

# **BASIC OPERATIONAL TROUBLESHOOTING OF GAS & CRUDE PROCESSING UNITS**



**PCE186  
Process and  
Chemical  
Engineering**

**COURSE TITLE**

**BASIC OPERATIONAL TROUBLESHOOTING OF GAS & CRUDE  
PROCESSING UNITS**

**COURSE DATE/VENUE**

07 - 11 June, 2021

London, UK

**COURSE REFERENCE**

PCE186

**COURSE DURATION**

05 Days

**DISCIPLINE**

Process and Chemical Engineering



**COURSE INTRODUCTION**

This course will cover how to establish and apply a general troubleshooting methodology as well as how to conduct process/equipment specific troubleshooting. 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 and gas production and processing facilities work, including the commonly used processes and equipment involved.

**COURSE OBJECTIVE**

**By the end of this course, participants will be able to understand**

- Troubleshooting methodology fundamentals and data reconciliation
- Gas - Liquid separators
- Reciprocating compressors
- Amine gas sweetening
- Glycol dehydration units
- 3-phase separators
- Centrifugal pumps
- Oil treating
- Produced water treating systems
- Shell and tube heat exchangers
- Centrifugal compressors
- Molecular sieve dehydration units
- NGL recovery processes



### **COURSE AUDIENCE**

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

### **COURSE CONTENT**

- 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 the upstream-midstream oil and gas industry

### **COURSE CERTIFICATE**

**TRAINIT ACADEMY** will award an internationally recognized certificate(s) for each delegate on completion of training.

### **COURSE FEES**

\$6,150 per Delegate. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

### **COURSE METHODOLOGY**

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions