



SETHU INSTITUTE OF TECHNOLOGY
(An Autonomous Institution | Accredited with 'A++' Grade by NAAC)
Pulloor, Kariapatti – 626 115.



B.E. COMPUTER SCIENCE AND DESIGN

REGULATIONS 2021

CHOICE BASED CREDIT SYSTEM

CURRICULUM & SYLLABUS

(1st SEMESTER To 8th SEMESTER)

BATCH 2021-25

**CHAIRPERSON
BOARD OF STUDIES**

**CHAIRMAN
ACADEMIC COUNCIL**

DEPARTMENT OF COMPUTER SCIENCE AND DESIGN

REGULATIONS 2021 [Batch 2021-2025]

OVERALL COURSE STRUCTURE

Code	Category	Total No. of Courses	Credits	Percentage
BS	Basic Sciences	10	28	17.4
ES	Engineering Sciences	8	20.5	12.73
HSS	Humanities and Social Sciences	5	9	5.59
PC	Professional Core	26	59.5	36.95
PE	Professional Elective	6	18	11.18
OE	Open Elective	4	12	7.4
PW	Project Work, Seminar & Internship	3	13	8.07
MC	Mandatory Courses	9	1	0.68
	TOTAL	71	161	100

COURSE CREDITS – SEMESTERWISE

Branch	I	II	III	IV	V	VI	VII	VIII	TOTAL
CSD	20	17	22	22	21	25	20	14	161

SEMESTER I

Course Code	Course Title	L	T	P	C	Type of Course
THEORY						
21UEN101	English for Technical Communication (Common to ALL Branches except CSBS)	2	0	0	2	HSS
21UMA102	Matrix and Calculus (Common to ALL Branches except CSBS)	3	1	0	4	BS
21UPH103	Engineering Physics (Common to ALL Branches except CSBS)	3	0	0	3	BS
21UCY105	Applied Chemistry (Common to CSE, ECE , EEE IT, ,BME,BT,AIDS,CSD)	3	0	0	3	BS
21UCS108	Problem Solving and Python Programming (Common to All Branches Except CSBS)	3	0	0	3	ES
OTHER THEORY COURSES						
21UCD107	Aesthetics Design	3	0	0	3	ES
PRACTICAL						
21UCS110	Problem Solving and Python Programming Laboratory (Common to All Branches Except CSBS)	0	0	2	1	ES
21UGS113	Basic Sciences Laboratory I (Common to All Branches Except CSBS)	0	0	2	1	BS
MANDATORY						
21UGM131	Induction Programme (Common to All Branches)	0	3	0	P/F	MC
	TOTAL	17	4	4	20	
Total No of Credits – 20						

SEMESTER II

Course Code	Course Title	L	T	P	C	Type of Course
THEORY						
21UEN201	Communication Skills for Professionals (Common to All Branches except CSBS)	1	0	1	1.5	HSS
21UMA210	Differential Equations, Fourier series and Transforms (Common to AI&DS,CSD)	3	1	0	4	BS
21UPH205	Physics for Information Science (Common to CSE, IT , EEE ,AIDS,CSD)	3	0	0	3	BS
OTHER THEORY COURSES						
21UCS204	Programming Using C (common to CSE,CSD)	3	0	0	3	ES
21UCD205	Digital and Computer Organization	3	0	0	3	ES
PRACTICAL						
21UGS210	Basic Sciences Laboratory II (Common to All Branches Except CSBS)	0	0	2	1	BS
OTHER PRACTICALS						
21UCS211	C Programming Laboratory (common to CSE,CSD)	0	0	3	1.5	ES
MANDATORY						
21UGM231	Environmental Science (Common to All Branches)	3	0	0	P/F	MC
	TOTAL	16	1	6	17	
Total No of Credits – 17						

SEMESTER III

Course Code	Course Title	L	T	P	C	Type of Course
THEORY						
21UMA328	Discrete Mathematics (Common To AIDS, CSD)	3	1	0	4	BS
21UIT302	Data Structures (Common to CSE, IT, AI&DS, CSD)	3	0	0	3	PC
21UCS303	Object Oriented Programming using C++ (Common to CSE, IT, CSBS, CSD)	3	0	2	4	PC
21UIT304	Principles of Operating Systems (Common to CSE, IT, AI&DS, CSD)	3	0	0	3	PC
21UCD305	Design Thinking	3	0	0	3	ES
21UCD306	Database System Design (Common to CSE, IT, AI&DS, CSD)	3	0	0	3	PC
PRACTICAL						
21UIT307	Data Structures Laboratory (Common to CSE, IT, AI&DS, CSD)	0	0	2	1	PC
21UCD308	Database System Design Laboratory (Common to CSE, IT, AI&DS, CSD)	0	0	2	1	PC
MANDATORY						
21UGM331	Biology for Engineers (Common to All except BME & BT)	2	0	0	P/F	MC
	TOTAL	20	1	6	22	
Total No of Credits - 22						

