



Estd. 1995

SETHU INSTITUTE OF TECHNOLOGY

(An *Autonomous Institution*)

Pulloor, Kariapatti – 626 115



ISO 9001:2008
FS 70973

B.E. CIVIL ENGINEERING

REGULATIONS 2014

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

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B.E. Degree Programme

CURRICULUM

Regulations 2014

Bachelor of Engineering in Civil Engineering

OVERALL COURSE STRUCTURE

Category	Total No. of Courses	Credits	Percentage
Science & Humanities	14	39	20
Basic Engineering	8	19	10
Professional Subjects – CORE	38	114	60
Professional Subjects – ELECTIVE	6	18	10
TOTAL	66	190	100

COURSE CREDITS – SEMESTER WISE

Branch	I	II	III	IV	V	VI	VII	VII	TOTAL
Civil Engineering	24	24	27	25	24	25	26	15	190

SEMESTER - I

Course Code	Course Title	L	T	P	C
THEORY					
14UEN101	Technical English-I (Common to ALL Branches)	3	1	0	4
14UMA102	Engineering Mathematics-I (Common to ALL Branches)	3	1	0	4
14UPH103	Engineering Physics (Common to ALL Branches)	3	0	0	3
14UCY104	Engineering Chemistry (Common to MECH. & CIVIL)	3	0	0	3
14UCS106	Computer Programming (Common to ALL Branches)	3	0	0	3
14UME107	Engineering Graphics (Common to ALL Branches)	2	0	3	4
PRACTICAL					
14UCS108	Computer Programming Laboratory – I (Common to ALL Branches)	0	0	2	1
14UME109	Engineering Practices Laboratory (Common to ALL Branches)	0	0	2	1
14UGS110	Physics and Chemistry Laboratory (Common to ALL Branches)	0	0	2	1
	TOTAL	17	2	9	24
Total No. of Credits – 24					

SEMESTER – II

Course Code	Course Title	L	T	P	C
THEORY					
14UEN201	Technical English – II (Common to ALL Branches)	3	0	0	3
14UMA202	Engineering Mathematics – II (Common to ALL Branches)	3	1	0	4
14UPH203	Material Science (Common to MECH. & CIVIL)	3	0	0	3
14UCY204	Environmental Science (Common to ALL Branches)	3	0	0	3
14UCE205	Construction Materials	3	0	0	3
14UEE206	Basic Electrical and Electronics Engineering (Common to MECH. & CIVIL)	4	0	0	4
PRACTICAL					
14UCE208	Construction Materials Laboratory	0	0	3	2
14UCS209	Computer Programming Laboratory – II (Common to ALL Branches)	0	0	2	1
14UGS210	Physics and Environmental Science Laboratory (Common to ALL Branches)	0	0	2	1
	TOTAL	19	1	7	24
Total No. of Credits – 24					

SEMESTER - III

Course Code	Course Title	L	T	P	C
THEORY					
14UMA321	Transforms and Partial Differential Equations (Common to ALL Branches)	3	1	0	4
14UCE302	Construction Techniques and Practices	3	0	0	3
14UCE303	Engineering Geology	3	0	0	3
14UCE304	Mechanics of Solids – I	3	1	0	4
14UCE305	Fluid Mechanics	3	1	0	4
14UCE306	Surveying – I	3	0	0	3
PRACTICAL					
14UCE307	Computer Aided Building Drawing				
14UCE308	Strength of Materials Laboratory				
14UCE309	Surveying Laboratory – I	0	0	3	2
VALUE ADDED COURSE		0	0	3	2
	Value Education and Human Rights	0	0	3	2
14UGS331					
	(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	T	P	C
THEORY					
14UMA422	Numerical Methods (Common to ICE, EEE, CIVIL & EIE)	3	1	0	4
14UCE402	Soil Mechanics	3	0	0	3
14UCE403	Highway Engineering	3	0	0	3
14UCE404	Mechanics of Solids – II	3	1	0	4
14UCE405	Applied Hydraulic Engineering	3	0	0	3
14UCE406	Surveying – II	3	0	0	3
	Qualitative and Quantitative Aptitude				
14UGS431	(Common to ALL Branches)	1	0	0	1
PRACTICAL					
14UCE407	Hydraulic Engineering Laboratory	0	0	3	2
14UCE408	Surveying Laboratory – II	0	0	3	2
	TOTAL	19	3	6	25
Total No. of Credits – 25					

