BA325 Mathematics VI

COURSE INFORMATION

Prerequisites		Academic Year & Level		Teaching Methods			Credit Hrs.
		Year	Semester	Lecture	Tutorial	Laboratory	
BA224	-	3	6	2	2	0	3

COURSE AIM

This course provides an introduction to theory of probability and random processes without burdening the student with a great deal of measure theory. The course helps to build up the important Skills necessary for understanding, analyzing and solving problems

COURSE WEEKLY CONTENTS

1	Elementary Probability- Probability theorems
2	Conditional probability --Independent and dependent events
3	Total probability rule – Baye's Theorem
4	enumeration methods
5	Discrete probability distribution – probability mass function
6	Continuous probability distribution – probability density function
7	Mathematical expectation, moments , mean and variance- **Midterm Exam**
8	Special discrete distribution: Bernoulli , Binomial , Geometric and Poisson distributions
9	Special continuous distribution: Uniform and exponential distribution
10	Special continuous distribution: normal distribution
11	Discrete joint probability distribution
12	Continuous joint probability distribution
13	Random Process: Temporal Characteristics
14	Random Process: Spectral Characteristics
15	Final revision

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	**20 Midterm**	←	10 MARKS To be freely distributed among possible assessments			→	
8 to 12	←		20 MARKS			→	
13 to 15	←		10 MARKS			→	
16 or 17	**40 Final**						
Total	**Exams**	**Assign.**	**Quizzes**	**Reports**	**Present.**	**Lab.**	100

R E F E R E N C E S

Textbook	Probability & statistics for Engineers and Scientists, ninth edition, by Walpole/ Myers / Myers and Ye.
Other	