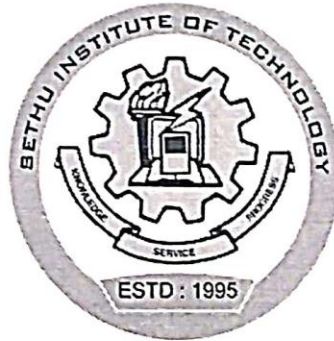


SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115

(An Autonomous Institution)

DEPARTMENT OF CIVIL ENGINEERING



B.E. CIVIL ENGINEERING

AMENDMENTS FOR CURRICULUM & SYLLABUS

(1st to 8th Semester)

REGULATIONS 2015

(Choice Based Credit System)

Approved in the Academic Council Meeting on 25.08.2018

Chairperson / BOS

Chairperson
Board of Studies
Civil Engineering
Sethu Institute of Technology
Kariapatti - 626 115

Chairman

Academic Council

CHAIRMAN
ACADEMIC COUNCIL
Sethu Institute of Technology
Pulloor, Kariapatti - 625 115

SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti - 626 115

(An Autonomous Institution)

B.E. Degree Programme

CURRICULUM

Regulations 2015

Bachelor of Engineering in Civil Engineering

OVERALL COURSE STRUCTURE

Category	Total No. of Courses	Credits	Percentage
Humanities and Social Sciences (HS)	5	11	6
Basic Sciences (BS)	11	31	18
Engineering Sciences (ES)	11	27	16
Professional Core(PC)	23	62	36
Professional Electives (PE)	6	18	10
Open Electives (OE)	3	9	5
Project Work (PW)	2	15	9
TOTAL	61	173	100

COURSE CREDITS – SEMESTER WISE

Branch	I	II	III	IV	V	VI	VII	VIII	TOTAL
Civil Engineering	22	21	22	24	22	24	18	20	173

Employability Courses

Skill Development Courses

Entrepreneurship Development Courses

Any two or all of the above

SEMESTER – I

Course Code	Course Title	L	T	P	C
THEORY					
15UEN101	Technical English (Common to ALL Branches)	2	0	0	2
15UMA102	Engineering Mathematics-I (Common to ALL Branches)	3	2	0	4
15UPH103	Engineering Physics (Common to ALL Branches)	3	0	0	3
15UCY106	Chemistry for Civil Engineers	3	0	0	3
15UCS107	Computer Programming (Common to ALL Branches)	3	0	0	3
15UME108	Engineering Graphics (Common to ALL Branches)	3	2	0	4
PRACTICAL					
15UCS109	Computer Programming Laboratory (Common to ALL Branches)	0	0	2	1
15UME110	Engineering Practices Laboratory (Common to MECH,EEE,CIVIL,Chemical, Biomedical and Agriculture)	0	0	2	1
15UGS112	Basic Sciences Laboratory - I (Common to ALL Branches)	0	0	2	1
	TOTAL	17	4	6	22
Total No. of Credits – 22					

SEMESTER – II

Course Code	Course Title	L	T	P	C
THEORY					
15UEN201	Business English and Presentation Skills (Common to ALL Branches)	3	0	0	3
15UMA202	Engineering Mathematics - II (Common to ALL Branches)	3	2	0	4
15UPH206	Building Physics	3	0	0	3
15UCY207	Environmental Science (Common to ALL Branches)	3	0	0	3
15UEE208	Basic Electrical and Electronics Engineering (Common to MECH, CIVIL, Chemical & Agriculture)	3	0	0	3
15UCE206	Basic Engineering Mechanics	3	0	0	3
PRACTICAL					
15UCE208	Computer aided Building Drawing	0	0	2	1
15UGS210	Basic Sciences Laboratory - II (Common to ALL Branches)	0	0	2	1
	TOTAL	18	2	4	21
Total No. of Credits – 21					

