

Play Assessment & Prospect Generation

5 days

EVAL/PLAY

Overview

LEVEL

Skilled

PURPOSE

This course provides a practical, comprehensive understanding of that part of the E&P value chain that deals with the technical evaluation of an exploration asset.

LEARNING OBJECTIVES

Upon completion of the course, participants will be able to:

understand prospect definition workflow and to estimate OHIP (Original Hydrocarbon In Place) estimation parameters,

understand risks and uncertainties related to OHIP calculation methods and to use related results accordingly,

review fundamental concepts of portfolio management and to learn how to define adapted exploration strategies.

WAYS AND MEANS

Lectures and exercises.

Hands-on sessions on real case studies.

Discussion, teamwork experience feedback.

LEARNING ASSESSMENT

Knowledge assessment with multiple choice questions and open explanatory questions.

PREREQUISITES

No prerequisites for this course.

Agenda

FROM PROSPECT LEAD TO POTENTIAL FIELD

1 d

Presentation of exploration methods and strategies.

Basin petroleum potential assessment process. Key points of the exploration workflow.

PLAY ASSESSMENT

1 d

Data collection and QC.

Basin potential assessment.

Regional context. The petroleum trilogy.

Migration and entrapment processes.

Relative timing of events.

PROSPECT ANALYSIS & GENERATION

2 d

Source rock potential estimation.

Seismic and well data integration and interpretation.

Basin structural history.

Timing of hydrocarbon expulsion and migration.

OHIP calculation parameters. Determinist and stochastic assessment.
Estimation of risks and related uncertainties. Assessment consistency.
"Prospect review card".
Case study on prospect generation.

RISK ANALYSIS

1 d

Identification and assessment of risks and uncertainties related to:
Geology (source rock, reservoir, seal, preservation).
Fluids (generation, maturation, migration, entrapment, timing).
Probability Of Success (POS). Transition to dynamics. Consequences for economics.
Case study.

WRAP UP & CONCLUSION