

# **DEPARTMENT OF STATISTICS**

## **SIKSHA-BHAVANA, VISVA-BHARATI**

### **TWO YEARS M.Sc. IN STATISTICS**

**Proposed Course Structure Semester I** - MSC-11: Linear Models and Distribution Theory - MSC-12: Real Analysis and Measure Theory - MSC-13: Statistical Inference I - MSC-14: Sample Survey - MSC-15: Practical on Linear Models, Distribution Theory and Statistical Inference I - MSC-16: Practical on Sample Survey **Semester II** - MSC-21: Statistical Inference II - MSC-22: Applied Multivariate Analysis - MSC-23: Regression Techniques - MSC-24: Design of Experiments - MSC-25: Practical on MSC-21 and MSC-22 - MSC-26: Practical on MSC-23 and MSC-24 **Semester III** - MSC-31: Stochastic Process - MSC-32: Advanced Data Analysis Techniques - MSC-33: Elective Course - MSC-34: Special Module Course - MSC-35: Practical on MSC-31 and MSC-32 - MSC-36: Practical on MSC-33 and MSC-34 **Semester IV** - MSC-41: Reliability Analysis - MSC-42: Special Module Course - MSC-43: Special Module Course - MSC-44: Practical on MSC-41, MSC-42 and MSC-43 - MSC-45: Project Work

**Elective Modules (Proposed)** - MSE-1: Operations Research and Optimization Technique - MSE-2: Statistical Genetics - MSE-3: Statistical Ecology

**Special Modules (Proposed)** - MSS-1: Actuarial Statistics - MSS-2: Time Series Analysis - MSS-3: Demography - MSS-4: Survival Analysis - MSS-5: Clinical Trials and Bioassays - MSS-6: Advanced Mathematics for Statistics - MSS-7: Bayesian Inference - MSS-8: Econometrics - MSS-9: Introductory Data Science and Statistical Machine Learning