



Course

Artificial Lift Systems (ALS)

22-26 Sep 2025

Baku, Azerbaijan

OUR VALUES



Service Excellence

We prioritize and consistently deliver top-tier service quality, exceeding industry standards to ensure the success of our clients.



Industry Support

Committed to actively supporting and addressing the evolving needs of the Oil and Gas industry, we strive to contribute to its growth and sustainability.



Client-Centric Growth

We embrace client feedback as a catalyst for growth, continuously evolving our business to align with the dynamic requirements of our valued clients.



Respectful Project Prioritization

We prioritize projects with a deep commitment to honoring and respecting people. Our approach creates a friendly, collaborative environment that builds lasting trust within our team and with our clients.

ABOUT OUR INSTRUCTOR



Dr. Osman Farag



**30 years of
experience**



Skills:

- **Petroleum Engineering**
- **Reservoir Engineering**
- **Production Management**
- **Artificial Lift Methods**
- **PROSPER, GAP, OFM**



Working experience:

- **Egypt**
- **Malaysia**
- **Kuwait**



The CPD Standards Office
CPD MENA PROVIDER: 90579
2024-2026
www.cpdstandards.com

**This course is CPD
Accredited**



Learning Objectives

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

1. Explain the operating principles and applications of key artificial lift methods including Gas Lift, Rod Pump, ESP, PCP, Jet Pump, and emerging technologies.
2. Compare the selection criteria, benefits, and limitations of each artificial lift method.
3. Apply basic design concepts to size and select suitable artificial lift systems for various well conditions.
4. Identify common problems and implement troubleshooting techniques for different lift systems.
5. Assess performance indicators to optimize lift system efficiency and production output.



Day 1

- Class Introduction
- Pre-Training Test
- Introduction to artificial lift: Purpose and role in production optimization
- Classification of lift methods
- Selection criteria overview (reservoir, well, surface constraints)
- Key parameters in artificial lift system design
- Overview of artificial lift system lifecycle and economics



Day 2

- Gas Lift principles and types (continuous, intermittent)
- Components and surface facilities
- Design basics (injection rate, valve spacing, pressure profiles)
- Common issues and troubleshooting
- Case studies and field examples



Day 3

Rod Pumping Systems

- Operation, design considerations, limitations
- Surface and downhole components
- Failure modes and troubleshooting

Electric Submersible Pumps (ESP)

- ESP system overview and components
- Sizing and power requirements
- Typical problems and operational challenges



Day 4

Progressive Cavity Pumps (PCP)

- Applications and design elements
- Sand handling and viscosity considerations

Jet Pumps

- Principles, surface setup, and nozzle selection
- Overview of other methods: Hydraulic lift, Plunger lift, new technologies
- Technology selection matrix and field examples



Day 5

- Integrated design exercise (selecting and sizing a lift method for a case well)
- Troubleshooting workflows and diagnostics across lift types
- Performance monitoring and optimization practices
- Artificial lift automation and digital surveillance trends
- Q&A session, wrap-up discussion, and certification



OUR SERVICES



NEXUS PETROLEUM ACADEMY



NEXUS MENTORING



ENGINEERING SERVICES



TRAININGS



**NEXUS COLLABORATION
(TECHNICAL WORKSHOPS AND
WEBINARS)**



EMPLOYEE GAP ASSESSMENT



EMPLOYEE SCREENING ASSIST



FIELD DIGITALIZATION



+971 521 969075

www.nexusofts.com

info@nexusofts.com

Compass building, RAK,
UAE