

Training - Reservoir characterization and modeling



RCM-EN-P



Face-to-face only



60 days

This course provides a comprehensive, practical knowledge of reservoir characterization and modeling workflow, via hands-on activities and case studies with the aim of bridging the gap between static geological characterization and dynamic reservoir behavior

IFP Training Certificate

Graduate Certificate

Level

Skilled

Public

Geoscientists, engineers newly hired or 2-3 years experienced, experienced technicians involved in multidisciplinary teams, willing to widen their knowledge and acquire practical know-how in geological modeling

Objectives

Attendees will be able to implement the following skills:

- understand the analysis methods and techniques applied to reservoir modeling with related challenges
- analyze and interpret a dataset and integrate it in order to elaborate a reliable static model
- build a consistent geological static model with heterogeneities affecting fluid flow and production
- assess the uncertainty and risks in order to reduce them and thus optimize investments

Pedagogical & technical resources

- Hands-on activities and simulations on real cases
- Emphasis on practical work to develop participants' autonomy and appropriate decisions
- Both personal and group work, team-building, group discussion in results and workflows
- Software tools used in the petroleum industry
- Software used during workshops: with courtesy of Beicip-Franlab, Schlumberger

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, including final project at the end to simulate operational situation to be presented to a jury

Prerequisites

No prerequisites are necessary to follow this course

Responsible

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

INFORMATION

Lectures, hands-on activities and case studies are distributed in several modules of 1-2 weeks long. Training content presents a clear operational orientation in order for participants to get familiar with specific techniques via an extensive exposure to simulations on real cases allowing them to anticipate the problems they will have to cope with later in their own projects.

PART 1: RESERVOIR CHARACTERIZATION TOOLS

30 days

Introduction to reservoir characterization. (1 week)
Well logging & qualitative log interpretation. (1 week)
Stratigraphy and sedimentology of siliciclastic reservoirs. (1 week)
Seismic interpretation and attributes analysis workshop: qualitative and quantitative methods. (1 week)
Petrophysical properties: core, log and test data integration for reservoir modeling. (1 week)
Fundamentals of facies analysis & rock-typing. (1 week).

PART 2: RESERVOIR MODELING & VOLUMETRICS

20 days

Geological modeling workshop for integrated reservoir studies. (2 weeks)
Hydrocarbons accumulations, reserves estimation, risk analysis and uncertainties. (1 week)
Naturally-fractured reservoirs: static and dynamic modeling. (1 week).

PART 3: FINAL PROJECT WORKSHOP

10 days

Final project. Hands-on workshop (team work). (2 weeks)
Presentation and jury.

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