

DEPARTMENT OF CIVIL ENGINEERING
GOVERNMENT COLLEGE OF TECHNOLOGY, COIMBATORE
(An Autonomous Institution Affiliated to Anna University, Chennai)

M.E STRUCTURAL ENGINEERING
CBCS 2016 REGULATIONS
CURRICULAM

M.E. STRUCTURAL ENGINEERING

CURRICULAM

(Full Time Candidates admitted during 2016-2017 and onwards)

FIRST SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16CEFC01	Applied Mathematics (Common with M.E. GeoTechnical Engineering)	FC	50	50	100	3	2	0	4
2	16SEPC01	Computer Methods of Structural Analysis	PC	50	50	100	3	0	0	3
3	16SEPC02	Structural Dynamics	PC	50	50	100	4	0	0	4
4	16SEPC03	Advanced Reinforced Concrete Structures	PC	50	50	100	3	0	0	3
5	PE1	Elective: 1	PE / IE	50	50	100	3	0	0	3
6	PE2	Elective: 2	PE	50	50	100	3	0	0	3
7	16SEPC08	Structural Engineering Laboratory	PC	50	50	100	0	0	4	2
Total						700				22

SECOND SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16SEPC04	Theory of Elasticity and Plasticity	PC	50	50	100	3	2	0	4
2	16SEPC05	Advanced Steel Structures	PC	50	50	100	3	0	0	3
3	16SEPC06	Stability of Structures	PC	50	50	100	3	0	0	3
4	16SEPC07	Finite Element Analysis	PC	50	50	100	3	2	0	4
5	PE3	Elective: 3 – Professional Elective/ Industry need based Elective	PE	50	50	100	3	0	0	3
6	PE4	Elective: 4 – Professional Elective/ Open elective	PE	50	50	100	3	0	0	3
7	16SEPC09	Computer Applications Laboratory	PC	50	50	100	0	0	4	2
Total						700				22

THIRD SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	PE5	Elective: 5	PE	50	50	100	3	0	0	3
2	PE6	Elective: 6	PE	50	50	100	3	0	0	3
3	PE7	Elective: 7	PE	50	50	100	3	0	0	3
4	16SEEE01	Project Phase I	EEC	100	100	200	0	0	12	6
		Total				600				15

* Professional Practice / Seminar/ Case Study with 1 credit

FOURTH SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16SEEE02	Project Phase II	EEC	200	200	400	0	0	24	12
		Total				400				12

L : Credits for Lecture Hours

P : Credits for Practical Hours

T : Credits for Tutorial Hours

C : Total Number of Credits

M.E. STRUCTURAL ENGINEERING

CURRICULAM

(Part Time Candidates admitted during 2016-2017 and onwards)

FIRST SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16CEFC01	Applied Mathematics (Common with M.E. GeoTechnical Engineering)	FC	50	50	100	3	2	0	4
2	16SEPC01	Computer Methods of Structural Analysis	PC	50	50	100	3	0	0	3
3	16SEPC02	Structural Dynamics	PC	50	50	100	4	0	0	4
Total						700				11

SECOND SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16SEPC04	Theory of Elasticity and Plasticity	PC	50	50	100	3	2	0	4
2	16SEPC05	Advanced Steel Structures	PC	50	50	100	3	0	0	3
3	16SEPC06	Stability of Structures	PC	50	50	100	3	0	0	3
Total						700				10

THIRD SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
4	16SEPC03	Advanced Reinforced Concrete Structures	PC	50	50	100	3	0	0	3
5	PE1	Elective: 1	PE / IE	50	50	100	3	0	0	3
6	PE2	Elective: 2	PE	50	50	100	3	0	0	3
7	16SEPC08	Structural Engineering Laboratory	PC	50	50	100	0	0	4	2
Total						700				11

FOURTH SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16SEPC07	Finite Element Analysis	PC	50	50	100	3	2	0	4
2	PE3	Elective: 3 – Professional Elective/ Industry need based Elective	PE	50	50	100	3	0	0	3
3	PE4	Elective: 4 – Professional Elective/ Open elective	PE	50	50	100	3	0	0	3
4	16SEPC09	Computer Applications Laboratory	PC	50	50	100	0	0	4	2
Total						700				12

FIFTH SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	PE5	Elective: 5	PE	50	50	100	3	0	0	3
2	PE6	Elective: 6	PE	50	50	100	3	0	0	3
3	PE7	Elective: 7	PE	50	50	100	3	0	0	3
4	16SEEE01	Project Phase I	EEC	100	100	200	0	0	12	6
Total						600				15

* Professional Practice / Seminar/ Case Study with 1 credit

SIXTH SEMESTER

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16SEEE02	Project Phase II	EEC	200	200	400	0	0	24	12
Total						400				12

L : Credits for Lecture Hours P : Credits for Practical Hours
T : Credits for Tutorial Hours C : Total Number of Credits

FOUNDATION COURSE

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16CEFC01	Applied Mathematics (Common with M.E. Geotechnical Engineering)	FC	50	50	100	3	2	0	4

LIST OF PROFESSIONAL CORE SUBJECTS

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16SEPC01	Computer Methods of Structural Analysis	PC	50	50	100	3	0	0	3
2	16SEPC02	Structural Dynamics	PC	50	50	100	4	0	0	4
3	16SEPC03	Advanced Reinforced Concrete Structures	PC	50	50	100	3	0	0	3
4	16SEPC04	Theory of Elasticity and Plasticity	PC	50	50	100	3	2	0	4
5	16SEPC05	Advanced Steel Structures	PC	50	50	100	3	0	0	3
6	16SEPC06	Stability of Structures	PC	50	50	100	3	0	0	3
7	16SEPC07	Finite Element Analysis	PC	50	50	100	3	2	0	4
8	16SEPC08	Structural Engineering Laboratory	PC	50	50	100	0	0	4	2
9	16SEPC09	Computer Applications Laboratory	PC	50	50	100	0	0	4	2

LIST OF PROFESSIONAL ELECTIVE SUBJECTS

Sl. No	Subject Code	Course Title	Category	Sessional Marks	Final Exam Marks	Total Marks	Credits			
							L	T	P	C
1	16SEPE01	Design of Concrete Bridges	PE	50	50	100	3	0	0	3
2	16SEPE02	Finite Element Analysis and Application Laboratory	PE	50	50	100	0	0	4	2
3	16SEPE03	Experimental Techniques and Instrumentation	PE	50	50	100	3	0	0	3
4	16SEPE04	Structural Optimization	PE	50	50	100	3	0	0	3
5	16SEPE05	Advanced Concrete Technology	PE	50	50	100	3	0	0	3
6	16SEPE06	Plastic Analysis of Structures	PE	50	50	100	3	0	0	3
7	16SEPE07	Plates and Shells	PE	50	50	100	3	0	0	3
8	16SEPE08	Fracture Mechanics	PE	50	50	100	3	0	0	3
9	16SEPE09	Design of Steel Concrete Composite Structures	PE	50	50	100	3	0	0	3
10	16SEPE10	Maintenance and Rehabilitation of Structures	PE	50	50	100	3	0	0	3
11	16SEPE11	Prefabricated Structures	PE	50	50	100	3	0	0	3
12	16SEPE12	Corrosion Engineering	PE	50	50	100	3	0	0	3
13	16SEPE13	Offshore Structures	PE	50	50	100	3	0	0	3
14	16SEPE14	Earthquake Resistant Design of Structures	PE	50	50	100	3	0	0	3
15	16SEPE15	Substructure Design	PE	50	50	100	3	0	0	3
16	16SEPE16	Design of Structures for Dynamic Loads	PE	50	50	100	3	0	0	3

17	16SEPE17	Design of Tall Buildings	PE	50	50	100	3	0	0	3
18	16SEPE18	Cold Formed Steel Structures	PE	50	50	100	3	0	0	3
19	16SEPE19	Smart Materials and Smart Structures	PE	50	50	100	3	0	0	3
20	16SEPE20	Research Methodology	PE	50	50	100	3	0	0	3
LIST OF COMMON ELECTIVES FOR ALL M.E DEGREE COURSES IN CIVIL ENGINEERING										
21	16CEPE01	Soil Structure Interaction (Common with M.E. Geotechnical Engineering)	PE	50	50	100	3	0	0	3
22	16CEPE02	Geotechnical Earthquake Engineering (Common with M.E. Geotechnical Engineering)	PE	50	50	100	3	0	0	3
23	16CEPE03	Environmental Engineering Structures (Common with M.E. Environmental Engineering)	PE	50	50	100	3	0	0	3
EMPLOYABILITY ENHANCEMENT COURSES										
24	16SEEE01	Project Phase I	EEC	100	100	200	0	0	12	6
25	16SEEE02	Project Phase II	EEC	200	200	400	0	0	24	12
INDUSTRY NEED BASED ELECTIVE SUBJECT										
26	16SEIE01	Design of Advanced Industrial Structures	IE	50	50	100	3	0	0	3
27	16SEIE02	Prestressed Concrete Structures	IE	50	50	100	3	0	0	3
OPEN ELECTIVE										
28	16SEOE01	Numerical methods and Finite Element Analysis	OE	50	50	100	3	0	0	3

L : Credits for Lecture Hours P : Credits for Practical Hours

T : Credits for Tutorial Hours C : Total Number of Credits