

ANNEXURE - V
PERI INSTITUTE OF TECHNOLOGY
(AUTONOMOUS)
REGULATIONS 2024
M.E APPLIED ELECTRONICS
SEMESTER - I

S. NO.	COURSE CODE	COURSE TITLE	CATE- GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Applied Mathematics for Electronics Engineers	FC	3	1	0	4	4
2.		Research Methodology and IPR	RMC	2	0	0	2	2
3.		Advanced Digital Signal Processing	PCC	3	0	0	3	3
4.		Semiconductor Devices and Modeling	PCC	3	0	0	3	3
5.		Digital CMOS VLSI Design	PCC	3	0	0	3	3
6.		Audit Course – I*	AC	2	0	0	2	0
LAB INTEGRATED COURSE								
		Advanced Digital System Design	PCC	3	0	2	5	4
PRACTICALS								
8.		Electronics System Design Laboratory	PCC	0	0	3	3	1.5
9.		Signal Processing Laboratory	PCC	0	0	3	3	1.5
TOTAL				19	1	8	28	22

SEMESTER - II

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Analog and Mixed Signal IC Design	PCC	3	0	0	3	3
2.		Industrial Internet of Things	PCC	3	0	0	3	3
3.		Power Conversion Circuits for Electronics	PCC	3	0	0	3	3
4.		Professional Elective I	PEC	3	0	0	3	3
5.		Professional Elective II	PEC	3	0	0	3	3
6.		Audit Course – II*	AC	2	0	0	2	0
LAB INTEGRATED COURSE								
7.		Embedded Systems	PCC	3	0	2	5	4
PRACTICALS								
8.		VLSI Design Laboratory	PCC	0	0	4	4	2
9.		Mini Project with seminar	EEC	0	0	2	2	1
TOTAL				20	0	8	28	22

SEMESTER - III

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Professional Elective III	PEC	3	0	0	3	3
2.		Professional Elective IV	PEC	3	0	0	3	3
3.		Open Elective	OEC	3	0	0	3	3
LAB INTEGRATED COURSE								
4.		Professional Elective V	PEC	3	0	2	5	4
PRACTICALS								
5.		Project Work I	EEC	0	0	12	12	6
TOTAL				12	0	14	26	19

SEMESTER - IV

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
PRACTICALS								
1.	CU4411	Project Work II	EEC	0	0	24	24	12
TOTAL				0	0	24	24	12

Total No.of.Credits: 75

PROFESSIONAL ELECTIVES**SEMESTER II, ELECTIVE I**

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Applications Specific Integrated Circuits	PEC	3	0	0	3	3
2.		Computer Architecture and Parallel Processing	PEC	3	0	0	3	3
3.		Automotive Electronics	PEC	3	0	0	3	3
4.		Robotics	PEC	3	0	0	3	3
5.		Soft Computing and Optimization Techniques	PEC	3	0	0	3	3

SEMESTER II, ELECTIVE II

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		RF System Design	PEC	3	0	0	3	3
2.		Electromagnetic Interference and Compatibility	PEC	3	0	0	3	3
3.		VLSI Design Techniques	PEC	3	0	0	3	3
4.		Nano Technologies	PEC	3	0	0	3	3
5.		VLSI Testing	PEC	3	0	0	3	3
6.		Edge Analytics and Internet of Things	PEC	3	0	0	3	3

SEMESTER III, ELECTIVE III

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Sensors and Actuators	PEC	3	0	0	3	3
2.		Signal Integrity for High Speed Design	PEC	3	0	0	3	3
3.		Consumer Electronics	PEC	3	0	0	3	3
4.		Advanced Microprocessors and Microcontrollers Architectures	PEC	3	0	0	3	3
5.		Biomedical Signal Processing	PEC	3	0	0	3	3

SEMESTER III, ELECTIVE IV

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
THEORY								
1.		Modeling and Synthesis with HDL	PEC	3	0	2	5	4
2.		Deep Learning	PEC	3	0	2	5	4
3.		Advanced Digital Image Processing	PEC	3	0	2	5	4
4.		PCB Design	PEC	3	0	2	5	4

AUDIT COURSES (AC)

Registration for any of these courses is optional to students

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
				L	T	P	
1.		English for Research Paper Writing	AC	2	0	0	0
2.		Disaster Management	AC	2	0	0	0
3.		Constitution of India	AC	2	0	0	0
4.		□□□□□□□□□□□□□□□□	AC	2	0	0	0

LIST OF OPEN ELECTIVES FOR PG PROGRAMMES

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
				L	T	P	
1.		Integrated Water Resources Management	OE	3	0	0	3
2.		Water, Sanitation and Health	OE	3	0	0	3
3.		Principles of Sustainable Development	OE	3	0	0	3
4.		Environmental Impact Assessment	OE	3	0	0	3
5.		Block chain Technologies	OE	3	0	0	3
6.		Deep Learning	OE	3	0	0	3
7.		Vibration and Noise Control Strategies	OE	3	0	0	3
8.		Energy Conservation and Management in Domestic Sectors	OE	3	0	0	3
9.		Additive Manufacturing	OE	3	0	0	3
10.		Electric Vehicle Technology	OE	3	0	0	3
11.		New Product Development	OE	3	0	0	3
12.		Sustainable Management	OE	3	0	0	3
13.		Micro and Small Business Management	OE	3	0	0	3
14.		Intellectual Property Rights	OE	3	0	0	3
15.		Ethical Management	OE	3	0	0	3
16.		IoT for Smart Systems	OE	3	0	0	3
17.		Machine Learning and Deep Learning	OE	3	0	0	3
18.		Renewable Energy Technology	OE	3	0	0	3
19.		Smart Grid	OE	3	0	0	3
20.		Security Practices	OE	3	0	0	3
21.		Cloud Computing Technologies	OE	3	0	0	3
22.		Design Thinking	OE	3	0	0	3
23.		Principles of Multimedia	OE	3	0	0	3
24.		Environmental Sustainability	OE	3	0	0	3
25.		Textile Reinforced Composites	OE	3	0	0	3
26.		Nanocomposite Materials	OE	3	0	0	3
27.		IPR, Biosafety and Entrepreneurship	OE	3	0	0	3