

Electrical Distribution Equipment Operation and Maintenance

COURSE OVERVIEW

This technical course is designed to provide participants with a solid understanding of the operation, inspection, and maintenance of electrical distribution equipment used in industrial, utility, and commercial power systems. The course covers the safe and efficient handling of key components such as switchgears, circuit breakers, transformers, relays, and protective devices.

Through a blend of theory and real-world case examples, delegates will learn how to identify early signs of failure, perform preventive maintenance, and enhance system reliability while adhering to safety and regulatory requirements.

WHO SHOULD ATTEND?

This course is suitable for Electrical Engineers, Plant Operators, Substation Technicians, Maintenance Engineers, Facility Managers, Utility Supervisors, and professionals responsible for the performance and safety of electrical distribution systems.

COURSE OUTCOMES

Delegates will gain knowledge and skills to:

- Understand the design and function of key distribution system components
- Operate distribution equipment safely and in compliance with industry standards
- Develop and implement preventive and predictive maintenance schedules
- Troubleshoot faults and restore systems with minimal downtime
- Ensure system protection through the proper coordination of relays and breakers
- Increase equipment lifespan and energy efficiency through best practices

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand:

- Overview of electrical distribution systems and load flow
- Operation of MV/LV switchgear, circuit breakers, and disconnects
- Transformer and relay maintenance best practices
- Common failure modes and diagnostic tools
- Electrical safety protocols and arc flash risk reduction
- Preventive vs. predictive maintenance planning
- Hands-on case studies of equipment inspection and fault resolution
- Compliance with IEC/IEEE standards and utility codes

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded