

EC544 Antenna Engineering**C O U R S E I N F O R M A T I O N**

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laboratory	
EC443	5	10	2	2	2	3

C O U R S E A I M

The course aims at introducing the student to the basic concepts of many shapes of antennas and antenna applications..

C O U R S E W E E K L Y C O N T E N T S

- 1** Linear array theory: uniform linear arrays (two-element and N-elements arrays)
- 2** types of uniform linear arrays (broadside- end fire- electronic scanning).
- 3** Non uniform linear arrays (binomial- Chebycheff)- planar array
- 4** circular arrays.
- 5** Planar arrays
- 6** Aperture on conducting and on free space
- 7** 7th week evaluation.
- 8** circular Aperture on conducting and on free space
- 9** Horn antennas- E-sectoral- H -sectoral - and pyramidal horns
- 10** Parabolic reflectors
- 11** Loop antennas
- 12** 12th week evaluation
- 13** Travelling wave antenna
- 14** Rohmbatic antenna
- 15** Introduction on Patch antenna

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	20 Midterm	←	1 0	M A R K S		→	30
8 to 12	←		2 0	M A R K S		→	20
13 to 15	←		1 0	M A R K S		→	10
16 or 17	40 Final						40
Total	Exams	Assign.	Quizzes	Reports	Present.	Lab.	100

R E F E R E N C E S

Textbook Consanten balanis 4th edition