



TRAINING PROGRAM



# Chemical Fundamentals Of Petroleum

## Introduction:

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This course overview the basic principle of petroleum industry with a brief explanation of crude oil chemistry, the impact on the refinery, and a fundamental discussion of the nature and purpose of the major refining processes. In addition, the chemical characteristics of refinery products will be explored.

## Who Should Attend?

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The course is designed for engineers, chemists, technical operating and supervisory staff, who have working in oil field,

## Methodology:

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This interactive Training will be highly interactive, with opportunities to advance your opinions and ideas and will include;

- Lectures

- Workshop & Work Presentation
- Case Studies and Practical Exercise
- Videos and General Discussions

## Certificate:

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**BTS** attendance certificate will be issued to all attendees completing minimum of 80% of the total course duration

## Course Objectives:

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Upon the successful completion of this course, the participants will be familiar with principles of chemical and physical processes including basic chemistry of crude oil and petroleum products.

## Course Outline:

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- Introduction
- History and Terminology
- Occurrence and Origin of Oil and Gas
- Accumulation in Reservoir Sediments
- Exploration
- Drilling Operations
- Well Completion
- Recovery
- Transportation
- Storage
- Petroleum Origin
- Petroleum Composition and its Properties
- Classification of crude oil types
- Crude oil receiving analysis
- Physical Properties of crude oil

### Chemical Composition of crude oil

- Evaluation of crude Oil
- Crude oil Treatments
- Hydrogen Production
- Blending
- Feed water
- Steam Generation
- Steam Distribution
- Heater Fuel
- Major Refinery Products
- Sampling Of Petroleum and Petroleum Products