

School Name: School of Engineering
Department Name : Civil Engineering
Programme Name: M. Tech in Energy and Environmental Engineering
Scheme: 2019-2021

SEMESTER I

S.No	Course Code	Course Title	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	15	1	8	20

SEMESTER II

S.No	Course Code	Course Title	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	18	0	2	20

SEMESTER III

S.No	Course Code	Course Title	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	-	-	2	1
5	MSTR7003	Comprehensive Examination	-	-	-	2
6	MSTR7004	Project (Phase I)	0	0	0	5

SEMESTER IV

S.No	Course Code	Course Title	L	T	P	C
1	MSTR8001	Project (Phase II)	0	0	0	15
		Total	0	0	0	15

LIST OF PROGRAM ELECTIVES

S.No.	Course Code	Course Title	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