

BVM Engineering College (An Autonomous Institution)**Mechanical Engineering Department****M. Tech. Machine Design****Semester 1**

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	5MD01	Advanced Machine Design	3	1	0	4	4
2	5MD02	Computer Aided Design	3	0	2	5	4
3	5MD03	Advanced Mechanics of Solids	3	1	0	4	4
4		Program Elective - I	3	0	2	5	4
5		Program Elective - II	3	0	0	3	3
Total			15	2	4	21	19

Program Elective - I

1	5MD41	Industrial Tribology	3	0	2	5	4
2	5MD42	Vibrations and Noise	3	0	2	5	4
3	5MD43	Advanced Engineering Dynamics	3	0	2	5	4

Program Elective - II

1	5MD44	Machine Tool Design	3	0	0	3	3
2	5MD45	Design for Manufacture and Assembly	3	0	0	3	3
3	5MD46	Quality and Reliability Engineering	3	0	0	3	3

Semester 2

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	5MD04	Research Methodology and Experimental Techniques	2	0	2	4	3
2	5MD05	Finite Element Methods	3	0	2	5	4
3	5MD06	Geometric Dimensioning and Tolerancing	3	0	0	3	3
4		Program Elective - III	3	0	2	5	4
5		Program Elective - IV	3	1	0	4	4
6	5MD07	Technical Writing and Presentation Skill	0	1	0	1	1
Total			14	2	6	22	19

Program Elective - III

1	5MD47	Advanced Numerical Methods	3	0	2	5	4
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2	5MD48	Robotics and Control	3	0	2	5	4
3	5MD49	Design of Heat and mass transfer Equipments	3	0	2	5	4

Program Elective - IV

1	5MD50	Fracture Mechanics	3	1	0	4	4
2	5MD51	Piping System Design	3	1	0	4	4
3	5MD52	Design of Pressure Vessels	3	1	0	4	4
4	5MD53	Design of Material Handling Equipment	3	1	0	4	4
5	5MD54	Design Optimization Techniques	3	1	0	4	4

Semester 3

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1		Program Elective - V	3	0	2	5	4
2		Open Elective	3	0	0	3	3
3	6MD31	Dissertation - I	0	0	20	20	10
Total			6	0	22	28	17

Program Elective - V

1	6MD41	Rotor Dynamics	3	0	2	5	4
2	6MD42	Oil Hydraulics and Pneumatics	3	0	2	5	4
3	6MD43	Thermal System Design and Simulation	3	0	2	5	4
4	6MD44	Mechanics and Manufacturing of Composites	3	0	2	5	4

Open Elective

1	6MD81	Robust Design	3	0	0	3	3
2	6MD82	Optimization Techniques	3	0	0	3	3
3	6MD83	Reliability Engineering and Quality Control	3	0	0	3	3

Semester 4

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1	6MD32	Dissertation - II	0	0	32	32	16
Total			0	0	32	32	16

Total Credits Distributions

35 4 64 103 71