

Course Overview:

Protection is applied on a component basis. Relays are associated with each major component of the power distribution system to detect various forms of distress associated with those components. If one of those relays operates, which means that an output contacts protective device which then isolates the defective system components. It may be convenient to think of the circuit breaker as the muscle that does the work of isolating the component, while the relay is the brain which decides that isolation is required.

Course Objective:

- Know the nature of different types of electrical faults and the effect these faults
- Understand electrical fault protection systems
- Have a comprehensive understanding of principles and selection of protection relays
- Understand the different methods of short circuit calculations
- Analyse the load flow study results.
- Explain types grounding system and earthing fault protection

Course Outline:

- Types Of Electrical Protection Devices And Faults
- Characteristics Of Fuses For Electrical Protection
- Characteristics Of Circuit Breakers For Electrical Protection
- Protection Functions And Instrument Transformers
- Busbar Protection
- Transformer Protection
- Motor Protection
- Capacitor Protection
- Type Of Related Faults
- Relevant Protection Functions
- Grounding Systems And Earth Fault Protection
- Methods Of Calculating Short Circuit Current And Harmonics
- Power Flow Analysis
- Coordination Of Electrical Protection Systems

Who Should Attend:

Electrical Engineers, Highly Qualified Technicians those working in Operation and Maintenance of Electrical Networks. Also, Engineers and Technicians those working in Protection of Electrical Networks.

Training Language:

Eng/Ar

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation