

**ADVANCED  
STIMULATION AND  
RESERVOIR  
TREATMENT**

**DRPT213 Drilling,  
Reservoir &  
Petroleum  
Training**

## **COURSE TITLE**

# **ADVANCED STIMULATION AND RESERVOIR TREATMENT**

## **COURSE DATE/VENUE**

02 - 06 September 2024

London, UK

## **COURSE REFERENCE**

DPRT213

## **COURSE DURATION**

05 Days

## **DISCIPLINE**

Drilling, Reservoir & Petroleum Training

## **COURSE INTRODUCTION**

This course delve into advanced techniques and strategies crucial for enhancing hydrocarbon recovery from subsurface reservoirs. This course is designed for professionals in the oil and gas industry seeking to deepen their understanding of advanced stimulation techniques and their application in optimizing reservoir performance.

## **COURSE OBJECTIVE**

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

Understand Advanced Stimulation Techniques: Gain in-depth knowledge of hydraulic fracturing, acidizing, and other stimulation methods, including their design, execution, and evaluation.

Explore Enhanced Oil Recovery (EOR) Methods: Learn about various EOR techniques such as thermal recovery, chemical flooding, and gas injection, and understand their application and integration into reservoir management strategies.

Apply Cutting-Edge Technologies: Familiarize yourself with the latest technological advancements in stimulation and reservoir treatment, including real-time monitoring and simulation tools.

Integrate Techniques for Optimal Results: Develop skills to integrate stimulation and EOR techniques effectively, optimizing reservoir performance and economic outcomes.

Address Practical Challenges: Gain insights into common challenges and best practices in the field, including risk management and troubleshooting.

### **COURSE AUDIENCE**

- Reservoir engineers
- Production engineers
- Field engineers
- Geoscientists
- Industry professionals involved in reservoir management, stimulation, and enhanced oil recovery

### **COURSE CONTENT**

The course is structured to balance theoretical knowledge with practical application:

#### **Day 1: Fundamentals and Overview**

- Geological and petrophysical properties
- Formation damage - how and why it happens
- Identification of candidate wells for stimulation
- Basic Concepts of Rock Mechanics:
- Stress and strain in reservoir rocks
- Fracture initiation and propagation

#### **Day 2: Hydraulic Fracturing**

- In-depth exploration of hydraulic fracturing techniques:
- Design
- Execution
- monitoring.

### **Day 3: Acidizing Techniques**

- Introduction to Acidizing:
- Purpose and principles
- Types of acidizing (Matrix Acidizing, Fracture Acidizing)
- Acid Chemistry and Reactions:
- Common acids used (HCl, HF, organic acids)
- Reactions with reservoir rock and formation damage removal
- Matrix Acidizing:
- Design and implementation
- Case studies and field examples
- Fracture Acidizing:
- Design considerations
- Case studies and field examples

### **Day 4: Enhanced Oil Recovery (EOR) Techniques**

Detailed study of EOR methods

- Thermal
- Chemical
- gas injection techniques.



### **Day 5: Integration and Future Trends**

Integration of stimulation and EOR techniques, exploration of future trends, and economic and environmental considerations.

### **COURSE CERTIFICATE**

**TRAINIT ACADEMY** will award an internationally recognized certificate(s) for each delegate on completion of training.

### **COURSE FEES**

£5,750 per Delegate. This rate includes participant's manual, Hand-Outs, lunch, coffee/tea on arrival, morning & afternoon of each day.

## **COURSE METHODOLOGY**

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions

