

**KUMARAGURU COLLEGE OF TECHNOLOGY,
COIMBATORE – 641 049**

(An Autonomous Institution Affiliated to Anna University, Chennai)

REGULATIONS – 2015

(CBCS)

CURRICULUM FOR I to VIII SEMESTERS

For Academic year 2015-2016

B.E - CIVIL ENGINEERING

B.E - CIVIL ENGINEERING**SEMESTER – I**

	Course Code	Course Title	Category	Contact Hours	Hrs/Week & Credits			
					L	T	P	C
Theory								
1.	U15ENT101	Technical English	HS	3	3	0	0	3
2.	U15MAT101	Engineering Mathematics – I	BS	5	3	2	0	4
3.	U15PHT101	Engineering Physics	BS	3	3	0	0	3
4.	U15CHT101	Engineering Chemistry	BS	3	3	0	0	3
5.	U15MET101	Engineering Graphics	ES	6	2	4	0	4
6.	U15CST101	Structured Programming using ‘C’	ES	4	2	2	0	3
Practical								
7.	U15PHP101	Physics Laboratory	BS	2	0	0	2	1
8.	U15MEP101	Engineering Practices Laboratory	ES	4	0	0	4	2
9	U15CSP101	Structured Programming Laboratory using ‘C’	ES	4	0	0	4	2
10.	U15GHP101	Personal Values - I	HS	2	0	0	2	1
TOTAL				36				26

SEMESTER – II

	Course Code	Course Title	Category	Contact Hours	Hrs/Week & Credits			
					L	T	P	C
Theory								
1.	U15ENT201	Business Communication and Presentation Skills	HS	4	0	0	4	2
2.	U15MAT201	Engineering Mathematics II	BS	5	3	2	0	4
3.	U15PHT201	Materials Science	ES	3	3	0	0	3
4.	U15CHT201	Chemistry for Civil Engineering	BS	3	3	0	0	3
5.	U15MET202	Engineering Mechanics	ES	4	2	2	0	3
6.	U15CET201	Construction Materials	PC	3	3	0	0	3
Practical								
7.	U15CHP201	Chemistry Laboratory	BS	2	0	0	2	1
8.	U15CSP211	Computing Laboratory	ES	4	0	0	4	2
9	U15CEP201	Construction Materials Laboratory	PC	4	0	0	4	2
10.	U15SIP201	Social Immersion Project	HS	2	0	0	2	2
TOTAL				34				25

SEMESTER – III

	Course Code	Course Title	Category	Contact Hours	Hrs/Week &Credits			
					L	T	P	C
Theory								
1.	U15MAT304	Partial Differential Equations and Fourier Analysis	BS	5	3	2	0	4
2.	U15CET301	Fluid Mechanics	PC	4	2	2	0	3
3.	U15CET302	Surveying	PC	4	2	2	0	3
4.	U15CET303	Solid Mechanics	ES	5	3	2	0	4
5.	U15CET304	Building Construction	PC	3	3	0	0	3
6.	U15EET311	Electrical and Electronics Engineering	ES	3	3	0	0	3
Practical								
7.	U15CEP301	Surveying Practical I	PC	3	0	0	3	1
8.	U15CEP302	Building Planning and Drawing	PC	3	0	0	3	1
9.	U15CEP303	Solid and Fluid Mechanics Laboratory	ES	3	0	0	3	1
10.	U15GHP301	Family Values	HS	1	1	0	0	1
TOTAL				34				24

SEMESTER – IV

	Course Code	Course Title	Category	Contact Hours	Hrs/Week &Credits			
					L	T	P	C
Theory								
1.	U15MAT401	Numerical Methods	BS	5	3	2	0	4
2.	U15CET401	Building Services	ES	3	3	0	0	3
3.	U15CET402	Strength of Materials	PC	4	2	2	0	3
4.	U15CET403	Applied Hydraulics and Hydraulic Machinery	PC	4	2	2	0	3
5.	U15EST002	Introduction to Environmental Science and Engineering	HS	3	3	0	0	3
6.	PE - I	Professional Elective I	PE	3	3	0	0	3
Practical								
7.	U15ENP401	Communication Skills Laboratory	EEC	3	0	0	3	1
8.	U15CEP401	Surveying Practical II	PC	3	0	0	3	1
9.	U15GHP401	Professional Values	HS	1	1	0	0	1
10.	U15CSP401	Problem Solving Techniques	EEC	3	1	0	2	2
TOTAL				32				24

