



Oil, Gas and Chemical

Advanced Fracking Technique

Course Introduction

Advanced Fracking Techniques

Advanced Fracking Techniques are crucial for enhancing hydrocarbon recovery, improving well productivity, and ensuring efficient resource extraction. As unconventional reservoirs become more common, mastering advanced fracturing methods is key to optimizing operations and reducing environmental impact. Understanding the latest technologies and approaches allows professionals to design better fracking strategies, increase operational efficiency, and ensure safety. This knowledge is essential for improving production while managing costs and minimizing risks.

This 5-day training program focuses on the principles, techniques, and innovations in advanced fracking. Each day covers a core topic, combining theoretical learning with practical exercises and case studies. Participants will learn about fracture design, fluid selection, equipment, and post-fracturing evaluation. The program also emphasizes safety, environmental considerations, and emerging technologies in fracking.

Training Course Methodology

This course is designed to be interactive and participatory, and includes various learning tools to enable the participants to function effectively and efficiently. The course will use sessions, exercises, and case applications, and presentation about proven-by-practice methods, new insights and ideas about the topic and its effects in a corporate world.

Target Audience

- Petroleum engineers
- Reservoir engineers
- Drilling engineers
- Field supervisors

- Operations managers

Learning Objectives

- Understand the fundamentals of advanced fracking techniques.
- Learn how to design and execute efficient fracturing operations.
- Gain knowledge of fluid selection and proppant technologies.
- Apply methods for evaluating and optimizing fracture performance.
- Address safety, environmental, and operational challenges in fracking.

Course Outline

- **01 Day One**

- Fundamentals of Hydraulic Fracturing**

- Overview of hydraulic fracturing and its role in unconventional reservoirs.
 - Understanding rock mechanics and fracture propagation.
 - Basics of wellbore construction for fracking operations.
 - Introduction to fracture design and planning.
 - Equipment and materials used in hydraulic fracturing.
 - Key considerations for site preparation and logistics.

- **02 Day Two**

- Fracture Design and Execution**

- Advanced techniques for fracture modeling and design.
 - Selecting appropriate fracture fluids and proppants.
 - Pressure management during the fracturing process.
 - Techniques for multi-stage fracturing.
 - Managing fracture geometry and complexity.
 - Real-time monitoring and data analysis during execution.
 - Practical exercises on designing a fracture operation.

- **03 Day Three**

Fluid Systems and Proppant Technologies

- Types of fracturing fluids and their properties.
- Innovations in fluid systems for better performance.
- Proppant selection and transportation techniques.
- Managing fluid loss and ensuring fracture conductivity.
- Addressing fluid compatibility and environmental concerns.
- Optimizing proppant placement for enhanced production.
- Case studies on fluid and proppant applications.

• 04 Day Four

Post-Fracturing Evaluation and Optimization

- Techniques for evaluating fracture effectiveness.
- Using well logging and diagnostic tools for assessment.
- Interpreting production data to optimize fracture design.
- Strategies for re-fracturing and improving well performance.
- Identifying and resolving operational challenges post-fracturing.
- Cost analysis and economic considerations for optimization.
- Practical exercises on fracture evaluation techniques.

• 05 Day Five

Safety, Environmental Management, and Future Trends

- Best practices for ensuring safety in fracking operations.
- Managing environmental impacts, including water and waste.
- Regulatory requirements and compliance in hydraulic fracturing.
- Innovations and emerging technologies in fracking.
- Addressing public concerns and stakeholder engagement.
- Strategies for sustainable and responsible fracking operations.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 26, 2025	May 30, 2025	5 days	4250.00 \$	UAE - Dubai

FROM	TO	DURATION	FEEs	LOCATION
July 7, 2025	July 11, 2025	5 days	4250.00 \$	UAE - Dubai
Oct. 16, 2025	Oct. 20, 2025	5 days	4250.00 \$	KSA - Riyadh