

## Department of Mathetmatics

### FYUP Course Structure

S. No.	Course Code	Title of the Course	Faculty Code	End Sem Mark	Sessional Mark	Credits	Part/ Semester	Course Category	Department	Session/ Year of Introduction
1	2	3	4	5	6	7	8	9	10	11
1	MMBSMJ1001	Calculus	S	70	30	4	I	MJC	Mathematics	2022-23
2	MMBSMJ1002	Two-Dimensional Coordinate Geometry	S	70	30	2	I	MJC	Mathematics	2022-23
3	MMBSMJ1003	Set Theory	S	70	30	2	I	MJC	Mathematics	2022-23
4	MMBSMN1004	Calculus of Single Variable	S	70	30	4	I	MNC	Mathematics	2022-23
5	MMBSMN1005	Basic Coordinate Geometry	S	70	30	2	I	MNC	Mathematics	2022-23
6	MMBSGE1006	Elementary Calculus	S	70	30	4	I	GNE	Mathematics	2022-23
7	MMBSMJ2001	Advanced Calculus	S	70	30	4	II	MJC	Mathematics	2022-23
8	MMBSMJ2002	Three-Dimensional Coordinate Geometry	S	70	30	2	II	MJC	Mathematics	2022-23
9	MMBSMJ2003	Numerical Methods	S	70	30	2	II	MJC	Mathematics	2022-23
10	MMBSMN2004	Calculus of Several Variables	S	70	30	4	II	MNC	Mathematics	2022-23

11	MMBSMN2005	Basic Numerical Methods	S	70	30	2	II	MNC	Mathematics	2022-23
12	MMBSGE2006	Matrices and Linear Programming	S	70	30	4	II	GNE	Mathematics	2022-23
13	MMBSMJ3001	Real Analysis	S	70	30	4	III	MJC	Mathematics	2023-24
14	MMBSMJ3002	Ordinary Differential Equations	S	70	30	2	III	MJC	Mathematics	2023-24
15	MMBSMJ3003	Number Theory	S	70	30	2	III	MJC	Mathematics	2023-24
16	MMBSMN3004	Basic Real Analysis	S	70	30	4	III	MNC	Mathematics	2023-24
17	MMBSMN3005	Elements of Ordinary Differential Equations	S	70	30	2	III	MNC	Mathematics	2023-24
18	MMBSGE3006	Functions of Several Variables	S	70	30	4	III	GNE	Mathematics	2023-24
19	MMBSVO3007	Mathematical Logic and Reasoning	S	70	30	2	III	VOC	Mathematics	2023-24
20	MMBSMJ4001	Linear Algebra	S	70	30	4	IV	MJC	Mathematics	2023-24
21	MMBSMJ4002	Partial Differential Equations	S	70	30	2	IV	MJC	Mathematics	2023-24
22	MMBSMJ4003	Vector Calculus	S	70	30	2	IV	MJC	Mathematics	2023-24
23	MMBSMN4004	Basic Linear Algebra	S	70	30	4	IV	MNC	Mathematics	2023-24
24	MMBSMN4005	Elements of Partial Differential Equations	S	70	30	2	IV	MNC	Mathematics	2023-24

25	MMBSGE4006	Differential Equations	S	70	30	4	IV	GNE	Mathematics	2023-24
26	MMBSMJ5001	Group Theory	S	70	30	4	V	MJC	Mathematics	2024-25
27	MMBSMJ5002	Geometry of Curves and Surfaces	S	70	30	4	V	MJC	Mathematics	2024-25
28	MMBSMJ5003	Mathematical Analysis	S	70	30	4	V	MJC	Mathematics	2024-25
29	MMBSXO5004	Mathematical Methods	S	70	30	4	V	MNO	Mathematics	2024-25
30	MMBSXO5005	Convex Analysis and Optimization	S	70	30	4	V	MNO	Mathematics	2024-25
31	MMBSXO5006	Fractional Calculus	S	70	30	2	V	MNO	Mathematics	2024-25
32	MMBSXO5007	Linear Programming	S	70	30	2	V	MNO	Mathematics	2024-25
33	MMBSMJ6001	Ring Theory	S	70	30	4	VI	MJC	Mathematics	2024-25
34	MMBSMJ6002	Complex Analysis	S	70	30	4	VI	MJC	Mathematics	2024-25
35	MMBSMJ6003	Metric Spaces	S	70	30	4	VI	MJC	Mathematics	2024-25
36	MMBSXO6004	Programming and Numerical Computations with MATLAB	S	70	30	4	VI	MNO	Mathematics	2024-25
37	MMBSXO6005	Mechanics	S	70	30	4	VI	MNO	Mathematics	2024-25
38	MMBSXO6006	Lattice Theory and Boolean Algebra	S	70	30	2	VI	MNO	Mathematics	2024-25

