



HARNESS THE POWER
OF KNOWLEDGE

Demystifying Oil and Gas Production

TRAIN



Course Overview:

This comprehensive 5-day professional training course will provide a thorough understanding of the oil and gas production process, from reservoir exploration to well completion and production optimization. Designed for non-technical professionals, the course will equip participants with the knowledge and skills to effectively navigate the complexities of oil and gas production and make informed decisions in their respective roles.

Course Objectives:

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

1

Grasp the fundamental principles of oil and gas production, including reservoir geology, wellbore engineering, and production optimization techniques

2

Identify the different stages of the oil and gas production process and their key components

3

Understand the role of various disciplines and technologies in oil and gas production, such as geology, geophysics, drilling, and production engineering

4

Analyze production data and reservoir performance indicators to assess well productivity and reservoir potential

5

Communicate effectively with technical professionals and make informed decisions related to oil and gas production activities

Course Agenda:

Day 1: Introduction to Oil and Gas Production

- Delve into the history and evolution of oil and gas production and its impact on global energy supply
- Explore the geological basis of oil and gas formation and accumulation in subsurface reservoirs
- Discuss the regulatory framework and safety standards governing oil and gas production operations
- Analyze the environmental considerations associated with oil and gas production and mitigation strategies

Day 2: Reservoir Exploration and Well Drilling

- Understand the principles of reservoir exploration and the techniques used to identify and evaluate potential hydrocarbon reservoirs
- Discuss the role of geophysical surveys, seismic data interpretation, and well logging in reservoir characterization
- Analyze the well drilling process, including drilling rig components, drilling fluids, and wellbore completion techniques
- Explore advanced drilling technologies, such as horizontal drilling, multilateral completions, and directional drilling

Day 3: Well Production and Wellbore Engineering

- Grasp the fundamental principles of well production, including fluid flow, pressure gradients, and production optimization techniques
- Discuss the different types of wellbore configurations, such as vertical wells, horizontal wells, and multilateral wells
- Analyze the role of production equipment, such as wellhead equipment, production tubing, and artificial lift systems
- Explore advanced wellbore engineering concepts, such as sand control, wellbore stability, and hydraulic fracturing

Day 4: Production Optimization and Reservoir Management

- Understand the principles of production optimization and its impact on well performance and reservoir productivity
- Discuss techniques for optimizing production parameters, such as choke control, gas lift, and artificial lift
- Analyze reservoir management strategies, including waterflooding, pressure maintenance, and enhanced oil recovery (EOR) techniques
- Explore advanced production optimization tools, such as nodal analysis, reservoir simulation, and real-time monitoring

Day 5: Economics of Oil and Gas Production and Case Studies

- Discuss the economics of oil and gas production, including cost estimation, revenue forecasting, and profitability analysis
- Analyze the impact of oil and gas prices, market conditions, and regulatory changes on production decisions
- Explore case studies of successful oil and gas production projects, highlighting challenges, strategies, and lessons learned
- Discuss emerging technologies and advancements in oil and gas production, such as unconventional resources, smart fields, and data-driven decision-making

Who Should Attend:

- Business professionals, analysts, and decision-makers in the oil and gas industry who need a comprehensive understanding of oil and gas production
- Non-technical professionals in finance, legal, marketing, and other departments within oil and gas companies
- Individuals seeking a career transition into the oil and gas industry and requiring a strong foundation in production principles

Course Benefits:

- Develop a comprehensive understanding of oil and gas production processes, technologies, and economic considerations
- Gain hands-on experience through case studies and real-world scenarios
- Enhance your ability to communicate effectively with technical professionals and make informed decisions in the oil and gas industry
- Stay updated on the latest advancements and trends in oil and gas production
- Expand your professional network and connect with industry experts