# ANNA UNIVERSITY, CHENNAI

### AFFILIATED INSTITUTIONS

## R - 2013

### **B. E. CIVIL ENGINEERING**

## I TO VIII SEMESTERS CURRICULUM & SYLLABUS

### SEMESTER I

SL. No.	COURSE CODE	COURSE TITLE	L	т	Р	С				
THEC	THEORY									
1.	HS6151	Technical English - I	3	1	0	4				
2.	MA6151	Mathematics – I	3	1	0	4				
3.	PH6151	Engineering Physics – I	3	0	0	З				
4.	CY6151	Engineering Chemistry – I	3	0	0	З				
5.	GE6151	Computer Programming	3	0	0	3				
6.	GE6152	Engineering Graphics	2	0	3	4				
PRAC	CTICAL									
7.	GE6161	Computer Practices Laboratory	0	0	3	2				
8.	GE6162	Engineering Practices Laboratory	0	0	3	2				
9.	GE6163	Physics and Chemistry Laboratory - I	0	0	2	1				
		TOTAL	17	2	11	26				

#### SEMESTER II

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Ρ	С				
THEC	THEORY									
1.	HS6251	Technical English - II	3	1	0	4				
2.	MA6251	Mathematics – II	3	1	0	4				
3.	PH6251	Engineering Physics – II	3	0	0	3				
4.	CY6251	Engineering Chemistry – II	3	0	0	3				
5.	GE6252	Basic Electrical and Electronics Engineering	4	0	0	4				
6.	GE6253	Engineering Mechanics	3	1	0	4				
PRAG	CTICAL									
7.	GE6261	Computer Aided Drafting and Modeling Laboratory	0	1	2	2				
8.	GE6262	Physics and Chemistry Laboratory - II	0	0	2	1				
		TOTAL	19	4	4	25				

#### SEMESTER III

SL. No.	COURSE CODE	COURSE TITLE	L	т	Ρ	С				
THEC	THEORY									
1.	MA6351	Transforms and Partial Differential Equations	3	1	0	4				
2.	GE6351	Environmental Science and Engineering	3	0	0	3				
3.	CE6301	Engineering Geology	3	0	0	3				
4.	CE6302	Mechanics of Solids	3	1	0	4				
5.	CE6303	Mechanics of Fluids	3	0	0	3				
6.	CE6304	Surveying I	3	0	0	3				
PRAG	CTICAL									
7.	CE6311	Survey Practical I	0	0	4	2				
8.	CE6312	Computer Aided Building Drawing	0	0	4	2				
		TOTAL	18	2	8	24				

## **SEMESTER IV**

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Р	С			
THEORY									
1.	MA6459	Numerical Methods	3	1	0	4			
2.	CE6401	Construction Materials	3	0	0	3			
3.	CE6402	Strength of Materials	3	1	0	4			
4.	CE6403	Applied Hydraulic Engineering	3	1	0	4			
5.	CE6404	Surveying II	3	0	0	3			
6.	CE6405	Soil Mechanics	3	0	0	3			
PRAG	CTICAL								
7.	CE6411	Strength of Materials Laboratory	0	0	3	2			
8.	CE6412	Hydraulic Engineering Laboratory	0	0	3	2			
9.	CE6413	Survey Practical II	0	0	4	2			
		TOTAL	18	3	10	27			

### SEMESTER V

SL.	COURSE			т	П	~			
No.	CODE	COURSE TITLE	L	I	Ρ	С			
THEORY									
1.	CE6501	Structural Analysis I	3	1	0	4			
2.	CE6502	Foundation Engineering	3	0	0	3			
3.	CE6503	Environmental Engineering I	3	0	0	3			
4.	CE6504	Highway Engineering	3	0	0	3			
5.	CE6505	Design of Reinforced Concrete Elements	3	0	0	3			
6.	CE6506	Construction Techniques, Equipment and Practice	3	0	0	3			
PRAC	TICAL								
7.	GE6674	Communication and Soft skills- Laboratory Based	0	0	4	2			
8.	CE6511	Soil Mechanics Laboratory	0	0	4	2			
9.	CE6512	Survey Camp*	-	-	-	1			
		TOTAL	18	1	8	24			

