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COURSE BROCHURE

Petroleum Geology for Non-Geologists Training Course

7 – 11 November 2027
Online

Petroleum Geology for Non-Geologists Training Course

Ref: 1671_61274 **Date:** 7 – 11 November 2027 **Location:** Online **Fees:** 2900 GBP

Petroleum Geology for Non-Geologists is a 1-week training course for commercial, finance, legal and engineering staff without geology training, built around a Prospect Challenge Checklist that each participant uses on a real geological report. Licence rounds, farm-in offers and reserves disclosures now land on the desks of people who must judge subsurface claims without a geoscience degree. Jupiter Prime Training delivers this petroleum geology course in plain language.

Why Petroleum Geology for Non-Geologists Matters Now

Three groups lean on geology without speaking its language: deal teams pricing acreage and farm-ins, finance and audit staff signing off reserves bookings, and lawyers drafting licences and unitisation terms. When they cannot test a geologist's story, companies overpay for prospects, misjudge appraisal risk or sign terms that ignore how a field may really behave. The course explains the petroleum system model, chance-of-success scoring and resource classification categories in everyday words, with examples from oil fields and carbon storage sites.

Who Gains Most from Petroleum Geology for Non-Geologists

- Those valuing licences, farm-ins and acquisitions of upstream assets
- Those reporting reserves, resources and impairment to boards and auditors
- Those drafting licence, joint operating and unitisation agreements
- Those planning wells, facilities or budgets from subsurface forecasts
- Those communicating exploration results to investors and partners

A new ventures or asset team that sends its commercial, finance and legal members together gains most.

Petroleum Geology for Non-Geologists Capabilities

Each outcome turns a geological concept into a question a non-specialist can put to the subsurface team.

- Assess whether a prospect has charge, reservoir, trap and seal — deal screening committee
- Apply chance-of-success scoring to compare two exploration opportunities — portfolio manager
- Weigh low, best and high resource estimates against investment size — finance lead
- Test seismic map claims by reading contours, faults and closure — negotiator in a farm-in
- Communicate geological uncertainty in plain words to a board — asset sponsor
- Specify the questions a geological report must answer before approval — contract and legal reviewer

Key Petroleum Geology for Non-Geologists Terms

- Source rock — An organic-rich rock that generates oil or gas when buried and heated.
- Reservoir rock — A porous, permeable rock that stores hydrocarbons and lets them flow to a well.
- Trap and seal — The rock geometry and tight cap layer that stop hydrocarbons from escaping to the surface.
- Petroleum system — The combination of source, migration path, reservoir, trap and timing needed for an accumulation.
- Seismic survey — Sound waves sent into the ground and recorded on return to image rock layers below.
- Chance of success — The estimated probability that a prospect contains a flowing accumulation of hydrocarbons.

Petroleum Geology for Non-Geologists Day by Day

Day 1: How Basins Make Oil and Gas

- Plate Settings and Sedimentary Basins — Locating Where Hydrocarbons Can Form
- Rock Types and the Geological Time Scale — Reading Formation Names in Reports
- Source Rock Maturity and Generation Windows — Judging Whether Oil or Gas Formed
- Migration Pathways — Explaining Why Some Basins Fill and Others Stay Dry
- Petroleum System Charts — Checking Timing Between Generation and Trap Formation

Day 2: Reservoirs, Traps and Seals

- Sandstone and Carbonate Reservoirs — Comparing Storage and Flow Quality
- Porosity and Permeability Basics — Linking Rock Quality to Well Rates
- Structural and Stratigraphic Traps — Recognising Closure Types on Maps
- Seal Integrity and Fault Leakage — Spotting Risks That Empty a Trap
- Core and Outcrop Photographs — Turning Images Into Plain Descriptions

Day 3: Seeing Below the Surface

- Seismic Acquisition and Processing Basics — Knowing What the Image Can Show
- Reading Seismic Sections and Time Maps — Following Horizons and Faults
- Well Logs for Non-Specialists — Identifying Hydrocarbon Zones on Log Displays
- Depth Conversion Uncertainty — Questioning the Size of a Mapped Closure
- Analogue Fields and Play Maps — Benchmarking a Prospect Against Neighbours

Day 4: From Prospect to Resource Numbers

- Volumetric Estimates of Oil and Gas in Place — Checking Inputs Behind Headline Volumes
- Low, Best and High Cases — Reading Ranges Rather Than Single Figures
- Chance-of-Success Scoring — Ranking Opportunities Across a Portfolio
- Resource and Reserve Classification Categories — Aligning Reports With Disclosure Needs
- Appraisal Wells and Value of Information — Deciding When More Data Pays

Day 5: Practising the Prospect Challenge Checklist

- Basin Screening Case for a Farm-In Offer — Applying Day 1 Petroleum System Logic
- Trap and Reservoir Review of a Prospect Map — Applying Day 2 Risk Elements
- Seismic and Log Interpretation Exercise — Applying Day 3 Imaging Methods
- Mock Investment Committee on Resource Ranges — Applying Day 4 Classification
- Prospect Challenge Checklist — Completing Questions for the Subsurface Team

Applying Petroleum Geology for Non-Geologists After the Course

- Run the challenge checklist on the next prospect report before it reaches the investment committee.
- Brief your commercial or legal colleagues on chance-of-success scoring using one current opportunity.

Petroleum Geology for Non-Geologists Questions FAQ

What is petroleum geology for non-geologists and why does it matter now?

It is a plain-language guide to how oil and gas form, collect and are estimated underground. It matters now because commercial, finance and legal staff increasingly sign off decisions that rest on geological claims.

Which roles gain most from petroleum geology for non-geologists training?

Commercial analysts, finance and reserves reporting staff, contract lawyers and engineers outside the subsurface team gain most. Staff working on carbon storage site selection also benefit.

How does petroleum geology for non-geologists differ from a reservoir engineering course?

It explains geology for people who use its results rather than produce them. You learn to read maps, logs and resource ranges and ask sharp questions, not to run simulations or interpret data yourself.

What do you bring back from petroleum geology for non-geologists training?

You bring back a checklist of questions for any prospect or reserves report. It covers charge, reservoir, trap, seal, mapping uncertainty and resource ranges.

Petroleum Geology for Non-Geologists: The Way Forward

The Prospect Challenge Checklist first informs whether a farm-in or licence offer goes forward to detailed due diligence. Deal teams, reserves reporters and legal reviewers use it alongside geologists, not instead of them. After its first use, the questions on depth conversion and analogue fields are worth revisiting.