

## SETHU INSTITUTE OF TECHNOLOGY



An Autonomous Institution | Accredited by NAAC with 'A' Grade Pulloor, Kariapatti – Taulk. Virudhunagar Dist - 626 115

#### **B.E. CIVIL ENGINEERING (Batch 2021-25)**

# **CURRICULUM -Regulations 2021 CHOICE BASED CREDIT SYSTEM**

### **OVERALL COURSE STRUCTURE**

Category	Total No. of Courses	Credits	Percentage
Humanities and Social Sciences (HS)	5	9	7.35
Basic Sciences (BS)	10	28	14.71
Engineering Sciences (ES)	8	20	11.76
Professional Core (PC)	22	58.5	32.35
Professional Electives (PE)	6	18	8.82
Open Electives (OE)	4	12	5.88
Project (P)	4	15	5.88
Mandatory Courses (MC)	9	1	13.24
TOTAL	68	161	100

#### **COURSE CREDITS – SEMESTER WISE**

Branch	I	II	III	IV	V	VI	VII	VIII	TOTAL
Civil Engineering	22	17	22	22	24	23	17	14	161

#### SEMESTER-I

S. No	Course Code	Name of the Course	L	T	P	C	Category
THEO	RY	<u>I</u>	I				
1.	21UEN101	English for Technical Communication (Common to All Branches – Except CSBS)	2	0	0	2	HSS
2.	21UMA102	Matrix and Calculus (Common to All Branches – Except CSBS)	3	1	0	4	BS
3.	21UPH103	Engineering Physics (Common to All Branches – Except CSBS)	3	0	0	3	BS
4.	21UCY106	Chemistry for Civil Engineers (Only for Civil)	3	0	0	3	BS
5.	21UCS107	Problem Solving and C Programming	3	0	0	3	ES
6.	21UME109	Engineering Graphics (Common to All Branches – Except CSBS, CSD and AI&DS)	3	1	0	4	ES
PRAC	TICAL						
7.	21UCS110	Problem Solving and C Programming Laboratory / (Except CSBS)	0	0	2	1	ES
8.	21UGS111	Engineering Practices Laboratory (Common to Mech, EEE, Civil, Agri and Chemical)	0	0	2	1	ES
9.	21UME113	Basic Sciences Laboratory I (Common to All Branches – Except CSBS)	0	0	2	1	BS
MANI	DATORY COU	RSE	•		•		•
10.	21UGM131	Induction Program (45 periods) (Common to All Branches)	0	3	0	P/F	MC
		TOTAL	17	5	6	22	
		Total No. of Credits – 22					

#### SEMESTER-II

S. No	Course Code	Name of the Course	L	Т	P	С	Category
THEO	RY						
11.	21UEN201	Communication Skills for Professionals (Common to All Branches – Except CSBS)	1	0	1	1.5	HSS
12.	21UMA206	Differential Equations, Complex Analysis and Transform Techniques for Civil Engineering (Only for Civil)	3	1	0	4	BS
13.	21UPH206	Building Physics (Only for Civil)	3	0	0	3	BS
14.	21UCE204	Engineering Mechanics (Only for Civil)	3	0	0	3	ES
15.	21UEE226	Basic Electrical and Electronics Engineering (Common to Civil and Mechanical)	3	0	0	3	ES
PRAC	TICAL				•	•	
16.	21UGS210	Basic Sciences Laboratory II (Common to All Branches – Except CSBS)	0	0	2	1	BS
17.	21UCE211	Computer Aided Building Drawing (Only for Civil)	0	0	3	1.5	ES
MANI	DATORY COU	JRSE		I			
18.	21UGM231	Environmental Science (Common to All Branches)	3	0	0	P/F	MC
		TOTAL	16	1	6	17	
		Total No. of Credits – 17	1				

#### SEMESTER-III

S. No	Course Code	Name of the Course	L	Т	P	C	Category
THEO	RY						
19.	21UMA325	Probability, Statistics and Transform Techniques (Only for Civil)	3	1	0	4	BS
20.	21UCE302	Engineering Geology and Construction Materials	3	0	0	3	ES
21.	21UCE303	Strength of Materials	3	1	0	4	PC
22.	21UCE304	Water Supply Engineering	3	0	0	3	PC
23.	21UCE305	Fluid Mechanics	3	0	0	3	PC
24.	21UCE306	Surveying	3	0	0	3	PC

PRAC	TICAL											
25.	21UCE307	Material Testing Laboratory	0	0	3	1	PC					
26.	21UCE308	Surveying Laboratory	0	0	3	1	PC					
MANI	MANDATORY COURSE											
27.	21UGM331	Biology for Engineers (Common to all Except BT and BME)	2	0	0	P/F	MC					
		TOTAL	20	2	6	22						
	Total No. of Credits – 22											

