

**Course Overview:**

A comprehensive overview of the overhead power network along with its structure was dedicatedly elaborated on. For decades, power has been transmitted via a relatively low cost medium, commonly known as overhead lines. Since then, substantial transformations have been occurring to improve the reliability of overhead networks. A load flow technique is often employed to analyze and design an improved overhead power network. An overview of overhead power networks has also been extensively further explored in this research. Various conductors used in overhead lines have also been discussed

**Course Objective:**

- Understanding the abnormal phenomena which affect the high voltage networks and overhead transmission lines.
- To know the abnormal conditions which cause rising of voltage on the network elements and how to mitigate it.
- To know about the conversion technologies.
- To understand the calculations and design of super tension cables

**Course Outline:**

- Introduction.
- High Voltage Overhead Network
- Loads And Energy Forecasting
- Load Flow
- The Use Of Super Tension Cable
- Transfer Power Along Power Lines From Power Stations Into Urban Areas
- Power Cables.
- Hv Cables Power Transmission
- Hv Cables Design And Constructions
- Cable Fault Location.
- Analyzing The Fault.
- Common Defects In Cables And Maintenance
- Power Cable Testing.
- Testing Hv Cables Standard And Procedures
- Dissipation Factor Test
- Cable Tracing And Splice Locating.
- Conversion Technologies

**Who Should Attend:**

This course is intended for electrical engineer, technicians, field engineers, supervisors who are work in operation, maintenance, control and analysis of utilities and industrial electrical networks.

**Training Language:**

EN / AR

**Training Methodology:**

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