

Course Overview:

This course of the Energy Generation Operations program is to prepare individuals for high-quality entry-level positions in various energy generation fields.

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, de-aerators, 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:

- Introduction
- Thermodynamic Principles
- Gas Turbines Basic
- Gas Turbine Performance
- Large Gas Turbine
- Advanced Gas Turbine Materials And Coatings
- Inspection And Maintenance
- Dry Low Nox Systems
- 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