

Training - Oil and Gas Field Equipments



OGFE-EN-P



Face-to-face only



5 days

This course provides a comprehensive understanding of onshore and offshore Oil & Gas technology and operating principles of surface production facilities equipment

Level

Knowledge

Public

Engineers and technicians interested in onshore and offshore Oil & Gas field technology and equipment

Objectives

Attendees will be able to implement the following skills:

- Detail the technology of main equipment
- Ascertain fundamentals of process control, draw a typical safety system layout
- Explain main metering techniques, corrosion issues, its prevention and monitoring

Pedagogical & technical resources

- Very interactive training by industry specialists
- Numerous applications and illustrations

Through our LMS, the following are shared or made available:

- Introductory content a few days before the virtual class, to save time and efficiency
- Training material, applications and additional content

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

Complementary informations

This training corresponds to the second week of the training entitled "Field Processing and Surface Production Facilities" and can be delivered independently

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

CASE OF OFFSHORE DEVELOPMENTS – FLOW ASSURANCE

1 day

Main flow assurance issues. Multiphase flow.

Case studies: gas condensate field development; deep-offshore production.

Offshore production structures: jacket, semi-submersible, spar, TLP, FPSO...

Storage and offloading vessels (FSO, FPSO, FPU, buoy...).

Deep offshore developments. Examples of subsea architecture. Flow assurance in (deep) offshore developments.

Main preservation techniques and pigging solutions.

ROTATING MACHINERY

1 day

Fundamentals of pumping circuits and gas compression. Operating principles, technology, selection criteria, performances and operating conditions of centrifugal & volumetric pumps and centrifugal & reciprocating compressors. Gas turbines. Turbo-expanders.

THERMAL EQUIPMENT

0.5 day

Heat exchangers, air coolers, furnaces: types, operation, technology.

FUNDAMENTALS OF CORROSION

0.5 day

Different types of corrosion, prevention and monitoring.

ELECTRICAL SYSTEMS - INSTRUMENTATION & PROCESS CONTROL - SAFETY SYSTEMS

1.5 days

Electrical power generation. Electrical power distribution network and equipment.

Field instrumentation; controllers; control loop structures: simple, cascade, split range.

Distributed Control System (DCS). Safety Instrumented Systems (SIS): Emergency ShutDown Systems ESD, High Integrity Pressure Protection System (HIPPS), fire and gas system.

METERING & ALLOCATION

0.5 day

Importance of metering and production allocation. Production accounting & material balance. Introduction to material balances: liquid and gas balances. Transactional metering of liquids and gas. Multi-phase metering: advantage, principle and fields of application.

Sessions

Rueil-Malmaison - From 11/30/2026 to 12/04/2026

4360 €/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