

I SEMESTER: PHYSICS CYCLE (EC STREAM) EC, EE, EI & ET														
Sl. No.	Course Code	Course Title	BoS	Credit Allocation				Category	CIE Duration (H)	Max Marks CIE		SEE Duration (Hrs)	Max Marks SEE	
				L	T	P	Total			Theory	Lab		Theory	Lab
1	22MA11A	Fundamentals of Linear Algebra, Calculus and Numerical Methods	MA	3	1	0	4	Theory	1.5	100	***		100	***
2	22PHY12A	Condensed Matter Physics for Engineers	PHY	2	1	1	4	Theory+Lab	1.5	100	***	3	100	***
3	22EC13	Basic Electronics (Common to EC, EI & ET Programs)	EC	2	1	0	3	Theory	1.5	100	***	3	100	***
	22EE13	Elements of Electrical Engineering (Only for EE Program)	EE					Theory	1.5	100	***	3	100	***
4	22ES14X	Engineering Science Course - I	XX	3	0	0	3	Theory	1.5	100	***	3	100	***
5	22EM1XX	Emerging Technology Course	XX	3	0	0	3	Theory	1	100	***	3	100	***
6	22HSE16	Communicative English-I	HSS	0	0	1	1	Lab	1	***	50	2	***	50
7	22HSSK17/ 22HSBK17	Samskrutika Kannada /Balake Kannada	HSS	1	0	0	1	Theory	1	50	***	2	50	***
8	22ME18	IDEA LAB (Idea Development, Evaluation & Application)	ME	0	0	1	1	Lab	2	***	50	2	***	50
				14	3	3	20							

II SEMESTER: CHEMISTRY CYCLE (EC STREAM) EC, EE, EI & ET														
Sl. No.	Course Code	Course Title	BoS	Credit Allocation				Category	CIE Duration (H)	Max Marks CIE		SEE Duration (H)	Max Marks SEE	
				L	T	P	Total			Theory	Lab		Theory	Lab
1	22MA21A	Vector Calculus, Laplace Transform and Numerical Methods	MA	3	1	0	4	Theory	1.5	100	***	3	100	***
2	22CHY22C	Chemistry of functional materials	CHY	2	1	1	4	Theory+Lab	1.5	100	***	3	100	***
3	22MECD23	Computer Aided Engineering Graphics	ME	2	0	1	3	Lab	1.5	***	50	3	***	50
4	22ES24X	Engineering Science Course-II	XX	3	0	0	3	Theory	1.5	100	***	3	100	***
5	22PL25X	Programming Languages Course	XX	2	0	1	3	Theory+Lab	1.5	100	***	3	100	***
6	22HSE26	Communicative English-II	HSS	0	0	1	1	Lab	1	***	50	2	***	50
7	22HSI27	Fundamentals of Indian Constitution	HSS	1	0	0	1	Theory	1	50	***	2	50	***
8	22HSY28	Scientific Foundations of Health-Yoga Practice	HSS	0	0	1	1	Lab	1	***	50	2	***	50
				13	2	5	20							

III SEMESTER														
Sl. No.	Course Code	Course Title	Credit Allocation				BoS	Category	CIE Duration (H)	Max Marks CIE		SEE Duration (H)	Max Marks SEE	
			L	T	P	Total				Theory	Lab		Theory	Lab
1	21MA31B	Linear algebra, Integral transforms and Fourier series	3	1	0	4	MA	Theory	1.5	100	****	3	100	****
2	21BT32A	Environmental Technology	2	0	0	2	BT	Theory	1	50	****	2	50	****
3	21EC33	Analog Microelectronic Circuits	3	0	1	4	EC	Theory+Lab	1.5	100	50	3	100	50
4	21EC34	Analysis and Design of Digital Circuits (Common with EC/EE/EI/ET)	3	0	1	4	EC	Theory+Lab	1.5	100	50	3	100	50
5	21EC35	Network Analysis and Control Systems	3	0	0	3	EC	Theory	1.5	100	****	3	100	****
6	21EC36	Digital System Design Using Verilog HDL	3	0	0	3	EC	Theory	1.5	100	****	3	100	****
7	21DMA37	Bridge Course: Mathematics	2(A)	0	0	AUDIT	MA	Theory	1	50	****	2	****	****
8	21HS38A / 21HS38V	Kannada Course: AADALITHA KANNADA (18HS38A) / VYAVAHARIKA KANNADA (18HS38V)	1	0	0	1	HSS	Theory	1	50	****	2	50	****
9	21HS39	Ability Enhancement course	0	0	1	1	HSS	Theory	1	****	50	2	****	50
10	21ECI310	Summer Internship-1	0	0	1	1	EC	Lab	1	****	50	2	****	50
				23										

