

Form (H)
Short course description

Course title: PROBABILITY AND STATISTICS FOR ENGINEERS	Course number and code: STAT 324
Previous course requirement: Non	Language of the course: English
Course level: 3/ Year 1	Effective hours: 4(3+2+0)

Course description

This course covers the basic tools for the collection, analysis, and presentation of data in all areas of engineers

Course objectives

The purpose of the course is to give students of engineering sciences the knowledge to use statistical and probabilistic methods when dealing with the data that is frequently encountered in the fields of engineering. This student will be able to understand these data correctly and then deal with them in the best way.

Learning outcomes (understanding, knowledge, and intellectual and scientific skills)

After studying this course, the student is expected to be able to:

- Define the principal concepts about statistics and probability rules.
- Define the random variables and their probability distribution.
- Knowledge of sampling distribution of the some important sample statistics.
- Knowledge of principals of estimation, estimation of some important population parameters and apply hypothesis testing via some of the statistical distributions.
- Analysis of mechanical and electrical problems
- Interpreting and communicating the results of statistical analysis
- Apply the theoretical foundations of probability theory and distribution theory
- Interpret statistical analysis results in engineering area

Textbook adopted and supporting references

Title of the book	Author's name	Publisher's name	Date of publication
Probability and Statistics for Engineers and Scientists	R. E.; Myers, R. H. and Myers, S. L.	Prentice Hall	1998