



**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**

**(1<sup>st</sup> SEMESTER To 8<sup>th</sup> SEMESTER)**

**BATCH 2022 - 26**

**CHAIRPERSON  
BOARD OF STUDIES**

**CHAIRMAN  
ACADEMIC COUNCIL**

**DEPARTMENT OF COMPUTER SCIENCE AND DESIGN**

**REGULATIONS 2021 [Batch 2022-2026]**

**OVERALL COURSE STRUCTURE**

<b>Code</b>	<b>Category</b>	<b>Total No. of Courses</b>	<b>Credits</b>	<b>Percentage</b>
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	10	2	0.68
	<b>TOTAL</b>	<b>72</b>	<b>162</b>	<b>100</b>

**COURSE CREDITS – SEMESTERWISE**

<b>Branch</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	<b>VII</b>	<b>VIII</b>	<b>TOTAL</b>
<b>CSD</b>	<b>20</b>	<b>18</b>	<b>23</b>	<b>22</b>	<b>20</b>	<b>25</b>	<b>20</b>	<b>14</b>	<b>162</b>

### SEMESTER I

Course Code	Course Title	L	T	P	C	Type of Course
<b>THEORY</b>						
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, AI&ML)	3	0	0	3	BS
21UCS107	Problem Solving and C Programming (Common to All Branches Except CSBS)	3	0	0	3	ES
<b>OTHER THEORY COURSES</b>						
21UME110	Engineering Drawing and Design	2	0	2	3	ES
<b>PRACTICAL</b>						
21UCS111	Problem Solving and C 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
<b>MANDATORY</b>						
21UGM131	Induction Programme (Common to All Branches)	0	3	0	P/F	MC
	<b>TOTAL</b>	<b>16</b>	<b>4</b>	<b>6</b>	<b>20</b>	
<b>Total No of Credits – 20</b>						

## SEMESTER II

Course Code	Course Title	L	T	P	C	Type of Course
<b>THEORY</b>						
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
<b>OTHER THEORY COURSES</b>						
21UIT206	Programming Fundamentals using Python (common to CSE,IT, CSD, AIML)	3	0	0	3	ES
21UCD205	Digital and Computer Organization	3	0	0	3	ES
<b>PRACTICAL</b>						
21UGS210	Basic Sciences Laboratory II (Common to All Branches Except CSBS)	0	0	2	1	BS
<b>OTHER PRACTICALS</b>						
21UIT207	Programming Fundamentals using Python Laboratory (common to CSE,IT, CSD, AIML)	0	0	3	1.5	ES
<b>MANDATORY</b>						
21UGT140	Heritage of Tamil (Common to All Branches)	1	0	0	1	MC
21UGM331	Biology for Engineers (Common to All except BME & BT)	2	0	0	P/F	MC
	<b>TOTAL</b>	<b>16</b>	<b>1</b>	<b>6</b>	<b>18</b>	
<b>Total No of Credits – 18</b>						

### SEMESTER III

Course Code	Course Title	L	T	P	C	Type of Course
<b>THEORY</b>						
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, AI&ML)	3	0	0	3	PC
<b>PRACTICAL</b>						
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, AI&ML)	0	0	2	1	PC
<b>MANDATORY</b>						
21UGT241	Tamil and Technology (Common to All branches)	1	0	0	1	MC
21UGM231	Environmental Science (Common to All branches)	3	0	0	P/F	MC
	<b>TOTAL</b>	<b>22</b>	<b>1</b>	<b>6</b>	<b>23</b>	
<b>Total No of Credits - 23</b>						

### SEMESTER IV

Course Code	Course Title	L	T	P	C	Type of Course
<b>THEORY</b>						
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
<b>PRACTICAL</b>						
21UCS407	Computer Networks Laboratory (Common to CSE, IT, CSD)	0	0	2	1	PC
21UCD408	Computer Graphics Laboratory	0	0	2	1	PC
<b>MANDATORY</b>						
21UGM431	Gender Equality (Common to all)	1	0	0	P/F	MC
		<b>19</b>	<b>1</b>	<b>6</b>	<b>22</b>	
<b>Total No of Credits –22</b>						

### SEMESTER V

Course Code	Course Title	L	T	P	C	Type of Course
<b>THEORY</b>						
21UGS531	Reasoning and Aptitude (Common to CSE, IT, CSBS, AIDS, CSD, AI&ML )	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
<b>PRACTICAL</b>						
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
	<b>TOTAL</b>	<b>16</b>	<b>0</b>	<b>8</b>	<b>20</b>	
<b>Total No of Credits – 20</b>						

## SEMESTER VI

Course Code	Course Title	L	T	P	C	Type of Course
<b>THEORY</b>						
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
<b>PRACTICAL</b>						
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
<b>MANDATORY</b>						
21UGM631	Indian Constitution (Common to all)	1	0	0	P/F	MC
	<b>TOTAL</b>	<b>20</b>	<b>0</b>	<b>12</b>	<b>25</b>	
<b>Total No of Credits - 25</b>						



**SEMESTER VII**

Course Code	Course Title	L	T	P	C	Type of Course
<b>THEORY</b>						
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
<b>PRACTICAL</b>						
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
<b>MANDATORY</b>						
21UGM731	Sports and Social Development	-	-	-	P/F	MC
21UGM732	Skill Development	-	-	-	P/F	MC
	<b>TOTAL</b>	<b>18</b>	<b>0</b>	<b>4</b>	<b>20</b>	
<b>Total No of Credits - 20</b>						

**SEMESTER VIII**

Course Code	Course Title	L	T	P	C	Type of Course
<b>THEORY</b>						
PE-VI	Professional Elective–VI	3	0	0	3	PE
OE-IV	Open Elective–IV	3	0	0	3	OE
<b>PRACTICAL</b>						
21UCD801	Project Work	0	0	16	8	PW
21UGE810	Multi Disciplinary Project - II	0	0	16	8	PC
<b>MANDATORY</b>						
21UGM831	Professional Ethics and Human Values (Common to all branches)	2	0	0	P/F	MC
	<b>TOTAL</b>	<b>8</b>	<b>0</b>	<b>16</b>	<b>14</b>	
<b>Total No of Credits – 14</b>						