



## Surface Production Operations - PO3

### COURSE

#### About the Course

This course presents a basic overview of all typical oilfield treating and processing equipment. Participants should learn not only the purpose of each piece of equipment but how each works. Emphasis is on gaining a basic understanding of the purpose and internal workings of all types of surface facilities and treating equipment. A major goal of this course is to improve communication among all disciplines, the field, and the office. Better communication should enhance operational efficiencies, lower costs and improve production economics. Example step-by-step exercises are worked together with the instructor to drive home the important points. Daily sessions include formal presentation interspersed with a good number of questions, discussion and problem solving.

*"I thought the focus was perfect for my needs."* - Electrical Engineer, United States

#### Target Audience

All field, service, support, and supervisory personnel having interaction with Facilities Engineers and desiring to gain an awareness level understanding of the field processing of production fluids. This course is excellent for cross-training and delivers an understanding of all the fundamental field treating facilities.

#### You Will Learn

- A practical understanding of all the fundamental field treating facilities: what they are, why they are needed, how they work
- The properties and behavior of crude oil and natural gas that govern production operations
- Field processes for treating and conditioning full wellstream production for sales or final disposition
- The basics of oilfield corrosion prevention, detection, and treatment
- Internal workings of separators, pumps, compressors, valves, dehydrators, acid gas treatment towers, and other treating equipment
- A wide range of produced fluid measurement and metering devices
- A description of treating equipment whether located on the surface, offshore platform, or sea floor

#### Course Content

- Properties of fluids at surface
- Flowlines, piping, gathering systems; solids and liquid limits

- Oil - water- gas - solids - contaminants
- Separation and treatment
- 2-3 phase separators, free water knockouts, centrifugal, filter
- Storage tanks, gun barrels, pressure/vacuum relief, flame arrestors
- Stabilizers
- Foams, emulsions, paraffins, asphaltenes, hydrates, salts
- Dehydrators
- Water treaters: SP packs, plate interceptors, gas floatation, coalescers, hydrocyclones, membranes
- Acid gas treatment: coatings, closed system, chemicals, solvents, conversion; stress cracking
- Valves: all types; regulators
- Pumps/Compressors: centrifugal, positive displacement, rotary, reciprocating, ejectors
- Metering: orifice, head, turbine, and others
- Corrosion/Scales: inhibition and treatment

## Product Details

Categories: [Upstream](#)

Disciplines: [Production and Completions Engineering](#) [Process Facilities](#)

Levels: [Basic](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#) [Virtual](#)

Instructors: [PetroSkills Specialist](#) [Omar Barkat](#)

## In-Classroom Format

24 Jun '24	28 Jun '24	-	Course	In-Classroom (in Houston)	\$4,610.00
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9 Dec '24	13 Dec '24	-	Course	In-Classroom (in Dubai)	\$5,725.00
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