

Fundamentals of Production

General Objectives:

To provide an introduction to oil and gas production, along with a glossary of terms, covering fundamentals of technology, chain structure from well to export terminal, skills and job positions involved in operating production facilities.

Specific Objectives:

At the end of training the trainees will be able:

- ✓ To learn about the different phases of the oil and gas production process;
- ✓ To grasp the specific issues of offshore oil and gas production;
- ✓ To understand organizations, skills and job positions involved in operating production facilities;
- ✓ To acquire a complete view of the oil and gas production chain, stretching over technical, business and economic issues.

Audience:

Non-technical staff or technical professionals not directly involved in hydrocarbons production (managers, executives, technicians, staff of human resources, finance of projects departments...).

Workload: 24 hours

CONTENTS:

Module I – The oil and gas chain: production position?

- ✓ Positioning of the production in the value E&P chain
- ✓ World Primary production
- ✓ Issues and technical constraints
- ✓ Conventional resources
- ✓ Unconventional resources
- ✓ Job descriptions and skills for production activities

Module II – Onshore & offshore production

- ✓ Technical specifications, operating modes
- ✓ Operating patterns and mapping fields
- ✓ Technical architectures
- ✓ Organizations (remote site, extreme condition, manning, shift...)
- ✓ Case studies: FPSO, wet gas field (onshore), oil fields operated with reinjection, remote control room, early production facilities.

Module III – From well to export point

- ✓ From reservoir to wellhead: hydrocarbons and well effluente behaviour
- ✓ Well techniques, production techniques and well servicing
- ✓ Surface facilities & treatment operations
- ✓ Metering and expedition
- ✓ Health Safety & Environment, sustainability
- ✓ Budgets (CAPEX, OPEX) during the life cycle of a production field