SEMESTER –V

	Course Code	Course Title	Category	Contact Hours	Hrs/Week &Credits			
					L	T	P	C
Theory								
1.	U15CET501	Structural Analysis I	PC	4	2	2	0	3
2.	U15CET502	Design of Masonry and Reinforced Concrete Elements	PC	4	2	2	0	3
3.	U15CET503	Irrigation Engineering	PC	3	3	0	0	3
4.	U15CET504	Geotechnical Engineering I	PC	3	3	0	0	3
5.	U15CET505	Highway & Railway Engineering	PC	3	3	0	0	3
6.	OE - I	Open Elective I	OE	3	3	0	0	3
Practical								
7.	U15CEP501	Soil Mechanics Laboratory	PC	3	0	0	3	1
8.	U15CEP502	Concrete & Highway Laboratory	PC	3	0	0	3	1
9.	U15CEP503	Survey Camp*	EEC	0	0	0	0	1
10.	U15GHP501	Social Values	HS	1	1	0	0	1
TOTAL				27				22

*10 days survey camp during the previous summer vacation.

SEMESTER –VI

	Course Code	Course Title	Category	Contact Hours	Hrs/Week &Credits			
					L	T	P	C
Theory								
1.	U15CET601	Structural Analysis II	PC	4	2	2	0	3
2.	U15CET602	Design of Reinforced Concrete Structures	PC	4	2	2	0	3
3.	U15CET603	Geotechnical Engineering II	PC	3	3	0	0	3
4.	U15CET604	Design of Steel Structures	PC	4	2	2	0	3
5.	U15CET605	Water Supply & Waste Water Engineering	PC	3	3	0	0	3
6.	OE - II	Open Elective II	OE	3	3	0	0	3
Practical								
7.	U15CEP601	Design and Drawing (RCC & Steel)	PC	3	0	0	3	1
8.	U15CEP602	Environmental Engineering Laboratory	PC	3	0	0	3	1

9.	U15CEP603	Industrial Training*	EEC	0	0	0	0	1
10.	U15GHP601	National Values	HS	1	1	0	0	1
TOTAL				28				22

*2 weeks in-plant training during the previous winter vacation.

SEMESTER –VII

	Course Code	Course Title	Category	Contact Hours	Hrs/Week & Credits			
					L	T	P	C
Theory								
1.	U15CET701	Estimation, Costing and Valuation	PC	4	2	0	2	3
2.	U15CET702	Construction project Management	PC	3	3	0	0	3
3.	PE - II	Professional Elective II	PE	3	3	0	0	3
4.	PE - III	Professional Elective III	PE	3	3	0	0	3
5.	OE - III	Open Elective III	OE	3	3	0	0	3
Practical								
6.	U15CEP701	Design Project	EEC	4	0	0	4	2
7.	U15CEP702	Computer Applications Laboratory	PC	3	0	0	3	1
8.	U15CEP703	Design and Drawing (Irrigation and Environmental Engineering)	PC	3	0	0	3	1
9.	U15GHP701	Global Values	HS	2	1	0	1	1
TOTAL				28				20

SEMESTER –VIII

	Course Code	Course Title	Category	Contact Hours	Hrs/Week & Credits			
					L	T	P	C
Theory								
1.	PE - IV	Professional Elective IV	PE	3	3	0	0	3
2.	PE - V	Professional Elective V	PE	3	3	0	0	3
3.	PE - VI	Professional Elective VI	PE	3	3	0	0	3
Practical								
4.	U15CEP801	Project Work	EEC	20	0	0	20	10
TOTAL				29				19

I and II semester	: 26 + 25 = 51
III and IV semester	: 24 + 24 = 48
V and VI semester	: 22 + 22 = 44
VII and VIII semester	: 20+ 19 = 39
Total credits	: 182

PROFESSIONAL ELECTIVES (PE)