SEMESTER - III

Course Code	Course Title	L	T	P	C
THEORY					
15UMA321	Transforms and Partial Differential Equations (Common to MECH, ECE, EEE, CIVIL, Chemical, Biomedical & Agriculture)	3	2	0	4
15UCE302	Engineering Geology and Construction Materials	3	0	0	3
15UCE303	Mechanics of Solids - I	4	0	0	4
15UCE304	Highway and Railway Engineering	3	0	0	3
15UCE305	Fluid Mechanics	3	0	0	3
15UCE306	Surveying	3	0	0	3
15UGS331	Value Education and Human Rights (Common to ALL Branches)	2	0	0	P/F
PRACTICAL					
15UCE307	Strength of Materials Laboratory	0	0	2	1
15UCE308	Survey Practical - I	0	0	2	1
	TOTAL	21	2	4	22
Total No. of Credits – 22					

SEMESTER – IV

Course Code	Course Title	L	T	P	C
THEORY					
15UMA422	Numerical Methods (Common to EEE, CIVIL, EIE & Chemical)	3	2	0	4
15UCE402	Construction Techniques, Equipments and Practices	3	0	0	3
15UCE403	Mechanics of Solids - II	4	0	0	4
15UCE404	Water Resources and Irrigation Engineering	3	0	0	3
15UCE405	Soil Mechanics	3	0	0	3
15UCE406	Applied Hydraulic Engineering	4	0	0	4
15UGS431	Reasoning and Quantitative Aptitude (Common to ALL Branches)	1	0	0	1
PRACTICAL					
15UCE407	Survey Practical II	0	0	2	1
15UCE408	Hydraulic Engineering Laboratory	0	0	2	1
	TOTAL	21	2	4	24
Total No. of Credits – 24					

SEMESTER – V

Course Code	Course Title	L	T	P	C
THEORY					
15UCE501	Structural Analysis - I	4	0	0	4
15UCE502	Foundation Engineering	3	0	0	3
15UCE503	Design of Reinforced Concrete Elements	3	2	0	4
15UCE504	Environmental Engineering	3	0	0	3
	Professional Elective - I	3	0	0	3
	Professional Elective - II	3	0	0	3
PRACTICAL					
15UCE507	Soil Mechanics Laboratory	0	0	2	1
15UCE508	Environmental Engineering Laboratory	0	0	2	1
	TOTAL	20	2	4	22
Total No. of Credits – 22					

SEMESTER – VI

Course Code	Course Title	L	T	P	C
THEORY					
15UCE601	Structural Analysis - II	4	0	0	4
15UCE602	Construction Management and Finance	3	0	0	3
15UCE603	Design of Steel Structures	3	2	0	4
	Professional Elective - III	3	0	0	3
	Professional Elective - IV	3	0	0	3
	Open Elective - I	3	0	0	3
PRACTICAL					
15UGS531	Soft Skills and Communication Laboratory (Common to MECH., CIVIL, EIE & Chemical)	0	0	2	1
15UCE608	Technical Project	0	0	6	3
	TOTAL	20	2	8	24
Total No. of Credits – 24					

SEMESTER – VII

Course Code	Course Title	L	T	P	C
THEORY					
15UCE701	Design of Reinforced Concrete and Brick Masonry Structures	3	0	0	3
15UCE702	Estimation, Costing and Valuation Engineering	3	0	0	3
15UCE703	Structural Dynamics and Earthquake Engineering	4	0	0	4
	Professional Elective - V	3	0	0	3
	Open Elective - II	3	0	0	3
PRACTICAL					
15UCE706	Concrete and Highway Engineering Laboratory	0	0	2	1
15UCE707	Software Applications Laboratory	0	0	2	1
	TOTAL	16	0	4	18
Total No. of Credits – 18					