39	MMBSXO6007	Projective Geometry	S	70	30	2	VI	MNO	Mathematics	2024-25
40	MMBSMJ7001	Advanced Linear Algebra	S	70	30	4	VII (H)	MJC	Mathematics	2025-26
41	MMBSMJ7002	General Topology	S	70	30	4	VII (H)	MJC	Mathematics	2025-26
42	MMBSMJ7101	Advanced Differential Equations	S	70	30	4	VII (H)	MJC	Mathematics	2025-26
43	MMBSMJ7003	Coding Theory	S	70	30	4	VII (H)	GNE	Mathematics	2025-26
44	MMBSMJ7004	Fixed Point Theory and Variational Principles	S	70	30	4	VII (H)	GNE	Mathematics	2025-26
45	MMBSMJ7005	Tensor Analysis and General Relativity	S	70	30	4	VII (H)	GNE	Mathematics	2025-26
46	MMBSMJ7006	Research Methodology	S	70	30	2	VII (H)	VOC	Mathematics	2025-26
47	MMBSMJ7S01	Seminar	S	70	30	4	VII (H)	SEM	Mathematics	2025-26
48	MMBSMJ8001	Functional Analysis	S	70	30	4	VIII (H)	MJC	Mathematics	2025-26
49	MMBSMJ8002	Differentiable Manifolds	S	70	30	4	VIII (H)	MJC	Mathematics	2025-26
50	MMBSMJ8101	Advanced Group Theory and Field Theory	S	70	30	4	VIII (H)	MJC	Mathematics	2025-26
51	MMBSMJ8003	Graph Theory	S	70	30	4	VIII (H)	GNE	Mathematics	2025-26
52	MMBSMJ8004	Approximation Theory and Sequence Spaces	S	70	30	4	VIII (H)	GNE	Mathematics	2025-26

53	MMBSMJ8005	Orthogonal Polynomial and Special Functions	S	70	30	4	VIII (H)	GNE	Mathematics	2025-26
54	MMBSMJ8D01	Project/Dissertation	S	70	30	6	VIII (H)	DISS	Mathematics	2025-26
55	MMBSMJ7001	Advanced Linear Algebra	S	70	30	4	VII (R)	MJC	Mathematics	2025-26
56	MMBSMJ7002	General Topology	S	70	30	4	VII (R)	MJC	Mathematics	2025-26
57	MMBSMJ7102	Theory of Ordinary Differential Equations	S	70	30	2	VII (R)	MJC	Mathematics	2025-26
58	MMBSMJ7003	Coding Theory	S	70	30	4	VII (R)	GNE	Mathematics	2025-26
59	MMBSMJ7004	Fixed Point Theory and Variational Principles	S	70	30	4	VII (R)	GNE	Mathematics	2025-26
60	MMBSMJ7005	Tensor Analysis and General Relativity	S	70	30	4	VII (R)	GNE	Mathematics	2025-26
61	MMBSMJ7006	Research Methodology	S	70	30	4	VII (R)	VOC	Mathematics	2025-26
62	MMBSMJ7D01	Dissertation (Continued)	S	70	30	4	VII (R)	DISS	Mathematics	2025-26
63	MMBSMJ8001	Functional Analysis	S	70	30	4	VIII (R)	MJC	Mathematics	2025-26
64	MMBSMJ8002	Differentiable Manifolds	S	70	30	4	VIII (R)	MJC	Mathematics	2025-26
65	MMBSMJ8102	Field Theory	S	70	30	2	VIII (R)	MJC	Mathematics	2025-26
66	MMBSMJ8003	Graph Theory	S	70	30	4	VIII (R)	GNE	Mathematics	2025-26

67	MMBSMJ8004	Approximation Theory and Sequence Spaces	S	70	30	4	VIII (R)	GNE	Mathematics	2025-26
68	MMBSMJ8005	Orthogonal Polynomial and Special Functions	S	70	30	4	VIII (R)	GNE	Mathematics	2025-26
69	MMBSMJ8D02	Dissertation	S	70	30	8	VIII (R)	DISS	Mathematics	2025-26

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