SEMESTER IV

Course Code	Course Title	L	T	P	C	Type of Course
THEORY						
21UMA426	Probability And Statistical Techniques (Common To AIDS & CSD)	3	1	0	4	BS
21UCS402	Computer Networks (Common to CSE, IT, CSD)	3	0	0	3	PC
21UCS403	Algorithm Analysis (Common to CSE, IT, AI&DS, CSD)	3	0	0	3	PC
21UIT404	Java Programming (Common to CSE, IT, CSD)	3	0	2	4	PC
21UCD405	Computer Graphics	3	0	0	3	PC
21UCD406	Agile Methodologies	3	0	0	3	ES
PRACTICAL						
21UCS407	Computer Networks Laboratory (Common to CSE, IT, CSD)	0	0	2	1	PC
21UCD408	Computer Graphics Laboratory	0	0	2	1	PC
MANDATORY						
21UGM431	Gender Equality (Common to All)	1	0	0	P/F	MC
		19	1	6	22	
Total No of Credits –22						

SEMESTER V

Course Code	Course Title	L	T	P	C	Type of Course
THEORY						
21UGS531	Reasoning and Aptitude (Common to CSE, IT, CSBS, AIDS, CSD)	1	0	0	1	BS
21UCD501	Visual Design and Communication	3	0	0	3	PC
21UCD502	Foundations of Machine Learning	3	0	0	3	PC
21UCD503	Multimedia Technologies	3	0	0	3	PC
PE1	Professional Elective-I	3	0	0	3	PE
OE1	Open Elective-I	3	0	0	3	OE
PRACTICAL						
21UCD507	Creative Thinking and Innovation	0	0	2	1	PW
21UCD508	Visual Design and Communication Laboratory	0	0	2	1	PC
21UCD509	Interactive Design Laboratory	0	0	2	1	PC
21UGS532	Soft Skills Laboratory (Common to CSE,IT,CSBS, AIDS,EEE, CSD,AGRI)	0	0	2	1	HSS
MANDATORY						
21UGT140	Heritage of Tamil (Common to all)	1	0	0	1	MC
	TOTAL	17	0	8	21	
Total No of Credits – 21						

SEMESTER VI

Course Code	Course Title	L	T	P	C	Type of Course
THEORY						
21UCD601	Game Design and Development	3	0	0	3	PC
21UCD602	IoT Design (Common to CSE, CSD)	2	0	0	2	PC
21UCD603	Distributed Computing	3	0	0	3	PC
PE-II	Professional Elective–II	3	0	0	3	PE
PE-III	Professional Elective–III	3	0	0	3	PE
OE-II	Open Elective–II	3	0	0	3	OE
PRACTICAL						
21UCD607	Product Development Project	2	0	4	4	PW
21UCD608	Game Design and Development Laboratory	0	0	2	1	PC
21UCD609	IoT Design Laboratory	0	0	3	1.5	PC
21UGS633	Interpersonal Skills Development Lab (Common to CSE,EEE, IT,AGRI,CSBS, AIDS)	0	0	3	1.5	HSS
MANDATORY						
21UGM631	Indian Constitution (Common to all)	1	0	0	P/F	MC
	TOTAL	20	0	12	25	
Total No of Credits - 25						

SEMESTER VII

Course Code	Course Title	L	T	P	C	Type of Course
THEORY						
21UME701	Project Management and Finance (Common to All Branches Except CSBS)	3	0	0	3	HSS
21UCD702	Virtual Reality and Augmented Reality	3	0	0	3	PC
21UCD703	3D Modeling and Animation	3	0	0	3	PC
PE-IV	Professional Elective–IV	3	0	0	3	PE
PE-V	Professional Elective –V	3	0	0	3	PE
OE-III	Open Elective–III	3	0	0	3	OE
PRACTICAL						
21UCD707	Virtual Reality and Augmented Reality Laboratory	0	0	2	1	PC
21UCD708	3D Modeling and Animation Laboratory	0	0	2	1	PC
21UGE710	Multi Disciplinary Project - I	0	0	6	3	PC
MANDATORY						
21UGM731	Sports and Social Development (Common to all)	-	-	-	P/F	MC
21UGM732	Skill Development	-	-	-	P/F	MC
	TOTAL	18	0	4	20	
Total No of Credits - 20						

SEMESTER VIII

Course Code	Course Title	L	T	P	C	Type of Course
THEORY						
PE-VI	Professional Elective–VI	3	0	0	3	PE
OE-IV	Open Elective–IV	3	0	0	3	OE
PRACTICAL						
21UCD801	Project Work	0	0	16	8	PW
21UGE810	Multi Disciplinary Project - II	0	0	16	8	PC
MANDATORY						
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						