

School Name: School Computing Science & Engineering

Program Name: B.Tech. (Computer Science)

Scheme: 2017-2021

1 st Semester							
Sr.No	Subject Code	Name of the Course	Teaching Scheme				Credits
			L	T	P	Total Hours	
Theory							
1	BCSE1001	Introduction to Computer Science & Engineering	0	0	2	2	1
2	BCSE1002	Computer Programming and Problem Solving	0	0	4	4	2
3	MATH1001	Multivariable Calculus	3	0	0	3	3
4	PHYS1001	Engineering Physics	3	0	0	3	3
5	SLBT1001	Basic English	0	0	4	4	2
6	BTME1002	Product Design Using Graphics	0	0	4	4	2
7	UHVE1001	Universal Human Values and Ethics	0	0	4	4	2
8	CHEM1001	Engineering Chemistry	3	0	0	3	3
Practical							
1	FREN1001	French - I	0	0	2	2	1
2	MATH1002	Exploration with CAS - I	0	0	2	2	1
3	PHYS1002	Engineering Physics Lab	0	0	2	2	1
4	CHEM1002	General Chemistry Lab	0	0	2	2	1
Total:			9	0	26	35	22

2 nd Semester							
Sr.No	Subject Code	Name of the Course	Teaching Scheme				Credits
			L	T	P	Total Hours	
Theory							
1	BCSE1003	Application Oriented Programming using Python	0	0	4	4	2
2	BEEE1002	Basic Electrical and Electronics Engineering	3	0	0	3	3
3	MATH1003	Matrices and Differential Equations	3	0	0	3	3
4	BTME1003	Product Manufacturing	0	0	2	2	1
5	PHYS1004	Physics of Semiconductor Devices	3	0	0	3	3
6	ENVS1001	Energy and Environmental Science	3	0	0	3	3
7	PSSO1001	Psychology and Sociology	2	0	0	2	2
Practical							
1	BEEE1003	Basic Electrical and Electronics Engineering Lab	0	0	2	2	1
2	MATH1004	Exploration with CAS-II	0	0	2	2	1

3	PHYS1005	Advance Physics Lab	0	0	2	2	1
4	FREN1002	French -II	0	0	2	2	1
5	SLBT1002	English Proficiency and Aptitude Building - 1	0	0	4	4	2
Total:			14	0	18	32	23

3rd Semester							
SrNo.	Subject Code	Name of the Course	Teaching Scheme				Credits
			L	T	P	Total Hours	
Theory							
1	BCSE2310	Digital Design and Computer Architecture	3	0	0	3	3
2	BCSE2340	Theory of Automata and Formal Languages	3	0	0	3	3
3	BCSE2320	Data Structures using C++	3	0	0	3	3
4	BTME2002	Engineering Thermodynamics	3	0	0	3	3
5	CSE211	Discrete Structure	3	0	0	3	3
6	BCSE2330	Introduction to Cryptographic Fundamentals	3	0	0	3	3
Practical							
1	BCSE2331	Introduction to Cryptographic Fundamentals Lab	0	0	2	2	1
2	BCSE2311	Digital Design and Computer Architecture Lab	0	0	2	2	1
3	BCSE2321	Data Structures using C++ Lab	0	0	2	2	1
4	SLBT2001	English Proficiency and Aptitude Building - II	0	0	4	4	2
Total:			18		10	28	23

4th Semester							
SN	Subject Code	Name of the Course	Teaching Scheme				Credits
			L	T	P	Total Hours	
1	SLBT2002	English Proficiency and Aptitude Building – 3	0	0	4	2	2
2	MATH2003	Probability and Statistics	3	0	0	3	3
3	BCSE2010	Operating Systems	3	0	0	3	3
4	BCSE2011	Data Base Management System	3	0	0	3	3
5	BCSE3004	Microprocessor & Interfacing	3	0	0	3	3
6	BCSE2012	Data communication & Networking	3	0	0	3	3
Programme Elective-I							
7	BSCS9007	Introduction to Cloud Computing	3	0	0	3	3
	BCSE2017	Introduction to IoT	3	0	0	3	3
	BSCS9001	Foundations of Data Science	3	0	0	3	3
	BCSE9009	Artificial Intelligence and Intelligent System	3	0	0	3	3
Lab							
8	BCSE2013	Operating Systems lab	0	0	2	2	1
9	BCSE2014	Data Base Management System lab	0	0	2	2	1
10	EMPS3003	Java Coding - Basics	0	0	2	2	1

