

BVM Engineering College (An Autonomous Institution)**Civil Engineering Department****M. Tech. Structural Engineering****Semester 1**

Sr. No	Course Code	Name of Course	L	T	P	H	C
1	5SE01	Advanced Structural Analysis	3	1	0	4	4
2	5SE02	Structural Dynamics and Earthquake Engineering	3	0	2	5	4
3	5SE03	Advanced Foundation Engineering	3	0	2	5	4
4	5CE03	Research Methodology	1	0	2	3	2
5	5SE04	Seminar	0	0	2	2	1
6		Programme Elective - I	3	1	0	4	4
7		Programme Elective - II	3	1	0	4	4
Total			16	3	8	27	23

Programme Elective - I

1	5SE41	Numerical Methods in Structural Engineering	3	1	0	4	4
2	5SE42	Model Analysis	3	1	0	4	4
3	5SE43	Experimental Stress Analysis	3	1	0	4	4

Programme Elective - II

1	5SE44	Advanced Solid Mechanics	3	1	0	4	4
2	5SE45	Structural Optimization	3	1	0	4	4
3	5SE46	Structural Health Monitoring	3	1	0	4	4

Semester 2

Sr. No	Course Code	Name of Course	L	T	P	H	C
1	5SE05	Finite Element Method in Structural Engineering	3	1	0	4	4
2	5SE06	Advanced Design of Steel Structures	3	1	0	4	4
2	5SE07	Advanced Design of Concrete Structures	3	1	0	4	4
4		Programme Elective - III	3	1	0	4	4
5		Programme Elective - IV	3	1	0	4	4

6	5SE31	Mini Project	0	0	4	4	2
Total			15	5	4	24	22

Programme Elective - III

1	5SE47	Bridge Structures	3	1	0	4	4
2	5SE48	Theory of Plates and Shells	3	1	0	4	4
3	5SE52	Soil Structure Interaction	3	1	0	4	4

Programme Elective - IV

1	5SE49	Ground Improvement Techniques	3	1	0	4	4
2	5SE50	Design of Pre-stressed Concrete Structures	3	1	0	4	4
3	5SE51	Sustainable Practices in Concrete Technology	3	1	0	4	4

Semester 3

Sr. No	Course Code	Name of Course	L	T	P	H	C
1		Programme Elective - V	3	1	0	4	4
2		Open Elective - I	3	0	0	3	3
3	6SE31	Dissertation Phase - 1	0	0	20	10	10
Total			6	1	20	17	17

Programme Elective - V

1	6SE41	Tall Structures	3	1	0	4	4
2	6SE42	Offshore Structures	3	1	0	4	4
3	6SE43	Design of Masonry and Timber Structures	3	1	0	4	4

Open Elective - I

1.	6CM81	Strategic Management	3	0	0	3	3
2.	6CM82	Disaster Management	3	0	0	3	3
3.	6EE81	Renewable Energy Systems	3	0	0	3	3
4.	6EN81	Rural Sanitation	3	0	0	3	3
5.	6EN82	Analytical Methods for Environmental Monitoring	3	0	0	3	3
6.	6IF81	Infrastructure Technology and Management	3	0	0	3	3
7.	6MD81	Robust Design	3	0	0	3	3
8.	6MD82	Optimization Techniques	3	0	0	3	3

9.	6MD83	Reliability Engineering and Quality Control	3	0	0	3	3
10.	6TE81	Road Safety and Environmental Impact Assessment	3	0	0	3	3
11.	6TE82	Transportation System Analysis	3	0	0	3	3

Semester 4

Sr. No	Course Code	Name of Course	L	T	P	H	C
1	6SE32	Dissertation Phase - 2	0	0	30	30	15
Total			0	0	30	30	15
Total Credits Distributions			37	9	62	108	77