Department of Civil Engineering
M.Tech in Structural Engineering
I Semester

Sl. No	Course Code	Name of the Course	L	T	P	C
1	CENG5001	Professional and Communication Skills	0	0	4	2
2	MATH5001	Advanced Numerical and Statistical Methods	3	1	0	4
3	MSTR5001	Structural Dynamics	3	0	0	3
4	MSTR5002	Matrix Methods of Structural Analysis	3	0	0	3
5	MSTR5003	Advanced Concrete Technology	3	0	0	3
6	MSTR5004	Design of Concrete Structural Systems	3	0	0	3
7	MSTR5005	Matrix methods of Structural Analysis Lab (STAAD PRO)	0	0	2	1
8	MSTR5006	Design of Concrete and Structural Systems Lab (STAAD PRO)	0	0	2	1
		Total Credit				**20**

Sl. No	Course Code	Name of the Course	L	T	P	C
1	MSTR6001	Finite Element Analysis	3	0	0	3
2	MSTR6002	Theory of Elasticity and Plasticity	3	0	0	3
3	MSTR6003	Limit State Design of Steel Structures	3	0	0	3
4		Elective – 1	3	0	0	3
5		Elective – 2	3	0	0	3
6		Elective – 3	3	0	0	3
7	MSTR6004	Structural Engineering lab (CASTING)	0	0	2	1
8	MSTR6005	Finite Element Analysis Lab (STAAD PRO)	0	0	2	1
		Total Credit				**20**

Sl No	Course Code	Name of the Course	L	T	P	C
1	MSTR7001	Application of Numerical Methods in Structural Engineering	3	0	0	3
2		Elective – 4	3	0	0	3
3		Elective – 5	3	0	0	3
4	MSTR7002	Seminar (or)Mini Project	- -	- -	2	1
5	MSTR7003	Comprehensive Examination	-	-	-	2
6	MSTR7004	Project (Phase I)	0	0	0	5
		Total Credit				**17**
	Course Code	**Name of the Course**				

Sl No			L	T	P	C
1	MSTR8001	Project (Phase II)	0	0	0	15
		Total Credit				**15**

School of Civil Engineering

List of Electives (Total Credits to be earned = 15)

Sl No	Course Code	Name of the Electives	L	T	P	C
1	MSTR6010	Advanced Foundation Engineering	3	0	0	3
2	MSTR6011	Design of Concrete Bridges	3	0	0	3
3	MSTR6012	Design of Industrial Structures	3	0	0	3
4	MSTR6013	Earthquake Resistant Design	3	0	0	3
5	MSTR6014	Design of Tall Buildings	3	0	0	3
6	MSTR6015	Energy Efficient Buildings	3	0	0	3
7	MSTR6016	Environmental Engineering Structures	3	0	0	3
8	MSTR6017	Experimental Stress Analysis	3	0	0	3
9	MSTR6018	Machine Foundations	3	0	0	3
10	MSTR6019	Maintenance & Rehabilitation of Structures	3	0	0	3
11	MSTR6020	Theory and Design of Plates & Shells	3	0	0	3
12	MSTR6021	Off Shore Structures	3	0	0	3
13	MSTR6022	Prefabricated Structures	3	0	0	3
14	MSTR6023	Pre-stressed Concrete Structures	3	0	0	3
15	MSTR6024	Soil Structure Interaction	3	0	0	3
16	MSTR6025	Stability of Structures	3	0	0	3
17	MSTR6026	Structural Optimization	3	0	0	3
18	MSTR6027	Composite Structures	3	0	0	3