

Training - Well Equipment and Operation for Production Engineer



TPP-EN-P



Face-to-face only



5 days

This course provides a comprehensive knowledge of well operations: from drilling, completion and artificial lift techniques and equipment to well intervention operations

Level

Knowledge

Public

Production engineers and other professionals interested in well operations

Objectives

Attendees will be able to implement the following skills:

- Grasp fundamentals of drilling techniques
- Draw the architecture of a typical well completion and explain the technology of the equipment used
- Understand operating principle and technology of artificial lift pumps
- Comprehend operating principle, monitoring and technology of gas lift systems
- Review main well servicing and workover operations (objectives, principles, equipment...)

Pedagogical & technical resources

- Highly interactive training by industry specialist lecturers
- Several applications and illustrations

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

FUNDAMENTALS OF DRILLING

1 day

Drilling and casing program: function of the different casings, how to determine the drilling and casing program.

Principle of drilling: different types of bits, drilling string, hoisting and pumping functions and material, mud

and solid treatments, wellheads.

Drilling methods and special operations: drilling parameters, turbo drilling, coring and logging, casing and cementing operations, directional drilling, well control, fishing jobs.

Offshore drilling operations: different types of rigs, specific offshore problems.

FUNDAMENTALS OF COMPLETION OF NORMALLY FLOWING WELLS

1 day

Operations involved in well completion.

Main factors influencing a completion design.

Connecting the pay-zone to the borehole: open hole and cased hole, drilling and casing of the pay zone, evaluating and restoring the cement job, perforating.

Equipment of naturally flowing wells: functions to be carried out and corresponding pieces of equipment, technology and handling of the main pieces of equipment (production wellhead, tubing, packer, downhole services, subsurface safety valve).

WELL PRODUCTIVITY - NEED FOR ARTIFICIAL LIFT

0.25 day

Overall approach of the well flow capacity: inflow and outflow performances.

Need for artificial lift.

Main artificial lift techniques.

ARTIFICIAL LIFT BY PUMPING

0.75 day

Techniques to be covered:

- Sucker Rod Pumps.
- Electrical Submersible Pumps (ESP).
- Progressing Cavity Pumps (PCP)...
- Jet pumps.

For each of these techniques, the following points will be highlighted: principle, technology of the involved pieces of equipment, operating procedure and troubleshooting, installation design, applications, advantages and drawbacks.

How to improve performances and run-life duration?

ARTIFICIAL LIFT BY CONTINUOUS GAS LIFT

1 day

Operating principle.

Specific completion equipment.

Factors to consider for design.

Unloading, operating problems and selection criteria.

WELL SERVICING & WORKOVER - WELL INTERVENTION

1 day

Main jobs: measurement, maintenance, stimulation, workover.

Operations on killed wells (workover).

Operations on live wells (well intervention): wireline, coiled tubing, snubbing.

Sessions

Pau - From 10/05/2026 to 10/09/2026

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