



HARNESS THE POWER  
OF KNOWLEDGE

**Aspects of Petroleum Geology:  
How to Generate, Evaluate and  
Propose a Prospect to Drill with  
Less Risk of Failure**

**TRAIN**



**Introduction:**

This comprehensive 5-day professional training course will provide you with in-depth knowledge and practical skills in the generation, evaluation, and proposal of petroleum prospects with a reduced risk of failure. Designed for aspiring and experienced petroleum geologists, geophysicists, and engineers working in the oil and gas industry, this course will equip you with the expertise to identify and assess potential hydrocarbon reservoirs, formulate effective exploration strategies, and prepare compelling prospect proposals.

**Course Objectives:**

By the end of this course, you will be able to:

- Thoroughly understand the fundamental principles of petroleum geology and basin analysis
- Apply geological and geophysical techniques to identify and evaluate potential hydrocarbon reservoirs
- Construct subsurface geological models and interpret seismic data to assess reservoir potential
- Conduct comprehensive prospect evaluations, considering geological factors, reservoir characteristics, and economic viability
- Prepare persuasive prospect proposals that clearly articulate the geological basis for drilling

**Course Agenda****Day 1: Introduction to Petroleum Geology and Basin Analysis**

- Overview of petroleum geology and its role in the oil and gas industry
- Plate tectonics and the formation of sedimentary basins
- Basin classification and their significance in hydrocarbon exploration
- Petroleum systems and the migration of hydrocarbons

**Day 2: Geological Techniques for Prospect Generation**

- Surface geology and mapping for identifying potential hydrocarbon traps
- Seismic stratigraphy and the interpretation of seismic data
- Well logging and its application in reservoir evaluation
- Basin analysis and prospectivity assessment

**Day 3: Geophysical Techniques for Prospect Evaluation**

- Seismic reflection and refraction methods for subsurface imaging
- Gravity and magnetic surveys for structural interpretation
- Electrical resistivity and electromagnetic methods for reservoir characterization
- Integration of geophysical data for prospect evaluation

**Day 4: Reservoir Characterization and Prospect Economics**

- Reservoir properties and their impact on hydrocarbon production
- Porosity, permeability, and fluid saturation analysis
- Reservoir modeling and simulation techniques
- Economic evaluation of petroleum prospects and risk assessment

**Day 5: Prospect Proposal Preparation and Presentation**

- Structure and content of a compelling prospect proposal
- Geological evidence and rationale for drilling
- Risk assessment and mitigation strategies
- Effective presentation techniques for prospect proposals

**Who Should Attend:**

This course is designed for:

- Aspiring and experienced petroleum geologists seeking to enhance their prospect generation and evaluation skills
- Geophysicists and engineers involved in hydrocarbon exploration and prospect evaluation
- Individuals seeking to specialize in petroleum geology and prospect development

**Course Benefits:**

- Gain a comprehensive understanding of petroleum geology and its application in prospect generation
- Develop practical skills in identifying, evaluating, and proposing petroleum prospects
- Enhance your ability to interpret geological and geophysical data to assess reservoir potential
- Master prospect evaluation techniques and risk assessment methodologies
- Learn from industry experts and case studies to refine your prospect proposal skills.