



PCE105

Oil & Gas Operations: Gas Processing, Hydrates, Dehydration, Sweetening, NGL Recovery & Fractionation, Oil Production, Desalting, Stabilization, Storage Tanks, Mixers, Meter Proving, Cargo Calculations & Flow Measurement

Course Introduction:

This course will provide the participants with an integrated view of the oil and gas production and related facilities during the life of the reservoir. It will present an overview/fundamental understanding of the wide range of oilfield production handling and treatment equipment. With this view and tools and knowledge on the properties and flow of the fluids provided in this course, the participant will be able to understand the behavior of the fluids from the reservoir up to end users.

The training gives strong emphasis of the calculation of reserves, fluids properties from reservoir through gathering network. This knowledge is necessary for the surface facility engineer to design or operate the equipment's and facilities.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- ✓ Familiarize the participants with global oil & gas related statistics, such as reserves, production, consumption and exports
- ✓ Familiarize the participants with both upstream, middle stream and downstream operations and related facilities
- ✓ Familiarize the participants with various methods and techniques used to explore, drill, produce, treat and transport oil, gas and their products
- ✓ Understand the oil & gas operations of various field facilities from wellhead, flow lines, separators, tanks, pumps and compressors, pipelines, gas treatment and processing, refinery operations, etc.
- ✓ Understand the basic concept with regards to evaluating oil & gas reserves, artificial lift and enhancing recovery
- ✓ Understand the challenge associated with this industry such as offshore operations, horizontal drilling and other safety concerns
- ✓ Get a general feel for petroleum economics and risk analysis

Who Should Attend?

This course is intended for all oil & gas production field personnel, operations, process and maintenance supervisors, technicians, support engineers and engineering trainees. It would also be of benefit to safety and other support staff who have an interest in increasing their understanding of Oil & Gas Operations.

Course Outline:

Day 1:

Module 1

- Energy Types
- Global Statistics
- Oil & Gas Reserves, Production, Export, and Consumption
- The Need for Oil & Gas
- The Upstream Operations
- Origin of Oil & Gas
- Reservoir types
- Exploring for Oil & Gas
- Seismic Technology

Day 2:

Module 2

- Drilling and Exploration well
- Directional Drilling
- Offshore Drilling
- Well Testing & Completion
- Well Stimulation & Workover
- Rock & Fluid Properties

Day 3:

Module 3

- Oil & Gas Production
- Artificial Lift Methods
- Recovery Mechanisms
- Reservoir Simulation
- Pressure Maintenance
- Enhanced Oil Recovery
- Surface Facilities

Day 4:

Module 4

- The Downstream Operations
- Oil Storage & Transportation
- Gas Treatment & Processing
- Refinery Operations & Products

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- Petrochemical Industry

Day 5:

Module 5

- The Role of Technology
- Health, Safety & Environment
- Corrosion Protection
- Petroleum Economics

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Fees:

To be advised as per course location. This rate includes participant's manual, and-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session

