removed from the process fluid
• Describe the methods used to obtain the maximum production targets from a reservoir
• Explain how oil and gas are transported ashore
• Explain why pipelines need to be cleaned
• Describe oil and gas storage methods
• Explain the process of refining oil and gas
• Explain what is meant by distillation
• Describe a distillation tower
• Describe what it is like to work offshore
• Describe some of the aspects of offshore life such as accommodation, transport and leisure facilities
• Explain the offshore safety precautions that must be adhered to
• Explain the importance of maintenance programmes
• Explain the process of decommissioning or abandonment
• Describe some of the ideas that have been implemented or considered for the reuse of offshore platforms