* Summer Internship-1 will be done after the II sem for 03 Weeks

IV SEMESTER														
Sl. No.	Course Code	Course Title	Credit Allocation				BoS	Category	CIE Duration (H)	Max Marks CIE		SEE Duration (H)	Max Marks SEE	
			L	T	P	Total				Theory	Lab		Theory	Lab
1	21MA41A/B/C	Engineering Maths- IV *	2	1	0	3	MA	Theory	1.5	100	****	3	100	****
2	21EC42	Engineering Materials	2	0	0	2	EC	Theory	1	50	****	2	50	****
3	21EI43	Microcontrollers & Programming	3	0	1	4	EI	Theory+Lab	1.5	100	50	3	100	50
4	21EC44	Signals and Systems	3	0	1	4	EC	Theory+Lab	1.5	100	50	3	100	50
5	21EC45	Electromagnetic Fields and Applications	3	0	0	3	EC	Theory	1.5	100	****	3	100	****
6	21XX4AX	Professional Elective – Group A MOOC Courses	3	0	0	3	EC	MOOC	1	50	****	2	50	****
7	21XX47	Design Thinking Lab	0	0	2	2	EC	Lab	1	****	50	2	****	50
8	21DCS48	Bridge Course: C Programming***	2 (A)	0	0	AUDIT	CS	Theory	1.5	50	****	2	50	****
9	21HS49	Universal Human Values and Social Connect	1	0	0	1	HSS	Theory	1	50	****	2	50	****
						22								

* Summer Internship-II will be done after the IV sem for 04 Weeks

FIFTH SEMESTER CREDIT SCHEME							
Sl. No	Course Code	Course Title	BoS	Credit Allocation			Total Credits
				L	T	P	
1.	18HSI51	Intellectual Property Rights & Entrepreneurship	HSS	3	0	0	3
2.	18EC52	Embedded System Design	EC	3	0	0	3
3.	18EC53	Communication Systems – 1(Theory & Practice)	EC	3	0	1	4
4.	18EC54	Digital VLSI Design (Theory & Practice)	EC	3	0	1	4
5.	18EC55	Digital Signal Processing and Machine Learning	EC	3	1	0	4
6.	18EC5AX	Group A: Professional Electives (MOOC Courses)	EC	3	0	0	3
7.	18EC5BXX	Group B: Global Elective	EC	3	0	0	3
Total Number of Credits				21	1	2	24
Total number of Hours/Week				21	1	5	

SIXTH SEMESTER CREDIT SCHEME							
Sl. No.	Course Code	Course Title	BoS	Credit Allocation			Total Credits
				L	T	P	
1.	18HEM61	Introduction to Management and Economics	HSS	3	0	0	3
2.	18EC62	Computer Networks and Protocols (Theory & Practice)	EC	3	0	1	4
3.	18EC63	Communication Systems – 2 (Theory & Practice)	EC	3	1	1	5
4.	18EC64	Minor Project**	EC	0	0	2	2
5.	18EC6CX	Elective C: Professional Electives	EC	3	0	0	3
6.	18EC6DX	Elective D: Professional Electives	EC	3	0	0	3
7.	18G6EXX	Elective E: Global Elective Wearable Electronics	EC	3	0	0	3
8.	18HSE68	Professional Practice-II	HSS	0	0	1	1
Total Number of Credits				18	1	5	24
Total number of Hours/Week				18	1	7+1	

SEVENTH SEMESTER CREDIT SCHEME							
Sl. No	Course Code	Course Title	BOS	Credit Allocation			Total Credits
				L	T	P	
1.	18HS71	Constitution of India and Professional Ethics	HSS	3	0	0	3
2.	18EC72	Microwave and Radiating Systems	EC	4	0	1	5
3.	18EC73	Broadband Wireless -LTE 4G	EC	3	1	0	4
4.	18EC74	Internship	EC	0	0	2	2
5.	18EC7FX	Elective F (PE)	EC	3	0	0	3
6.	18EC7GX	Elective G (PE)	EC	3	0	0	3
7.	18G7HXX	Elective H (GE)*	Respective BOS	3	0	0	3
Total Number of Credits				19	1	3	23
Total Number of Hours/Week				19	2	7.5	

*Students should take other department global elective courses.

EIGHTH SEMESTER CREDIT SCHEME							
Sl. No	Course Code	Course Title	BOS	Credit Allocation			Total Credits
				L	T	P	
1.	18ECP81	Major Project	EC	0	0	16	16
Total Number of Credits				0	0	16	16
Total Number of Hours/Week						32	