

Statistics (ST)

ST 687 - THEORY OF STATISTICS I

Semester Hours: 3

Distribution of statistics based on ordered samples, asymptotic sampling distributions, maximum likelihood, least squares, and other methods of point estimation, Rao-Blackwell theorem and Cramer-Rao inequality, confidence intervals, regions, and their optimal properties. Neyman-Pearson formulation and tests of simple hypothesis against simple alternatives.

ST 787 - THEORY OF STATISTICS II

Semester Hours: 3

Continuation of hypothesis testing, likelihood ratio and unbiased tests, uniformly most powerful tests, power function, nonparametric tests, statistical decision theory, distribution and linear models.