

ELECTRICAL COURSES

TRANSFORMER PROTECTION (E29A)

OBJECTIVE:

This course is designed to provide the participants with detailed theoretical and practical information about all elements of transformer protection systems.

WHO SHOULD ATTEND?

This course is very efficient for electrical technicians and engineers who work in the protection field and need to get advanced knowledge in transformer protection.

COURSE CONTENT:

- Transformer Construction and Operating Principles.
- Nature and Effects of Transformer Faults.
- Magnetizing Inrush Current.
- Over Temperature Protection.
- Gas Actuating (Buchloze), Sudden Pressure, and Pressure Relief Devices.
- Over Current Protection.
- Earth Fault and High Impedance Restricted
- Earth Fault Protection.
- Differential Protection.
- Over Flux Protection.
- Tank Earth Protection.
- Auto Transformer Protection.

PRACTICAL TASKS:

- Testing of differential relay.
- Testing of over current relay.
- Testing of earth fault relay.
- Testing of Buchloze relay.

Duration: 5 Days

Date:	Venue:	Cost:
Mar 21-25	Dammam	SR7,000
Jul 18-22	Dammam	SR7,000
Nov 28-Dec 2	Abha	SR 8,000

TRANSFORMER TESTING AND MAINTENANCE (E5A)

OBJECTIVE:

This seminar is designed to provide information on the fundamentals of transformer maintenance and testing. The major emphasis will be on liquid filled power transformers as well as dry type transformers.

WHO SHOULD ATTEND?

This program is recommended for experienced electrical technicians, supervisors and engineers involved with the operations and maintenance of transformers.

COURSE CONTENT:

- Electrical Safety in Industrial Plants
- Transformer Types
- Components and Indicators
- Name Plate Data
- Inspections
- Insulating Liquid Sampling
- Transformer Insulating Liquid Testing
- Gas Sampling
- AC & DC Testing of Transformers
- Filling and Filtering
- Drying

PRACTICAL TASKS:

- Megger test
- Resistance test
- Transformer Turns Ratio Test (TTR)
- Oil test
 - dielectric test, ppm test
 - acidity test
 - power factor test
 - color test
- Demonstration of oil purification system

Duration: 5 Days

Date:	Venue:	Cost:
Apr 11 – 15	Dammam	SR7,000
Jul 25 – 29	Jubail	SR 8,000
Dec 26 – 30	Dammam	SR7,000