



## **Pumps and Pumping Systems - ME-21**

### **COURSE**

#### **About the Course**

This is an intensive course providing a comprehensive overview of pumps and pumping systems. The focus is on equipment selection; type, unit, and station configuration; and integration of these units in the process scheme and control strategy in upstream and midstream oil and gas facilities. The material of the course is applicable to field production facilities, pipelines, gas plants, and offshore systems.

#### **Target Audience**

Engineers, senior technicians, and system operators responsible for and involved in design, operation, and maintenance of pumping systems in oil and gas facilities.

#### **You Will Learn**

- An in-depth understanding of pumping system hydraulics
- An in-depth knowledge of pump operation and troubleshooting
- Specification and selection of pumps & control systems
- The purpose and intricacies of the various mechanical components used in pumps
- The ability to specify, select and troubleshoot pump mechanical and dry seals.
- The ability to specify and select appropriate drivers for pumps
- Attending and verifying/witnessing pumps tests

#### **Course Content**

- Types of pumps, compressors, and drivers, and their common applications and range of operations
- Evaluation and selection of pumps and compressors, and their drivers for long-term efficient operations
- Unit and station configuration including multiple trains in series and/or parallel operations
- Integration with upstream and downstream process equipment, local and remote control systems, and facilities utilities
- Key auxiliary systems including monitoring equipment, heat exchangers, lube and seal systems, and fuel/power systems
- Major design, installation, operating, troubleshooting, and maintenance considerations

#### **Product Details**

Categories: Midstream

Disciplines: Mechanical Engineering

Levels: Intermediate

Product Type: Course

Formats Available: In-Classroom

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