Department: Statistics

Course No: STAT 224Q

Title: Probability Models for Engineers

Credits: 3

Contact : Dipak K. Dey

WQ: Q

Catalog Copy : 224Q. Probability Models for Engineers Either semester. Three credits. Prerequisite: MATH 210Q or 220Q. Students may not receive more than three credits from STAT 224 and STAT 220 or from STAT 224 and STAT 230.

Probability set functions, random variables, expectations, moment generating functions, discrete and continuous random variables, joint and conditional distributions, multinomial distribution, bivariate normal distribution, functions of random variables, central limit theorems, computer simulation of probability models.

Course Information :
A. This course offers instruction in statistical methods for engineering students. The course is formatted to focus on probability models and examples that are suitable for the engineering discipline.

B. Students will be assigned weekly reading and homework problems from the text, in-class mid-term exam and an in-class final exam.

C. This course will instruct students in the concepts of probability set functions, and continuous random variables and their distributions, and special univariate and multivariate distributions, functions of random variables, central limit theorems, and computer simulation of probability models.

Q Criteria : This is a calculus based course.

Role of Grad Students: Graduate assistants grade homeworks, tutor, and offer software related help in the department's Teaching Lab.