

**COURSE STRUCTURE AND SCHEME OF EVALUATION**  
**M.Tech. (Structural Engineering)**  
**(To be effective from 2015-2016 )**

**I Semester**

S. No	Subject Code & Title	Periods per week		Maximum Marks			Credits
		L	P	Int.	Ext.	Total	
1.	MCE /SE/511 Theory of Elasticity and Plasticity	4		40	60	100	4
2.	MCE/SE/512 Dynamics of structures	4		40	60	100	4
3.	MCE/SE/513 Matrix methods of structural analysis	4		40	60	100	4
4.	Elective - I	4		40	60	100	4
5.	Elective - II	4		40	60	100	4
6.	Elective -III	4		40	60	100	4
7.	MCE/SE/551 Structural Engineering Laboratory		3	40	60	100	2
8.	MCE/SE/552 Seminar		1	100	-	100	2
		24	3	380	420	800	28

L: Lecture, P: Practical

Duration of Internal Examination : 2 Hours

Duration of External Examination : 3 Hours

**II Semester**

S. No	Subject Title	Periods per week		Maximum Marks			Credits
		L	P	Int.	Ext.	Total	
1.	MCE/SE/514 Finite Element Analysis of Structures	4		40	60	100	4
2.	MCE/SE/515 Stability of Structures	4		40	60	100	4
3.	MCE/SE/516 Theory of Plates and Shells	4		40	60	100	4
4.	Elective - IV	4		40	60	100	4
5.	Elective - V	4		40	60	100	4
6.	Elective - VI	4		40	60	100	4
7.	MCE/SE/553 Computer Aided Design Laboratory		3	40	60	100	2
8.	MCE/SE/554 Seminar		1	100	-	100	2
		24	4	380	420	800	28

L: Lecture, P: Practical

Duration of Internal Examination : 2 Hours

Duration of External Examination : 3 Hours

### III Semester

S.No.	Subject Code & Title	Maximum Marks (Internal)	Credits
1	MCE/SE/711 Internship	100	2
2	MCE/SE/712 Project (Phase-I)	100	6

### IV Semester

S.No.	Subject Code & Title	Maximum Marks		Credits
		Int.	Ext (Viva-voce)	
1	MCE/SE/713 Project (Phase-II)	50	150	16

### ELECTIVE SUBJECTS

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MCE/SE/611 Advanced Theory and Design of RCC Structures  
MCE/SE/612 Design of reinforced concrete foundations  
MCE/SE/613 Structural optimization  
MCE/SE/614 Fracture Mechanics of concrete  
MCE/SE/615 Fibre Reinforced Plastic Composites  
MCE/SE/616 Experimental stress analysis and Motion measurement  
MCE/SE/617 Health monitoring of structures  
MCE/SE/618 Design of Tall Buildings  
MCE/SE/619 Advanced Foundation Engineering  
MCE/SE/620 Earthquake Resistant Design of Structures  
MCE/SE/621 Disaster Management  
MCE/SE/622 Ground Improvement Techniques  
MCE/SE/623 Advanced Design of Steel Structures  
MCE/SE/624 Composite Construction  
MCE/SE/625 Design of Prestressed Concrete Structures  
MCE/SE/626 Repair and Rehabilitation of Structures  
MCE/SE/627 Advanced Bridge Engineering  
MCE/SE/628 Fibre reinforced concrete