

Training - Drilling Fundamentals



INFOR-EN-P



Face-to-face only



5 days

This intensive course provides a comprehensive overview of drilling and completion techniques and operations

Level

Awareness

Public

Professionals interested but not involved in drilling operations for Oil & Gas, geothermal and storage wells (i.e. geologists, geophysicists, reservoir engineers, completion, production and process staff, platform designers, economists, etc.)

Objectives

Attendees will be able to implement the following skills:

- recognize the vocabulary specific to drilling
- understand the basics of well design
- define the functions of drilling fluids (mud & cement)
- identify and describe drilling operations and equipment used
- identify the different professionals involved in drilling and learn about their roles and responsibilities

Pedagogical & technical resources

- Videos and animations
- Exercises
- Visit to a drilling site*
- * 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

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

ORGANIZATION OF DRILLING OPERATIONS

0.5 day

Drilling principles.
Cost, duration of a drilling job.
Different people involved, types of contracts.
Safety.

DRILLING PRINCIPLES - EQUIPMENT

1.25 days

Different types of bits.
Drilling string.
Drilling rig:

- Hoisting function and equipment.
- Pumping function and equipment.
- Rotating function and equipment.
- Power function.
- Safety function and equipment.

Mud and solid treatment.

WELL ARCHITECTURE

0.5 day

Reservoir notions.
Functions of different casings.
Parameters to be taken into account to determine well architecture.
Examples of architectures.

SPECIAL OPERATIONS

1.25 days

Cementing operations.
Wellhead.
Directional drilling.
Well control.
Fishing jobs.
Wireline logging, well test (DST).

DRILLING ON A SIMULATOR (PAU)

0.25 day

Use of a well control simulator to show the drilling operations (tripping, drilling, running of casings).

OFFSHORE DRILLING OPERATIONS

0.25 day

Different types of rigs.
Problems related to their use.

WELL COMPLETION

0.25 day

Reservoir-wellbore interface.
Equipment for flowing wells.
Well intervention.

TECHNOLOGIES IN USE FOR ENERGETIC TRANSITION

0.25 day

Geothermal wells.
Underground storage wells.
Hybrid-powered rig equipped with battery Energy Storage System (ESS) to reduce emissions.
Utilization of production associated gas to power gas turbine to reduce the carbon footprint.
Environmental technology (i.e. oilfield waste disposal control and decommissioning of offshore oil and gas installations).

VISIT OF A DRILLING SITE*

0.5 day

Sessions

Pau - From 03/30/2026 to 04/03/2026

4320 €/HT

Rueil-Malmaison - From 06/29/2026 to 07/03/2026

4320 €/HT

Rueil-Malmaison - From 10/12/2026 to 10/16/2026

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