B.E. CIVIL ENGINEERING

REGULATIONS 2013

CURRICULUM & SYLLABUS

(1st SEMESTER to 8th SEMESTER)

Approved in the Academic Council Meeting held on 15.06.2014

Chairman
Academic Council

SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115

(An Autonomous Institution)

B.E. Degree Programme

CURRICULUM

Regulations 2013

Bachelor of Engineering in Civil Engineering

OVERALL COURSE STRUCTURE

Category	Total No. of Courses	Credits	Percentage
Science & Humanities	14	40	21
Basic Engineering	8	23	12
Professional Subjects – CORE	37	109	57
Professional Subjects – ELECTIVE	6	18	10
TOTAL	65	190	100

COURSE CREDITS – SEMESTER WISE

Branch	I	II	III	IV	V	VI	VII	VII	TOTAL
Civil Engineering	26	27	27	25	24	25	24	12	190

SEMESTER - I

Course Code	Course Title		L	Т	Р	С			
THEORY									
01UEN101	Technical English-I (Common to ALL Branches)		3	1	0	4			
01UMA102	Engineering Mathematics-I (Common to ALL Branches)		3	1	0	4			
01UPH103	Engineering Physics (Common to ALL Branches)		3	0	0	3			
01UCY104	Engineering Chemistry (Common to MECH. & CIVIL)		3	0	0	3			
01UCS106	Computer Programming (Common to ALL Branches)		3	0	0	3			
01UME107	Engineering Graphics (Common to ALL Branches)		2	0	3	4			
PRACTICAL									
01UCS108	Computer Practice Laboratory – I (Common to ALL Branches)		0	0	3	2			
01UME109	Engineering Practices Laboratory (Common to ALL Branches)		0	0	3	2			
01UGS110	Physics & Chemistry Laboratory (Common to ALL Branches)		0	0	2	1			
		TOTAL	17	2	11	26			
Total No. of Credits - 26									

SEMESTER - II

Course Code	Course Title	L	Т	Р	С
THEORY					
01UEN201	Technical English – II (Common to ALL Branches)	3	1	0	4
01UMA202	Engineering Mathematics – II (Common to ALL Branches)	3	1	0	4
01UPH203	Material Science (Common to MECH. & CIVIL)	3	0	0	3
01UCY204	Environmental Science (Common to ALL Branches)	3	0	0	3
01UME205	Basic Civil & Mechanical Engineering (Common to ALL Branches)	4	0	0	4
01UEE 206	Basic Electrical & Electronics Engineering (Common to MECH. & CIVIL)	4	0	0	4
PRACTICAL					
01UME208	Computer Aided Drafting and Modeling Laboratory (Common to MECH. & CIVIL)	0	0	3	2
01UCS209	Computer Practice Laboratory – II (Common to ALL Branches)	0	0	3	2
01UGS210	Physics and Environmental Science Laboratory (Common to ALL Branches)		0	2	1
	TOTAL	19	3	8	27
	Total No. of Credits - 27				

SEMESTER - III

Course Code	Course Title	L	Т	Р	С	
THEORY						
01UMA321	Transforms and Partial Differential Equations (Common to ALL Branches)	3	1	0	4	
01UCE302	Construction Techniques and Practices	3	0	0	3	
01UCE303	Engineering Geology	3	0	0	3	
01UCE304	Mechanics of Solids – I	3	1	0	4	
01UCE305	Fluid Mechanics	3	1	0	4	
01UCE306	Surveying – I	3	0	0	3	
PRACTICAL						
01UCE307	Computer Aided Building Drawing	0	0	3	2	
01UCE308	Strength of Materials Laboratory	0	0	3	2	
01UCE309	Surveying Laboratory – I	0	0	3	2	
VALUE ADDE	D COURSE					
01UGS331	Value Education and Human Rights (Common to ALL Branches)	2	0	0	P/F	
	TOTAL	20	3	9	27	
Total No. of Credits - 27						

SEMESTER - IV

Course Code	Course Title		L	Т	Р	С
THEORY						
01UMA422	Numerical Methods (Common to ICE, EEE, CIVIL & EIE)		3	1	0	4
01UCE402	Soil Mechanics		3	0	0	3
01UCE403	Highway Engineering		3	0	0	3
01UCE404	Mechanics of Solids – II		3	1	0	4
01UCE405	Applied Hydraulic Engineering		3	0	.0	3
01UCE406	Surveying – II		3	0	0	3
01UGS431	Qualitative and Quantitative Aptitude (Common to ALL Branches)		1	0	0	1
PRACTICAL						
01UCE407	Hydraulics Engineering Laboratory		0	0	3	2
01UCE408	Surveying Laboratory – II		0	0	3	2
		TOTAL	19	2	6	25
Total No. of Credits - 25						

