



think • innovate • transform

# B. TECH – CSE (Regular)

#### **Regulation 2021**

#### **CURRICULUM STRUCTURE**

#### **SEMESTER I**

S.No.	Description	AICTE	Course	Courses		Cr	edi	its		Hours		
		Abbr.	Code		L	T	P	Total	L	T	P	Total
1	MA-I	BSC	XMA101	Calculus and Linear Algebra	3	1	0	4	3	1	0	4
2	BE	ESC	XBE102	Electrical and Electronics	3	1	0	4	3	1	0	4
				Engineering Systems	3	1	U	4	J	1	U	+
3	С	BSC	XAC103	Applied Chemistry for Engineers	3	1	0	4	3	1	0	4
4	PPS-T	ESC	XCS104	Basics of Electronic Devices and	3	0	0	3	3	0	0	3
				Circuits	3	U	U	3	J	U	U	3
5	SC	HSMC	XGS105	Speech Communication	0	1	2	3	0	1	4	5
6	UMAN-I	MC	XUM106	Constitution of India	0	0	0	0	3	0	0	3
7	BEL	ESC	XBE107	Electrical and Electronics	0	0	1	1	0	0	2	2
				Engineering Systems Laboratory	U	U	1	1	U	U	2	2
8	CL	BSC	XAC108	Applied Chemistry for Engineers	0	0	1	1	0	0	2	2
				Laboratory	U	U	1	1	U	U		2
				Total				20				27

#### **SEMESTER II**

S.No.	Description	AICTE	Course	Courses		Cr	edi	ts		Hours		
		Abbr.	Code		L	T	P	Γotal	L	T	P	Total
1.	MA-II	BSC	XMA201	Calculus, Ordinary Differential	3	1	0	4	3	1	0	4
				Equations and Complex Variable	3	1	U	4	3	1	U	4
2.	PPS-T	ESC	XCP202	Programming for Problem Solving	3	0	0	3	3	0	0	3
3	P	BSC	XAP203	Applied Physics for Engineers	3	1	0	4	3	1	0	4
4	TC	HSMC	XGS204	Technical Communication	2	0	0	2	2	0	0	2
5	Works	ESC	XWP205	Workshop Practices	1	0	2	3	1	0	4	5
6	EM/BT	ESC	XEM206	Engineering Mechanics	3	0	0	3	3	0	0	3
7	PPS-L	ESC	XCP207	Programming for Problem Solving	0	0	1	1	0	0	2	2
				Laboratory	U	U	1	1	U	U		
8	PL	BSC	XAP208	Applied Physics for Engineers	0	0	1	1	0	0	2	2
				Laboratory	٥	0	1	1	U	U		
				Total				21				25

## **SEMESTER III**

S.No.	Description	AICTE	Course	Courses		Cre	dits	5		Н	our	S
		Abbr.	Code		L	T	P	Tota	L	T	P	Tota
1.	MA-III	BSC	XPS301	Probability and Statistics	3	0	0	3	3	0	0	3
2.	PCC T	PCC	XCS302	Digital Electronics	3	1	0	4	3	1	0	4
3.	PCC-T	PCC	XCS303	Data Structure & Algorithms	3	0	0	3	3	0	0	3
4.	PCC-T	PCC	XCS304	Object Oriented Programming	3	0	0	3	3	0	0	3
5.	PCC-T	PCC	XCS305	Signals & Systems	3	1	0	4	3	1	0	4
6.	MNGT-I	HSMC	XUM306	Entrepreneurship Development	2	0	0	2	2	0	0	2
7.	UMAN-I	MC (HSMC)	XUM307	Universal Human Values 2: Understanding Harmony and Gender	2	1	0	3	2	1	0	3
8	PCC-L	PCC	XCS308	Data Structure & Algorithms Laboratory	0	0	1	1	0	0	2	2
9	PCC-L	PCC	XCS309	Object Oriented Programming Laboratory	0	0	1	1	0	0	2	2
10	IPT-I	PROJ	XCS310	In-plant Training - I	-	-	-	1	-	-	-	-
	·			Total				25				26

# **SEMESTER IV**

		AICTE	Course			Cre	dits		Н			
S.No.	Description	Abbr.	Code	Courses	L	T	P	Γotal	L	T	P	Tota l
1.	MA-IV	BSC	XCS401	Discrete Mathematics	3	0	0	3	3	0	0	3
2.	PCC T	PCC	XCS402	Computer Organization & Architecture	3	1	0	4	3	1	0	4
3.	PCC-T	PCC	XCS403	Operating Systems	3	0	0	3	3	0	0	3
4.	PCC-T	PCC	XCS404	Design & Analysis of Algorithms	3	0	0	3	3	0	0	3
5.	MNGT-II	HSMC	XUM009	Economics for Engineers	3	0	0	3	3	0	0	3
6	UMAN-III	MC	XUM003	Disaster Management	0	0	0	0	3	0	0	3
7	PCC-L	PCC	XCS407	IT Workshop Laboratory	0	0	1	1	0	0	2	2
8	PCC-L	PCC	XCS408	Operating Systems Laboratory	0	0	1	1	0	0	2	2
9	PCC-L	PCC	XCS409	Design and Analysis of Algorithms Laboratory	0	0	1	1	0	0	2	2
				Total				19				25

