

Training  
Course

## Production Optimization in Oil & Gas Operations

## Course Plan

### Introduction

In today's dynamic energy landscape, maximizing hydrocarbon production efficiently and sustainably is more critical than ever. This course on Production Optimization in Oil & Gas Operations is designed to equip professionals with the tools, methodologies, and technologies required to enhance production performance, reduce operational costs, and extend asset life. Participants will explore real-world case studies, integrated optimization strategies, and the latest innovations in field operations, reservoir management, and artificial lift systems.

### Course Objectives:

- ✓ Understand the fundamentals of production systems and constraints.
- ✓ Identify opportunities for optimizing oil and gas production.
- ✓ Analyze production data to diagnose underperformance.
- ✓ Apply integrated asset modeling techniques.
- ✓ Evaluate and select artificial lift methods.
- ✓ Implement surface and subsurface optimization strategies.
- ✓ Recognize the role of digital tools and real-time monitoring.
- ✓ Apply best practices for reducing downtime and increasing efficiency.
- ✓ Understand flow assurance challenges and mitigation techniques.
- ✓ Collaborate effectively across disciplines for holistic optimization.

## Who Should Attend?

- Production engineers
- Petroleum engineers
- Field operations personnel
- Reservoir engineers
- Facility and process engineers
- Asset managers and team leaders
- Technical service providers in upstream oil & gas
- Young professionals seeking to specialize in production optimization

## Training Methods:

- ✓ Online Video material.
- ✓ Presentation.
- ✓ Live Interactive sessions.
- ✓ Course presenter will make extensive use of all tools that will be needed for the virtual environment.
- ✓ Questions & Answers

## Course Outline:

### Day One

- Introduction to Production Optimization
- Production System Components (Reservoir, Wellbore, Surface Facilities)
- Production Performance Analysis
- Inflow and Outflow Performance Modeling
- Identifying Bottlenecks in Production Systems

### Day Two

- Nodal Analysis for System Optimization
- Integrated Asset Modeling (IAM)
- Reservoir Surveillance and Monitoring
- Well Testing and Interpretation
- Decline Curve Analysis & Forecasting

### Day Three

- Artificial Lift Selection and Optimization
- Gas Lift Systems: Design and Troubleshooting
- Electrical Submersible Pumps (ESP)
- Rod Pump and PCP Optimization
- Surface Facilities Optimization

### Day Four

- Flow Assurance: Wax, Hydrates, and Scaling
- Sand and Water Production Management
- Production Chemistry in Optimization
- Real-Time Data Acquisition & Digital Oilfield
- Use of SCADA and Remote Monitoring Systems

### Day Five

- Data Analytics and Machine Learning in Production
- Maintenance and Reliability in Production Systems
- Economic Evaluation of Optimization Projects
- Case Studies from Mature and Green Fields
- Sustainability and Emissions Reduction in Production Operations

## Training Details

Course Duration	5 days
Pre-Schedule	29 Sept – 3 Oct 2025
Venue	Crowne Plaza Hottel - Geneva
Training Fees Per Person	KWD 1500 ( One Thousand Five Hundred Only )
Course Fees Include	<ul style="list-style-type: none"> <li>✓ Tuition documentation</li> <li>✓ Curriculum and Training Handout</li> <li>✓ Five star Lunch</li> <li>✓ Completion Certificates</li> <li>✓ Lunch Included</li> </ul>