

## Field Operator Certification

An established methodology for training operators in Oil & Gas/Chemical industry

60.00 days

OPE/BO-E

### Overview

#### AUDIENCE

Newly recruited operators in the refining, petrochemical and chemical industries.

#### PURPOSE

This course provides the knowledge and know-how for the specific field operator position. Successful participants will be granted the "Field Operator" Vocational Certificate.

#### LEARNING OBJECTIVES

Upon completion of the course, participants will be able to:  
monitor the facilities in an autonomous way, in compliance with Safety and Environmental rules,  
safely perform all routine operations related to operator duties, as well as the key non-routine ones,  
identify equipment deficiencies, explain their root causes, and take appropriate action,  
communicate effectively with their colleagues.

#### PREREQUISITE

Having already been pre-recruited by an Oil & Gas company.  
Although not mandatory, a technical education is desirable.

#### WAYS AND MEANS

The training program is structured by alternating:  
Classroom training (2-week sessions) including theoretical and practical courses.  
On-The-Job training (typically 1-month sessions) 100% on-site, in their facilities, with instructors' help.  
Even during classroom training, lots of practical exercises and applications.  
Instructors having extensive Oil & Gas downstream experience, helped by company mentors.  
Continuous assessment completed by a final exam in front of a jury.

#### OBSERVATION

Including classroom training, On-The-Job training and job practice under control, the typical duration of the program is 1 year. Esta formación se puede proponer en español.

### Agenda

#### CLASSROOM TRAINING (THEORETICAL & PRACTICAL)

Professional basic training (10 days)  
Physical parameters; liquid vapor equilibria notions; fluid flow; heat transmission.  
Chemistry: basic notions, industrial chemical reactions.  
Products and processes (10 days)  
Quality tests, specifications; sampling safety procedures; refining processes; safety aspects.  
Storage tanks, reception and expedition facilities; utilities; environmental protection; energy.  
Equipment operation and safety (35 days)  
Pressure vessels (columns, drums, reactors) description and operation.

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Rotating equipment (centrifugal and positive displacement pumps, compressors, steam turbines, electric motors).

Thermal equipment (heat exchangers, furnaces, boilers).

Instruments (sensors/actuators), process control.

Safety in plant operation.

## ON-THE-JOB TRAINING

Presentation, initial recommendations and safety instructions

General technical information: presentation of the refinery, main feeds and products.

Safety: safety rules, specific instructions, control and protection, prevention, fire extinction exercises.

Injury and life protection: preparation of rescuer degree.

General training on the job

On different production units: equipment identification; operation follow-up.

Identification of operator tasks, responsibilities of each member on the shift team.

Specific job position study

Process, feeds and product characteristics, circuits.

Equipment field control; safety; operational instructions, procedures.

Controlled practice in job position

Achievement of the various tasks involved in the job, under control of the assigned people on the shift team.

## KNOWLEDGE ASSESSMENT

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Continuous assessment during training modules. Final written exam at the end of the theoretical training.

Rating of practical exercises and on-the-job trainings, based on presentations and written reports.

Personal job-based final report, describing assigned unit and operator day-to-day activities, rated.

Final examination to confirm proficiency (knowledge of circuits, equipment and processes, job practice).