Course description

CHP403
Power Plant Process (Combined Cycle Power Plant)

Course goal
The course goal is to give students fundamental knowledge of Combined Cycle Power Plant Process and an overview of functionality and operation of the main components.

Learning objectives
- Describe different types of power plants and layouts
- Component involved in the CCPP and the functionality of the major components
- Understand system dependencies
- Overview and the procedure involved in starting the combined cycle gas turbine plant
- Key performance indicators of the plant

Participants
Sales and technical personnel

Prerequisites
Engineering degree, technical college qualifications or equivalent.
Recommended course: CHP401

Topics
- Open Cycle and Combined Cycle Gas Turbine Plants (Brayton and Rankine Cycle)
- Different Combined Cycle Power Plants (CCPP, ICCP)
- Process overview and main components as gas turbine, HRSG, water steam circuit, steam turbine
- Gas turbine start-up pre-requisites
- Gas turbine start-up steps up to 3000 rpm
- Gas turbine load operation, process behaviour of HRSG and water steam circuit during gas turbine load operation (condenser vacuum pulling, steam bypass operation etc.)
- Gas turbine operation concept
- Start-up pre-requisites for steam turbine rolling
- Steam turbine cold start exercise on the simulator
- CCP Operation and dynamic behaviour

Method
Lectures, demonstrations, exercises on simulator

Duration
2 days

Register
If you would like to enroll please contact us or use the following registration button

Register