

# ELECTRICAL COURSES

## POWER DISTRIBUTION SYSTEM GROUNDING AND TRANSIENTS (E93AE)

### OBJECTIVE:

The objective of this course emphasizes distribution systems. Substation grounding is also covered because, in most cases, faults in substations determine the maximum transferred ground potential to distribution system grounds.

### WHO SHOULD ATTEND?

This course is designed for electric power utility engineers, consultants, and system designers involved in the design of power distribution installations and operations. It is also intended for consulting and manufacturing engineers, as well as engineers with equipment supply companies for industrial systems.

### COURSE CONTENT:

- Basic Concepts
- Grounding Practices
- Ground Potential Rise Calculations
- Safety Standards
- Computer Based Design
- Soil Modeling
- Ground Measurements
- Distribution System Transients
- Propagation of Transients through Grounds
- Fault Detection and Isolation

**Duration: 5 Days**

Date:	Venue:	Cost:
Mar 1 – 5	Dubai	SR8,000
May 31 – Jun 4	Qatar	SR8,000
Jul 19 – 23	Sharm El-Shaikh	SR8,000
Dec 27 - 31	Jubail	SR7,000

## POWER FLOW ANALYSIS (E103AE)

### OBJECTIVE:

The course is designed to provide the participants with understanding of the theory of load flow studies, power system elements, complex interconnected network and power flow analysis.

### WHO SHOULD ATTEND?

Consultants engineers, field engineers, application engineers, design engineers, supervisors and electrical engineers from generation, transmission and distribution systems.

### COURSE CONTENT:

- Characteristics influencing generation and transmission
- Nature of transmission and distribution systems
- Forecasting T&D load
- Overview of economic operation functions
- Characteristics of power generating unit
- Formulation of the economic dispatch problems
- Power flow studies
- Unit commitment
- Optimal preventive and corrective actions
- Fault analysis
- Disturbances in power system
- Electricity deregulation
- Harmonics in power systems

**Duration: 5 Days**

Date:	Venue:	Cost:
Jan 5-9	Dubai	SR8,000
Feb 23-27	Jubail	SR7,000
Jun 14-18	Sharm El-Shaikh	SR8,000
Nov 29-Dec 3	Qatar	SR8,000