

## 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
- Resrevoir Engineering
- Production Management
- Artificial Lift Methods
- PROSPER, GAP, OFM



### **Working experience:**

- Egypt
- Malaysia
- Kuwait



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.





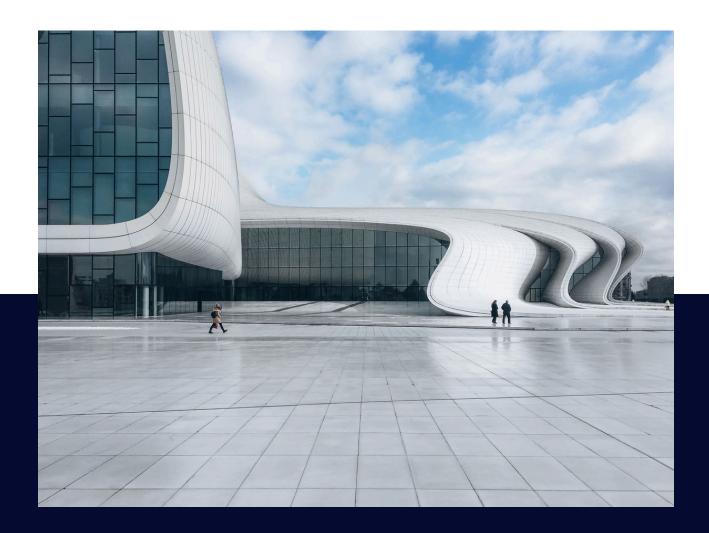
- Class Introduction
- Pre-Training Test
- Introduction to artificial lift: Purpose and role in production optimization
- Classification of lift methods
- Selection criteria overview (reservoir, well, surface constraints)
- Key parameters in artificial lift system design
- Overview of artificial lift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





- 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





### 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





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





- 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** 



**ENGINEREENG SERVICES** 



**TRAININGS** 



NEXUS COLLABORATION (TECHNICAL WORKSHOPS AND WEBINARS)



**EMPLOYEE GAP ASSESSMENT** 



**EMPLOYEE SCREENING ASSIST** 



FIELD DIGITALIZATION







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