

Applied Petroleum Economics and Risk Modelling Using Digital Tools

COURSE OVERVIEW

This course provides a comprehensive understanding of petroleum economics and risk modelling with a strong emphasis on practical applications using modern digital tools. Participants will explore core concepts such as project evaluation, cash flow modelling, investment appraisal, portfolio management, and risk analysis within the upstream oil and gas sector. Through interactive sessions, case studies, and software-based exercises, participants will develop the ability to integrate economic principles with digital analytics, enabling more robust decision-making in an increasingly complex and uncertain energy landscape.

WHO SHOULD ATTEND?

The course is designed for petroleum engineers, geoscientists, energy economists, asset managers, project analysts, and financial professionals working in the oil and gas industry who are involved in project evaluation and decision-making. It is equally valuable for early- to mid-career professionals seeking to strengthen their economic and risk assessment skills, as well as individuals aspiring to pursue careers in petroleum economics, portfolio management, and energy investment analysis.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Apply key petroleum economic principles for evaluating oil and gas projects.
- Build and analyze cash flow and project models using digital tools.
- Conduct risk and uncertainty analysis using probabilistic methods.
- Perform sensitivity analysis and scenario planning to support investment decisions.
- Integrate economic and technical data for effective project evaluation and portfolio optimization.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Practical training with industry-standard digital tools for economic and risk modelling.
- Real-world case studies from upstream oil and gas projects.
- Functional application of probabilistic and deterministic approaches to risk assessment.
- Exposure to decision-making under uncertainty with modern analytics.
- Blended learning approach combining theory, practice, and digital simulations.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded