Department of studies in Statistics

Courses Offered:

Courses	Duration	Eligibility criteria
1 M.Sc. in Statistics	4 semesters	B.Sc. with Statistics and Mathematics as major/optional subjects with 45% marks OR B.Sc. with Mathematics as major with 60% marks.
2 M.Phil. in Statistics	12 months	M.Sc. in Statistics with 55% marks.
3 Ph.D. in Statistics	-	M.Sc. in Statistics with 55% marks.

Outline Syllabus of each course offered:

1. M.Sc. Statistics: **I semester**: Syllabus includes basic mathematics needed for Statistics: Real Analysis and Linear Algebra, Probability Theory and Distributions-I and Statistical Computing. **II semester**: Probability Theory and Distributions-II, Inference-I, Linear Models and Regression Analysis and Sampling theory and Statistics for National Development. **III semester**: Inference-II, Multivariate analysis, Design and Analysis of Experiments and a Choice based paper to be studied in another Department.

IV semester: Four optional papers from : Nonparametric and Semiparametric Inference, Reliability Analysis, Time Series Analysis, Stochastic Processes, Operations, Statistical Process Control and Total Quality Management, Statistical Quality Control, Biostatistics, Analysis of Categorical Data, Demography. There is a mandatory Project Work consisting of a Primary and a Secondary Data Analysis component in the IV semseter.

2. M.Phil. Statistics: The syllabus consists of three papers: Research Methodology consisting of metric space theory, probability measures on metric spaces, and whatnot, and two optional papers to be selected from: Extreme Value Theory, Advanced Probability Theory, Advanced Asymptotic Inference, Sums of Independent Random Variables.

3. Ph.D. in Statistics: The research interests of the faculty include: Extreme Value Theory, Sums of random variables, Order Statistics and Records, Nonparametric Inference, Reliability Theory, Heavy Tailed Distributions, etc.