M. Tech. in Structural Engineering

Sl. No.	Subject Code	SEMESTER I	L	T	P	C
1.	HS5111	Technical Writing and Soft Skill	1	2	2	4
2.	CE5108	Advanced Structural Analysis	3	0	2	4
3.	CE5109	Structural Dynamics	3	0	2	4
4.	CE5110	Theory of Plates and Shells	3	0	0	3
5.	CE51XX/ CE61XX	DE- I: Structure Elective	3	0	0	3
6.	CE51XX/ CE61XX	DE- II: Structure / Department Elective	3	0	0	3
7.	XX61PQ	IDE	3	0	0	3
		TOTAL				24

Sl. No.	Subject Code	SEMESTER II	L	T	P	C
1.	CE5209	Advanced Concrete Design	3	0	2	4
2.	CE5210	Earthquake Resistant Design of Structures	3	0	2	4
3.	CE5211	Stability of Structures	3	0	0	3
4.	CE52XX/ CE62XX	DE-3: Structure Elective	3	0	0	3
5.	CE52XX/ CE62XX	DE-4: Structure / Department Elective	3	0	0	3
6.	RM6201	Research Methodology	3	1	0	4
7.	IK6201	IKS	3	0	0	3
		TOTAL				24

Sl. No.	Subject Code	SEMESTER III	L	T	P	C
1.	CE6198	Summer Internship/Mini Project*	0	0	12	3
2.	CE6199	Project I **	0	0	30	15
		TOTAL				18

Sl. No.	Subject Code	SEMESTER IV	L	T	P	C
1.	CE6299	Project II	0	0	42	21
		TOTAL				21

Total Credits: 87

ELECTIVE GROUPS

Sl. No.	Subject Code	Subject	L	T	P	C
		Department Elective - I (Structure Elective)				
1.	CE6115	Advanced Structural Mechanics	3	0	0	3
2.	CE6116	Bridge Engineering and Design	3	0	0	3
3.	CE6117	Masonry Structures	3	0	0	3
4.	CE6118	Wind Analysis and Design of Structures	3	0	0	3
5.	CE6119	Special Topics in Structural Analysis	3	0	0	3
6.	CE6120	Analysis Plates and Shells Structure	3	0	0	3
		Department Elective-II (Structure / Department Elective)				

Sl. No.	Subject Code	Subject	L	T	P	C
1.	CE6106	Soil Dynamics	3	0	0	3
2.	CE6107	Rock Slope Engineering	3	0	0	3
3.	CE6108	Constitutive Modelling in Geotechnics	3	0	0	3
4.	CE6111	Rock Mechanics	3	0	0	3
5.	CE6113	Pavement Geotechnics	3	0	0	3
6.	CE6114	Probabilistic Methods in Geotechnical Engineering	3	0	0	3
7.	CE6121	Prestressed Concrete Structure: Theory & Design	3	0	0	3
8.	CE6122	Advanced Concrete Technology	3	0	0	3
9.	CE6123	Structural Fire Engineering	3	0	0	3
10.	CE6124	Advanced Structural Dynamics	3	0	0	3
11.	CE6128	Highway Geometric Design and Safety	3	0	0	3
12.	CE6129	Airport Engineering	3	0	0	3
13.	CE6130	Analytical Methods in Civil Engineering	3	0	0	3

Sl. No.	Subject Code	Subject	L	T	P	C
		Department Elective - III (Structure Elective)				
1.	CE6217	Advanced Steel Design	3	0	0	3
2.	CE6218	Finite Element Method	3	0	0	3
3.	CE6219	Structural Health Monitoring	3	0	0	3
4.	CE6220	Condition Assessment and Retrofitting of Structures	3	0	0	3
5.	CE6221	Advanced Topics in Reinforced Concrete Design	3	0	0	3
6.	CE6222	Seismic Analysis and Design of Structures	3	0	0	3

**Department Elective-IV (Structure / Department Elective)**
Sl. No.	**Subject Code**	**Subject**	**L**	**T**	**P**	**C**
1.	CE5217	Geoinformatics for Engineers	3	0	0	3
2.	CE6206	Geotechnical Earthquake Engineering	3	0	0	3
3.	CE6207	Soil-Structure Interaction Analysis	3	0	0	3
4.	CE6209	Coupled Process in Fractured Geological Media	3	0	0	3
5.	CE6210	Ground Improvement Techniques	3	0	0	3
6.	CE6213	Design of Underground Excavations	3	0	0	3
7.	CE6215	Forensic Geotechnical Engineering	3	0	0	3
8.	CE6223	Uncertainty, Risk and Reliability Analyses in Civil Engineering	3	0	0	3
9.	CE6224	Nonlinear Structural Mechanics	3	0	0	3
10.	CE6225	Theory of Random Vibration	3	0	0	3
11.	CE6226	Analysis of Structural Stability	3	0	0	3
12.	CE6228	Analytical Techniques for Infrastructure Systems Analysis	3	0	0	3
13.	CE6230	Advanced Concrete Pavement Analysis and Design	3	0	0	3