

Course Overview:

This highly relevant course is intended for all experiences operators and technicians involved in operation and maintenance, and those are responsible for general mechanical, electrical management for maintenance, operation in different aspects of mechanical maintenance or electrical procedures, and persons who are interested to work in chemical , petrochemical and industrial plant area.

Course Objective:

- Understanding the operation information of technical processes and equipment in order to apply suitable techniques and to be familiar with principles of mechanical and electrical.
- Have an overview on the evolution of Electrical concepts ,Mechanical Equipments and Safety Work Standards and its recent advancements

Course Outline:**Day-1**

- Shell and Tube Heat Exchanger Operations
- Shell and Tube Heat Exchanger Problems
- Plate Heat Exchangers
- Condenser Operations

Day-2

- Multistage Centrifugal Pumps
- Single Stage Centrifugal Pump Start-up and Shutdown
- Multistage Centrifugal Pump Start-up and Shutdown
- Preventive Maintenance Measures
- Compressor Instrumentation and Controls
- Compressor Start-up
- Compressor Operation
- Compressors troubleshooting & Maintenance

Day-3

- Electricity
- AC & DC CONCEPTS
- Conductors and Insulators
- Voltage
- Units of Measurements
- Ohms Law
- Common Causes of Circuit Failure
- Alternating Current AC
- Comparison of AC & DC waveforms
- Periodic Time, Cycle & Frequencies

Day-4

- Principles of Furnace
- Types of furnaces
- Control system for furnaces
- Corrosion Prevention & Control

Training Language:

EN / AR

Training Methodology:

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

- Major Components of heaters & furnaces

- Applications of heaters

Day-5

- Distillation Processes & Equipment

- Tower Operating Conditions

- Start-up of distillation Towers

Who Should Attend:

- experiences operators and technicians involved in operation and maintenance

- all those are responsible for general mechanical, electrical, maintenance, operation in different aspects of mechanical maintenance or electrical procedures

- all persons who are interested to work in chemical , petrochemical and industrial plant area.