

SCHEME

B.Tech. Information Technology I Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
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
ITIR13	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. Information Technology II Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
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
ITPC10	Digital System Design		3	0	0	3	PC1
ITPC12	Data Structures		3	0	2	4	PC2
ITPC14	Object Oriented Programming using C++		3	0	2	4	PC3
ITIR12	Engineering Graphics (Web Designing)		1	0	3	2	EPR
		Total	19	5	11	28	

B.Tech. Information Technology 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
ITPC21	Design and Analysis of Algorithms		3	1	2	5	PC1
ITPC23	Java Programming		3	0	2	4	PC2
ITPC25	Database Systems		3	1	2	5	PC3
ITPC27	Software Engineering		3	1	0	4	PC4
ITPC29	Computer Organization and Architecture		3	1	0	4	PC5
		Total	18	5	6	26	

B.Tech. Information Technology IV Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
ITPC20	Operating Systems		3	1	2	5	PC1
ITPC22	Communication Systems		3	0	2	4	PC2
ITPC24	Software Verification and Validation		3	0	2	4	PC3
ITPC26	Computer Networks		3	0	2	4	PC4
ITPE2x	Programme Elective I		3	0	2	4	PE1
ITPE2x	Programme Elective II		3	1	0	4	PE2
		Total	18	2	10	25	

List of Programme Electives I			List of Programme Electives II	
Course Code	Course Title		Course Code	Course Title
ITPE20	Advanced Programming	Java	ITPE60	Stochastic Processes and Queuing Theory
ITPE22	Programming using Python		ITPE62	Software Project Management
ITPE24	Soft Computing		ITPE64	Number Theory and Cryptography

B.Tech. Information Technology V Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
ITPC31	Mobile Application Development		3	0	2	4	PC1
ITPC33	Web Technologies		2	0	2	3	PC2
ITPC35	Software Development using UML and Agile Methodology		3	1	2	5	PC3
ITPC37	Automata Theory		3	1	0	4	PC4
ITPC39	Seminar		0	0	2	1	
ITPE3x	Programme Elective III		3	0	2	4	PE1
ITPE3x	Programme Elective IV		3	1	0	4	PE2
		Total	17	3	10	25	

List of Programme Electives III		List of Programme Electives IV	
Course Code	Course Title	Course Code	Course Title
ITPE31	Unix and Linux Programming	ITPE71	Advanced Database Systems
ITPE33	Embedded System Development	ITPE73	Service Oriented Architecture
ITPE35	Information Security	ITPE75	Computer Vision
ITPE37	Image Processing	ITPE77	Data Mining and Data Warehousing
ITPE39	Microprocessor and Interfacing	ITPE79	Complex Networks

B.Tech. Information Technology VI Semester w.e.f 2017-18

Semester VI							
Course Code	Course Title	Prerequisites Course Code(s)	L	T	P	Credits	Course Type
ITIR30 / ITIR32	Internship / Project Work					10	EPR
VI Semester Credits						10	

B.Tech. Information Technology VII Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L T P			Credits	Course Type
			L	T	P		
HSIR13	Business Management		2	1	0	3	EPR
ITPC41	Machine Learning		3	0	2	4	PC1
ITPC43	Human Computer Interaction		3	0	0	3	PC2
ITPC45	Advanced Data Structures and Algorithms		3	0	2	4	PC3
ITPE4x	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
ITPE41	Graphics and Visualization	ITOE41	Operating Systems
ITPE43	Advances in Computer Networks		
ITPE45	Compiler Design		
ITPE47	Game Theory and Applications		

B.Tech. Information Technology VIII Semester w.e.f 2017-18

Course Code	Course Title	Prerequisites Course Code(s)	L T P			Credits	Course Type
			L	T	P		
HSIR14	Professional Ethics & IPR		1	0	2	2	EPR
ITPC40	Big Data Analytics		3	0	2	4	PC1
ITPE4x	Programme Elective VI		3	1	0	4	PE1
ITPE40	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
ITIR40	Comprehensive Viva Voce					3	
Total			13	1	7	23	

List of Programme Electives VI	
Course Code	Course Title
ITPE42	Advanced Multimedia Technologies
ITPE44	Distributed Computing
ITPE46	Cloud and Grid Computing
ITPE48	Cyber Security and IT Infrastructure
Open Elective II and III	
Course Code	Course Title
ITOE40	Database Systems
ITOE42	Soft Computing