SEMESTER - V

Course Code	Course Title	L	Т	Р	С
THEORY		•			
01UCE501	Design of Reinforced Cement Concrete and Masonry Structures	3	1	0	4
01UCE502	Foundation Engineering	3	0	0	3
01UCE503	Railways, Airports and Harbour Engineering	3	0	0	3
01UCE504	Structural Analysis – I	3	1	0	4
01UCE505	Water Supply Engineering	3	0	0	3
01UCE506	Irrigation Engineering	3	0	0	3
PRACTICAL					
01UCE507	Soil Mechanics Laboratory	0	0	3	2
01UCE508	Concrete and Highway Laboratory	0	0	3	2
	TOTAL	18	2	6	24
	Total No. of Credits - 24				

SEMESTER - VI

Course Code	Course Title	L	T	Р	С		
THEORY							
01UCE601	Design of Steel and Timber Structures	3	1	0	4		
01UCE602	Estimation, Costing and Valuation	3	0	0	3		
010CL002	Engineering	3	0	0	3		
01UCE603	Waste Water Engineering	3	0	0	3		
01UCE604	Structural Analysis – II	3	1	0	4		
	Elective – I	3	0	0	3		
	Elective – II	3	0	0	3		
PRACTICAL							
01UCE607	Water and Waste Water Analysis Laboratory	0	0	3	2		
01UCE608	Irrigation and Environmental Engineering Drawing	0	0	3	2		
01UGS531	Soft Skills and Communication Laboratory (Common to MECH., ICE, CIVIL & EIE)	0	0	2	1		
	TOTAL	18	2	8	25		
	Total No. of Credits - 25						

SEMESTER - VII

Course Code	Course Title	L	Т	Р	С	
THEORY					•	
01UCE701	Construction Management and Finance	3	0	0	3	
01UCE702	Advanced Structural Design	3	1	0	4	
01UCE703	Prestressed Concrete Structures	3	1	0	4	
01UCE704	Structural Dynamics and Farthquake				3	
	Elective – III				3	
	Elective – IV	3	0	0	3	
PRACTICAL						
01UCE707	Computer Aided Structural Design and Drawing Laboratory	0	0	3	2	
01UCE708	Creative and Innovative Project	0	0	3	1	
01UCE709	Industrial Training	0	0	0	1	
	TOTAL	18	2	6	24	
Total No. of Credits – 24						

SEMESTER - VIII

Course Code	Course Title	L	Т	Р	С		
THEORY							
	Elective – V	3	0	0	3		
	Elective – VI	3	0	0	3		
PRACTICAL							
01UCE803	Project Work	0	0	12	6		
	TOTAL	6	0	12	12		
	Total No. of Credits – 12						

LIST OF ELECTIVES

Course Code	Course Title	L	Т	Р	С
01UCE901	Finite Element Method	3	0	0	3
01UCE902	Design of Plate and Shell Structures	3	0	0	3
01UCE903	Experimental Stress Analysis	3	0	0	3
01UCE904	Industrial Structures	3	0	0	3
01UCE905	Repair and Rehabilitation of Structures	3	0	0	3
01UCE906	Prefabricated Structures	3	0	0	3
01UCE907	Tall Structures	3	0	0	3
01UCE908	Concrete Technology	3	0	0	3
01UCE909	Pavement Engineering	3	0	0	3
01UCE910	Ground Improvement Techniques	3	0	0	3
01UCE911	Traffic Engineering and Management	3	0	0	3
01UCE912	Transportation Planning and Systems	3	0	0	3
01UCE913	Urban Planning and Development	3	0	0	3
01UCE914	Air Pollution and Control Engineering	3	0	0	3
01UCE915	Environmental and Social Impact Assessment	3	0	0	3
01UCE916	Industrial Waste Water Engineering	3	0	0	3
01UCE917	Municipal Solid Waste Management	3	0	0	3
01UCE918	Hydrology and Water Resource Engineering	3	0	0	3
01UCE919	Coastal Engineering	3	0	0	3
01UCE920	Ground Water Engineering	3	0	0	3
01UCE921	Geoinformatics Applications for Civil Engineers	3	0	0	3
01UCE922	Cartography	3	0	0	3
01UCE923	Total Station and GPS Surveying	3	0	0	3
01UCE924	Geographic Information System	3	0	0	3

Students may Choose any one of the Electives offered by the other branches of study