COEP Technological University Pune (A Unitary Public University of Govt. of Maharashtra)

NEP 2020 Compliant

Proposed Curriculum Structure

M. Tech.

Electronics and Telecommunication – Intelligent Communication Systems

(Effective from: A.Y. 2025-26)

PG Program [M. Tech. Electronics and Telecommunication – Wired and Wireless Communication] Proposed Curriculum Structure

W.e.f AY 2025-26

List of Abbreviations

Abbreviation	Title	No of courses	Credits	% of Credits
PSMC	Program Specific Mathematics Course	1	4	5.88 %
PSBC	Program Specific Bridge Course	1	3	4.41 %
PCC	Program Core Course	5	15	22.06 %
PEC	Program Specific Elective Course	3	9	13.24 %
LC	Laboratory Course	5	8	11.76 %
VSEC	Vocational and Skill Enhancement Course	2	18	26.47 %
OE	Open Elective	1	3	4.41 %
SLC	Self-Learning Course	2	6	8.82 %
AEC	Ability Enhancement Course	1	1	1.47 %
MLC	Mandatory Learning Course	2		
CCA	Co-curricular & Extra-curricular Activities	1	1	1.47 %
	Total	24	68	100%

PG Program [M. Tech. M. Tech. Electronics and Telecommunication – Wired and Wireless Communication]

Proposed Curriculum Structure

Semester I

Sr.	Course	Course Name	Tea	ching	Credits			
No.	Category	Code	Course Name	L	T	Р	S	Credits
1.	PSMC	PSMC- 01	Applied Mathematics	3	1		1	4
2.	PSBC	PSBC- 01	Communication Networks and Protocols	3			1	3
3.	PCC	PCC-01	Digital communication	3				3
4.	PCC	PCC-02	Wireless Communications & Mobile Technologies	3				3
5.	LC	LC-01	Digital Communication Lab			3	2	2
6.	LC	LC-02	Wireless Communications & Mobile Technologies Lab			3	2	2
	LC	LC-03	Programming and Network Simulation Lab			2	1	1
7.	AEC	AEC-01	Seminar			2	2	1
8.	PEC	PEC-01	Program Specific Elective –I a) Cognitive Radio b) RF and Microwave Circuit Design c) Embedded System Design	3			1	3
9.	MLC	MLC-01	Research Methodology and Intellectual Property Rights	1			2	
10.	MLC	MLC-02	Effective Technical Communication Skills				1	
	Total					10	13	22

PG Program [M. Tech. Electronics and Telecommunication – Wired and Wireless Communication] Proposed Curriculum Structure

Semester II

Sr. No.	Course Category	Course Code	Course Name	Teaching Scheme				Credits
				L	Т	Р	S	
1.	OE	OE-01	Open Elective Interdisciplinary Open Course	3	1	-	1	3
2.	PCC	PCC-03	AI Techniques for Communication systems	3				3
3.	PCC	PCC-04	Smart Antennas	3				3
4.	PCC	PCC-05	Connected Systems and Cloud Computing	2	1			3
5.	LC	LC-03	AI Techniques for Communication systems Lab			2	2	1
6.	LC	LC-04	Smart Antennas Lab			2	2	1
7.	LC	LC-05	Connected Systems and Cloud Computing Lab			2	2	1
8.	PEC	PEC-02	Program Specific Elective –II a) Wireless Sensor Network b) Radar and Satellite Communication c) Advanced Digital Signal Processing	3			1	3
9.	PEC	PEC-03	Program Specific Elective –III a) Programmable networks- SDN, NFV b) Optical Communication and Networks c) Wireless Standards and Security	3			1	3
10.	CCA	CCA-01	Liberal Learning Course			2	2	1
	Total					08	11	22

- > Exit option to qualify for **PG Diploma in Wired and Wireless Communication**:
 - Eight weeks domain specific industrial internship in the month of June-July after successfully completing first year of the program.

PG Program [M. Tech. M. Tech. Electronics and Telecommunication – Wired and Wireless Communication]

Proposed Curriculum Structure

Semester-III

Sr.	Course	Course	Course Name		ching	Credits		
No.	Category	Code	Course Haine	L	T	P	S	Credits
1.	VSEC	VSEC- 01	Dissertation Phase – I	I	I	18	12	9
2.	SLC	SLC-01	Massive Open Online Course –I	3	I	I	3	3
			Total	3		18	15	12

Semester-IV

Sr.	Course	Course	Course Name			hing eme		Credits
No.	Category	tegory Code	L	T	P	S		
1.	VSEC	VSEC-02	Dissertation Phase – II			18	12	9
2.	SLC	SLC-02	Massive Open Online Course – II	3			3	3
			Total	3		18	15	12