

ARTIFICIAL LIFT METHODS: SELECTION, OPERATION, AND OPTIMIZATION



COURSE OVERVIEW

This course provides a comprehensive understanding of artificial lift systems used in the oil and gas industry to enhance production from wells with insufficient reservoir pressure. Participants will explore various lift methods, including rod pumping, gas lift, electric submersible pumps (ESP), progressive cavity pumps (PCP), and hydraulic lift systems. Emphasis is placed on system selection, design criteria, operational efficiency, failure analysis, and performance optimization. The course combines theory with real-world case studies to ensure participants gain both conceptual and practical knowledge.

DATES, VENUES AND FEES



07 – 11 September 2025 - Dubai

Fees

US\$ 5000

(5 Days)

Note: Fee is per participant + 5% VAT (if applicable). Groups from the same company can enjoy a **discounted** price.

WHO SHOULD ATTEND?

This course is appropriate for a wide range of professionals but not limited to:

- Production, reservoir, and petroleum engineers
- Well and field operations supervisors
- Artificial lift specialists and technicians

- Oilfield service and equipment providers
- Asset managers and planners involved in field development
- Anyone involved in well performance optimization and production operations

CONTACT US NOW

+971 (4) 4539841 – 42 – 43 WhatsApp: +971 52 398 7781 Millennium Solutions Training Center FZ-LLC
Block 2B, 1st Floor, Office 134, Knowledge Park, Dubai, UAE
Email: info@mstcme.com

Website: www.mstcme.com





ACCREDITATION



This training course is certified by CPD.

The CPD Certification Service is the leading independent CPD accreditation institution operating across industry sectors to complement the Continuing Professional Development policies of professional institutes and academic bodies. The CPD Certification Service provides support, advice, and recognised independent CPD accreditation compatible with global CPD principles. CPD is the term used to describe the learning activities professionals engage in to develop and enhance their abilities and keep skills and knowledge up to date. CPD Units are only awarded to programmes after each programme is scrutinised to ensure integrity and quality according to CPD standards and benchmarks.

COURSE CERTIFICATE

MSTC certificate will be issued to all attendees completing a minimum of 80% of the total tuition hours of the course.

CPD internationally recognized certificate will be issued for all participants who will meet the course requirements. CPD certificates will be issued within a month of the successful completion of the course.

TRAINING METHODOLOGY

- Expert-led sessions with dynamic visual aids
- Comprehensive course manual to support practical application and reinforcement
- Interactive discussions addressing participants' real-world projects and challenges
- Insightful case studies and proven best practices to enhance learning

LEARNING OBJECTIVES

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

- Understand the principles and applications of various artificial lift systems
- Evaluate the advantages, limitations, and selection criteria for each lift method
- Design and operate artificial lift systems based on well characteristics
- Identify and troubleshoot common operational issues and failures
- Apply optimization techniques to maximize production efficiency
- Interpret performance data and make informed decisions for lift system improvements



+971 (4) 4539841 – 42 – 43 WhatsApp: +971 52 398 7781



COURSE OUTLINE

DAY 1

Overview of Artificial Lift Systems

- Pre test
- Introduction to artificial lift: when and why it's
- Types of artificial lift systems
- Comparison of lift methods: advantages and limitations
- Key considerations in lift system selection
- Matching lift systems with well/reservoir characteristics

DAY 2

Rod Pumping and Progressive Cavity Pumping

- Sucker rod pumping system components and design
- Failure mechanisms and maintenance strategies
- Introduction to Progressive Cavity Pumps (PCP)
- Applications and limitations of PCPs
- Case studies

DAY 3

Gas Lift Systems

- Principles of continuous and intermittent gas lift
- System design and gas lift valve operation
- Gas compression requirements and surface facilities
- Optimization and troubleshooting of gas lift systems
- Hybrid systems and deep gas lift

DAY 4

Electric Submersible Pumps (ESP) and **Hydraulic Lift**

- ESP components, installation, and well compatibility
- Design calculations and performance curves
- Causes of ESP failure and performance monitoring
- Overview of hydraulic lift systems: jet and piston
- Applications in high-deviation and gassy wells

DAY 5

System Selection, Optimization and Case **Studies**

- Artificial lift selection workflow
- Nodal analysis and lift system integration
- Data-driven optimization strategies
- Field implementation and production monitoring
- Global case studies and lessons learned from artificial lift projects
- Post test



Website: www.mstcme.com

