

# **Power Plant System Protection and Maintenance**

#### **COURSE OVERVIEW**

This comprehensive course is designed to provide participants with a deep understanding of the principles, practices, and technologies involved in the protection and maintenance of power plant systems. The course covers electrical, mechanical, and control systems, focusing on ensuring the reliability, safety, and efficiency of power generation facilities. Participants will learn about the latest industry standards, diagnostic tools, and maintenance strategies to minimize downtime and optimize plant performance.

#### WHO SHOULD ATTEND?

The course is designed for diverse professionals in the energy sector like power plant engineers, technicians, and operators responsible for maintaining and protecting power generation systems. It is also beneficial for electrical engineers, protection specialists, and utility professionals involved in power distribution, transmission, and grid stability. Facility managers, industrial plant supervisors, and HSE officers seeking to enhance their expertise in power system maintenance and protection strategies, overseeing energy systems and ensuring regulatory compliance will also find this course highly relevant.

### **COURSE OUTCOMES**

Delegates will gain knowledge and skills to:

- Explain power plant systems, components, and their interrelationships.
- Identify and apply protection schemes to prevent faults and disturbances.
- Develop and manage maintenance strategies for power plant systems.
- Use diagnostic tools for system monitoring and fault detection.
- Apply safety protocols and regulatory requirements in power plants.
- Diagnose and resolve operational issues using troubleshooting methods.
- Analyze case studies to extract best practices for plant operations.
- Collaborate with teams to improve system performance and reliability.

## **KEY COURSE HIGHLIGHTS**

At the end of the course, you will understand:

- Comprehensive Overview of Power Plant Systems
- Protection Schemes & Fault Prevention
- Maintenance Strategies
- Diagnostic Tools & Techniques
- Safety & Regulatory Compliance
- Troubleshooting & Problem-Solving
- Case Study Analysis
- Team Collaboration & Best Practices

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











