# SCTR's Pune Institute of Computer Technology (PICT), Pune

#### **Department of Electronics and Telecommunication Engineering (E&TCE)**

Structure for B-Tech (E&TCE) [AY 2025-26 onwards]



Proposed Structure of Department of E&TCE, PICT - (SY to B. Tech)

#### Abbreviations used

Sr. No.	Broad Category of the course	Sub- Category of course	Category Code
т	Basic Science/ Engineering	Basic Science Course (BSC)	01
1.	Science Course (BSC/ ESC)	Engineering Science Course (ESC)	02
п		Program Core Course (PCC)	03
11.	Program Courses (PC)	Program Elective Course (PEC)	04
Ш	Multidisciplinary Courses (MC)	Multidisciplinary Minor (MDM)	05
111.	with disciplinary Courses (WC)	Open Elective (OE) Other than particular program	06
IV.	Skill Courses (SC)	Vocational and Skill Enhancement Course (VSEC)	07
		Ability Enhancement Course (AEC-01, AEC-02)	08
T.	Humanities Social Science and	Entrepreneurship/Economics/ Management Courses (EEM)	09
<b>v.</b>	Management (HSSM)	Indian Knowledge System (IKS)	10
		Value Education Course (VEC)	11
		Research Methodology (RM)	12
VI	Experiential Learning Courses	Community Engagement Project (CEP) / Field Project (FP)	13
V 1.	(ELC)	Project (PRJ)	14
		Internship/ On Job Training (IP/OJT)	15
VII.	Liberal Learning Courses (LLC)	Co-curricular Activities (CCA)	16

## Semester wise distribution of Credits and Marks

Class	Sem-I – Credits	Sem-II – Credits	Total Credits	Sem-I – Marks	Sem-II – Marks	Total Marks
FY	20	20	40	725	750	1475
SY	22	22	44	750	750	1500
TY	20	20	40	750	750	1500
<b>B-Tech</b>	20	16	36	700	400	1100
Total	82	78	160	2925	2650	5575

Proposed Structure of Department of E&TCE, PICT - (SY to B. Tech)

## Proposed Structure: Scheme-A: B. Tech (Semester – VII)

Semester-7			Teaching Scheme (Hours/Week)				Credit scheme				Examination/ Evaluation Scheme and Marks							
	C	Norma of the Commu										Theor	y	P	ractica	l		
Category	Course	Name of the Course	T	р	т	Tatal	T	р	T	Tatal	CIE	ISE	ESE	CIE	E	SE	Total	
or Course	code	(Short forms)		P	1	Total		P		Total	[20]	[20]	[60]	TW	<b>(P)</b>	(OR)		
PCC	2703120	VLSI Design (VD)	3	-	-	3	3	-	-	3	20	20	60	-	-	-	100	
PCC	2703221	VLSI Design Lab (VDL)	-	2	-	2	-	1	-	1	-	-	-	-	25	-	25	
PCC	2703122	5G Wireless Communication (WC)	3	-	-	3	3	-	-	3	20	20	60	-	-	-	100	
PCC	2703223	5G Wireless Communication (WCL)Lab	-	2	-	2	-	1	-	1	-	-	-	-	25	-	25	
PEC	27041X3	Program Elective-III	2	-	-	2	2	-	-	2	20	20	60	-	-	-	100	
PEC	27042X3	Program Elective-III Lab	-	2	-	2	-	1	-	1	-	-	-	-	50	-	50	
PEC	27041X4	Program Elective-IV	2	-	1	3	2	-	1	3	20	20	60	50	-	-	150	
RM	0712301	Research Methodology (RM) *	-	-	2	2	-	-	2	2	-	-	25	-	-	-	25	
RM	0712302	Academic Research Writing (ARW)	-	-	1	1	-	-	1	1	-	-	-	25	-	-	25	
PRJ	0714201	Project work Phase-I	-	6	-	6	-	3	-	3	-	-	-	50	-	50	100	
		Total	10	12	4	26	10	6	4	20	80	80	265	125	100	50	700	

L: lecture, P: Practical, T: Tutorial, ISE: In-Semester Examination, CIE: Continuous Internal Evaluation, ESE: End-Semester Examination, TW: Term work, OR: Oral

\*: Offered by online platform such as SWAYAM/NPTEL, Refer Annexture-II for details.

	Prog	ram Elective Courses-III (PEC-III)	Prog	am Elective Courses-IV (PEC-IV)
Domain Name	Course Code	Course name	Course Code	Course name
Communication Engineering (CE)	2704113	Antenna Design and Radar systems (ADRS)	2704114	Optical fiber Communication (OFC)
Advance Electronics (AE)	2704123	Theater Engineering (TE)	2704124	3D Printing and Design (3DPD)
Computer vision and AI (CVAI)	2704133	Deep Learning (DL)	2704134	Advance Deep Learning (ADL)
Emerging Trends (ET)	2704143	Android App Development (AAD)	2704144	IoT: Sensors and Actuator (ISA)
Semiconductor Technology (ST)	2704153	Digital Design and Verification (System Verilog, UVM) (DDV)	2704154	Physical IC design
Embedded Systems (ES)	2704163	Embedded Systems and AI Integration	2704164	Applications and IoT Integration (A&II)