11	BCSE3009	Microprocessor & Interfacing Lab	0	0	2	2	1
Total			27	0	12	37	24

5 th Semester							
SN	Subject Code	Name of the Course	Teaching Scheme				Credits
			L	T	P	Total Hours	
1	BSCS2350	Design and Analysis of Algorithms	3	0	0	3	3
2	BCSE3002	Compiler Design	3	0	0	3	3
3	BSCS2440	Software Engineering	3	0	0	3	3
4	BSCS9003	Introduction to Cyber Security	3	0	0	3	3
5	SLBT3001	English Proficiency and Aptitude Building -4	0	0	4	4	2
Practical							
6	BCSE3007	Compiler Design Lab	0	0	2	2	1
7	BSCS2351	Design & Analysis of Algorithms Lab	0	0	2	2	1
8	BSCS2441	Software Engineering Lab	0	0	2	2	1
9	BCSE3071	Industry Oriented Java-2	0	0	2	2	1
10	BCSE3072	Industry Oriented Python-2	0	0	2	2	1
Programme Elective-II							
11	BCSE3066	Machine Learning	3	0	0	3	3
	CSDT1001	Disruptive Technology	3	0	0	3	3
Total			15	0	14	29	22

6 th Semester							
SN	Subject Code	Name of the Course	Teaching Scheme				Credits
			L	T	P	Total Hours	
1	BCSE3012	Web Technologies	3	0	0	3	3
2	BCSE3011	Computer Graphics	3	0	0	3	3
3	BCSE3019	IOT and Applications	3	0	0	3	3
4	BCSE9020	Artificial Intelligence and Intelligence System-II	3	0	2	5	4
5	SLBT3002	Campus to Corporate	0	0	2	2	1
6	BCSE3016	Web Technologies Lab	0	0	2	2	1
7	BCSE3015	Computer Graphics Lab	0	0	2	2	1
10	BCSE3073	Industry Oriented Python-III	0	0	2	2	1
11	BCSE3074	Industry Oriented Java-III	0	0	2	2	1
Programme Elective –III							
12	BCSE9021	Digital Image Processing	3	0	0	3	3
	BCSE9031	Pattern Recognition	3	0	0	3	3
	BCSE9011	Robotic Process Automation	3	0	0	3	3
Total			21	0	12	33	21

7 th Semester								
SN	Subject Code	Name of the Course	Teaching Scheme				Credits	
			L	T	P	Total Hours		
1	BCSE4036	APP DEVELOPMENT FOR ANDROID	0	0	6	6	3	
2	BCSE3067	Cloud Computing Technologies	3	0	0	3	3	
Programme Elective –IV								
3	BCSE 3052	Bioinformatics	3	0	0	3	3	
	BCSE 3053	Information Technology Infrastructure & its Management	3	0	0	3	3	
	BCSE3055	Enterprise Resource Planning	3	0	0	3	3	
Programme Elective –V								
4	BCSE3061	Simulation and Modelling	2	0	2	4	3	
	BCSE3063	Big Data Analytics	2	0	2	4	3	
	BCSE3060	Wireless Sensor Network	2	0	2	4	3	
	BCSE3065	Mobile Computing	2	0	2	4	3	
5	BCSE9998	Capstone Design –I	0	0	6	6	3	
Total			8	0	14	22	15	

Semester-8								Credits
S. No.	Course Code	Course Title	L	T	P	Total hrs		
Practical								
1	BCSE9991	Industrial Internship	0	0	4	4	2	
2	BCSE9999	Capstone Design –II	0	0	1	16	8	
Total:						20	10	

Total Credits

160