TECHNICAL
EDUCATION
ACADEMY

School of Engineering

COURSE PROGRAMME

000056

PROD016 - Oil Processing and Conditioning

The Oil Processing and Conditioning training programme is designed to train professional and technically knowledgeable individuals for careers in production and operations.



Learn from the Best in the Business!

Course overview

Intermediate level

Why take this course

The Oil Processing and Conditioning training programme is designed to train professional and technically knowledgeable individuals for careers in production and operations.

The emphasis of this course is on oil production facilities - from the wellhead, to the delivery of a specification crude oil product, to the refinery. Both onshore and offshore facilities are discussed. Produced water treating and water injection systems are also covered. Solution gas handling processes and equipment will be discussed at a relatively high level. In addition to the engineering aspects of oil production facilities, practical operating problems will also be covered, including emulsion treatment, sand handling, dealing with wax and asphaltenes.

Delegates will expand their knowledge and practical skills and develop an academic background relevant to the upstream oil and gas industry.

Who it is for and how it helps

Production and processing operations and maintenance technicians, supervisors and managers, as well as other non-engineering personnel requiring a broad introduction to production and processing facilities, including the separation, conditioning and disposition of produced oil, gas and water; including the common operational difficulties that may arise, as well as the operational tactics used to resolve them.

What you will learn

- Explain the effects of produced fluid compositions on facility design and operation (oil, gas and water)
- Use various separation and conditioning processes for meeting specifications on Oil, Gas and Produced Water streams
- Determine the water vapor content of produced natural gas
- Recognize problems and dangers of hydrate formation
- Recognize methods and issues in hydrate prevention/inhibition.

Curriculum

Modules 01–06

01 Oil production and Processing Basic

- Oil production and processing Overview
- Wellhead and equipment
- Gathering systems and separation stations

02 Separation Equipment

- Phases of separation
- Variables affection de phase separations
- Scrubbers and separators design and operations

03 Oil Treatment Basic Concepts

- Dehydration
- Emulsion theory
- Gravity separation and viscosity
- Emulsion theory and crude oil emulsion stabilizer

04 Oil Dehydration Equipment and Variables

- Dehydration equipment
- Design and sizing calculations
- Applications

05 Oil Heaters

- Applications
- ASME criteria
- Design procedures

06 Crude Oil Desalting

- Oil desalting principles
- Equipment and technology
- Operation and design considerations

Curriculum

Modules 07–08

07 Crude Oil Stabilization and Sweetening

- Vapor pressure fundamentals
- Sour and sweet oil concepts
- Safety, operation and design considerations
- Process configuration

08 Crude Oil Storage and Vapor Recovery Units

- Types of storage tanks
- Processing configuration
- Operation and design considerations

Joining the programme

Contact the Academy and quote course code 000056 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

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