Revised Curriculum for MSc Programs (for Mathematics Department)

First Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	19M21MA111	Department Core-1 (Ordinary Differential Equations)	3	1	-	4	4
2	19M21MA112	Department Core-2 (Real Analysis)	3	1	-	4	4
3	19M21MA113	Department Core-3 (Abstract Algebra)	3	1	-	4	4
4	19M21MA114	Department Core-4 (General Topology)	3	1	-	4	4
5	19M21MA115	Department Core-5 (Mathematical Methods)	3	1	-	4	4
6	19M21HS111	Presentation and Communication Skills *	2	-	-	2	Audit
		Total	17	5	0	22	20

Second Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	19M21MA116	Department Core-6 (Linear Algebra)	3	1	-	4	4
2	19M21MA211	Department Core-7 (Mathematical Statistics)	3	1	-	4	4
3	19M21MA119	Department Core-8 (Functional Analysis)	3	1	-	4	4
4	19M21MA120	Department Core-9 (Partial Differential Equations)	3	1	-	4	4
5	19M21MA118	Department Core-10 (Computer Programming)	3/2	0/1	-	3	3
6	19M25MA111	Department Lab-I (Computer Programming Lab)	-	-	2	2	1
7	xxxxxxxx	DE-I	3	-	-	3	3
		Total	18/17	4/5	2	24	23

Third Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	19M21MA117	Department Core-11 (Complex Analysis)	3	1	-	4	4
2	19M21MA212	Department Core-12** (Numerical Analysis)	3	0/1	-	3/4	3/4
3	19M21MA213	Department Core-13 (Operations Research)	3	-	-	3	3
4	xxxxxxxx	DE-II	3	-	-	3	3
5	xxxxxxxx	DE-III	3	-	-	3	3
6	xxxxxxxx	DE-IV	3	-	-	3	3
7	xxxxxxxx	DE-V	3	-	-	3	3
8	19M25MA212	Department Lab-II (Operations Research Lab)	-	-	2	2	1

9	19M25MA211	Department Core Lab-III** (Numerical Analysis Lab)	-	-	2/0	2/0	1/0
		Total	21	1/2	4/2	26/25	24/24

Fourth Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	xxxxxxxx	DE-VI	3	-	-	3	3
2	xxxxxxxx / 19M27MA211	Industrial project work / Dissertation	-	-	20	20	10
		Total	3	-	20	23	13

Total Credits: 80

*****Audit course can be one or more of zero credit and in 1-0-2 or 2-0-0 or 0-0-2 mode.

******The Department Core includes theory of 3 credits and lab of 1 credit OR theory of 4 credits.

Department Electives (DE)

S. No.	DE- I	DE- II	DE- III
1.	Advanced Matrix Theory	Fluid Dynamics	Fuzzy Sets and Applications
2.	Measure Theory	Wave Propagation	Data Structures
3.	Differential Geometry & Tensors	Continuum Mechanics	Multivariate Analysis

S. No.	DE- IV	DE- V	DE- VI
1.	Wavelet Theory & Its Applications	Advanced Numerical Methods	Theory of Data Science
2.	Number Theory	Theory of Computation	Linear models and Regression Analysis
3.	Graph Theory	Database-Management System	Mathematical Imaging
4.	----------	Advanced Operations Research	----------

Note: In the beginning of the respective semesters, the department will announce the list of elective courses to be offered during the semester.