\* Survey Camp to be conducted for a period of 2 weeks during 4<sup>th</sup> Semester Summer Vacation

# SEMESTER VI

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Ρ	С			
THEORY									
1.	CE6601	Design of Reinforced Concrete & Brick Masonry Structures	3	0	0	3			
2.	CE6602	Structural Analysis II	3	1	0	4			
3.	CE6603	Design of Steel Structures	3	1	0	4			
4.	CE6604	Railways, Airports and Harbour Engineering	3	0	0	3			
5.	CE6605	Environmental Engineering II	3	0	0	3			
6.		Elective I	3	0	0	3			
PRAC	TICAL								
7.	CE6611	Environmental Engineering Laboratory	0	0	3	2			
8.	CE6612	Concrete and Highway Engineering Laboratory	0	0	3	2			
		TOT	AL 18	2	6	24			

## SEMESTER VII

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Ρ	С				
THEO	THEORY									
1.	CE6701	Structural Dynamics and Earthquake Engineering	3	0	0	3				
2.	CE6702	Prestressed Concrete Structures	3	0	0	3				
3.	CE6703	Water Resources and Irrigation Engineering	3	0	0	3				
4.	CE6704	Estimation and Quantity Surveying	3	0	0	3				
5.		Elective II	3	0	0	3				
6.		Elective III	3	0	0	3				
PRAC	CTICAL									
7.	CE6711	Computer Aided Design and Drafting Laboratory	0	0	4	2				
8.	CE6712	Design Project	0	0	4	2				
		TOTAL	18	0	8	22				

### SEMESTER VIII

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Ρ	С
THEO	RY					
1.	MG6851	Principles of Management	3	0	0	3
2.		Elective IV	3	0	0	3
3.		Elective V	3	0	0	3
PRAC	TICAL					
4.	CE6811	Project Work	0	0	12	6
		TOTAL	9	0	12	15

# TOTAL NO OF CREDITS: 187

## LIST OF ELECTIVES

### ELECTIVE I

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Ρ	С
1.	CE6001	Hydrology	3	0	0	3
2.	CE6002	Concrete Technology	3	0	0	3
3.	CE6003	Remote Sensing Techniques and GIS	3	0	0	3
4.	CE6004	Architecture	3	0	0	3
5.	GE6075	Professional Ethics in Engineering	3	0	0	3
6.	CE6005	Construction Planning and Scheduling	3	0	0	3

## ELECTIVE II

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Ρ	С
7.	CE6006	Traffic Engineering and Management	3	0	0	3
8.	CE6007	Housing Planning and Management	3	0	0	3
9.	CE6008	Groundwater Engineering	3	0	0	3
10.	CE6009	Water Resources Systems Analysis	3	0	0	3
11.	CE6010	Pavement Engineering	3	0	0	3

## ELECTIVE III

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Ρ	С
12.	EN6801	Environmental Impact Assessment	3	0	0	3
13.	CE6023	Industrial Waste Management	3	0	0	3
14	CE6011	Air Pollution Management	3	0	0	3
15.	EN6501	Municipal Solid Waste Management	3	0	0	3
16.	CE6012	Ground Improvement Techniques	3	0	0	3
17.	GE6083	Disaster Management	3	0	0	3

## ELECTIVE IV

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Р	С
18.	CE6013	Bridge Structures	3	0	0	3
19.	CE6014	Storage Structures	3	0	0	3
20.	CE6015	Tall Buildings	3	0	0	3
21.	CE6016	Prefabricated Structures	3	0	0	3
22.	CE6017	Experimental Analysis of Stress	3	0	0	3
23.	GE6757	Total Quality Management	3	0	0	3
24.	GE6084	Human Rights	3	0	0	3

### ELECTIVE V

SL. No.	COURSE CODE	COURSE TITLE	L	Т	Ρ	С
25.	CE6018	Computer Aided Design of Structures	3	0	0	3
26.	CE6019	Industrial Structures	3	0	0	3
27.	CE6020	Finite Element Techniques	3	0	0	3
28.	CE6021	Repair and Rehabilitation of Structures	3	0	0	3
29.	CE6022	Earthquake Geotechnical Engineering	3	0	0	3