

This course can be adapted to virtual classroom mode - Advanced Certificate

Advanced Oil & Gas Process Engineering Certification

35 days

OGADV-EN-A

Overview

LEVEL

Skilled

PURPOSE

The program proposed hereafter aims at providing an advanced knowledge of and industry best practices in Oil & Gas processing and in management.

LEARNING OBJECTIVES

Upon completion of the course, participants will be able to:

- support oil, gas and water field processing plant and equipment,
- participate to troubleshooting studies,
- review, comment and validate engineering documents (process and equipment datasheets, safety engineering results),
- lead a project according to project management best practices,
- efficiently manage a team.

WAYS AND MEANS

Highly interactive training by industry-specialist lecturers.
Numerous case studies, applications, illustrations and teamwork sessions.

LEARNING ASSESSMENT

Continuous evaluation.

PREREQUISITES

At least 10 years of experience as process, production or site engineer.

WHY AN IFP TRAINING CERTIFICATION?

- An international recognition of your competencies.
- A Advanced Certificate delivered.
- An expertise confirmed in Advanced Oil & Gas Process Engineering Certification.
- Ready-to-use skills.

Agenda

MODULE 1: OVERVIEW OF OIL & GAS FIELD PROCESSING

2 d

MODULE 2: EQUIPMENT DESIGN & OPERATION

6 d

Separator design methodology and case studies.
Desalters design and operation.
Rotating equipment technology pumps and compressors design and datasheet review methodology and case studies.
Relief system and flare network design methodology.

MODULE 3: CORROSION MANAGEMENT IN OPERATION	1 d
MODULE 4: PROCESS CONTROL & SAFETY Process control overview. Controllers - Control structures. Safety Instrumented Systems (SIS) review. Impact of HAZID and HAZOP studies on design.	4 d
MODULE 5: PROCESS DESIGN DOCUMENTS VERIFICATION METHODOLOGY Process documents to be prepared during engineering phase. Process datasheets review methodology and checklist. Engineering document verification workshop.	2 d
MODULE 6: PROCESS TROUBLESHOOTING METHODOLOGY Troubleshooting methodology and case studies. EFR compressor failure, injection water scaling, emulsion case, desalting scheme, flowline erosion.	2 d
MODULE 7: TROUBLESHOOTING EXERCISES Troubleshooting exercises in total learning plant and associated control room.	3 d
MODULE 8: HAZID, HAZOP & QRA REVIEW METHODOLOGY HAZID exercise. HAZOP exercise. QRA review exercise. Bow-tie construction method.	4 d
MODULE 9: PLANT LAYOUT & GAD REVIEW Plant layout review tools application. Management of iterative design. Technical workshop: plant layout review.	2 d
MODULE 10: PROJECT MANAGEMENT Integration and scope management. Project execution: contracting. Project execution: organization. Project control: cost and schedule.	3 d
MODULE 11: TEAM MANAGEMENT & TEAM LEADING Develop deep listening and expression skills. Identify your own behavior style. Providing feedback and getting things done. Assertiveness assessment. Regulate the team and prevent conflict. Mastering a specific regulation tool: the DESC. Situational management. Identifying preferred managing style through co-development. Mentorship, work organization and delegation. Mentorship monitor. Intermediate management.	6 d