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

SEMESTER-I

S.No.	Subject	Subject	Hours per Week			Th.	Pr.	Maximum Marks				
5.110.	Code		L	T	P	Credit	Credit	TH	CW	SW	Pr.	Total
1	CE50009	Advanced Concrete Technology	3	ı	-	3	ı	70	30	-	-	100
2	CE50015	Advanced Soil Mechanics and Foundation Engineering	3	ı	-	3	ı	70	30	-	-	100
3	CE50018	Finite Element Method	3	ı	-	3	ı	70	30	-	-	100
4		Elective - I	3	1	-	3	ı	70	30	-	-	100
5		Elective - II	3	ı	-	3	ı	70	30	-	-	100
6	CE51457	Concrete Lab	-	ı	2	-	1	-	-	40	60	100
7	CE51458	Soil Mechanics Lab	-	-	2	-	1	-	-	40	60	100
8	CE51459	Computing Techniques Lab	-	-	4	-	2	-	-	40	60	100
9	CE51498	Comprehensive Viva	-		-	-	-	-	-	-	100	100
		Total	15	0	8	15	4	350	150	120	280	900

SEMESTER -II

S.No.	Subject	Subject	Subject Hours per Week				Th. Pr.		Maximum Marks					
5.110.	Code	Subject	L	T	P	Credit	Credit	TH	CW	SW	Pr.	Total		
1	CE51517	Advanced Concrete Structures	3	-	-	3	-	70	30	-	-	100		
2	CE51518	Advanced Metal Structures	3	-	-	3	-	70	30	-	-	100		
3	CE51519	Earthquake Resistant Design of Structures	3	-	-	3	-	70	30	-	-	100		
4		Elective - III	3	-	-	3	-	70	30	-	-	100		
5		Elective - IV	3	-	-	3	-	70	30	-	-	100		
6	CE51884	Seminar	-	-	2	-	1	-	-	50	-	50		
7	CE51885	Term Paper	-	-	2	-	1	-	-	50	-	50		
8	CE51891	Minor Project	-	-	4	-	2	-	-	40	60	100		
9	CE51898	Comprehensive Viva	-	-	-	-	-	-	-	-	100	100		
		Total	15	0	8	15	4	350	150	140	160	800		

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE I M.TECH. STRUCTURAL ENGINEERING List of Electives

El	lective I	Semester I
S.No	Subject Code	Subject
1	CE51217	Advanced Structural Analysis
2	CE51212	Structural Dynamics
3	CE51213	Stablity of Structures
4	CE51214	Theory of Elasticity & Plasticity
5	CE51215	Instrumentation and Experimental Techniques
6	CE51216	Quality and safety in Construction

El	ective II	Semester I
S.No	Subject Code	Subject
1	CE51311	Prestressed Concrete Design
2	CE51312	Theory of Plates & Shells
3	CE51313	Structural Optimisation
4	CE51314	Numerical & System Methods
5	CE51315	Research Methodology
6	CE51316	Structural Safety & Reliability

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE I M.TECH. STRUCTURAL ENGINEERING List of Electives

Ele	ective III	Semester II
S.No	Subject Code	Subject
1	CE51717	Analysis & Design of Bridges
2	CE51712	Computer Aided Analysis and Design
3	CE51713	Analysis and Design for Dynamics Effects
4	CE51714	Analysis and Design of Composite structures: Steel, RCC, Timber
5	CE51715	Design of Hydraulic & PHE Structures
6	CE51716	Blast Resistant Design of Structures

Ele	ective IV	Semester II
S.No	Subject Code	Subject
1	CE51761	Design of Tall Structures
2	CE51762	Non-Linear Analysis
3	CE51763	Advanced Prestressed Concrete Design
4	CE51764	Design of offshore Structure/Marine Infrastructure
5	CE51765	Advacnced Construction Practices
6	CE51766	Repair, Maintainance & Rehabilitation of Structures

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE II M.TECH. STRUCTURAL ENGINEERING

SEMESTER - III

S.No.	Subject	Cubicat	Hours per Week			Th.	Pr.	Maximum Marks					
5.110.	Code	Subject	L	T	P	Credit	Credit	TH	$\mathbf{C}\mathbf{W}$	SW	Pr.	Total	
1	CE51931	*Industrial Training	-	-	8	-	4	1	1	50	-	50	
2	CE51932	Dissertation Phase-I	-	-	20	-	10	-	-	40	60	100	
3	MA51902	**Research Methodology & IPR	2	-	-	2	-	70	30	-	-	100	
		Total	2	0	28	2	14	70	30	90	60	250	

^{*} Industrial training to be carried out between II and III semester during vacation

SEMESTER - IV

S.No.	Subject	Cubicat	Hours per Week			Th. Pr.		Maximum Marks					
	Code	Subject		T	P	Credit	Credit	TH	$\mathbf{C}\mathbf{W}$	SW	Pr.	Total	
1	CE51952	Dissertation Phase-II	-	-	32	-	16	-	-	80	120	200	
		Total	0	0	32	0	16	0	0	80	120	200	

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