GTC Transforming Emerging Economies
GTC Training Consulting Group Ltd,
22 Kumasi Crescent,
Off Aminu Kano Crescent,
Wuse 2, Abuja.
Tel: +234(0) 9056761232
Email:enquiries@thegtcgroup.com
Web:www.thegtcgroup.com

Power Systems Protection, Control & Metering

COURSE OVERVIEW

This course provides an essential introduction to power systems protection, control, and metering, covering fundamental concepts and practical applications. The course curriculum includes design and coordination of protection schemes for transformers, generators, lines, and buses. It addresses metering principles, control mechanisms, and automation technologies to enhance power system reliability and safety. Participants will learn about protective devices, relay operations, fault detection, and system stability to safeguard power networks.

WHO SHOULD ATTEND?

This course is essential for protection engineers, power systems engineers, utility technicians, renewable energy integration specialists, and grid operations personnel involved in designing, maintaining, or operating protection and control systems for electrical transmission, distribution, and generation facilities.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Design and coordinate protection schemes for generation, transmission, and distribution systems.
- Configure and commission protective relays and intelligent electronic devices.
- Implement and maintain advanced metering infrastructure and SCADA systems.
- Analyze power system faults and determine appropriate protection responses.
- Integrate renewable energy sources into existing protection and control systems.
- Develop cybersecurity measures for protection and control infrastructure.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Protective relay principles and coordination methodologies.
- Fault calculation techniques and protection response analysis.
- SCADA systems and grid automation technologies.
- Smart metering infrastructure and data management.
- Protection challenges for renewable energy integration.
- Cybersecurity protocols for protection systems.
- Testing and commissioning of protection equipment.

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