

# **Electrical protection for power**

Date Venues (\$)Fees Book your seat

25 Feb -29 Feb 2024 Cairo 2900 Register Now

#### **Course Overview:**

- The continuity of Electrical Power Supply is very important to the consumers specially, for industrial sector where the curtail of electrical power supply is costly.
- It is important to take the necessary action to prevent the faults, and If they do occur, to minimize possible damage or possible power disruption. A protection system continuously monitors the power system to ensure maximum of electrical supply with minimum damage to life, equipment and property.

## Course Objective:

- Knowing the fault reasons in electrical networks and Its effect on the electrical quantities.
- Reviewing the Grounding System of generation, Transmission and Distribution Networks and how it affects the electrical quantities, short circuit level and protection system.
- Understanding main concepts of protection equipment and its necessity in electrical System.
- How to make relay coordination for main and back-up protection relays on lke network.
- How to find the cause of relay operation and verify if it is correct, falls or mal operation
- How to protect the power system due to up normal operational conditions.

#### **Who Should Attend?**

• This course is intended for Electrical Engineers & Supervisors, who work in operation, maintenance, protection, control and analysis of Utilities & Industries Electrical Networks.

### **Course Outline:**

- Introduction to Power System Relaying (PSR)
- Overview:
- Fuses
- Measuring Transformers (VTs & CTs)
- Protective Relays
- Relay Coordination
- Differential Relays (D.R.)
- Impedance Relays
- Under Frequency Protection (U/F.P.)
- Over Voltage protection (0/V.P.)
- Applications & Case Studies
- Motor Protection
- Synchronous & asynchronous Motors
- Substation Protection
- Transmission lines Protection
- Distribution Protection

#### **Training Methodology:**

- · Presentation & Slides
- Audio Visual Aids

- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation

