

Course Overview:

This course is aimed at introducing the power-substation layout and design to utility and industrial engineers. The course will cover substation layout, design, grounding and protection. The course will be supported by practical design examples.

Course Objective:

To improve the skills of engineers involved in design, operation and maintenance of electric power substation. A degree in electrical engineering is recommended to gain maximum benefit from the course

Course Outline:

- Introduction
- Power Systems
- Substations of Voltages 230 kV and Above
- Substation Busbars
 - Substations of Voltages up to 220 kV
- Transformer, Reactors and Regulators Transformers
- Reactors
- Regulators
- Outgoing and Incoming Overhead Lines
- Tower Selection
 - Substation Grounding
- Zones of Protection
- Circuit Breakers
- Reclosers, Sectionalizers and Fuses
 - Lightning Protection

Who Should Attend:

Engineers involved in design, operation and maintenance of power substations. A degree in electrical engineering is recommended to gain maximum benefit.

Training Language:

EN / AR

Training Methodology:

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