



## Troubleshooting Oil Processing Facilities - PF-490

### COURSE

#### About the Course

This course will cover how to establish and apply a general troubleshooting methodology as well as how to conduct process/equipment specific troubleshooting related to oil production and processing facilities. Definitions of good/normal performance will be discussed for each process/ equipment type covered. Data gathering, validation and utilization procedures will be discussed. Criteria to use when evaluating possible problem solutions will also be covered. Real-world exercises will be utilized throughout the class to reinforce the learning objectives. Both onshore and offshore facilities will be discussed.

It is assumed that course participants have a solid understanding of how typical oil production and processing facilities work, including the commonly used processes and equipment involved. This course will not provide in-depth coverage of fundamentals.

#### Target Audience

Process/Facilities engineers with 5-10 years of experience, facilities engineering team leaders/ supervisors, and senior facilities operational personnel.

#### You Will Learn

- The difference between troubleshooting, optimization, and debottlenecking
- How to recognize trouble when it is occurring
- How to develop a methodical approach to troubleshooting
- To recognize how different components of a facility interact with each other, and the significance of these interactions
- How to gather, validate, and utilize the data needed for troubleshooting
- The criteria to be considered for identifying the best solution when several feasible solutions are available
- Typical causes of problems, and their solutions, for the main types of processes and equipment used in upstream/midstream oil production and processing operations

#### Course Content

- Understanding the similarities and differences between troubleshooting vs optimization vs debottlenecking
- Types of oil production and processing facilities

- System trouble vs component/equipment-specific trouble
- Defining good/normal operation
- Quantifying the cost of the trouble
- Gathering, validating, and utilization of data (types of data, sources of data, data quality and validation, using the data)
- Fundamentals of root cause analysis and methodology
- Developing a step-by-step troubleshooting methodology/flowchart
- Identifying the best solution (criteria for defining best)
- Processing and major equipment modules covered include separation equipment, oil treating and desalting, oil stabilization and sweetening, oil storage and vapor recovery, produced water treating, centrifugal pumps, and water injection

## Product Details

Categories: Midstream

Disciplines: Process Facilities

Levels: Intermediate

Product Type: Course

Formats Available: In-Classroom

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