Training - Introduction to Petroleum Engineering

INFPG-EN-P | Face-to-face only | 5 days

This course provides a complete overview of petroleum engineering covering primary issues of reservoir, drilling, completion and surface production

Level

Awareness

Public

Professionals in technical, commercial, legal, financial or human resources departments, within the petroleum industry or related sectors, who need a general knowledge in petroleum engineering

Objectives

Attendees will be able to implement the following skills:

- know about major issues in petroleum engineering
- understand the various operations carried out during field development, from drilling to surface treatment
- know the vocabulary needed to communicate with E&P professionals
- identify the contribution of the different business lines and interact effectively with the different technical teams

Pedagogical & technical resources

- Interactive animation by E&P senior experienced lecturers
- Visits to a drilling rig and a production site (in Pau training center)*
- Numerous videos
- * When the course is delivered in Rueil-Malmaison, practical illustration is provided by video

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

INTRODUCTION TO THE OIL & GAS INDUSTRY — 0.25 day

Introduction to the energy business: energy resources; energy demand and supply.

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Scope of the Oil & Gas industry:

- Context: producer and consumer countries; national/ independent/ international oil companies; services companies; international organizations.

Risks related to the Oil & Gas industry.

RESERVOIR ENGINEERING — 1 day

Introduction to petroleum geology:

- Geodynamics of the earth. Sedimentary basins. Structural deformations (folds & faults).
- Clastic and carbonate depositional environments and reservoirs.
- Elements and processes of the petroleum system (source, reservoir, seal, traps).

Subsurface models, inputs data and concepts:

- Seismic data gathering, processing and interpretation.
- Well data acquisition and analysis.
- Formation evaluation and sampling (logs and cores).

Reservoir characterization and modeling:

- Data integration; introduction to reservoir modeling.
- Management of subsurface uncertainties.
- Volumetrics (in-place hydrocarbon estimation).

Subsurface Development Options: reservoir engineering:

- Field development planning.
- Drainage mechanisms: introduction to EOR and storage.
- Different types of reservoir effluents and their behavior.
- Unconventional resources:
- Introduction to unconventional developments.
- Non-conventional resources and their extraction techniques.
- Environmental aspects.

WELL — 2 days

Drilling:

- Organization on site.
- Well design.
- Drilling rig: functions hoisting, rotations, pumping, power and safety.
- Drilling rigs.
- Drilling operations chronology.
- Drilling operations: casing, cement job, directional drilling, fishing, D.S.T.
- Drilling rig visit*.

Downhole production/completion:

- Completion design.
- Reservoir-wellbore interface.
- Well stimulation.
- Well equipment and maintenance.
- Activation.

Offshore wells:

- Selection of the drilling and production rigs - Platforms.

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- Design and specific equipment.

OIL & GAS PROCESSING FACILITIES — 1.75 days

Produced fluid properties.
Gathering system, hydrate inhibition.
Crude oil treatment: separation, crude oil dehydration and desalting processes.
Gas processing: dehydration, sweetening, NGL recovery processes.
Metering and shipment.
Visit of a production site (if available)*.

Sessions

Pau - From 02/09/2026 to 02/13/2026	**4320 €/HT**
Rueil-Malmaison - From 04/13/2026 to 04/17/2026	**4320 €/HT**
Rueil-Malmaison - From 11/16/2026 to 11/20/2026	**4320 €/HT**

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

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