1.5 Semester 5

BA329 Probability and Statistics

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laboratory	
BA124	3	5	2	2	0	3

COURSE AIM

This course provides an introduction to Statistical analysis and theory of probability 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	An introduction to Statistics and statistical analysis on data observation
2	Statistical measurements
3	Elementary Probability - Probability theorems
4	Conditional probability - Independent and dependent events
5	fields / Double Integrals in Cartesian
6	Combinatorial analysis / Counting Rules
7	Midterm Exam
8	Discrete probability distribution – probability mass function –Mathematical expectation, mean and variance
9	Special discrete distribution: Binomial, Negative Binomial, Geometric and Poisson distributions
10	Continuous probability distribution – probability density Function - Mathematical expectation, mean and variance
11	Normal distribution
12	12th week Assessment
13	The exponential distribution - The exponential model in life testing - The exponential model in reliability
14	The Normal Approximation to the Binomial Distributions
15	General worked Examples

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			→	**30**
8 to 12	←			20 MARKS			→	**20**
13 to 15	←			10 MARKS			→	**10**
16 or 17	**40**	**Final**						**40**
Total	**Exams**		**Assign.**	**Quizzes**	**Reports**	**Present.**	**Lab.**	100

REFERENCES

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