

# Practical Distribution Transformers – Operation and Maintenance Course

## Venue Information

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**Venue:** London UK

**Place:**

**Start Date:** 2025-12-15

**End Date:** 2025-12-19

## Course Details

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**Net Fee:** £4750.00

**Duration:** 1 Week

**Category ID:** EAPET

**Course Code:** EAPET-52

## Syllabus

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### Course Description

This intensive five-day program focuses on the essential knowledge of power transformers, covering their theory, operation, and maintenance practices. Participants will explore topics such as transformer fundamentals, oil quality testing, dissolved gas analysis, electrical inspections, receipt and acceptance testing, load tap changers, and preventive maintenance strategies. Case-based discussions will also highlight insulation resistance testing, transformer turns ratio (TTR) evaluations, and oil sampling procedures.

### Course Objective

- Understand the operating principles of distribution transformers.
- Identify and compare different types of transformers.
- Examine transformer performance under harmonic conditions.

## Course Outline

- Principles of transformer theory.
- Functions and classifications of transformers.
- Understanding transformer vector groups.
- Losses and efficiency in transformers.
- Parallel operation techniques.
- Power transformer applications and safety considerations.
- Role of transformers within power systems.
- Special design transformers (k-factor units).
- Neutral point earthing in transformers.
- Transformer protection methods.
- Auto-transformers and their applications.
- Oil quality assessment and transformer oil testing.
- Electrical testing standards and evaluation criteria.
- Pole-mounted and pad-mounted transformer types.
- Preventive maintenance techniques for power transformers.