

**Indian Institute of Technology Tirupati**  
**M.sc Mathematics and Statistics Curriculum**  
**From the Academic Year 2023-2024**

**Semester-I**

S. No.	Course Code	Course Name	L-T-P-C
1.	MA513L	Real Analysis	3-1-0-4
2.	MA506L	Linear Algebra	3-0-0-3
3.	MA516L	Basic Graph Theory	2-0-0-2
4.	MA512L	Probability Theory	3-1-0-4
5.	MA519L	Sampling Theory	2-0-0-2
6.	MA518L	Groups and Rings	3-0-0-3
7.	MA517M	Basic Programming Laboratory	1-0-2-2
<b>Total Credits</b>			<b>20</b>

**Semester-II**

S. No.	Course Code	Course Name	L-T-P-C
1.	MA5XXL	Multivariable Calculus	3-0-0-3
2.	MA511L	Ordinary Differential Equations	3-1-0-4
3.	MA601L	Complex Analysis	3-0-0-3
4.	MA508L	Statistical Inference	3-0-0-3
5.	MA6XXL	Design of Experiments	2-0-0-2
6.	MA5XXL	Stochastic Processes	2-0-0-2
7.	MA5XXM	Data Science Programming Laboratory	1-0-2-2
<b>Total Credits</b>			<b>19</b>

**Semester-III**

S. No.	Course Code	Course Name	L-T-P-C
1.	MA514L	Regression Analysis	3-1-0-4
2.	MA6XXL	Time Series Analysis	2-0-0-2
3.	DPE1	Department Elective 1	3-0-0-3
4.	DPE2	Department Elective 2	3-0-0-3
5.	DPE3	Department Elective 3	3-0-0-3
6.	FRE1	Free Elective 1	3-0-0-3
<b>Total Credits</b>			<b>18</b>

**Semester-IV**

S. No.	Course Code	Course Name	L-T-P-C
1.	MA6XXL	Numerical Analysis	3-0-0-3
	MA6XXP	Scientific Programming Laboratory	0-0-2-1
2.	DPE4	Department Elective 4	3-0-0-3
3.	DPE5	Department Elective 5	3-0-0-3
4.	FRE2	Free Elective 2	3-0-0-3
5.	MA691G/ DPE6	Project or Department Elective 6	0-0-0-3 3-0-0-3
<b>Total Credits</b>			<b>16</b>

**Total Credits–73**