Training - Economics and Risk Analysis of Upstream Projects

EAR-EN-P

Face-to-face only

5 days

To provide participants with an in-depth understanding of the tools used in economic analysis and decision-making tools within the upstream industry

Level

Skilled

Public

Engineers, economists and project managers who need to extend their understanding of the specific methods used to evaluate Exploration-Production projects

Objectives

Attendees will be able to implement the following skills:

- Carry out investment profitability studies including all aspects of complex fiscal terms, inflation, and financing
- Analyze the economic results and carry out sensitivity analysis
- Incorporate the geological risk and uncertainty in the economic evaluation of Exploration & Production projects
- Develop advanced computer models for the study of Oil & Gas development projects

Pedagogical & technical resources

Case studies simulated on computers:

- Development of an oil field (under concession and production sharing agreements)
- Impact of “ringfencing” and the state participation in the decision-making process
- Valuation of a decision to acquire information (seismic or drilling)
- Pricing of an exploration bloc

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners’ understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

ECONOMIC & CONTRACTUAL FRAMEWORK OF E&P — 1 day

Various phases of Exploration-Production.
Technical cost, evolution of the economic environment.
Petroleum Exploration and Production contracts.
Concessions, production sharing contracts, service contracts.
Sharing of the economic rent, economic flexibility in petroleum contracts.
Economic clauses.

INVESTMENT PROFITABILITY STUDIES — 2 days

Cost of capital and discount rate, value creation.
Economic criteria for project evaluation: net present value (NPV), internal rate of return (IRR), payback period, etc.
Global profitability analysis, the impact of taxation and inflation on economic indicators.
Specific method to Exploration and Production: shadow interest.
Case studies: development of an oil field (under concession and production sharing agreements).
Introduction to risk analysis and risk discount rate: sensitivity analysis, Spider and Tornado diagrams.
Impact of “ringfencing” and the state participation in the decision-making process.

IMPACT OF FINANCING ON PROJECT ECONOMICS — 1 day

Financing Oil & Gas projects, project finance and B.O.T. structures.
Various financing plans and debt repayment.
Analysis of equity cash flows, return on equity capital, financial leverage.
Case studies: development of an oil field under concession with specific financing.

RISK ANALYSIS OF E&P PROJECTS — 1 day

Probability of success, analysis of economic risk in oil exploration.
Evaluation of exploration projects and decision trees.
Farm in/Farm out.
Risked and unrisked economics.
Case study: economic study of an oil project including Min, Mode and Max scenarios.
Evaluation of development projects.
Economic risk associated with a marginal development.
Decision trees and subjective probabilities, decision theory.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com