

III YEAR COURSE STRUCTURE

I Semester							
S.No.	Category	Code	Title	L	T	P	Credits
1.	PCC	23A0451T	Analog and Digital IC Applications	3	0	0	3
2.	PCC	23A0452T	Microprocessors and Microcontrollers	3	0	0	3
3.	PCC	23A0453T	Antennas & Wave Propagation	3	0	0	3
4.	PCC	23A0554T	Introduction to Quantum Technologies and Applications	3	0	0	3
5.	PEC-I	23A045AT	Computer Architecture & Organization	3	0	0	3
		23A045BT	Information theory and coding				
		23A045CT	Detection and Estimation Theory				
6.	OEC-I		Open Elective-I	3	0	0	3
7.	PCC	23A0451L	Analog & Digital IC Applications Lab	0	0	3	1.5
8.	PCC	23A0452L	Microprocessors and Microcontrollers Lab	0	0	3	1.5
9.	SEC	23A0453L	VHDL Programming	0	1	2	2
10.	SEC	23A0454L	Tinkering Lab for Electronic Engineers	0	0	2	1
11.	INTERN	23A0459I	Evaluation of Community Service Internship	-	-	-	2
			Total	18	1	10	26

Open Elective – I

S.No.	Code	Title	Offered by the Dept
1.	23A015DT	Green Buildings	CIVIL
2.	23A015ET	Construction Technology and Management	
3.	23A025ET	Electrical Safety Practices and Standards	EEE
4.	23A035FT	Sustainable Energy Technologies	ME
5.	23A055ET	Java Programming	CSE& Allied/IT
6.	23A055FT	Fundamentals of Artificial Intelligence	
7.	23A055GT	Quantum Technologies and Applications	
8.	23AHS51T	Mathematics for Machine Learning and AI	Mathematics
9.	23AHS52T	Materials Characterization Techniques	Physics
10.	23AHS53T	Chemistry of Energy Systems	Chemistry
11.	23AHS54T	English for Competitive Examinations	Humanities
12.	23AHS56T	Entrepreneurship and New Venture Creation	

III YEAR COURSE STRUCTURE

II Semester							
S.No.	Category	Code	Title	L	T	P	Credits
1	PCC	23A0461T	Microwave and Optical Communications	5	0	0	3
2	PCC	23A0462T	VLSI Design	5	0	0	3
3	PCC	23A0463T	Digital Signal Processing	5	0	0	3
4	PEC - II	23A046AT	Electronic Measurements and Instrumentation	5	0	0	3
		23A046BT	Embedded systems & IOT				
		23A046CT	Speech Processing				
5	PEC - III	23A046DT	Digital Image Processing	5	0	0	3
		23A046ET	Artificial Intelligence & Machine learning				
		23A046FT	Satellite Communications				
6	OEC - II		Open Elective-II	5	0	0	3
7	PCC	23A0461L	Microwave and Optical Communications Lab	0	0	3	1.5
8	PCC	23A0462L	VLSI Design Lab	0	0	3	1.5
9	SOC - IV	23A0463L	Machine Learning and DSP	0	1	2	2
10	HSMC	23AHS61T	Technical Paper Writing & IPR	2	0	0	-
			Total	32	1	8	23
Mandatory Industry Internship of 08 weeks duration during summer vacation							

Open Elective – II

S.No.	Code	Title	Offered by the Dept
1.	23A016GT	Disaster Management	CIVIL
2.	23A016HT	Sustainability In Engineering Practices	
3.	23A0261T	Renewable Energy Sources	EEE
4.	23A036KT	Automation and Robotics	ME
5.	23A056IT	Operating Systems	CSE& Allied/IT
6.	23A056JT	Introduction to Machine Learning	
7.	23AHS61T	Optimization Techniques	Mathematics
8.	23A54601b	Mathematical Foundation of Quantum Technologies	
9.	23AHS62T	Physics Of Electronic Materials and Devices	Physics
10.	23AHS63T	Chemistry Of Polymers and Applications	Chemistry
11.	23AHS64T	Academic Writing and Public Speaking	Humanities

IV YEAR COURSE STRUCTURE

I Semester							
S.No.	Category	Code	Title	L	T	P	Credits
1	PCC	23A0471T	Data Communications and Networking	3	0	0	3
2	Management Course-II	23AHSM7CT	Management Science	2	0	0	2
		23AHSM7DT	Entrepreneurship and Incubation				
		23AHSM7ET	Human Resource Management				
3	PEC - IV	23A047AT	Radar Engineering	3	0	0	3
		23A047BT	DSP Processors & Architectures				
		23A047CT	Cellular & Mobile Communications				
4	PEC - V	23A047DT	Low Power VLSI Design	3	0	0	3
		23A047ET	Wireless Sensor Networks				
		23A047FT	5G Communications				
5	OEC-III		Open Elective-III	3	0	0	3
	OEC-IV		Open Elective-IV	3	0	0	3
6	SOC - V	23A0472L	RF System Design tools	0	1	2	2
		23A0473L	Industrial IOT & Automation				
7	Audit Course	23AHS79T	Gender Sensitization	2	0	0	-
8		23A0473I	Evaluation of Industry Internship	-	-	-	2
			Total	19	1	2	21

Open Elective - III

S.No.	Code	Title	Offered by the Dept
1	23A017GT	Building Materials and Services	CIVIL
2	23A017HT	Environmental Impact Assessment	
3	23A027IT	Smart Grid Technologies	EEE
4	23A037KT	3D Printing Technologies	ME
5	23A057IT	Data Base Management Systems	CSE& Allied/IT
6	23A057JT	Cyber Security	
7	23AHS71T	Wavelet transforms and its applications	Mathematics
8	23AHS72T	Smart Materials and Devices	Physics
9	23AHS73T	Green Chemistry and Catalysis for Sustainable Environment	Chemistry
10	23AHS74T	Employability Skills	Humanities

Open Elective - IV

S.No.	Code	Title	Offered by the Dept
1.	23A017IT	Geo-Spatial Technologies	CIVIL
2.	23A017JT	Solid Waste Management	
3.	23A027JT	Electric Vehicles	EEE
4.	23A037LT	Total Quality Management	ME
5.	23A057KT	Introduction to Computer Networks	CSE& Allied/IT
6.	23A057LT	Internet of Things	
7.		Introduction to Quantum Computing	
8.	23AHS75T	Financial Mathematics	Mathematics
9.	23AHS76T	Sensors And Actuators for Engineering Applications	Physics
10.	23AHS77T	Chemistry Of Nano materials And Applications	Chemistry
11.	23AHS78T	Literary Vibes	Humanities

IV YEAR COURSE STRUCTURE

II Semester							
S.No.	Category	Code	Title	L	T	P	Credits
1		23A0481P	Internship	-	-		4
2		23A0482P	Project				8

COURSES OFFERED FOR HONOURS DEGREE WITH VLSI SPECIALIZATION IN
ELECTRONICS AND COMMUNICATION ENGINEERING

S. No.	Course Code	Title	L	T	P	Credits
1.	23A04H01	Analog IC Design	3	0	0	3
2.	23A04H02	Digital IC Design	3	0	0	3
3.	23A04H03	Low Power VLSI	3	0	0	3
4.	23A04H04	Testing and Verification	3	0	0	3
5.	23A04H05	FPGA architectures	3	0	0	3
6.	23A04H06	Analog and Digital IC Design Lab	0	0	3	1.5
7.	23A04H07	Physical Design Automation Lab	0	0	3	1.5
TOTAL			15	0	6	18