TECHNICAL
EDUCATION
ACADEMY

School of Engineering

COURSE PROGRAMME

000075

PROD015 - Oil and Gas Production Laboratory Operation and Management



Learn from the Best in the Business!

Course overview

Advanced level

Why take this course

The availability of consistent, real-time information enables the continuous improvement of the production processes; quality control of the end products according to certain specifications; and the implementation of adjustments and corrections during the production process to improve the final product. To remain compliant, companies are required to run their laboratory operations in an efficient and quality-minded manner. A modern laboratory management system supports the everyday planning, organizing, leading and controlling of tasks and ensures compliance with regulations.

During this 3-day training programme trainees will be given an introduction to the responsibilities of offshore & onshore chemists and the laboratory management systems, inspection and maintenance of gas detection equipment, use of relevant analytical international standards and number of basic tests that may be performed to give an insight into the possible composition of unknown solids, debris and deposits.

Who it is for and how it helps

Laboratory personnel, operational staff and other professionals interested in laboratory analyzes dedicated to Oil & Gas operations.

What you will learn

- Use wide variety of differing laboratory tests
- Appreciate the importance and application to process systems
- Use a dewpoint analyser correctly, inclusive of initial set-up and calibration
- Know how sample and purge lines
- Identify possible carry-over of water or hydrocarbons and how to protect the analyser
- Appreciate the importance of correct homogenisation and subsampling along with instrument set up, calibration, maintenance and problem solving
- Sample deposits safely
- Appreciate the importance of detailed records, basic investigative laboratory techniques, details of specialist testing labs

Curriculum

Modules 01–04

01 Introduction to Laboratory Operations

- Introduction to the responsibilities of offshore chemists
- Laboratory management systems
- Quality assurance and laboratory safety management

02 Hydrocarbon Gas Analysis

- Hydrocarbon gas sampling and analysis methods such as Dewpoint, H2S and CO2
- How to use a dewpoint analyse
- Initial set-up and calibration
- How to sample and purge lines
- Identify possible carry-over of water or hydrocarbons
- How to protect the analyser

03 Crude Oil Analysis

- Accurate and repeatable analysis of crude oil and condensate samples
- Karl Fischer
- BS&W by Centrifuge
- Density by Hydrometer and Digital Densitometer
- Salt Content
- H2S in Crude
- Sand Content
- Reid Vapour Pressure

04 Testing of Unknown Solids and Deposits

- How to sample deposits safely
- The importance of detailed records
- Basic investigative laboratory techniques
- Details of specialist testing labs

Participation and contacts

Joining the programme

Contact the Academy and quote course code 000075 to confirm dates, delivery format, prices and enrolment terms.

Training for your team

Tell us your business goals, the roles and number of participants, and your preferred dates and location. This will help us discuss the right training option.

Preparing for the programme

The published programme does not specify any prerequisites. Contact us before enrolling to confirm how to prepare.

Discuss your training needs

mail@tecedu.org
www.tecedu.academy

Learn from the Best in the Business!