

**Course Overview:**

Circuit breakers play an important role in the safe distribution of electrical power. The equipment needs to be operated, maintained and installed in a safe manner securing continuity of supply to consumers. This course focuses mainly on the operation and maintenance of circuit breakers.

**Course Objective:**

- Identifying principles of engineering service electrical substation equipment
- Explaining Switchgear items and functions
- Describe Different forms of circuit breakers connections in electrical networks
- Describe Forming different types of circuit breakers
- Identifying Automatic operation consideration of circuit breakers and prevent faults in circuits
- Explaining Modes of uses stages in circuits and the effect of the short circuits
- Explaining Modes of Arc extinction by circuit breakers
- Explaining Modes of standard tests in circuit breaker
- Explaining Mobile measuring and test equipment of circuit breakers (Dabble)
- Complying with Measuring equipment of constant resistance of connectors
- How to prepare the reports of the technical state of circuit breaker
- How to test the SF6 isolating gas

**Course Outline:**

- Introduction
- Engineering Service For Substation's Electrical Equipment
- Definitions, Construction And Jobs Of Switch Gear Items
- Operation And Consideration Of Switch Gear
- Different Forms Of Substations
- Different Forms And Construction Of Circuit Breakers
- Automatic Operation Consideration Of Circuit Breaker
- Relay's Types And Transient Currents
- Modes Of Arc Extinction In A.C Circuit Breaker
- Rated Characteristics. Of H.V. – A.C Circuit Breaker
- Circuit Breaker Various Tests
- Dabble Circuit Breaker Tests Equipment Tr3000
- D-C Resistance Measurements By Crd100-X Set
- Sf6 Moistures Content At C.B. By Dilo Set
- Practical Implementation Of The Various Tests
- How Determine The C.B. Technical State

**Who Should Attend:**

This course is intended for engineers and technicians from substation, distribution station, power utilities, transmission and maintenance in electricity companies. Participants need no specific requirements other than basic understanding of electrical equipments in his work area to gain maximum.

**Training Language:**

EN / AR

**Training Methodology:**

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