M.Sc. (Applied Statistics & Data Analytics)

Semester I
Linear Algebra
Probability Theory and Estimation
Data Structures and Algorithms
Optimization Techniques
Introduction to Data Science
Python Programming
Cultural Education

Semester II
Statistical Inference and Design of
Experiments
Multivariate Statistics and Regression Analysis
Machine Learning
Big Data Analytics and Hadoop
Data Mining
Data Security
Amrita Value Programme

Semester III
Statistical Quality Control and Reliability
Introduction to Deep Leaming
Elective I
Elective II
Elective II
Live-in-Lab®/ Open Elective

Semester IV
Dissertation

ELECTIVES (any three)
Taugchi Techniques
Special Distribution Functions
Pattern Recognition
Stochastic Process
Queuing Theory
Market Analytics
Survival Analysis
Sampling Techniques

Demography and Actuarial Statistics
Official Statistics
Healthcare Analytics
Computational Biology
Computer aided drug designing
Reinforcement Leaming
Social Network Analytics
Mining of Massive Datasets
Parallel and Distributed Systems