

# M.Sc. Curriculum Mathematics and Statistics

From the Academic Year 2019-20

## Semester - I

S. No.	Course No.	Course Name	L-T-P-C
1.	MA5107	Analysis I	3-1-0-4
2.	MA5109	Linear Algebra	3-0-0-3
3.	MA5111	Discrete Mathematics	3-0-0-3
4.	MA5113	Introduction to Probability Theory	3-1-0-4
5.	MA5115	Statistical Inference	3-0-0-3
6.	MA5191	Programming Laboratory	0-0-3-2
<b>Total</b>			<b>19</b>

## Semester - II

S. No.	Course No.	Course Name	L-T-P-C
1.	MA5202	Analysis II	3-1-0-4
2.	MA5204	Ordinary Differential Equations	3-1-0-4
3.	MA5206	Algebra	3-0-0-3
4.	MA5208	Regression Analysis	3-1-0-4
5.	MA5210	Stochastic Processes and Time Series Analysis	3-0-0-3
<b>Total</b>			<b>18</b>

## Semester - III

S. No.	Course No.	Course Name	L-T-P-C
1.	MA6105	Complex Analysis	3-0-0-3
2.	MA6107	Sampling Theory and Design of Experiments	3-0-0-3
3.	MA6109	Multivariate Statistical Analysis	3-0-0-3
4.	E1	Elective 1	3-0-0-3
5.	E2	Elective 2	3-0-0-3
6.	E3	Free Elective	3-0-0-3
<b>Total</b>			<b>18</b>

## Semester - IV

S. No.	Course No.	Course Name	L-T-P-C
1.	MA6204	Numerical Analysis	3-0-2-4
2.	E3	Elective 3	3-0-0-3
3.	E4	Elective 4	3-0-0-3
4.	E5	Elective 5	3-0-0-3
5.	MA6250	Project	- - - 2
<b>Total</b>			<b>15</b>

**Total Credits – 70**

### Mathematics Electives

1. MA6021 Topology
2. MA6022 Functional Analysis
3. MA6023 Number Theory
4. MA6024 Partial Differential Equations
5. MA6025 Continuum Mechanics
6. MA6026 Mathematical Modelling
7. MA6027 Distributions and Sobolev Spaces
8. MA6101 Linear Integral Equations
9. MA6102 Fixed Point Theory
10. MA6103 Fractal Geometry

### Statistics Electives

1. MA6028 Non-Parametric Statistics
2. MA6029 Bayesian Statistics
3. MA6030 Statistical Finance
4. MA6031 Categorical Data Analysis
5. MA6032 Spatio -Temporal Modelling
6. MA6033 Functional Data Analysis
7. MA6034 Operation Research
8. MA6035 Statistical Simulations & Data Analysis
9. MA6036 Bio-Statistics
10. MA6202 Generalised Linear Models