Course Overview:

Protection of the Relay requires an understanding of system faults and their detection, as well as their reliable safe isolation from the system. This course presents comprehensive and systematic descriptions of the concepts and principles of application and operation of protection and relaying schemes applied for various power system elements. In addition, the course enforces the concepts by presenting several actual case studies occurred on the relay. The course will be valuable to engineers and technicians just entering the protective relaying and relay protection field and those seeking a better understanding of the new state-of-the-art numerical relaying.

Course Objective:

This course is designed to review for the participant the fundamental concepts of protective relaying, relay protection using symmetrical components. It advances to important issues regarding the protection, of transformers, generators, transmission lines, breaker failures, buses, motors and shunt capacitors.

Course Outline:

- Introduction And General Philosophies
- Technical Tools Of The Relay Engineer: Phases, Polarity, And Symmetrical Components
- Basic Relay Units
- Protective Relay Principles
- Protection Against Transients And Surges
- Instrument Transformers For Relaying
- Microprocessor Relaying Fundamentals
- Generator Protection
- Motor Protection
- Protective Relay Principles And Application

Who Should Attend:

The course curriculum is designed for electric power utility engineers, technicians and designers involved in the control, operation, and protection of electric power systems. It is also intended for consulting and manufacturing engineers as well as engineers with protective relaying relay supply companies.

Training Language:

EN / AR

Training Methodology:

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