



COURSE SPECIFICATIONS (2011-2012)



Benha University Faculty of Engineering at Shobra Electrical Engineering Department

A- Basic Information

Course Title: Electrical testing (2) **Code:** EPE121
Lecture: - **Tutorial:** - **Practical:** 4 **Total:** 4
Program on which the course is given: B.Sc. Electrical Engineering (Power)
Major or minor element of program: N. A.
Department offering the program: Electrical Engineering Department
Department offering the course: Electrical Engineering Department
Academic year / level: first Year / second Semester
Date of specifications approval: 10/5/2006

B- Professional Information

1- Overall aims of course:

By the end of the course the students will be able to:

- i. Understanding of basic principles of electronics.
- ii. To provide students with a sound understanding of modern logic circuits.

2- Intended learning outcomes of course (ILOs)

By completion of the course, the student should be able to:

Graduating engineers should demonstrate knowledge and understanding of the following:

a- Knowledge and Understanding:

A2-Fundamental concepts, principles, theories and applications of basic engineering / electrical engineering courses.

b- Intellectual Skills

b2-Use of scientific principles in development of engineering and/or electrical engineering solutions to practical problems.

c- Professional Skills

c4-Proper use of workshop, laboratory and measuring equipment to generate valuable data.

d- General and transferable Skills

- d.1) Collaborate effectively within multidisciplinary team.
- d.2) Work in stressful environment and within constraints.
- d.3) Communicate effectively.

3- Contents



COURSE SPECIFICATIONS (2011-2012)



Benha University Faculty of Engineering at Shobra Electrical Engineering Department

Topic No.	Topic	No. of Hours	ILO,s	Teaching and learning methods	Assessment
1	1- Experiments: Fundamentals of Electronics	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
2	1- Experiments: Fundamentals of Electronics	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
3	2- Logic Circuits.	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
4	2- Logic Circuits.	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
5	3- Measuring & Testing devices	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
6	3- Measuring & Testing devices	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
7	3- Measuring & Testing devices	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
8	4- Methods of Measuring	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
9	4- Methods of Measuring	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
10	5- Methods of Testing Soft wares.	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
11	5- Methods of Testing Softwares.	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes



COURSE SPECIFICATIONS (2011-2012)



Benha University Faculty of Engineering at Shobra Electrical Engineering Department

12	5- Methods of Testing Soft wares.	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
13	6-Components identifications.	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
14	6-Components identifications.	4	A2,b2, c4	Practical, training, Class activity, Case study, Assignments / homework	Practical work, oral, examination, quizzes
Total		56			

4- Teaching and learning methods

Lectures
 Practical training
 Class activity
 Case study
 Assignments / homework

5- Student assessment methods

Assignments to assess knowledge and intellectual skills.
 Quizzes.
 Mid-term exam.
 Oral exam.
 Final exam.

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 Practical and 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% Practical and Oral examination
 50% Final-term examination
 100% Total

6- List of references

Course notes
 Course notes prepared by instructor.

6.1- Course Notes by

6.2- Required Books (Text Books)



COURSE SPECIFICATIONS (2011-2012)



Benha University Faculty of Engineering at Shobra Electrical Engineering Department

6.3- Recommended Books

6.4- Periodicals, Web Sites, ... etc

7- Facilities required for teaching and learning

Lecture room equipped with overhead projector
Presentation board, computer and data show

Course coordinator: Prof. Dr. Nagat Abdelgawad

Course instructor: Prof. Dr. Nagat Abdelgawad + A. Prof. Dr. Nasser Buomy

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

Date: March 20, 2012