

Course Overview:

This is an intensive 5-day course providing a comprehensive overview of pumps and compressor systems. The focus is on equipment selection; type, unit, and station configuration; and integration of these units in the process scheme in upstream and midstream oil and gas facilities.

Course Objective:

- Selecting the appropriate integrated pump and compressors units (drivers, pumps, compressors, and auxiliary systems)
- Evaluating pump and compressor units and their drivers in multiple train configurations, parallel and series
- Identifying the key local and remote control elements of pumps and compressors as well as their drivers
- Defining the major life-cycle events, such as changes in flows, fluid composition, and operating conditions that can affect equipment selection and operating strategies
- Assessing the key pump hydraulics and compressor thermodynamics, and their effect on selection and operations
- Identifying significant operating conditioning monitoring parameters and troubleshooting techniques

Course Outline:

- Types of pumps and compressors
- Types of drivers, and their common applications and range of operations
- Evaluation and selection of pumps and compressors
- Unit and station configuration
- Integration with upstream and downstream process equipment
- Key auxiliary systems including heat exchangers, lube and seal systems, and fuel/power systems
- Installation, operating, troubleshooting, and maintenance considerations

Who Should Attend:

Senior technicians, and system operators , operating, and maintaining pump and compressor systems in oil and gas facilities.

Training Language:

EN / AR

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation