EXCEL ENGINEERING COLLEGE
(Autonomous)
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NBA, NAAC with "A+" and Recognised by UGC (2f &12B)
KOMARAPALAYAM – 637303

DEPARTMENT OF CIVIL ENGINEERING
M.E STRUCTURAL ENGINEERING
REGULATION 2020
CHOISE BASED CREDIT SYSTEM
I TO IV SEMESTER CURRICULUM

SEMESTER I									
Sub code	Course	Category	Periods /Week			C	Maximum Marks		
			L	T	P		CA	FE	Total
Theory Course (s)									
20PMA101	Advanced Mathematical Methods	FC	3	2	0	4	40	60	100
20PSE101	Advanced Concrete Structures	PC	3	0	0	3	40	60	100
20PSE102	Structural Dynamics	PC	3	0	0	3	40	60	100
20PSE103	Theory of Elasticity and Plasticity	PC	3	0	0	3	40	60	100
20PSEEXX	Professional Elective I	PE	3	0	0	3	40	60	100
20PSEEXX	Professional Elective II	PE	3	0	0	3	40	60	100
		Total	**18**	**2**	**0**	**19**	**240**	**360**	**600**

SEMESTER II									
Sub code	Course	Category	Periods /Week			C	Maximum Marks		
			L	T	P		CA	FE	Total
Theory Course (s)									
20PSE201	Advanced Steel Structures	PC	3	2	0	4	40	60	100
20PSE202	Stability of Structures	PC	3	0	0	3	40	60	100
20PSE203	Experimental Techniques and Model Analysis	PC	3	0	0	3	40	60	100
20PSE204	Finite Element Analysis	PC	3	0	0	3	40	60	100
20PSEEXX	Professional Elective III	PE	3	0	0	3	40	60	100
20PSEEXX	Professional Elective IV	PE	3	0	0	3	40	60	100
Practical Course									
20PSE205	Advanced Structural Engineering Laboratory	PC	0	0	6	3	50	50	100
Employability Enhancement Course									
20PSE206	Industrial Training – I	EEC	(2 Weeks)			1	50	50	100
		Total	**18**	**2**	**6**	**23**	**440**	**460**	**900**

SEMESTER III									
Sub code	**Course**	**Category**	**Periods /Week**			**C**	**Maximum Marks**		
			L	**T**	**P**		**CA**	**FE**	**Total**
Theory Course (s)									
20PEE301	Research Methodology and Intellectual Property Rights	PC	3	0	0	3	40	60	100
20PSEEXX	Professional Elective V	PE	3	0	0	3	40	60	100
20PSEEXX	Professional Elective VI	PE	3	0	0	3	40	60	100
Employability Enhancement Course									
20PSE301	Project work (Phase I)	EEC	0	0	12	6	50	50	100
20PSE302	Industrial Training II	EEC	(2 Weeks)			1	100	0	100
TOTAL			**9**	**0**	**12**	**16**	**270**	**230**	**500**

SEMESTER-IV									
Sub code	**Course**	**Category**	**Periods /Week**			**C**	**Maximum Marks**		
			L	**T**	**P**		**CA**	**FE**	**Total**
Employability Enhancement Course									
20PSE401	Project work (Phase II)	EEC	0	0	24	12	50	50	100
TOTAL			**0**	**0**	**24**	**12**	**50**	**50**	**100**

TOTAL CREDITS TO BE EARNED FOR THE AWARD OF THE DEGREE = 70

CREDIT SUMMARY

S.No	CATEGORY	CREDITS PER SEMESTER				TOTAL CREDIT	CREDITS IN %
		I	II	III	IV		
1	**FC**	4				4	**5.7**
2	**PC**	9	16	3		28	**40.0**
3	**PE**	6	6	6		18	**25.7**
4	**EEC**		1	7	12	20	**28.6**
TOTAL		19	23	16	12	70	**100.0**

FC - Foundation Course
PC - Professional Core
PE - Professional Electives
EEC - Employability Enhancement Courses
MC - Mandatory Courses (Non-Credit Courses)
CA - Continuous Assessment
FE - Final Examination

PROFESSIONAL ELECTIVE I& II									
SEMESTER I									
Sub code	**Course**	**Category**	**Periods /Week**			**C**	**Maximum Marks**		
			L	**T**	**P**		**CA**	**FE**	**Total**
20PSEE01	Maintenance and Rehabilitation of Structures	PE	3	0	0	3	40	60	100
20PSEE02	Prefabricated Structures	PE	3	0	0	3	40	60	100
20PSEE03	Offshore Structures	PE	3	0	0	3	40	60	100
20PSEE04	Matrix Methods for Structural Analysis	PE	3	0	0	3	40	60	100

PROFESSIONAL ELECTIVES III & IV									
SEMESTER II									
Sub code	**Course**	**Category**	**Periods /Week**			**C**	**Maximum Marks**		
			L	**T**	**P**		**CA**	**FE**	**Total**
20PSEE11	Theory of Plates	PE	3	0	0	3	40	60	100
20PSEE12	Mechanics of Composite Materials	PE	3	0	0	3	40	60	100
20PSEE13	Analysis and Design of Tall Buildings	PE	3	0	0	3	40	60	100
20PSEE14	Industrial Structures	PE	3	0	0	3	40	60	100
20PSEE15	Prestressed Concrete	PE	3	0	0	3	40	60	100
20PSEE16	Wind and Cyclone Effects on Structures	PE	3	0	0	3	40	60	100

PROFESSIONAL ELECTIVES V& VI									
SEMESTER III									
Sub code	**Course**	**Category**	**Periods /Week**			**C**	**Maximum Marks**		
			L	**T**	**P**		**CA**	**FE**	**Total**
20PSEE21	Nonlinear Analysis of Structures	PE	3	0	0	3	40	60	100
20PSEE22	Design of Sub Structures	PE	3	0	0	3	40	60	100
20PSEE23	Optimization of Structures	PE	3	0	0	3	40	60	100
20PSEE24	Design of Steel Concrete Composite Structures	PE	3	0	0	3	40	60	100
20PSEE25	Design of Bridges	PE	3	0	0	3	40	60	100
20PSEE26	Design of Shell and Spatial Structures	PE	3	0	0	3	40	60	100
20PSEE27	Computer Aided Analysis and Design	PE	3	0	0	3	40	60	100
20PSEE28	Design of Formwork	PE	3	0	0	3	40	60	100
20PSEE29	Earthquake analysis and design of structures	PE	3	0	0	3	40	60	100