

esanda



# Introduction to oil & gas exploration & production

The course provides a comprehensive overview of the oil and gas exploration and production industry from a historical, current and future perspective for both non-technical and technical staff. The principles of exploration, development and production will be covered and complemented by what is happening in the industry and what the future holds. The full lifecycle of exploration to product delivery will be covered.

## The course is designed for

- Professionals who need to learn about the industry
- Personnel within the industry
- Technical support staff entering the industry
- Technical staff who want to expand their understanding of the industry

## What you will leave with

- Comprehensive understanding of the oil and gas lifecycle
- The significance of the oil and gas industry
- How oil and gas is created
- History of the oil and gas industry
- How reservoirs are created
- How oil and gas accumulate
- Understanding of oil and gas exploration
- Understanding of field appraisal, development and production
- What happens to the oil and gas once it is produced
- Unconventional oil and gas

## Course overview

### **The role of oil and gas in society**

The nature of oil and gas  
Uses for oil and gas

### **Petroleum geology**

Geological time  
Rock types  
Sedimentary basins  
Mapping  
Plate tectonics  
Source rocks  
Reservoirs  
Traps and seals

### **History of oil and gas**

Pre-history  
1800s to the great wars  
Post war to present

### **Exploration**

Gravity and magnetic surveying  
2D, 3D and 4D seismic  
Field valuation  
Field appraisal

### **Drilling**

Drilling basics  
Drilling, Casing and completing a well  
Sampling and testing

### **Field development and production**

Field development planning  
Lifecycle costing  
Economic analysis  
Development drilling  
Facilities and production  
Abandonment

### **The big picture**

Upstream  
Midstream  
Downstream

### **Health, Safety and Environment**

Health Safety and Environmental considerations

### **Alternatives**

Shale gas  
Coal Bed Methane (CBM)  
Alternatives to oil and gas  
Carbon capture and storage

### **The Future**

Peak Oil  
Where will we find oil and gas in the future  
Technology

## Course instructor

Anastasis Kokkinos has 30 years experience in the oil and gas industry with a focus on full field development and lifecycle costing. His experience covers offshore and onshore, conventional and unconventional developments. He has worked closely with subsurface/reservoir teams and senior management to ensure integrated field development plans. He also has expert knowledge of IHS/CERAs QUE\$TOR field development and costing software, running training programs on behalf of IHS/CERA.

## Courses also available

- *Field Development Planning and Lifecycle Cost Estimating*
- *Oil and Gas Facilities Fundamentals*
- *Offshore Oil and Gas Facilities Fundamentals*
- *FPSO Fundamentals*
- *Subsea Facilities Fundamentals*
- *QUE\$TOR Oil and Gas Cost Analysis*
- *Strategic Management*
- *Petroleum Economics and Risk Analysis*
- *Project Management*
- *Bespoke courses available upon request*

To reserve a place contact  
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