#### SEMESTER-IV

S. No	Course Code	Name of the Course	L	T	P	С	Category
THEO	RY						
28.	21UMA423	Numerical Methods (Only for Civil)	3	1	0	4	BS
29.	21UCE402	Soil Mechanics	3	0	0	3	PC
30.	21UCE403	Structural Analysis – I	3	1	0	4	PC
31.	21UCE404	Waste Water Engineering	3	0	0	3	PC
32.	21UCE405	Highway Engineering	3	0	0	3	PC
33.	21UCE406	Applied Hydraulic Engineering	3	0	0	3	PC
PRAC	TICAL						
34.	21UCE407	Water and Waste Water Analysis Laboratory	0	0	3	1	PC
35.	21UCE408	Hydraulic Engineering Laboratory	0	0	3	1	PC
MANI	DATORY COU	RSE	•				
36.	21UGM431	Gender Equality (Common to All Branches)	1	0	0	P/F	MC
		TOTAL	19	2	6	22	
_		Total No. of Credits – 22					-

#### SEMESTER- V

S. No	Course Code	Name of the Course	L	T	P	C	Category
THEO	RY						
37.	21UCE501	Structural Analysis – II	3	1	0	4	PC
38.	21UCE502	Foundation Engineering	3	0	0	3	PC
39.	21UCE503	Design of Reinforced Concrete Elements	3	1	0	4	PC
40.		Professional Elective – I	3	0	0	3	PE
41.		Open Elective – I	3	0	0	3	OE
PRAC'	TICAL						
42.	21UCE507	Creative Thinking & Innovation	0	0	2	1	PW
43.	21UCE508	Soil Mechanics Laboratory	0	0	3	1.5	PC
44.	21UCE509	Survey Camp (4 <sup>th</sup> Semester Summer Vacation - 2 Weeks)	0	0	0	2	PW
45.	21UGS533	Interpersonal Skills Laboratory (Common to Mech. Civil, BT and BME)	0	0	3	1.5	HSS
MAND	OATORY COUR	SE					
46.	21UGT140	Heritage of Tamil (Common to All Branches)	1	0	0	1	MC
		TOTAL	15	2	8	24	
		Total No. of Credits – 24					

#### SEMESTER- VI

S. No	Course Code	Name of the Course	L	T	P	C	Category				
THEO	THEORY										
47.	21UCE601	Concrete Technology (I.C)	3	0	0	3	PC				
48.	21UCE602	Design of Steel Structures	3	1	0	4	PC				
49.		Professional Elective – II	3	0	0	3	PE				
50.		Professional Elective – III	3	0	0	3	PE				
51.		Open Elective – II	3	0	0	3	OE				
52.	21UGS631	Logical Reasoning & Aptitude (Common to Civil, BT and BME)	1	0	0	1	BS				

PRAC	TICAL										
53.	21UCE607	Product Development Project	0	0	8	4	PW				
54.	21UCE608	Highway Engineering Laboratory	0	0	3	1	PC				
55.	21UGS632	Soft Skills and Communication Laboratory	0	0	3	1	HSS				
MANI	MANDATORY COURSE										
56.	21UGM631	Indian Constitution (Common to All Branches)	1	0	0	P/F	MC				
		TOTAL	17	1	14	23					
	Total No. of Credits – 23										

#### SEMESTER- VII

S. No	Course Code	Name of the Course	L	T	P	С	Category
THEO	RY						
57.	21UME701	Project Management and Finance	3	0	0	3	HSS
58.	21UCE702	Estimating and Costing (Integrated Course)	3	0	2	4	PC
59.		Professional Elective – IV	3	0	0	3	PE
60.		Professional Elective – V	3	0	0	3	PE
61.		Open Elective – III	3	0	0	3	OE
PRAC	TICAL						
62.	21UCE707	Structural Design Software Laboratory	0	0	3	1	PC
		TOTAL	15	0	5	17	
MANI	DATORY COUL	RSE					
63.	21UGM731	Sports and Social Development	-	-	-	P/F	MC
64.	21UGM732	Skill Development	-	-	-	P/F	MC
		Total No. of Credits – 17					

#### SEMESTER-VIII

S. No	Course Code	Name of the Course	L	T	P	C	Category
THEO	RY						
65.		Professional Elective – VI	3	0	0	3	PE
66.		Open Elective – IV	3	0	0	3	OE
PRAC	TICAL						
67.	21UCE801	Project Work	0	0	16	8	PW
MANI	DATORY COURS	SE .					
68.	21UGM831	Professional Ethics and Human Values (Common to All Branches)	2	0	0	P/F	MC
		TOTAL	8	0	16	14	
		Total No. of Credits – 14					