ANNEXURE - V

PERI INSTITUTE OF TECHNOLOGY

(AUTONOMOUS)

REGULATION 2026

M.E APPLIED ELECTRONICS

SEMESTER - I

S.NO.	COURSE CODE	COURSETITLE	CATEGORY	PERIODS PER WEEK			TCP	CREDITS
				L	T	P		
THEORY								
1.		Advanced Mathematical Methods (ECE)	BS	4	0	0	4	4
2.		Statistical Signal Processing and Modeling	PCC	3	1	0	4	4
3.		Advanced Digital System Design	PCC	3	1	0	4	4
4.		Analog Integrated Circuit Design	PCC	3	0	0	3	3
5.		Digital CMOS VLSI Design	PCC	3	0	0	3	3
PRACTICALS								
8.		Analog IC Design Laboratory	PCC	0	0	4	4	2
9.		Technical Seminar	EEC	0	0	2	2	1
			TOTAL	**16**	**2**	**6**	**24**	**21**

SEMESTER - II

S.NO.	COURSE CODE	COURSETITLE	CATEGORY	PERIODSPER WEEK			TCP	CREDITS
				L	T	P		
THEORY								
1.		Industrial Internet of Things	PCC	3	1	0	4	4
2.		High Speed Circuit Design	PCC	3	1	0	4	4
3.		Program Elective - I	PEC	3	0	0	3	3
4.		Industry Oriented Course - I	EEC	1	0	0	1	1
5.		Industrial Training	EEC	0	0	0	0	1
LAB INTEGRATED COURSE								
6.		Embedded System Design	PCC	3	0	2	5	4
PRACTICALS								
7.		Applied Engineering Project	EEC	0	0	4	4	2
			TOTAL	**13**	**2**	**6**	**21**	**19**

SEMESTER – III

S.NO.	COURSE CODE	COURSETITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Professional Elective II	PEC	3	0	0	3	3
2.		Professional Elective III	PEC	3	0	0	3	3
3.		Professional Elective IV	PEC	3	0	0	3	3
4.		Open Elective	PEC	3	0	0	3	3
5.		Industry Oriented Course - II	EEC	1	0	0	1	1
PRACTICALS								
6.		Capstone Project - I	EEC	0	0	12	12	6
TOTAL				**13**	**0**	**12**	**25**	**19**

SEMESTER - IV

S. NO.	COURSE CODE	COURSETITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
PRACTICALS								
1.		Capstone Project - II	EEC	0	0	24	24	12
TOTAL				**0**	**0**	**24**	**24**	**12**

Total No. of. Credits: 71

PROFESSIONAL ELECTIVES

S.NO.	COURSE CODE	COURSETITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1		Digital Image and Video Processing	PEC	3	0	0	3	3
2		DSP Architecture and Programming	PEC	3	0	0	3	3
3		RF Integrated Circuit Design	PEC	3	0	0	3	3
4		Electromagnetic Interference and Compatibility	PEC	3	0	0	3	3
5		Advanced Microprocessors and Microcontrollers Architectures	PEC	3	0	0	3	3
6		Advanced Computer Architecture Design	PEC	3	0	0	3	3
7		Signal Integrity for High Speed Design	PEC	3	0	0	3	3
8		VLSI Interconnects	PEC	3	0	0	3	3
9		Semiconductor Memory Design	PEC	3	0	0	3	3
10		Algorithms For VLSI Physical Design Automation	PEC	3	0	0	3	3
11		Statistical Analysis and Optimization for VLSI	PEC	3	0	0	3	3
12		System on Chip Design	PEC	3	0	0	3	3
13		Hardware /Software Co-Design	PEC	3	0	0	3	3
14		MEMS and NEMS	PEC	3	0	0	3	3
15		Cryptography and Network Security	PEC	3	0	0	3	3
16		Neuromorphic Computing	PEC	3	0	0	3	3
17		Artificial Intelligence for Hardware Design	PEC	3	0	0	3	3
18		IP Core Design and Protection	PEC	3	0	0	3	3
19		Spintronics and Quantum Computing	PEC	3	0	0	3	3
20		Analog and Mixed Signal VLSI Design	PEC	3	0	0	3	3