Training - Advanced Oil and Gas Field Processing

ADV-EN-P | Face-to-face only | 15 days

This course aims to deepen understanding of Oil & Gas field processing techniques

IFP Training Certificate

Advanced Certificate

Level

Skilled

Public

Engineers involved in operating or designing Oil & Gas field processing facilities

Objectives

Attendees will be able to implement the following skills:

- Understand main thermodynamic transformations involved in Oil & Gas processing
- Grasp a comprehensive picture of Oil & Gas processing facilities
- Simulate main Oil & Gas facilities
- Master operating variables and conditions of processing facilities

Pedagogical & technical resources

- Highly interactive training with industry-specialist lecturers
- Numerous applications and illustrations
- Extensive practice of PRO/II™ process simulation software: a case study will be developed all along these 3 weeks (simulation of a crude oil and associated gas treatment process)

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

MODULE 1: THERMODYNAMICS APPLIED TO WELL EFFLUENT PROCESSING — 5 days

Well effluent.

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Ideal and real fluid behavior.
Liquid-vapor equilibrium of pure substances:

- Vapor pressure curves.
- Enthalpy diagrams.
- PRO/II™ simulation exercises.

Liquid-vapor equilibrium of mixtures - Mixture separation processes:

- Phase envelopes.
- Flash, distillation, absorption, stripping.
- PRO/II™ simulation exercises.

Heat transfer, heat balance and thermal equipment.

MODULE 2: OIL & WATER TREATMENT — 5 days

Need for field processing of oil - Quality requirements.
Crude oil treatment:

- Crude stabilization.
- Crude dehydration.
- Acid crude sweetening.
- Crude oil treatment process simulation using PRO/II™.

Storage tanks: technology, operations and maintenance.
Production water treatment:

- Regulation for disposal.
- Main treatments.

Injection water treatment:

- Quality requirements.
- Main treatments.

MODULE 3: GAS PROCESSING & CONDITIONING — 5 days

Need for field processing of gas - Quality requirements.
Gas processing:

- Gas dehydration.
- Gas sweetening.
- NGL extraction.
- Simulation of a gas processing chain using PRO/II™.

Liquefied Natural Gas (LNG).

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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