SEMESTER – VIII

Course Code	Course Title	L	T	P	C
THEORY					
15UME801	Professional Ethics (Common to ALL Branches)	2	0	0	2
	Professional Elective - VI	3	0	0	3
	Open Elective - III	3	0	0	3
PRACTICAL					
15UCE804	Project Work	0	0	24	12
	TOTAL	8	0	24	20
Total No. of Credits – 20					

LIST OF PROFESSIONAL ELECTIVES

Course Code	Course Title	L	T	P	C
15UCE901	Hydrology	3	0	0	3
15UCE902	Concrete Technology	3	0	0	3
15UCE903	Modern Surveying	3	0	0	3
15UCE904	Town Planning and Architecture	3	0	0	3
15UCE905	Traffic Engineering and Management	3	0	0	3
15UCE906	Housing Planning and Management	3	0	0	3
15UCE907	Ground Water Engineering	3	0	0	3
15UCE908	Pavement Engineering	3	0	0	3
15UCE909	Environmental Impact Assessment	3	0	0	3
15UCE910	Industrial Waste Management	3	0	0	3
15UCE911	Air Pollution Management	3	0	0	3
15UCE912	Municipal Solid Waste Management	3	0	0	3
15UCE913	Ground Improvement Techniques	3	0	0	3
15UCE914	Bridge Structures	3	0	0	3
15UCE915	Storage Structures	3	0	0	3
15UCE916	Tall Structures	3	0	0	3
15UCE917	Prefabricated Structures	3	0	0	3
15UCE918	Experimental Stress Analysis	3	0	0	3
15UCE919	Industrial Structures	3	0	0	3
15UCE920	Finite Element Method	3	0	0	3
15UCE921	Repair and Rehabilitation of Structures	3	0	0	3
15UCE922	Advanced Engineering Mechanics	3	0	0	3
15UCE923	Prestressed Concrete Structures	3	0	0	3
15UCE924	Airport, Docks and Harbour Engineering	3	0	0	3
15UCE925	Transportation Planning and Systems	3	0	0	3
15UCE926	Urban Planning and Development	3	0	0	3
15UCE927	Coastal Engineering	3	0	0	3
15UCE928	Geoinformatics Applications for Civil Engineers	3	0	0	3
15UCE929	Cartography	3	0	0	3
15UCE930	Smart Cities	3	0	0	3
15UCE931	Disaster Management and Mitigation	3	0	0	3

List of Open Electives

Sl.No	Course Code	Course Title	L	T	P	C
1.	15UCE971	Remote Sensing and GIS	3	0	0	3
2.	15UCE972	Air Pollution and Control Engineering	3	0	0	3
3.	15UCE973	Environmental and Social Impact Assessment	3	0	0	3
4.	15UCE974	Disaster Management	3	0	0	3
5.	15UCE975	Environmental Science and Engineering	3	0	0	3

List of One Credit Courses (With Industry Collaboration)

Sl.No	Course Code	Course Title	L	T	P	C
1.	15UCE861	Green Building Concepts	1	0	0	1
2.	15UCE862	Practical Aspects of Architecture.	1	0	0	1
3.	15UCE863	Water Conservation Techniques	1	0	0	1
4.	15UCE864	Office Management	1	0	0	1
5.	15UCE865	Construction Safety	1	0	0	1
6.	15UCE866	Practical Valuation	0	2	0	1
7.	15UCE867	Design of Multistorey Building - A Practical Approach	0	2	0	1
8.	15UCE868	Corrosion of Steel in Concrete and Preventive Measures	1	0	0	1
9.	15UCE869	Effluent Treatment Plant	1	0	0	1
10.	15UCE870	Building Planning and Byelaws	1	0	0	1
11.	15UCE871	Automation in Construction	1	0	0	1
12.	15UCE872	Special Concretes	1	0	0	1
13.	15UCE873	Health Monitoring of Structures	1	0	0	1
14.	15UCE874	Building Energy Audit	1	0	0	1
15.	15UCE875	Real Estate Properties and Regulations	1	0	0	1