

SCHEME
B.Tech. Computer Engineering I Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites	L	T	P	Credits	Course Type
		Course Code(s)					
HSIR11	Communication Skills in English		2	0	2	3	EPR
MAIR11	Mathematics-I		3	1	0	4	EPR
PHIR11	Physics-I		2	1	2	4	EPR
CHIR11	Environment Studies		2	0	2	3	EPR
CSIR11	Basics of Programming		2	0	2	3	EPR
CSIR13	Introduction to Discipline Engineering		2	0	0	2	EPR
MEIR11	Engineering Practice		1	0	3	2	EPR
SWIR11	Sports		0	0	2	1	EPR
		Total	14	2	13	22	

B.Tech. Computer Engineering II Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites	L	T	P	Credits	Course Type
		Course Code(s)					
HSIR12	Economics for Engineers		2	1	0	3	EPR
MAIR12	Mathematics-II		3	1	0	4	EPR
PHIR12	Physics-II		2	1	2	4	EPR
CHIR12	Chemistry		2	1	2	4	EPR
CSPC10	Digital System Design		3	0	0	3	PC1
CSPC12	Data Structures		3	0	2	4	PC2
CSPC14	Object Oriented Programming using C++		3	0	2	4	PC3
CSIR12	Engineering Graphics (Web Designing)		1	0	3	2	EPR
		Total	19	5	11	28	

B.Tech. Computer Engineering III Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
MAIR24	Discrete Mathematics		3	1	0	4	EPR
CSPC21	Design and Analysis of Algorithms		3	1	2	5	PC1
CSPC23	Java Programming		3	0	2	4	PC2
CSPC25	Database Systems		3	1	2	5	PC3
CSPC27	Software Engineering		3	1	0	4	PC4
CSPC29	Computer Organization and Architecture		3	1	0	4	PC5
		Total	18	5	8	26	

B.Tech. Computer Engineering IV Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
CSPC20	Operating Systems		3	1	2	5	PC1
CSPC22	Microprocessor and Interfacing		3	0	2	4	PC2
CSPC24	Unix and Linux Programming		2	0	2	3	PC3
CSPC26	Computer Networks		3	1	2	5	PC4
CSPE2x	Programme Elective I		3	0	2	4	PE1
CSPE2x	Programme Elective II		3	1	0	4	PE2
		Total	17	3	10	25	

List of Programme Electives I		List of Programme Electives II	
Course Code	Course Title	Course Code	Course Title
CSPE20	Advanced Java Programming	CSPE60	Stochastic Processes and Queuing Theory
CSPE22	Programming using Python	CSPE62	Software Project Management
CSPE24	Number Theory and Cryptography	CSPE64	Data Mining and Data Warehousing

B.Tech. Computer Engineering V Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
CSPC31	Advanced Data Structures and Algorithms		3	0	2	4	PC1
CSPC33	Soft Computing		3	0	2	4	PC2
CSPC35	Software Development using UML and Agile Methodology		3	0	2	4	PC3
CSPC37	Automata Theory		3	1	0	4	PC4
CSPC39	Seminar		0	0	2	1	
CSPE3x	Programme Elective III		3	0	2	4	PE1
CSPE3x	Programme Elective IV		3	1	0	4	PE2
		Total	18	2	10	25	

List of Programme Electives III		List of Programme Electives IV	
Course Code	Course Title	Course Code	Course Title
CSPE31	Software Verification and Validation	CSPE71	Advanced Database Systems
CSPE33	Embedded System Development	CSPE73	Service Oriented Architecture
CSPE35	Mobile Application Development	CSPE75	Advanced Computer Architecture
CSPE37	Complex Networks	CSPE77	Image Processing

B.Tech. Computer Engineering VI Semester w.e.f 2017-18

Semester VI							
Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
CSIR30 / CSIR32	Internship / Project Work					10	EPR
VI Semester Credits						10	

B.Tech. Computer Engineering VII Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
HSIR13	Business Management		2	1	0	3	EPR
CSPC41	Machine Learning		3	0	2	4	PC1
CSPC43	Distributed Computing		3	0	0	3	PC2
CSPC45	Information Security		3	0	2	4	PC3
CSPE4x	Programme Elective V		3	1	0	4	PE1
	Open Elective I from other departments		3	0	0	3	OE1
Total			17	2	4	21	

List of Programme Electives V		Open Elective I (For Non-CS and IT students)	
Course Code	Course Title	Course Code	Course Title
CSPE41	Cloud and Grid Computing	CSOE41	Operating Systems
CSPE43	Natural Language Processing		
CSPE45	Computer Vision		
CSPE47	Graphics and Visualization		

B.Tech. Computer Engineering VIII Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
HSIR14	Professional Ethics & IPR		1	0	2	2	EPR
CSPC40	Big Data Analytics		3	0	2	4	PC1
CSPE4x	Programme Elective VI		3	1	0	4	PE1
CSPE40	PROJECT		0	0	3	4	PE2
	Open Elective II from other departments		3	0	0	3	OE2
	Open Elective III from other departments		3	0	0	3	OE3
CSIR40	Comprehensive Viva Voce					3	
Total			13	1	7	23	

List of Programme Electives VI	
Course Code	Course Title
CSPE42	High Performance Computing
CSPE44	Human Computer Interaction
CSPE46	Compiler Design
CSPE48	Graph Theory and Combinatorics
Open Elective II and III	
Course Code	Course Title
CSOE40	Database System
CSOE42	Soft Computing