#### Proposed Structure: Scheme-A: B. Tech (Semester – VIII)

Semester-8			Teaching Scheme (Hours/Week)				Credit scheme			Examination/ Evaluation Scheme and Marks							
<b>G</b> .	C										Theory			Practical			
Category	Course	Name of the Course	L	Р	T	Total	L	P	T	Total	CIE	ISE	ESE	CIE	E	SE	Total
of Course	code	(Snort forms)									[20]	[20]	[60]	TW	<b>(P)</b>	(OR)	
IP	0815201	Internship	-	22	-	22	-	11	-	11	-	-	-	150	-	100	250
MDM	08053X5	MDM-5 (Virtual)	-	-	2	2	-	-	2	2	-	-	-	-	-	-	50
PRJ	0814202	Project work Phase-II	-	6	-	6	-	3	-	3	-	-	-	50	-	50	100
		Total	0	28	2	30	0	14	2	16	0	0	0	200	0	150	400

Note: Students who opted for an internship in 7<sup>th</sup> Semester will complete the courses in the 8<sup>th</sup> semester. Students who opted for courses in the 7<sup>th</sup> semester will take an internship in their 8<sup>th</sup> semester.

## Proposed Structure: Scheme-B: B. Tech (Semester – VII)

Semester-7			Teaching Scheme (Hours/Week)				Credit scheme			Examination/ Evaluation Scheme and Marks							
<b>G</b> .	C										r	Theory	y	P			
Category	Course	Name of the Course	L	P	T	Total	L	P	T	Total	CIE	ISE	ESE	CIE	E	SE	Total
of Course	code	(Snort forms)									[20]	[20]	[60]	TW	<b>(P)</b>	(OR)	
IP	0715201	Internship	-	22	-	22	-	11	-	11	-	-	-	150	-	100	250
MDM	07053X5	MDM-5 (Virtual)	-	-	2	2	-	-	2	2	-	-	-	-	-	-	50
PRJ	0714202	Project work Phase-II	-	6	-	6	-	3	-	3	-	-	-	50	-	50	100
		Total	0	28	2	30	0	14	2	16	0	0	0	200	0	150	400

#### **Proposed Structure: Scheme-B: B. Tech (Semester – VIII)**

Semester-8			Teaching Scheme (Hours/Week)				Credit scheme				Examination/ Evaluation Scheme and Marks							
C (	C								Т			Theor	у	Pr	actica	l		
Category	Course	Name of the Course	T	р	Т	Tatal	T	р		Total	CIE	ISE	ESE	CIE	ES	SE	Total	
of Course	coue	(Short forms)		P		lotai		r		Total	[20]	[20]	[60]	TW	<b>(P)</b>	(OR)		
PCC	2803120	VLSI Design (VD)	3	-	-	3	3	-	-	3	20	20	60	-	-	-	100	
PCC	2803221	VLSI Design Lab (VDL)	-	2	-	2	-	1	-	1	-	-	-	-	25	-	25	
PCC	2803122	5G Wireless Communication (WC)	3	-	-	3	3	-	-	3	20	20	60	-	-	-	100	
PCC	2803223	5G Wireless Communication (WCL)Lab	-	2	-	2	-	1	-	1	-	-	-	-	25	-	25	
PEC	28041X3	Program Elective-III	2	-	-	2	2	-	-	2	20	20	60	-	-	-	100	
PEC	28042X3	Program Elective-III Lab	-	2	-	2	-	1	-	1	-	-	-	-	50	-	50	
PEC	28041X4	Program Elective-IV	2	-	1	3	2	-	1	3	20	20	60	50	-	-	150	
RM	0812301	Research Methodology (RM) MOOC*	-	-	2	2	-	-	2	2	-	-	25	-	-	-	25	
RM	0812302	Academic Research Writing (ARW)	-	-	1	1	-	-	1	1	-	-	-	25	-	-	25	
PRJ	0814201	Project work Phase-II	-	6	-	6	-	3	5 - 3		-	-	-	50	-	50	100	
		Total	10	12	4	26	10	6	4	20	80	80	265	125	100	50	700	

	Pro	gram Elective Courses-III (PEC-III)	Program Elective Courses-IV (PEC-IV)					
Domain Name	Course	Course name	Course	Course name				
	Code		Code					
Communication Engineering (CE)	2804113	Antenna Design and Radar systems (ADRS)	2804114	Optical fiber Communication (OFC)				
Advance Electronics (AE)	2804123	Theater Engineering (TE)	2804124	3D Printing and Design (3DPD)				
Computer vision and AI (CVAI)	2804133	Deep Learning (DL)	2804134	Advance Deep Learning (ADL)				
Emerging Trends (ET)	2804143	Android App Development (AAD)	2804144	IoT: Sensors and Actuator (ISA)				
Semiconductor Technology (ST)	2804153	Digital Design and Verification (System Verilog, UVM) (DDV)	2804154	Physical IC design				
Embedded Systems (ES)	2804163	Embedded Systems and AI Integration	2804164	Applications and IoT Integration (A&II)				

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