Planning for Integrated Field Development

Increasing Output in the Field

Introduction

This course on Planning for Integrated Field Development will provide participants with a solid grasp of how integrated, multidisciplinary teams work together inside oil and gas firms to determine the optimal approach to developing an oil or gas field.

The responsibilities of the many different scientific, technical, commercial, and business disciplines that go into making difficult decisions that need significant investments and cope with a lot of uncertainty are highlighted in this Oil & Gas training course.

The goal of this Course N Carry training program is to prepare early- and mid-career professionals in the fields of geology, engineering, and commerce for leadership roles in the oil industry in the future as well as for working in integrated, multidisciplinary teams on worldwide development projects.

Objectives

Following completion of this workshop in Planning for Integrated Field Development, participants will:

- Recognize how the integrated field development planning team works on global oil and gas projects.
- Possess useful abilities and equipment that they may utilize for their next projects.
- Recognize the history of the field and the fundamental principles of oil and gas formation science.
- Acknowledge that successful project delivery depends on making wise early planning decisions (concept selection and "front-end loading").

Training Methodology

This theoretical and practical Planning for Integrated Field Development training course is taught using the following methods:

- Engaging lectures and workshops
- Exercises for both individual and team workshops
- Worked samples displayed on screen

- Posters and videos
- Discussions and arguments
- Supervised research and self-study
- Tests
- Case studies
- In this era of rapidly evolving technology, fast-track projects, online collaboration, joint decision making, and "information overload," participants will gain experience using contemporary online (cloud) team collaboration information tools and strategies while completing the workshop exercises.

Organizational impacts

Teaching the principles of Interactive Economics to your employees can help drive organizational growth and seamless operations:

- A short course that equips employees with skills for the real world
- Employees receive enhanced and economically driven decision-making skills
- Helps create better marketing strategies for higher sales
- Provides a competitive advantage by helping make calculated risks

Personal Imapct

Enrolling in this course can benefit you in the following ways:

- Gain a deep understanding of the relation between human behavior and finances
- Learn modern techniques to estimate market demand and prediction
- Attain leadership, adaptability, and decision-making skills
- Analyze and understand successful market strategies

Who should attend?

Numerous fields, such as development engineering, facilities engineering, geoscience, reservoir engineering, planning, risk analysis, portfolio planning, decision support, and commercial strategy, might benefit from this Integrated Field Development Planning training course.

Professionals working in the upstream oil and gas industry across all disciplines who would want to:

- Learn how their contribution fits into the "bigger picture" of asset development and the oil industry as a whole.
- Get ready to take on more leadership and engagement responsibilities in field development, strategic management, and decision-making.
- Prepare oneself for working in close-knit, multidisciplinary, value-focused, fully integrated asset development teams on challenging, large-scale projects.
- Learn about the vast range of field development engineering as well as the difficulties and intricacies of facilities engineering.

Course Outline

Day 1

Planning for Field Development: The Sector and the Group

- The field development planning context within the industry. The upstream oil and gas business from a number of important "perspectives," including the value chain, the industry actors, the oil and gas asset lifetime, and the sector's position in society
- The professional team's integrated involvement in development planning. An overview of the core engineering and geoscience disciplines, including as geophysics, petrophysics, reservoir engineering, well engineering, and facilities engineering, that serve as the foundation for decision-making
- A summary of the procedure for field development planning. An overview of the field development planning science, culture, and practice in the upstream oil and gas industry, including how to cope with ambiguity and inadequate information

Day 2

Planning and Economics for Field Development

- Planning for Field Development. How the interdisciplinary team, comprising experts from engineering, science, and commerce, works together to determine the optimal strategy for reservoir development
- Economics of Petroleum. The application of cash flow analysis, time value of money, and investment indicators are only a few examples of how economics is used to plan oil and gas expansions in order to maximize value.
- Workshop on Field Development Planning. Participants engage in realistic field development planning, economics, and decision-making exercises either alone or in groups.

Day 3

Making Choices in Field Development Planning

- Analysing Decisions. How the integrated field development team uses tools like expected value, sensitivity analysis, decision trees, and Monte Carlo simulation to make complex decisions involving a wide range of input parameters so that extremely large investments are made sensibly and effectively
- Workshop on Field Development Planning. Participants engage in realistic field development planning, economics, and decision-making exercises either alone or in groups.

Day 4

Contracts for Production and Management of Petroleum Resources

- Production Licences and Contracts. The terms under which an oil corporation obtains the legal, financial, and contractual authority to produce oil or gas, as well as the manner in which the profits and resources are distributed to the host nation
- Management of Petroleum Resources. How oil and gas amounts in reservoirs (reserves and resources) are determined, categorized, and reported consistently for investment, management, and regulatory purposes
- Workshop on Field Development Planning. Participants engage in realistic field development planning, economics, and decision-making exercises either alone or in groups.

Day 5

Planning for Field Development with Safety and Environment in Mind

- Corporate Accountability. How to carry out oil and gas projects in a way that is environmentally responsible, safe, and beneficial to the local communities where they are implemented; this includes discussing issues like social license to operate, environmental effect, and safety.
- Workshop on Field Development Planning. Participants engage in realistic field development planning, economics, and decision-making exercises either alone or in groups.