

INTRODUCTION TO COMBINED CYCLE POWER PLANT (REF:OTSICCO01)

Course Objectives

To gain an understanding of a Combined Cycle Power Plant.

Course Description

This course is an Introduction to the workings of a Combined Cycle Power Plant

Who Should Attend

This is an essential course for those engineers/technicians in a Combined Cycle Power Plant.

Pre-Requisites

All Attendees should have a sound power generation background.

Course Outcome

At the end of this course you will be able to understand the components of a combined cycle power plant.

Course Outline

Day 1 - Boiler Operations & Steam Turbine

- Introduction
- Steam Properties
- Boiler Operations and Principles
- Basic Thermodynamics of Steam Turbines
- Steam Turbine Types
- Uses of Steam Turbines in Petrochemical Plants
- Steam Turbine Components

Day 2 - Gas Turbines & Generator Control

- Gas Turbine Theory/Principles
- Definition of terms (Heat Rate, Power Output)
- Simple Cycle, Combined cycle
- Major Components of a Gas Turbine
- Compressor Overview
- Combustor Types, Theory and Overview
- Turbine Overview
- Generator Construction and Design
- Stator Construction and Design
- Rotor Construction and Design

Course review and Assessment