SEMESTER – V

Course Code	Course Title	L	T	P	C
THEORY					
14UCE501	Design of Reinforced Cement Concrete and Masonry Structures	3	1	0	4
14UCE502	Foundation Engineering	3	0	0	3
14UCE503	Railways, Airport and Harbour Engineering	3	0	0	3
14UCE504	Structural Analysis – I	3	1	0	4
14UCE505	Water Supply Engineering	3	0	0	3
14UCE506	Irrigation Engineering	3	0	0	3
PRACTICAL					
14UCE507					
14UCE508					
	Soil Mechanics Laboratory	0	0	3	2
	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	P	C
THEORY					
14UCE601	Design of Steel and Timber Structures	3	1	0	4
14UCE602	Estimation, Costing and Valuation Engineering	3	0	0	3
14UCE603	Waste Water Engineering	3	0	0	3
14UCE604	Structural Analysis – II	3	1	0	4
	Elective – I	3	0	0	3
	Elective – II	3	0	0	3
PRACTICAL					
14UCE607	Water and Waste Water Analysis Laboratory	0	0	3	2
14UCE608	Irrigation and Environmental Engineering Drawing	0	0	3	2
14UGS531	Soft Skills and Communication Laboratory	0	0	2	1
	(Common to MECH., ICE, CIVIL & EIE)				
	TOTAL	18	2	8	25
Total No. of Credits – 25					

SEMESTER – VII

Course Code	Course Title	L	T	P	C
THEORY					
14UCE701					
14UCE702	Construction Management and Finance	3	0	0	3
14UCE703	Advanced Structural Design	3	1	0	4
	Prestressed Concrete Structures	3	1	0	4
	Structural Dynamics and Earthquake				
14UCE704	Engineering Elective – III	3	0	0	3
	Elective – IV	3	0	0	3
		3	0	0	3
PRACTICAL					
14UCE707	Computer Aided Structural Design and Drawing Laboratory	0	0	3	2
14UCE708	Creative and Innovative Project	0	0	3	2
14UCE709	Industrial Training	0	0	0	2
	TOTAL	18	2	6	26
	Total No. of Credits – 26				

SEMESTER – VIII

Course Code	Course Title	L	T	P	C
THEORY					
14UME801	Professional Ethics (Common to ALL Branches)	3	0	0	3
	Elective – V	3	0	0	3
	Elective – VI	3	0	0	3
PRACTICAL					
14UCE804	Project Work	0	0	12	6
	TOTAL	9	0	12	15
	Total No. of Credits – 15				

LIST OF ELECTIVES

Course Code	Course Title	L	T	P	C
14UCE901	Finite Element Method	3	0	0	3
14UCE902	Design of Plate and Shell Structures	3	0	0	3
14UCE903	Experimental Stress Analysis	3	0	0	3
14UCE904	Industrial Structures	3	0	0	3
14UCE905	Repair and Rehabilitation of Structures	3	0	0	3
14UCE906	Prefabricated Structures	3	0	0	3
14UCE907	Tall Structures	3	0	0	3
14UCE908	Concrete Technology	3	0	0	3
14UCE909	Pavement Engineering	3	0	0	3
14UCE910	Ground Improvement Techniques	3	0	0	3
14UCE911	Traffic Engineering and Management	3	0	0	3
14UCE912	Transportation Planning and Systems	3	0	0	3
14UCE913	Urban Planning and Development	3	0	0	3
14UCE914	Air Pollution and Control Engineering	3	0	0	3
14UCE915	Environmental and Social Impact Assessment	3	0	0	3
14UCE916	Industrial Waste Water Engineering	3	0	0	3
14UCE917	Municipal Solid Waste Management	3	0	0	3
14UCE918	Hydrology and Water Resource Engineering	3	0	0	3
14UCE919	Coastal Engineering	3	0	0	3
14UCE920	Ground Water Engineering	3	0	0	3
14UCE921	Geoinformatics Applications for Civil Engineers	3	0	0	3
14UCE922	Cartography	3	0	0	3
14UCE923	Total Station and GPS Surveying	3	0	0	3
14UCE924	Geographic Information System	3	0	0	3

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