Credits: 4:0:0

Course Objective:
• To understand the principle of protective schemes and various faults in the Power System Scenario.
• To examine protection of power system with various protection relays.
• To study the various types of the circuit breakers, the arc quenching phenomena and the protection against over voltages.

Unit I

Unit II

Unit III

Unit IV

Unit V
Earthing and Insulation Co-Ordination: Solid, resistance and reactance Earthing - Arc suppression coil - Earthing transformers – Earth wires - Earthing of appliances- Insulation co-ordination: Definition - Determination of line insulation - Insulation levels of sub-station equipment - Co-ordination amongst items of substation equipment - Introduction to Indian Electricity rules.

Course Outcome:
At the end of the Course the student would be able to:
• Design the relevant protection systems for the main elements of a power system.
• Analyze with over current, differential, and ratio protection devices and their application in a coordinated protection scheme.
• Do the stability problems and clearing of faults to mitigate these problems.

**Text Books:**

**Reference Books:**