	Course Code	Course Title	Category	Contact Hours	Hrs/Week & Credits			
					L	T	P	C
1.	U15CEPE01	Concrete Technology	PE	3	3	0	0	3
2.	U15CEPE02	Basics of Dynamics and Aseismic Design	PE	3	3	0	0	3
3.	U15CEPE03	Town Planning and Architecture	PE	3	3	0	0	3
4.	U15CEPE04	Pavement Engineering	PE	3	3	0	0	3
5.	U15CEPE05	Hydrology	PE	3	3	0	0	3
6.	U15CEPE06	Repair and Rehabilitation of Structures	PE	3	3	0	0	3
7.	U15CEPE07	Prefabricated Structures	PE	3	3	0	0	3
8.	U15CEPE08	Prestressed Concrete Structures	PE	3	3	0	0	3
9.	U15CEPE09	Finite Element Analysis	PE	3	3	0	0	3
10.	U15CEPE10	Advanced Railways, Airports and Harbour	PE	3	3	0	0	3
11.	U15CEPE11	Geographical Information system (GIS) and Remote Sensing	PE	3	3	0	0	3
12.	U15CEPE12	Industrial Waste Management	PE	3	3	0	0	3
13.	U15CEPE13	Construction Planning & Scheduling	PE	3	3	0	0	3
14.	U15CEPE14	Water Resources System Analysis	PE	3	3	0	0	3
15.	U15CEPE15	Ground Improvement Techniques	PE	3	3	0	0	3
16.	U15CEPE16	Earthquake Resistant Structures	PE	3	3	0	0	3
17.	U15CEPE17	Structural Dynamics	PE	3	3	0	0	3
18.	U15CEPE18	Ground Water Engineering	PE	3	3	0	0	3
19.	U15CEPE19	Geotechnical Earthquake Engineering	PE	3	3	0	0	3
20.	U15CEPE20	Shoring, Scaffolding and Formwork	PE	3	3	0	0	3

21.	U15CEPE21	Steel-Concrete Composite Structures	PE	3	3	0	0	3
22.	U15CEPE22	Tall Buildings	PE	3	3	0	0	3
23.	U15CEPE23	Storage Structures	PE	3	3	0	0	3
24.	U15CEPE24	Bridge Structures	PE	3	3	0	0	3
25.	U15CEPE25	Industrial Structures	PE	3	3	0	0	3
26.	U15CEPE26	Computer Aided Design of Structures	PE	3	3	0	0	3
27.	U15CEPE27	Transportation Planning	PE	3	3	0	0	3
28.	U15CEPE28	Urban and Regional Planning	PE	3	3	0	0	3
29.	U15CEPE29	Air Pollution Management	PE	3	3	0	0	3
30.	U15CEPE30	Disaster Management and Mitigation	PE	3	3	0	0	3
31.	U15CEPE31	Environmental Impact Assessment	PE	3	3	0	0	3
32.	U15CEPE32	Solid Waste Management	PE	3	3	0	0	3
33.	U15GST002	Total Quality Management	PE	3	3	0	0	3
34.	U15GST003	Principles of Management	PE	3	3	0	0	3
35.	U15GST004	Operations Research	PE	3	3	0	0	3
36.	U15GST005	Engineering Economics and Financial Management	PE	3	3	0	0	3
37.	U15GST006	Product Design and Development	PE	3	3	0	0	3
38.	U15GST007	Professional Ethics	PE	3	3	0	0	3
39.	U15GST008	Foundation Skills in Integrated Product Development	PE	3	3	0	0	3

OPEN ELECTIVES (OE)

	Course Code	Course Title	Category	Contact Hours	Hrs/Week & Credits			
					L	T	P	C
1.	U15CEOE01	Basics of Civil Engineering	OE	3	3	0	0	3
2.	U15CEOE02	Solid and Fluid Mechanics	OE	3	3	0	0	3
3.	U15CEOE03	Energy Conservation in Buildings	OE	3	3	0	0	3
4.	U15CEOE04	Traffic Engineering and Management	OE	3	3	0	0	3

ONE CREDIT COURCES

	Course Code	Course Title	Category	Contact Hours	Hrs/Week &Credits			
					L	T	P	C
1.	U15CEI001	Total Station Survey	PC	1	0	0	2	1
2.	U15CEI002	Tender Document Preparation	PC	1	0	0	2	1
3.	U15CEI003	Building Bye-Laws and Approval Drawing Preparation	PC	1	0	0	2	1
4.	U15CEI004	Construction Planning Using Software	PC	1	0	0	2	1
5.	U15CEI005	Green Building Audit	PC	1	0	0	2	1
6.	U15CEI006	Environmental Quality Modeling	PC	1	0	0	2	1
7.	U15CEI007	Application of Remote Sensing and GIS in Civil Engineering	PC	1	0	0	2	1
8.	U15CEI008	Introduction to Indian Traditional Architecture	PC	1	0	0	2	1
9.	U15CEI009	Structural Detailing and Bar bending Schedule	PC	1	0	0	2	1
10.	U15CEI010	Construction Safety Engineering	PC	1	0	0	2	1
11.	U15CEI011	Underground and Elevated Metro Projects	PC	1	0	0	2	1
12.	U15CEI012	3D Software for Modeling, Animation and Rendering - Revit Architecture	PC	1	0	0	2	1
13.	U15CEI013	3D Software for Modeling, Animation and Rendering - 3D Studio Max	PC	1	0	0	2	1