

M Tech Civil Engineering
(Specialization in Structural Engineering)
 (Regular, 2 Years, 4 Semesters, 68 Credits)

First Semester: Course Structure

Theory/ Practical	Sl no	Sub code	subject	Hours per week			Credit
				L	T	P	
Theory	1		Advanced Structural Analysis	3	0	0	3
	2		Advanced Solid Mechanics	3	0	0	3
	3		Advanced Concrete Technology	3	0	0	3
Practical	4		Advanced Concrete Technology lab	0	0	4	2
Programme Elective-I							
Theory	5		Program Elective -1	3	0	0	3
Open Elective							
Theory	6		Open Elective	3	0	0	3
Mandatory Learning Course							
Theory	7		Research Methodology and IPR	2	0	0	2
Audit Course-I							
Theory	8		Audit Course-1	2	0	0	0
Total				19	0	4	19

Program Elective-1

Sl no	Code	Subject
1		Theory of Thin Plates and Shells
2		Theory and Applications of Cement Composites
3		Theory of Structural Stability
4		Analytical and Numerical Methods for Structural Engineering
5		Structural Health Monitoring
6		Structural Optimization
7		Any other subject offered from time to time with the approval

Second semester: Course Structure

Theory/ Practical	Sl no	Sub code	subject	Hours per week			Credit
				L	T	P	
Theory	1		FEM in Structural Engineering	3	0	0	3
	2		Structural Dynamics	3	0	0	3
	3		Advanced Steel & Concrete Design	3	0	0	3
Practical	4		Software Lab	0	0	4	2
Programme Elective-2							
Theory	5		Program Elective -2	3	0	0	3
Program Elective-3							
Theory	6		Program Elective-3	3	0	0	3
Audit Course-2							
Theory	7		Audit Course-2	2	0	0	0
Total				17	0	4	17

Program Elective-2

Sl no	Code	Subject
1		Design of Formwork
2		Design of High Rise Structures
3		Design of Masonry Structures
4		Design of Prestressed Concrete Structures
5		Any other subject offered from time to time with the approval

Program Elective-3

Sl no	Code	Subject
1		Soil Structure Interaction
2		Advanced Design of Foundations
3		Design of Industrial Structure
4		Design of Plates and Shells
5		Any other subject offered from time to time with the approval

Third Semester: Course Structure

Theory/ Practical	Sl no	Sub code	Subject	Hours per week			Credit
				L	T	P	
Practical	1		Mini Project	0	0	8	4
	2		Dissertation Phase – I	0	0	24	12
Total				0	0	32	16

Fourth Semester: Course Structure

Theory/ Practical	Sl no	Sub code	Subject	Hours per week			Credit
				L	T	P	
Practical	1		Dissertation Phase – II	0	0	32	16
Total				0	0	32	16