

# COMBINED CYCLE POWER PLANT (REF:OTSCCP001)

## Course Description

This course covers the operations of a Combined Cycle Power Plant. The course will introduce the student to the Major Components of a Combined Cycle and associated systems. Maintenance scheduling, fault finding and rectification will be discussed for the major components and applications found in a Combined Cycle Power Plant.

## Who Should Attend

Engineers and Supervisors.

## 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 how a Combined Cycle Power Plant Works, plan schedule maintenance and have a deeper understanding of the fault finding and rectification on these systems.

## Course Outline

### Day 1 - Industry History and Governance, Generation

Introduction  
Regulatory Regime  
Industry Structure  
Electricity Trading  
Standards & Regulations  
Introduction to Power Generation Systems

### Day 2 - Power Plant Overview

Power Plant Comparisons  
CCGT Plants  
Gas Turbines  
Boilers & HRSG's  
Steam Turbines  
Operational Overview  
CCGT Operational Overview  
CCGT Control and Protection

### Day 3 - Power Plant Operations

Boiler Start up  
Large Steam turbine start up  
Emissions Control  
Why UK moving away from Cyclical time-based maintenance  
Techniques for Condition based maintenance  
Future Developments of the Industry

## Course Review and Feedback

