

**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 Components
- H.V Substations Up To 220 Kv
- Transformers
- Reactors
- Regulators
- Outgoing And Incoming Overhead Lines
- 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