

## Course Overview:

The aim of this course is as below:

- 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
- Complying with Measuring equipment of constant resistance of connectors

## Course Objective:

- 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
- Complying with Measuring equipment of constant resistance of connectors
- How to prepare the reports of the technical state of circuit breaker

## Course Outline:

1. INTRODUCTION
2. ENGINEERING SERVICE FOR SUBSTATION'S ELECTRICAL EQUIPMENT
3. DEFINITIONS, CONSTRUCTION AND JOBS OF SWITCH GEAR ITEMS
4. OPERATION AND CONSIDERATION OF SWITCH GEAR
5. DIFFERENT FORMS OF SUBSTATIONS Circuit breakers connectionsConsideration for bus bar schemesRecommended bus bar schemes
6. DIFFERENT FORMS AND CONSTRUCTION OF CIRCUIT BREAKERS
7. AUTOMATIC OPERATION CONSIDERATION OF CIRCUIT BREAKER
8. RELAY'S TYPES AND TRANSIENT CURRENTS
9. PRACTICAL IMPLEMENTATION OF THE VARIOUS TESTS
10. 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