

**SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE**  
**I M.E. STRUCTURAL ENGINEERING**

## SEMESTER -I

S.No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	MAXIMUM MARKS				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE50004	Concrete Technology and Composites	3	0	0	3	0	70	30	0	0	100
2	CE50005	Advanced Soil Mechanics and Foundation Engineering	3	0	0	3	0	70	30	0	0	100
3	CE51008	Finite Element Method	3	0	0	3	0	70	30	0	0	100
4		Elective - I	3	0	0	3	0	70	30	0	0	100
5		Elective - II	3	0	0	3	0	70	30	0	0	100
6	CE51454	Concrete Lab	-	-	2	-	1	-	-	40	60	100
7	CE51455	Soil Mechanics Lab	-	-	2	-	1	-	-	40	60	100
8	CE51456	Computing Techniques Lab	-	-	4	-	2	-	-	40	60	100
9	CE51500	Comprehensive Viva	-	-		-	-	-	-	-	Grade	Grade
Total			15	0	8	15	4	350	150	120	180	800

## SEMESTER -II

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE51507	Advanced Concrete Structures	3	0	0	3	0	70	30	0	0	100
2	CE51508	Advanced Metal Structures	3	0	0	3	0	70	30	0	0	100
3	CE51509	Earthquake Resistant Design of Structures	3	0	0	3	0	70	30	0	0	100
4		Elective - III	3	0	0	3	0	70	30	0	0	100
5		Elective - IV	3	0	0	3	0	70	30	0	0	100
6	CE51882	Seminar			2		1			50	0	50
7	CE51883	Term Paper			2		1			50	0	50
8	CE51890	Minor Project			4		2			40	60	100
9	CE51900	Comprehensive Viva					0				Grade	Grade
Total			15	0	8	15	4	350	150	140	60	700

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Elective I		Semester I
S.No	Sub. Code	Subject
1	CE51207	Advanced Structural Analysis
2	CE51202	Structural Dynamics
3	CE51203	Stability of Structures
4	CE51204	Theory of Elasticity & Plasticity
5	CE51205	Instrumentation and Experimental Techniques
6	CE51206	Quality and safety in Construction

Elective II		Semester I
S.No	Sub. Code	Subject
1	CE51301	Prestressed Concrete Design
2	CE51302	Theory of Plates & Shells
3	CE51303	Structural Optimisation
4	CE51304	Numerical & System Methods
5	CE51305	Research Methodology
6	CE51306	Structural Safety & Reliability

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Elective III		Semester II
S.No	Sub. Code	Subject
1	CE51707	Analysis & Design of Bridges
2	CE51702	Computer Aided Analysis and Design
3	CE51703	Analysis and Design for Dynamics Effects
4	CE51704	Analysis and Design of Composite structures: Steel, RCC, Timber
5	CE51705	Design of Hydraulic & PHE Structures
6	CE51706	Blast Resistant Design of Structures

Elective IV		Semester II
S.No	Sub. Code	Subject
1	CE51751	Design of Tall Structures
2	CE51752	Non-Linear Analysis
3	CE51753	Advanced Prestressed Concrete Design
4	CE51754	Design of offshore Structure/Marine Infrastructure
5	CE51755	Advanced Construction Practices
6	CE51756	Repair, Maintenance & Rehabilitation of Structures

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## SEMESTER - III

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE51931	*Industrial Training			8		4			50	0	50
2	CE51932	Dissertation Phase - I			20		10			40	60	100
3	MA51902	**Research Methodology & IPR	2			2	0	70	30			100
<b>TOTAL</b>			<b>2</b>	<b>0</b>	<b>28</b>	<b>2</b>	<b>14</b>	<b>70</b>	<b>30</b>	<b>90</b>	<b>60</b>	<b>250</b>

\* Industrial training to be carried out between II and III semester during vacation

\*\* This course can be studied online with prior permission of HOD, however, End-semester examination will be conducted in the Institute.

**Semester: IV**

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE51952	Dissertation Phase - II			32		16			80	120	200
<b>TOTAL</b>			<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>120</b>	<b>200</b>