M.Tech.- Structural Engineering

I SEMESTER

S1. No.	Subject Code	Title	Teaching Hours / Week			Credit			
			Theory	Practical/ Field Work/ Assignment	Duration	I.A. Marks	Theory/ Practical Marks	Total Marks	orcuit
1	16CSE11	Computational Structural Mechanics	4	-	3	20	80	100	4
2	16CSE12	Advanced Design of RC Structures	4	-	3	20	80	100	4
3	16CSE13	Mechanics of Deformable Bodies	4	-	3	20	80	100	4
4	16CSE14	Structural Dynamics	4		3	20	80		E 1 VI
5	16 CSE15X	Elective-I	3					100	4
5	16CSEL16	Structural Engineering Lab-1		3	3	20	80	100	3 2
7	16CSE17	Seminar		3		100			
		TOTAL	19	6	18	100 220	480	700	1 22

Elective -I	
16CSE151	Advanced Design of Pre-Stressed Concrete Structures
16CSE152	Special Concrete
16CSE153	Design of Precast & Composite Structures
16CSE154	Reliability Analysis of Structures

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SI. No.	Subject Code	Title	Teaching Hours / Week		Examination				Credit
			Theory	Practical/ Field Work/ Assignment	Duration	I.A. Marks	Theory/ Practical Marks	Total Marks	
1	16CSE21	Advanced Design of Steel Structures	4	22 <u>11</u>	3	20	80	100	4
2	16CSE22	Earthquake Resistance Structures	4	146 J. 22	3	20	80	100	4
3	16CSE23	Finite Elements Method of Analysis	4	(12	3	20	80	100	4
4	16CSE24	Design Concepts of Substructures	4		3	20	80	100	4
5	16CSE25X	Elective-II	3		3	20	80	100	3
6	16CSEL26	Structural Engineering Lab-2		3	3	20	80	100	2
7	16CSE27	Seminar	-	3		100	_	100	1
		TOTAL	19	6	18	220	480	700	22

Elective -II	
16CSE251	Design of Tall structures
	Repair and Rehabilitation of Structures
16CSE253	Stability of Structures
	Theory of Plates and Shells

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III SEMESTER: Internship

			Teachin	g Hours /Week		Exami	nation		Credit
Sl. No.	Subject Code	Title	Theory	Practical/Field Work/ Assignment	Duration	I.A. Marks	Theory/ Practical Marks	Total Marks	
1	16CSE31	Seminar / Presentation on Internship (After 8 weeks from the date of commencement)	-	-	-	25	1	25	20
2	16CSE32	Report on Internship			<u>-</u>	25	<u>.</u>	25	20
3	16CSE33	Evaluation and Viva-Voce of Internship	-	-	_	_	50	50	
4	16CSE34	Project Phase -1			-	50	<u>-</u>	50	1
		TOTAL	-	•	-	100	50	150	21

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IV SEMESTER

SI. No.	Subject Code	CARLO SEE SECTION	Teaching Hours / Week		Examination				Credit
		Title	Theory	Practical/ Field Work/ Assignment	Duration	I.A. Marks	Theory/ Practical Marks	Total Marks	
1	16CSE41	Design of Concrete Bridges	4	16 5 - 1 3 - 1	3	20	80	100	4
2	16CSE42X	Elective-3	3		3	20	80	100	3
3	16CSE43	Project phase -2	8-1		<u> </u>	50	-	50	3
4	16CSE44	Evaluation of Project and Viva- Voce	1	2 -	3	-	100+100	200	10
	6-1 (T)	TOTAL	1 -100	- 3	6	90	360	450	20

Elective-III					
16CSE421	Optimization Techniques				
16CSE422	6CSE422 Design of Industrial Structures				
16CSE423	Theory of Plasticity and Fracture Mechanics				
16CSE424	Design of Masonry Structures				

Note:

- 1. Project Phase-1: 6-week duration shall be carried out between 2nd and 3rd Semester vacation. Candidates in consultation with the guide shall carry out literature survey/ visit industries to finalize the topic of Project.
- 2. Project Phase-2: 16-week duration during 4th semester. Evaluation shall be done by the committee constituted comprising of HoD as Chairman, Guide and Senior faculty of the department.
- 3. Project Evaluation: Evaluation shall be taken up at the end of 4th semester. Project work evaluation and Viva-Voce examination shall conducted
- 4. Project evaluation:
 - a. Internal Examiner shall carry out the evaluation for 100 marks.
 - b. External Examiner shall carry out the evaluation for 100 marks.
 - c. The average of marks allotted by the internal and external examiner shall be the final marks of the project evaluation.
 - d. Viva-Voce examination of Project work shall be conducted jointly by Internal and External examiner for 100 marks.