

M.Sc Statistics

- ✓ Students will create quantitative models to solve real world challenging problems.
- ✓ Demonstrate a deep understanding and usage of the various statistical computing packages and execute statistical analyses with Statistical software's.
- ✓ Develops logical skills enabling them to get ready for high end technology-oriented programmes
- ✓ Motivate for research in mathematical and statistical sciences

Subjects

<u>Semester 1</u>	<u>Semester 2</u>	<u>Semester 3</u>	<u>Semester 4</u>
1 Mathematical Analysis & Linear Algebra (MA & LA)	1 Sampling Techniques (ST)	1 Non-Parametric Inference (NPI)	1 Stochastic Process (SP)
2 Probability Theory (PT)	2 Parametric Inferences (PI)	2 Quality Control and Optimization Techniques (QCOT)	2 Time Series Analysis (TSA)
3 Distribution Theory (DT)	3 Linear Models & Design of Experiments (LM &DOE)	3 Elective-I Applied Regression Models (ARM)/Econometric models (EM)	3 Elective-I Reliability Theory (RT)/Actuarial Science (AS)
4 Estimation Theory (ET)	4 Multivariate Analysis (MVA)	4 Elective-II Advanced Design of Experiment (ADE)/Data Modelling using Machine Learning Techniques (DMMLT)* /Data Mining (DM)/Bayesian Inference (BI)	4 Elective-II Advanced Operation Research (AOR)/Text Analysis (TA)*+ /Clinical Trials/Demography (DGY)
5 Practical – I (Python)	5 Practical- I (ST + PI)	Practical-I Elective-I+ Elective-II	Practical-I Elective-I+ Elective-II
6 Practical-II (LA+ DT +ET)	6 Practical -II (LM+DOE+MVA)	Practical-II (R + TORA)/Elective-2* Project	Practical-II (SPSS)/ Elective-2* Project