IRM
INTEGRATED RESERVOIR MANAGEMENT

OBJECTIVES

- To develop an understanding of the Fundamentals of Reservoir Engineering, from Geology to Hydrocarbon Recovery.
- To promote, on an international basis, Reservoir Engineering techniques and best practices relating to the Development of Oil and Gas fields, in order to optimise, technically and economically, Company Resources and create additional value.
- To provide experts in Hydrocarbons Resources Management the opportunity to practice other disciplines within an international team and develop professionals capable of leading multidisciplinary teams in Reservoir Development, Operations and Planning.
- To provide an exposure to a range of reservoir conditions through various case studies.
- To provide an opportunity through field trips to visit outcrops associated with some reservoirs being studied.

COURSE CONTENT

RESERVOIR ENGINEERING AND FIELD DEVELOPMENT FUNDAMENTALS (IFP TRAINING) — 23 days

Production geology, geophysics

Well logging, interpretation - production logging

Petrophysics: rock properties (porosity, saturation, permeability) and their interactions with fluids

Fluid properties: PVT oil gas and water

Well testing: principles and interpretation

Production mechanism: natural drive (primary recovery), immiscible fluid injection gas or water (secondary recovery), tertiary recovery (EOR: miscible, chemical or thermal process)

Field development methodology, data acquisition, reserves estimation

Drilling and completion

Project economics

Oil prices and markets

Well performance optimization: inflow, outflow, formation damage remedial (acid stimulation, fracturing, sand control)

Uncertainties assessment

Environment problems in E&P

Field trip to Montpellier area (2,5 days): well testing in an aquifer, interpretation and analysis of the results (production, draw-down, build-up), outcrop observation of a reservoir analogue to the one on which the test was performed, geological and dynamic modeling

CASE STUDIES (IFP TRAINING) — 10 days

Tertiary recovery in a mature oil field with lean gas injection

Reservoir management specificities for carbonate fractured reservoirs

Gas: gas properties and field case: development and monitoring of a gas field

Alwyn area: complex gas, condensate and oil field evaluation development and monitoring in the North Sea environment

Special case histories: deep offshore, deep reservoir, heavy oils

CASE STUDIES (IMPERIAL COLLEGE LONDON) — 12 days

Development and application of a reservoir simulation model for reservoir management, including upscaling, history matching, reservoir performance prediction, field development planning and simple economic analysis

UK field Development Project

Field trip to the Wessex basin

Group-based computer-aided exercise covering the development and monitoring of a large oil field

Data analysis, development of a reservoir simulation model, including upscaling and history matching

Application of model to identify an optimum field development plan with simple economic evaluation

For the field trips to Montpellier and the Wessex basin, accommodation and transportation costs are not included in the course fees. A specific brochure is available on request.

E-001

▲ Who should attend?

This course will be of significant interest for upstream professionals such as Petroleum Engineers, Geologists & Geoscientists, together with Drilling and Development Engineers, who need to broaden their technical experience.
With the increasing importance of Integrated Reservoir Management, the programme will provide a unique opportunity for engineers, whose principal expertise may not be in Reservoir Management, but who need to appreciate the key issues which determine the outcome of a successful development.
This course has a strong practical bias and is therefore ideally suited for those who already have industrial experience, high potential and likely to become future managers of various E&P activities.
Applicants must have a confirmed scientific background, together with an engineering or science degree.

▲ Duration

45 days

▲ Dates & Locations

April 20 - June 19, 2009
Rueil-Malmaison (Paris) & London (UK)

▲ Registration

Fees: **€ 28,000**

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