BLACKBIRD FOR TRAINING

Integrated Field Development Planning: From Discovery to Sanction

2027 □□□□□ 16 – 12
Kigali (Rwanda)



Integrated Field Development Planning: From Discovery to Sanction

Location: Kigali (Rwanda) **Fees:** 4900 GBP

Why This Course

Successful field development planning lies at the heart of every profitable and sustainable oil and gas project. It demands an integrated approach that aligns subsurface understanding, surface facility design, economic evaluation, and project execution into one coherent plan.

The Integrated Field Development Planning for Oil and Gas Projects program is an intensive 1-week course designed to equip engineers, geoscientists, project managers, and planners with the technical and strategic skills to evaluate, design, and optimize field development opportunities. Participants will gain hands-on experience in multidisciplinary planning, risk analysis, and decision-making—ensuring readiness to contribute effectively to major upstream development projects.

What You'll Learn and Practice

By joining this program, you will:

- Understand the integrated field development planning FDP process from exploration to execution.
- Analyze geological, engineering, and economic data to support field development decisions.
- Apply industry-standard tools and methodologies to design optimized FDPs.
- Identify, assess, and mitigate risks throughout the field development lifecycle.
- Collaborate effectively in multidisciplinary teams and communicate technical plans to stakeholders.

The Program Flow

Day 1: Introduction to Field Development Planning

- Overview of the oil and gas value chain and field development lifecycle.
- Exploration, appraisal, and resource evaluation techniques.
- Reservoir characterization, modeling, and data integration.
- Fundamentals of production forecasting and reserve estimation.
- Workshop: Developing an initial field development concept.



Day 2: Subsurface Development Planning

- Well-designed and placement strategies for reservoir optimization.
- Reservoir management and production enhancement techniques.
- Secondary and enhanced oil recovery EOR methods.
- Uncertainty analysis and risk-based decision-making in subsurface planning.
- Exercise: Evaluating alternative well and reservoir development scenarios.

Day 3: Surface Facilities and Infrastructure

- Design and selection of production systems and processing facilities.
- Flow assurance, transportation, and export system considerations.
- Integrating environmental, health, and safety EHS principles into facility design.
- Linking subsurface development to surface infrastructure planning.
- Case Study: Integrating subsurface and surface plans for optimal field performance.

Day 4: Economic Evaluation and Risk Assessment

- Fundamentals of project economics and cash flow modeling.
- Cost estimation, economic indicators, and investment appraisal.
- Risk identification, assessment, and mitigation in project planning.
- Decision analysis tools and portfolio management techniques.
- Workshop: Conducting an economic evaluation of multiple field development options.

Day 5: Project Integration and Execution

- Creating and presenting a comprehensive integrated field development plan.
- Project execution planning, scheduling, and stage-gate management.
- Stakeholder engagement and communication strategies.
- Lessons learned and best practices from global field development projects.
- Capstone Project: Developing and presenting a field development plan for peer review.

Individual Impact

- Strengthen your ability to integrate subsurface, surface, and economic considerations.
- Gain practical experience in multidisciplinary decision-making and project evaluation.
- Enhance your confidence in planning and executing complex development projects.
- Build professional competence recognized across the oil and gas value chain.

Organizational Impact

- Improve project evaluation and planning accuracy across development phases.
- Reduce uncertainty and risk through data-driven decision-making.
- Enhance cross-functional collaboration and technical communication.
- Strengthen project execution efficiency and capital investment outcomes.



Training Methodology

This program combines technical instruction, hands-on exercises, and case-based learning to ensure practical mastery. Learning methods include:

- Real-world case studies from upstream oil and gas operations.
- Group projects simulating integrated field development scenarios.
- Practical sessions using industry-standard planning and analysis tools.
- Facilitated discussions led by senior industry experts.
- Capstone project presentation and feedback from peers and instructors.

Beyond the Course

Upon completion, participants will be fully equipped to contribute to and lead integrated field development planning efforts in oil and gas projects. They will return ready to:

- Develop, evaluate, and present full-scale field development plans.
- Integrate technical, economic, and risk perspectives in decision-making.
- Apply structured methodologies to optimize project outcomes.
- Strengthen organizational capability in upstream project planning and execution.

