

Fundamentals of Hydrocarbon Exploration and Production

4-day classroom course

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13th-16th January 2020

9h-17h

Instituto Superior Técnico
Lisbon, Portugal

Registration until
January 8th 2020

Who should attend:

Any professional interested in knowing more
about the Petroleum Industry, including:

- Engineers with different backgrounds
- Non-technical staff dealing with the Petroleum industry such as legal professionals, administrative staff, economists, etc.
- Researchers

4 days: 400€ + IVA/VAT early bird fee until December 13th
 550 € + IVA / VAT for professionals
 500 € + IVA / VAT for professionals SPE members
2 days (each module) for half the price

For more information and registration:



www.chronosurveys.com

info@chronosurveys.com

<https://www.spe.org/sections/?209>

portugal@spemail.org

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Introduction to the oil and gas industry (0.5 days)

- History of oil and gas.
- The role of oil and gas in society.
- International Oil & Gas Supply.
- Global Reserves, Production & Trade.
- Ownership of hydrocarbons - Concessions, contracts and joint ventures.
- International and National Oil Companies, OPEC, IEA.
- Safety and the Environment.

Petroleum Geology (0.5 days)

- Earth and plate tectonics.
- Rock types & Sedimentary basins.
- Geological time.
- Petroleum systems elements – Source rock, reservoir, seal and trap, timing of events.

Exploration and development activities (0.5 days)

- Basin screening and play-based exploration.
- Geophysical Methods: Gravimetry, Magnetics and seismic.
- Geological methods: seismic interpretation, sedimentology, stratigraphy.
- Plays, leads and prospects.

Pre-drill and volumetric assessment (0.5 days)

- Volumetric assessment and risking.
- Well planning.
- Petrophysical logs and reservoir properties.
- Mudlogging, gas-logging and other well site geological data.

Well Engineering (0.5 days)

- Drilling phases (Drilling, Casing and Cementing).
- BHA components and Drilling Fluids.
- Well pressure control.
- Directional Drilling.
- Well completion.

Reservoir Engineering (0.5 days)

- Phase Equilibrium of Hydrocarbons.
- Reservoir rock and fluid properties.
- Fluid Flow in Porous media.
- Recovery Mechanisms.
- Well Test Analysis.
- Reservoir Simulation.

Production Eng. and Flow Assurance (0.5 days)

- Well inflow (IPR) /outflow (VLP) performance.
- Artificial lift.
- Flow Assurance issues (Wax, Hydrates, Scales, Asphaltenes).
- SURF: Subsea architectures, umbilical, flowlines and risers.

Upstream Process Engineering (0.5 day)

- Types of production facilities.
- Oil Separation and dehydration.
- Gas Separation and compression.
- Production and Injection water treatment.
- Subsea Processing.

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