

B.TECH. 4 YEAR PROGRAMME

COMPUTER SCIENCE & ENGINEERING

SCHEME 2020-21

(1st, 2nd, 3rd, 4th, 5th, 6th & 7th Semester)

Detailed Scheme for B.Tech. CSE

B.Tech. – CSE (First Semester)

CourseNo.	Subject	Scheme of Studies Periods per Week			Credits
		L	T	P	
MTH 101	Engineering Mathematics I	3	1	-	4
PHY 101	Engineering Physics I	3	1		4
CS 101	Fundamentals of Computer Programming	2	1	2	4
EE 101	Fundamentals of Electrical & Electronics	2	1	2	4
HUM 101	Effective Communication and soft skills	2	1	2*	4
IT 101	Engineering Workshop	-		4	2
*Language Lab Total L=12, T=5, P =10		Total Credit			22

B.Tech. – CSE (Second Semester)

CourseNo.	Subject	Scheme of Studies Periods per week			Credits
		L	T	P	
MTH 102	Engineering Mathematics-II	3	1	-	4
PHY 102	Engineering Physics-II	2	1	2	4
EG 101	Engineering Graphics	2	1	2	4
CS 102	Data Structures and Algorithms	2	1	2	4
HUM 102	Culture & Human Values	2	1	2	4
IT 102	Programming Lab	-	-	4	2
Total L=11, T=5, P =12		Total Credit			22

B.Tech. - CSE (Third Semester)

CourseNo.	Subject	Scheme of Studies Periods per Week			Credits
		L	T	P	
MTH 211	Mathematics III	3	1	-	4
CSE-212	Discrete Structure	3	1	-	4
CSE-213	Digital Logic and Design	2	1	2	4
CSE-214	Principles of Programming Languages	2	1	2	4
CSE-215	Design and Analysis of Algorithms	2	1	2	4
CSE-216	Computer Workshop		1	2	2
Total L=12, T=6, P =8		Total Credit			22

B.Tech. – CSE (Fourth Semester)

CourseNo.	Subject	Scheme of Studies Periods per week			Credits
		L	T	P	
CSE-221	Analog and Digital Communication	3	1	-	4
CSE-222	Computer organization and Architecture	2	1	2	4
CSE-223	Software Engineering	2	1	2	4
CSE-224	Database Management System	2	1	2	4
CSE-225	Formal Language and Automata Theory	3	1	-	4
CSE-226	Entrepreneurship Development		-	4	2
CSE-227	Community Services	-	-	-	S/NS
Total L=12, T=5, P =10		Total Credit			22

Community Services*: 15 days (100 Hrs) community services such as Swach bharat Abhiyan etc. to get Satisfactory (S) or Not Satisfactory (NS) Grade.

B.Tech. – CSE (Fifth Semester)

Course No.	Subject	Scheme of Studies Periods per week			Credits
		L	T	P	
CSE-311	Computer Networks	2	1	2	4
CSE-312	Digital Image Processing	2	1	2	4
CSE-313	Micro-Processors and Micro-Controllers	2	1	2	4
CSE-314	Compiler Design	2	1	2	4
CSE-315	Operating System	3	1	-	4
Total L=11, T=5, P=8		Total Credit			20

B.Tech.– CSE (Sixth Semester)

Course No.	Subject	Scheme of Studies Periods per week			Credits
		L	T	P	
CSE-321	Cryptography and Information Security	2	1	2	4
CSE-322	Data Warehouse and Data Mining	2	1	2	4
CSE-323	Distributed Systems	3	1	-	4
CSE-324	Artificial Intelligence	3	-	-	3
L-1	CS Elective -1	3	-	-	3
CSE 325	Minor Project	-	-	4	2
Total L=13, T=3,P=8		Total Credit			20

List of Electives Level -1 (Any One Subject for VI Semester)

Data Engineering & Computing Stream		Computer System Architecture Stream		Network Security & Algorithms Stream		Language, Theory & Communication Stream	
CSE501	Advances in Database Management Systems	CSE502	Computer Graphics & Multimedia	CSE503	Computer & Network Security	CSE504	Mobile & Wireless Communications

B.Tech.– CSE (Seventh Semester)

Course No.	Subject	Scheme of Studies Periods per week			Credits
		L	T	P	
CSE-411	Soft Computing	2	1	2	4
OT-1	Open Theory from Science/Math/Humanities/Management.	3	-	-	3
L-2	CS Elective 2	3	-	-	3
L-2	CS Elective 3	3	-	-	3
L-2	CS Elective 4	3	-	-	3
CSE 412	Industrial Training	-	-	-	2
CSE 413	Major Project (Phase-1)	-	-	4	2
Total L=14, T=1, P =6		Total Credit			20

List of Electives Level -2 (Any Three Subject for VII Semester)

Data Engineering & Computing Stream		Network Security & Algorithms Stream		Computer System Architecture Stream		Language, Theory & Communication Stream	
CSE 601	Mobile Computing	CSE 602	Parallel Algorithms	CSE 603	Natural Language Processing	CSE 604	Software Testing & Quality
CSE 605	Machine Learning	CSE 606	Cyber Crime & Information Warfare	CSE-607	High Performance Computing	CSE 608	Optimization Method
CSE 609	Information Retrieval & Extraction	CSE 610	Digital Forensic and Cyber Law	CSE-611	Real Time Systems	CSE 612	Graph Theory

List of Electives OT-1 (Any One Subject for VII Semester)

Open Theory from Science/Math/Humanities/Management							
CSE 701	Environmental Science	CSE 702	Technical Communication	CSE 703	System Biology	CSE 704	Intellectual Property Right