

**Course Overview:**

With the ever-increasing demand of electric energy, existing distribution systems grow and expand. As well, new systems are constructed in the new developing residential, industrial and agricultural areas. Consequently, distribution system engineers are in continuous need to develop their capabilities to plan new networks as well as existing networks expansions, based on the most recent planning bases and methodologies.

**Course Objective:**

This course is devoted to develop the qualifications of Utilities Electrical Power Engineers to be capable of proper distribution system planning. This enables the engineers to develop plans for existing networks rehabilitation and expansion. As well, they will be capable of proper planning of the distribution networks in newly developing areas in the manner that these networks can supply the present and future loads at the standard voltages with the highest efficiency and supply reliability.

**Course Outline:**

- Introduction
- Planning Concepts And Technologies
- Load And Energy Forecasts
- Heat Exchangers
- Planning Of Overhead Lines Networks
- Electrical Safety
- Planning Of Underground Cables Networks
- Optimum Selection Of Network Elements
- Design Principles
- System Reliability
- Network Performance Improvements.

**Who Should Attend:**

In general, electrical power engineers can take part in this course, preferably, those engineers who have experience in distribution systems operation and maintenance. Design and projects engineers should take part.

**Training Language:**

EN / AR

**Training Methodology:**

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