EC443 **Electromagnetic Transmitting Media**

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	
EC442	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 TEM waves , smith charts and circular cavity.

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

1	Transmission line
2	Types- parameters
3	voltage and current equations
4	matched and mismatched lines
5	Use of Smith chart- single- double- and triple stub matching.
6	Multiple reflection of EM waves between infinite parallel plates- rectangular waveguides
7	7th week evaluation.
8	TE and TM modes. Cutoff frequency and propagation parameters. Power transmitted
9	wall losses
10	dielectric losses s.
11	Circular waveguides- TE and TM modes. Cutoff frequency and propagation parameters. Power transmitted- wall losses-and dielectric losses..
12	12th week evaluation
13	Power transmitted- wall losses-and dielectric losses
14	Cavity resonators.
15	Circular cavity

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	**20 Midterm**	←	1 0 M A R K S To be freely distributed among possible assessments			→	**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 Pozar 3 rd edition