This course provides learners with a comprehensive overview of the operations of FPSOs.

The topics covered include station keeping, maintaining stability, the use of the turret on an FPSO, the production and exportation of oil, oil and gas processing facilities on FPSOs, and marine systems on the FPSO.

Learning Methods

• e-learning

Course Duration

3 hours

Targeted Participants

These e-learning courses are aimed at Technicians working in the upstream Oil and Gas Industry. The materials are suitable for new starts to the industry or long-term employees who wish to gain formal vocational qualifications. This course leads to a BTEC Advanced Award in Oil and Gas Extraction Theory.

Business Benefits of E-learning

Our e-learning courses will not only improve your business efficiency and employee performance, but will also reduce training costs and down time compared to traditional learning, whilst improving knowledge retention and compliance.

Features

• Capability for individual companies to add plant-specific materials (video clips / presentations / web-links / pdfs etc.)

• e-Learning modules tie into paper-based modules covering Mathematics and communications and IT skills

• Bookmarking allows learners to leave the course and re-join at the same point

• SCORM™ 1.2 compliant

• Leads to a BTEC Advanced Award in Oil and Gas Extraction Theory

• Continuous and final assessment

• Interactive 3D models as well as consistent use of detailed animated graphics to represent the concepts being discussed

• Technical content geared for the target audience and presented in a clear and concise manner

• Fully accessible glossary that can be accessed at any point throughout the course

• Modules can be purchased independently or as a complete package

• Integrated trainee results management system

• Courses have been produced in collaboration with a recognised training leader in the field of Oil and Gas

Course Content

• Module One: FPSO Overview

• Module Two: Station Keeping on a FPSO

• Module Three: Maintaining Stability on FPSOs

• Module Four: Use of the Turret on FPSOs

• Module Five: The Production and Offloading of Oil on FPSOs

• Module Six: Oil and Gas Processing Facilities on FPSOs

• Module Seven: Marine Systems on a FPSO

• Module Eight: Manning Strategies

Learning Objectives

• Define Floating Production, Storage and Offloading Vessel

• Describe the basic physical structure of a FPSO

• Identify the different types of FPSOs used today

• Differentiate between the Converted...
Floating Production, Storage and Offloading (FPSO) Vessels

- Tanker FPSO and the New Build FPSO
- Differentiate between the powered and unpowered FPSO
- Identify the different types of mobile production/drilling units in existence
- Identify the advantages and disadvantages of each type of mobile production/drilling unit
- Define station keeping Explain why station keeping is important on a FPSO
- Identify the station keeping methods for FPSOs
- Explain how anchors and chains are used as a method of station keeping
- Explain how wire ropes are used as a method of station keeping
- Explain how dynamic positioning is used as a method of station keeping
- Identify when the different methods of station keeping should be used
- Define stability Explain the importance of stability on a FPSO
- Identify the different methods of maintaining stability on a FPSO
- Explain the role of ballasting in maintaining stability
- Explain the role of loading in maintaining stability
- Explain the role of cargo handling in maintaining stability
- Define turrets Explain how a turret is constructed
- Identify the different types of turrets used on FPSOs
- Describe the internal turret
- Describe the external turret
- Describe the rotating turret
- Describe the fixed turret
- Identify the equipment used in subsea production systems
- Describe subsea well systems
- Explain the functions of subsea well systems
- Explain the purpose of flowlines Identify the two types of flowlines
- Explain the purpose of risers
- Explain the purpose of subsea manifold systems
- Define umbilicals Explain the purpose of umbilicals
- Describe the purpose of Subsea control systems
- Identify the equipment used in export systems
- Explain the role of shuttle tankers in the offloading of oil
- Explain how FPSOs export oil to shuttle tankers
- Explain the Production and Offloading Flow Strategy
- Explain how emergency shutdown is achieved
- Identify the oil and gas processing facilities
- Explain the process of crude separation
- Explain the purpose of the produced water system
- Identify the four main functions of the Gas Process System
- Describe the gas compression process
- Describe the gas treatment process
- Describe the Gas Enhanced Oil Recovery (EOR) process
- Identify the different utilities for oil and gas processing
- Describe the different utilities for oil and gas processing
- Identify the marine systems on the FPSO
- Explain the marine systems on a FPSO
- Explain how the LOADMASTER® software program can assist with marine operations
- Explain the purpose of vessel classification
- Describe the legislation and guidelines for FPSOs
- Describe FPSO manpower skill requirements
- Explain FPSO manpower organisation
- Describe the roles and responsibilities for personnel in production operations
- Describe the roles and responsibilities of engineering onshore support
- Describe logistical support

To request a demonstration or to purchase this course please contact your Atlas Account Manager or email info@atlasknowledge.com