

# **Operation of Combined Cycle Power Plant**

Date	Venues	(\$)Fees	Book your seat
21 Apr -25 Apr 2024	Istanbul	3300	Register Now

#### Course Overview

The aim of this course is designed to provide a thorough understanding of Steam Power Plants, Gas Turbines, co-generation and combined cycle plants. Each of the components such as compressors, gas and steam turbines, heat recovery steam generators, deaerators, condensers, lubricating systems, transformers, and generators are covered in detail. The selection considerations, operation, maintenance and economics of co-generation plants and combined cycles as well as emission limits, monitoring and governing systems will also be covered thoroughly. All the significant improvements that were made to co-generation and combined cycles plants during the last two decades will also be explained

### Course Objective

This course is designed to provide a thorough understanding of Steam Power Plants, Gas Turbines, co-generation and combined cycle plants. Each of the components such as compressors, gas and steam turbines, heat recovery steam generators, deaerators, condensers, lubricating systems, transformers, and generators are covered in detail. The selection considerations, operation, maintenance and economics of co-generation plants and combined cycles as well as emission limits, monitoring and governing systems will also be covered thoroughly. All the significant improvements that were made to co-generation and combined cycles plants during the last two decades will also be explained

## Who Should Attend?

Operators, engineers, technicians, and administrative personnel of operating facilities as well those who may work in affiliated industries

#### Course Outline

- INTRODUCTION
- THERMODYNAMIC REVIEW
- OPERATING PHILOSOPHY
- GENERAL OPERATOR RESPONSIBILITIES
- BALANCE OF PLANT SYSTEMS REVIEW AND OPERATION
- GAS TURBINE REVIEW AND OPERATION
- HRSG REVIEW AND OPERATION
- STEAM TURBINE REVIEW AND OPERATION
- COMBINE CYCLE STARTUP
- PRE STARTUP REQUIREMENTS
- GAS TURBINE STARTUP
- HRSG STARTUP
- AUTO DRAIN SEQUENCE
- STEAM TURBINE STARTUP
- COMBINE CYCLE STARTUP REVIEW

- COMBINE CYCLE NORMAL OPERATION
- OFF PEAKING OPERATIONS
- GT WATER WASH
- ROUTING TESTING & MAINTENANCE
- COMBINE CYCLE SHUTDOWN
- COMBINE CYCLE STARTUP
- LOAD REJECTION
- LOSS OF LUBE OIL

### **Training Methodology**

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

