

Course Number	Course	Credit hours	Prerequisite
0300103	Statistics and Probability	3	--

Descriptive Statistics, data presentation. Measures of central deviation (The Arithmetic Mean, Harmonic Mean, Geometric Mean, Median, Mode and Quartiles). Measures of Variation (The range, Variance and Standard Deviation, Coefficient of variation, Coefficient of skewness). Techniques of Counting: (Multiplication rule, Permutations and Combinations). Laws of Probability Probability of union and intersection events, Conditional Probability and independence, Bayes Theorem. Random variables, Probability Distribution function, Expectation and Variance. Binomial, Poisson, Geometric, Hypergeometric and Normal distributions. Inference about mean, and the Difference between two means: Estimation of the Mean, Confidence intervals, Estimation of Differences Between two Means. Hypothesis testing.