## SEMESTER V

S No	Description	AICTE	Course	Courses		Cr	Credits			Hours			
5.110.	Description	Abbr.	Code	Courses	L	T	P	Total	L	T	P	Total	
1	PCC T	PCC	XCS501	Formal Language and Automata Theory	3	0	0	3	3	0	0	3	
2	PCC-T	PCC	XCS502	Database Management Systems	3	0	0	3	3	0	0	3	
3	PCC-T	PCC	XCS503	Software Engineering	3	0	0	3	3	0	0	3	
4	PCC-T	PCC	XCS504	Computer Networks	3	1	0	4	3	1	0	4	
5	PEC-I	PEC	XCSE*	Professional Elective Course	3	0	0	3	3	0	0	3	
6	OE I	OE	XOE**	Open Elective Course	3	0	0	3	3	0	0	3	
7	PCC-L	PCC	XCS507	Database Management Systems Laboratory	0	0	1	1	0	0	2	2	
8	PCC-L	PCC	XCS508	Software Engineering Laboratory	0	0	1	1	0	0	2	2	
9	IPT-II	PROJ	XCS509	In-Plant Training – II	-	-	-	1	-	1	-	-	
				Total				22				23	

## **SEMESTER VI**

		AICTE	Course			Cr	edi	ts	Hours				
S.No.	Description	Abbr.	Code	Courses	L	T	P	Total	L	T	P	Tota l	
1	PCC T	PCC	XCS601	Compiler Design	3	0	0	3	3	0	0	3	
2	PCC-T	PCC	XCS602	Big Data Analytics	3	0	0	3	3	0	0	3	
3	PEC-II	PEC	XCSE*	Professional Elective Course	3	0	0	3	3	0	0	3	
4	OE II	OE	XOE**	Open Elective Course	3	0	0	3	3	0	0	3	
5	ELS	HSMC	XGS605	Professional Skills	1	0	2	3	1	0	4	5	
6	PCC-T	PCC	XCS606	Cyber Security	3	0	0	3	3	0	0	3	
7	PCC-L	PCC	XCS607	Compiler Design Lab	0	0	1	1	0	0	2	2	
8	PCC-L	PCC	XCS608	Big Data Analytics Lab	0	0	1	1	0	0	2	2	
				Total				20				24	

## **SEMESTER VII**

C No	Degarintian	<b>AICTE</b>	Course	Convegee		Cı	redi	its		Н	oui	rs
5.110.	Description	Abbr.	Code	Courses	L	T	P	Total	L	T	P	Total
1	PCC T	PCC	XCS701	Web Technology	3	0	0	3	3	0	0	3
2	PCC-T	PCC	XCS702	Machine Learning	3	0	0	3	3	0	0	3
3	PEC-III	PEC	XCSE*	Professional Elective Course	3	0	0	3	3	0	0	3
4	OE III	OE	XOE**	Open Elective Course	3	0	0	3	3	0	0	3
5	UMAN-V	MC	XUM008	Environmental science	0	0	0	0	3	0	0	3
6	PCC-L	PCC	XCS706	Web Technology Lab	0	0	1	1	0	0	2	2
7	PCC-L	PCC	XCS707	Machine Learning Lab	0	0	1	1	0	0	2	2
8	PROJ I	PROJ	XCS708	Project Work (Phase-I)	0	0	2	2	0	0	4	4
9	IPT III	PROJ	XCS709	In-plant Training - III	-	-	-	2	-	-	-	-
				Total				18				23

## **SEMESTER VIII**

S No	Description	AICTE	Course	Courses		Cr	edit	ts	Hours				
2.110.	Description	Abbr.	Code	Courses	L	T	P	Total	L	$\mathbf{T}$	P	Total	
1	PEC-IV	PEC	XCSE*	Professional Elective Course	3	0	0	3	3	0	0	3	
2	OE IV	OE	XOE**	Open Elective Course	3	0	0	3	3	0	0	3	
3	OE V	OE	XOE**	Open Elective Course	3	0	0	3	3	0	0	3	
4	PROJ II	PROJ	XCS804	Project Work (Phase-II)	0	0	9	9	0	0	18	18	
				Total				18				27	

Grant Total Credits: 163