



**GCC Electrical
Testing Laboratory**
المفتبر الفليبي لفمص الممعات الكهريانية

Electrical System and Protections

Distribution networks are widely used also in industrial factories, beyond the usual distribution network operated by utilities. Protection rules knowledge is fundamental to maintain the network fully operating.



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Education
Course Code: **M08**



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JULY
1 - 5
2018



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المفتبر الفليبي لفمص المصمدم الكهربلانفة

Objectives

To familiarize with the calculation of the short circuit currents and the protection relays

Addressed to:

Engineers Operating in the Maintenance of Industrial or Electrical Distribution Networks

Duration:

3 Full Days

Location/Venue:

GCCIA HQ, Dammam

Course Fees:

PROGRAM

Electrical System and Protections

The Course program contains the following training outline:

DAY 1

Electrical systems

- a. Basic definition of electrical system and its main parameters
- b. Basic components of a distribution network
- c. Design criteria of the main system parameters
- d. ground and earthing systems
- e. Typical faults in distribution networks
- f. Component tripping

DAY 2

Cable Systems

- a. Electrical field in cable systems
- b. Thermal stress
- c. Temperature limits
- d. Cable earthing
- e. Mechanical characteristics
- f. Problems in cable laydown
- g. Fire behavior
- h. Cable accessories
- i. electrical field control
- j. Cable termination technology
- k. Available joints

DAY 3

Practical Exercise in Cable Jointing

- a. Tools and calculation criteria
- b. technique of preparation
- c. in field mounting environmental condition
- d. heat shrink, cold shrink

