

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

Course Outline:

1. INTRODUCTION
2. THERMODYNAMIC PRINCIPLES
3. GAS TURBINES BASIC
4. GAS TURBINE PERFORMANCE
5. LARGE GAS TURBINE
6. ADVANCED GAS TURBINE MATERIALS AND COATINGS
7. INSPECTION AND MAINTENANCE
8. DRY LOW NO_x SYSTEMS
9. STEAM TURBINES

Who Should Attend:

- Power Generation Managers, Engineers, Superintendents, Supervisors, Foremen, Technicians
- Power-house Managers, Engineers, Superintendents, Supervisors, Foremen, Technicians
- Utility Managers, Engineers, Superintendent, Supervisors, Foremen and Technicians
- Distribution Managers, Engineers, Superintendent, Supervisors, Foremen, Technicians.
- Electrical Engineers, Superintendent, Supervisors, Foremen and Technicians
- Mechanical Engineers, Superintendent, Supervisors, Foremen and Technicians

Training Language:

EN / AR

Training Methodology:

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