

# Combustion Control System Course

## Venue Information

---

**Venue:** London UK

**Place:**

**Start Date:** 2026-10-13

**End Date:** 2026-10-17

## Course Details

---

**Net Fee:** £4750.00

**Duration:** 1 Week

**Category ID:** EAPET

**Course Code:** EAPET-3

## Syllabus

---

## Course Description

The course covers the fundamentals of boilers, utility power plants cycles, and combustion. This is followed by a brief tutorial on control theory, then a detailed discussion of combustion control, feedwater control and steam temperature control. The course is ideal for someone involved in all control equipments related to power plant controls, or as a refresher for experienced personnel.

### Course Objectives

This course provides basic knowledge of combustion fundamentals including the burning of fossil fuels, municipal incineration, the burning of solid wastes and catalytic incineration as well as NO<sub>x</sub> and SO<sub>x</sub> emission control systems. The participants successfully completing this course will understand combustion principles and the design parameters influencing the achievement of combustion efficiency.

A scientific calculator is required for these exercises.

### **Course Outlines**

- Review of basic concepts (Physics, Chemistry & Thermodynamics)
- Combustion fundamentals
- Fuel properties
- Formation of air pollutants in the combustion process
- Pollution emission calculation and F-Factor method
- Thermal and catalytic incinerations
- NO<sub>x</sub>/SO<sub>x</sub> control equipment
- Standard Product Line – Applications, Components, Diagnostics, BMS, Combustion Management, Servo Motors, Field Sensors, Start Up, Option Parameters, Fuel profiles, light off programming
- Expanded Product Line – Applications, Components, Diagnostics, O<sub>2</sub> Trim, Variable Speed, Analogue I/O, Lead Lag, Start Up, Option Parameters, Fuel profiles, Alarm Functions
- O<sub>2</sub> Trim System – Application, Installation, Day to Day, Advantages
- Communications Software – ComFire Software, Installation, Plant Monitoring, Trending, Logging, Alarm functions
- Sales Information – Pricing and Selection, Attractive Features, Customer Benefits, Fuel Savings