

## MSc Applied 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

### Subjects

<b>Semester 1</b>	<b>Semester2</b>	<b>Semester 3</b>	<b>Semester 4</b>
1 Linear Algebra and Linear Models (LA &LM)	1 Statistical Inference (SI)	1 Operations Research (OR -I)	1 Statistical Process and Quality Control (SPQC)
2 Probability Theory (PT)	2 Applied Regression Analysis (ARA)	2 Forecasting Models (FM)	2 Applied Stochastic Process (ASP)
3 Distribution Theory and Estimation Theory (DT & ET)	3 Multivariate Data Analysis (MDA)	3 Elective-I Reliability Theory(RT)/Actuarial Science(ASC)	3 Elective-I Operation Research (OR – 2)/ Econometric models (EM)
4 Sampling Techniques (ST)	4 Design of Experiments (DOE)	4 Elective-II Data Modeling Using Machine Learning Techniques (DMMLT)/Statistical Pattern Recognition (SPR)/ Data Mining (DM)/Bayesian Inference (BI)	4 Elective-II Artificial Neural Networks (ANN)/ Text Analysis (TA)*+/Clinical Trials/Demography (DGY)
5 Practical - I (Python)	5 Practical – I (SI + ARA)	5 Practical – I Elective-I+ Elective-II	5 Practical – I Elective-I+ Elective-II
6 Practical - II (LA & LM + DT & ET + ST)	6 Practical – II (MDA + DOE)	6 Practical – II (R + TORA)/ Elective-2* Project	6 Practical – II (SPSS)/ Elective-2* Project