Petroleum Production Engineering

ABOUT THE COURSE

Production engineering is a complex of various disciplines included in a well life cycle and/or well network on the field. Planning of field development is closely connected with good knowledge of all production system components, processes and occurrences, all defining both economic and operational limits. Starting with well characteristics, through problem analysis, to the final solutions (operative methods on field, workovers, stimulations, etc.), with all necessary risks and economic analyses, the course participants would gain complete overview and knowledge useful for any subsequent specialized course in respective disciplines.

DESIGNED FOR

Petroleum engineers with academic and practical experience, field operating engineers and geoscientists in the petroleum and natural gas industries.

YOU WILL LEARN

- How to analyze oil and gas production system
- Nodal concept and theory
- How to collect, evaluate and use production data to predict future system behavior
- What is required to recognize problems in petroleum system

COURSE OUTLINE

- The basic principles of oil and gas production
- Introduction to integrated production system
- Well completion effects on well inflow characteristics
- Well performance modeling
- Methods and procedures for production data analyzing (decline, reciprocal productivity index, time series analysis)
- System analysis principles
- Petroleum problem analysis methodology
- Methods for solving production problems
- Workover planning, operation and control
- Reservoir rocks chemical treatment basic principles
- The basics of hydraulic fracturing of reservoir rocks
- Introduction to risk and economic analysis of production system

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