

# Oil and gas process control room operator

**61 days, i.e. 427 hours' training (excluding industrial work placement)**

## Training objectives:

Understand the physical principles behind the way processes and utilities are managed.  
Understand the engineering and technological basis of processes.  
Recognise and identify the various process equipment, both on diagrams and on site.  
Mobilise resources to manage installations in accordance with safety rules and recommendations.  
Diagnose malfunctions using an appropriate methodology.  
Control operating parameters for the process in question.

## Target personnel – Prerequisites:

Personnel responsible for control room management working in an industrial environment or with equivalent initial experience.

## Teaching methods

Various audiovisual materials.  
Role-play exercises using a teaching pilot unit, models and simulators.  
The unit driving section will use an industrial training unit and/or oil and gas platform simulator. A control room equipped with a centralised management system will be used for trainee role-play scenarios.

## Course leaders

Performed by qualified trainers, Apave engineers or technicians, with a background in the chemicals and petrochemicals industry, who also work as technical advisers to industry.

## Number of trainees

Maximum recommended: 10 people.

## COURSE CONTENT

### 1. Technical knowledge:

This teaching sequence provides the technical knowledge needed to become familiar with and operate industrial facilities.

- Reading plans and diagrams
- Fixed equipment (separator, column etc.)
- Pumps
- Compressors
- Turbines
- Instrumentation and control: control and automated systems

### 2. The oil and gas processes:

This teaching sequence provides additional technical knowledge specific to oil and gas facilities

- Oil and gas vocabulary and terminology
- Reservoirs
- Wells: technological description and operations
- Water treatment and equipment (hydrocyclone, filtration etc.)
- Oil processing and equipment (desalter, separator etc.)
- Gas treatment and equipment (desulphurisation, dehydration etc.)
- Utilities

### 3. Process management:

This teaching sequence provides knowledge and practical sessions on safe process management

- Operational safety
- Unit driving and operations monitoring
- Shutting down and starting up a unit
- Simulator-based driving of an oil and gas platform
- Process monitoring
- Failure analysis
- Analysis of workplace risks and maintenance monitoring

### 4. Getting on in the workplace

This teaching sequence makes people aware of their role and the importance of communication.

- Roles and procedures
- Communication in daily work activities
- Traceability of maintenance work