





## COURSE SPECIFICATIONS (2010-2011)

**Benha University**

**Faculty of Engineering at Shobra**

**Electrical Engineering Department**

- a.18) Theories and techniques for calculating short circuit, motor starting and voltage drop.  
a.19) Diverse applications of electrical equipment.

### **b- Intellectual Skills**

- b.13) Identify and formulate engineering problems to solve problems in the field of electrical power and machines engineering.  
b.14) Analyze design problems and interpret numerical data and test and examine components, equipment and systems of electrical power and machines.

### **c- Professional and Practical Skills**

- c.2) Professionally merge the engineering knowledge, understanding, and feedback to improve design, product and/or services.  
c.11) Exchange knowledge and skills with engineering community and industry.

### **d- General and Transferable Skills**

- d.3) Communicate effectively  
d.9) Refer to relevant literatures.

### **3- Contents**

No.	Topic	No. of hours	ILO's	Teaching / learning methods and strategies	Assessment method
1	Characteristics of current transformers	4	a3, a18, a19, b13, b14, c2, c11, d3, d9	Practical training / laboratory, Assignments / homework	Home Assignments, Quizzes, Oral Exam, Practical training
2	Characteristics of reversed time stabilizer in over-current protection (scale, adjusting, undetermined minimum point)	4	a3, a18, a19, b13, b14, c2, c11, d3, d9	Practical training / laboratory, Assignments / homework	Home Assignments, Quizzes, Oral Exam, Practical training
3	Characteristic and adjusting the differential protection, characteristics of different types of distance protections	4	a3, a18, a19, b13, b14, c2, c11, d3, d9	Practical training / laboratory, Assignments / homework	Home Assignments, Quizzes, Oral Exam, Practical training





## COURSE SPECIFICATIONS (2010-2011)

Benha University

Faculty of Engineering at Shobra

Electrical Engineering Department

14	charatrstics for thyrastores and UJT	4	a3, a18, a19, b13, b14, c2, c11, d3, d9	Practical training / laboratory, Assignments / homework	Home Assignments, Quizzes, Oral Exam, Practical training
15	<b>Final Exam</b>				
16					

### 4- Teaching and Learning Methods

Practical training / laboratory

### 5- Student Assessment Methods

Assignments to assess knowledge and intellectual skills.

Quiz to assess knowledge, intellectual and professional skills.

Mid-term exam to assess knowledge, intellectual, professional and general skills.

Oral exam to assess knowledge and intellectual skills.

Final exam to assess knowledge, intellectual, professional and general skills.

### Assessment Schedule

Assessment 1 on weeks 2, 5, 9, 11

Assessment 2 Quizzes on weeks 4, 6, 10, 12

Assessment 3 Mid-term exam on week 8

Assessment 4 Oral Exam on week 14

Assessment 5 Final exam on week 15

### Weighting of Assessments

05% Home assignments

05% Quizzes

10% Mid-term examination

20% Oral examination



## COURSE SPECIFICATIONS (2010-2011)

**Benha University**

**Faculty of Engineering at Shobra**

**Electrical Engineering Department**

60% Final-term examination  
100% Total

### 6- List of References

Course notes

Course notes prepared by instructor.

Essential books

Recommended books

### 7- Facilities required for teaching and learning

Lecture room equipped with overhead projector

Presentation board, computer and data show

Laboratory

**Course coordinator:** Prof. Dr. Hassan Abd El-Aziz Mansour

**Course instructor:** Prof. Dr. Hassan Abd El-Aziz Mansour

**Head of Department:** Prof. Dr. Mousa Abd-Allah

Date: 1/1/2012

وحدة ضمان الجودة