



COURSE SPECIFICATIONS (2011-2012)

Benha University

Faculty of Engineering at Shobra

Electrical Engineering Department

b.15) Analyze the performance of digital and analog communication, mobile communication, coding and decoding systems.

c- Professional and Practical Skills

c.12) Prepare and present technical reports.

c.15) Use relevant laboratory equipment and analyze the results correctly.

c.16) Troubleshoot, maintain and repair almost all types of electronic systems using the standard tools.

d- General and Transferable Skills

d.10) Write technical reports and presentation.

d.11) Share ideas and communicate with others according to the rules of professional ethics.

d.12) Develop skills related to creative and critical thinking as well as problem solving.

3- Contents

No	Topic	No. of hours	ILOs	Teaching / learning methods and strategies	Assessment method
1	Basic Active filters	4	c15	Practical training / laboratory	Assignments, Oral exam
2	Basic Active filters	4	c15	Practical training / laboratory	Assignments, Oral exam
3	phase locked loop circuits	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
4	phase locked loop circuits	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
5	frequency synthesizers	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam



COURSE SPECIFICATIONS (2011-2012)

Benha University

Faculty of Engineering at Shobra

Electrical Engineering Department

6	frequency synthesizers	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
7	sampling and encryption	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
8	Mid term exam				
9	sampling and encryption	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
10	TDMA	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
11	TDMA	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
12	TDMA	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
13	FDMA	4	a10, a18, b14, b15, c12, c15, c16, d10,	Practical training / laboratory	Assignments, Oral exam



COURSE SPECIFICATIONS (2011-2012)



Benha University

Faculty of Engineering at Shobra

Electrical Engineering Department

			d11, d12		
14	FDMA	4	a10, a18, b14, b15, c12, c15, c16, d10, d11, d12	Practical training / laboratory	Assignments, Oral exam
15	Final exam				
16					

4- Teaching and Learning Methods

Practical training / laboratory
Class activity
Assignments / homework

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



COURSE SPECIFICATIONS (2011-2012)



Benha University

Faculty of Engineering at Shobra

Electrical Engineering Department

Weighting of Assessments

- 05% Home assignments
- 05% Quizzes
- 10% Mid-term examination
- 20% Oral examination
- 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: Dr. Ashraf M. Hafez

Course instructor: Dr.

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

Date: 1/1/2012

وحدة ضمان الجودة