Kingdom of Saudi Arabia
Ministry of Education
University of Bisha
College of Engineering
Dept. of Electrical Engineering



المملكة العربية السعودية وزارة التعليـــــم جامعة بيشة

> كلية الهندسة قسم الهندسة الكهربائية

## Course Syllabus

Course Code and Name	IE 26322 — Engineering Statistics and Probability
Credit and contact hours	3 (2, 2, 0) (Lecture, Tutorial, Lab)
Required or Elective	Required
Level / Year	Level (6) / Year (3)
Course Prerequisite	MATH26211 Differentiation and Integration – 1
Textbook	Applied Statistics and Probability for Engineers by D. C. Montgomery and G. C. Runger, 5th Edition, John Wiley & Sons, Inc., 2019.
Course Description	This course is designed to enable students to analyze the concepts of the presentation and analysis of data, measures of central tendency, measures of dispersion, probability theory, discrete and continuous statistical distributions, sampling methods, testing hypotheses, goodness of fit tests, correlation coefficients, and regression analysis.
Brief List of Topics to be Covered	<ol> <li>The Role of Statistics in Engineering</li> <li>Probability Theory.</li> <li>Discrete Random Variables and Probability Distributions</li> <li>Continuous Random Variables and Probability Distributions</li> <li>Random Sampling and Data Description</li> <li>Statistical Intervals for a Single Sample</li> <li>Tests of Hypotheses for a Single Sample</li> <li>Simple Linear Regression and Correlation</li> </ol>
Course is prerequisite for	-