

# ELECTRICAL COURSES

## ADVANCED PROTECTIVE RELAYS (E69AE)

**OBJECTIVE:**

The course addresses the philosophy and technical tools of relay engineers. The different protective relaying schemes are introduced along with instrument transformers for relaying.

**WHO SHOULD ATTEND?**

All electrical engineers are invited to attend this course. Operation, Control and Planning Engineers are strongly recommended to attend this course.

**COURSE CONTENT:**

- Introduction and General Philosophies
- Technical Tools of the Relay Engineer: Phasors, Polarity, and Symmetrical Components.
- Protection Against Transients and Surges
- Microprocessor Relaying
- System Grounding and Protective Relaying
- Generator Protection
- Motor Protection
- Transformer and Reactor Protection
- Station-Bus Protection
- Load Shedding and Frequency Relaying

**Duration: 5 Days**

Date:	Venue:	Cost:
Mar 1 – 5	Qatar	SR8,000
May 17 – 21	Jubail	SR7,000
May 31 – June 4	Dubai	SR8,000
Jul 19 - 23	Sharm El-Shaikh	SR8,000

## AUTOMATIC VOLTAGE REGULATOR (E84AE)

**OBJECTIVE:**

This seminar is designed to provide information relating to automatic voltage regulators.

**WHO SHOULD ATTEND?**

This course is recommended for engineers and supervisors with basic experience in the field of automatic voltage regulators.

**COURSE CONTENT:**

- Transformer Types and Operation
- Voltage Regulator Tapcon 230
- Parameter Setting
- Tap Changer Operation
- Operating Mechanism
- Tapcon 230 Installation
- Measuring Instruments Current Transformer and Voltage Transformer
- Digital Multifunction Meter

**Duration: 5 Days**

Date:	Venue:	Cost:
Mar 29 – Apr 2	Dubai	SR8,000
May 3 – 7	Qatar	SR8,000
Jun 21 – 25	Sharm El-Shaikh	SR8,000
Nov 22 - 26	Jubail	SR7,000