



Portfolio Management of Oil and Gas Assets

Course Description

This course is aimed at both managers, engineers, and commercial specialists. It provides the participants with tools and practical techniques to identify, analyze and manage uncertainties and risk in exploration and production projects. Delegates will have the opportunity to explore these challenges, with hands-on application of industry-standard tools and techniques to assess realistic scenarios and associated data. The essential commercial drivers are held in perspective at all times. Learning is reinforced by working on case material to explore uncertainties and risks in the context of production forecasting, cash-flow management, incremental projects and asset portfolio manipulation.

Course Objectives

By the end of this course delegates will be able to:

- Define risk & uncertainty in technical and business opportunities
- Summarise petroleum economics techniques and indicators
- Utilise a range of tools to combine uncertainties and quantify risk
- Evaluate technical risks in exploration and appraisal
- Assess commercial uncertainties
- Understand how utility theory drives our risk-reward judgements
- Compare probabilistic vs. multiple deterministic methods
- Understand reserves addition techniques
- Understand the impact of portfolio management in risk and uncertainty

Who Should Attend

Managers, engineers and legal/commercial experts and corporate, portfolio and asset-based decision-makers requiring deeper understanding of portfolio management and the challenges of decision making in complex oil and gas industry environment.

Course Content

1. Day 1

Introduction to Course and the state of Play of the Global Energy Industry
Fundamentals of strategic portfolio management
Background to modern portfolio theory

2. Day 2

Portfolio uncertainty and probability of achieving key strategic targets
Estimating under conditions of uncertainty

3. Day 3

Project Cash Flow management
Investment analysis and decision making
E&P Portfolio Analysis and Management

4. Day 4

Project Sensitivity to Field Economics
Practical Simulation Exercise
Risk and Uncertainty Management

5. Day 5

Decision Making in a Complex Petroleum Business Environment
Portfolio Optimization
Portfolio Presentation