

I Year BE Programs of 2022 Scheme (Components and Credit structure)

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	Sanskritika 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		4	MA	Theory	1.5	100	****	3	100	****
2	21BT32A	Environmental Technology	2	0	0	2	BT	Theory	1	50	****	2	50	****
3	21EE33	Linear Integrated Circuits (common with EE / ET/ EI)	3	0	1	4	EE	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	21ET35	Signal Processing - I	3	1	0	4	ET	Theory	1.5	100	****	3	100	****
6	21ET36	Circuit Analysis	2	0	0	2	ET	Theory	1	50	****	2	50	****
7	21DMA37	Bridge Course: Mathematics	2(A)	0	0	AUDIT	MA	Theory	1.5	50	****	****	****	****
8	21HS38A / 21HS38V	Kannada Course: AADALITHA KANNADA / VYAVAHARIKA KANNADA	1	0	0	1	HSS	Theory	1	50	****	2	50	****
9	21HSAE39 A/B/C/D/E **	Ability Enhancement course	0	0	1	1	HSS	Lab	1	****	50	2	****	50
10	21ETI310	Summer Internship- I	0	0	1	1	ET	Internship	1	****	50	2	****	50
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* Summer Internship-1 will be done after the II semester for 03 Weeks. (Will have CIE & SEE)

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	21MA41*	Statistics and Probability for Data Science	2	1	0	3	MA	Theory	1.5	100	****	3	100	****
2	21EC42**	Materials for Electronics Engineering (Common with EC/EE/ EI/ET)	2	0	0	2	EC	Theory	1	50	****	2	50	****
3	21EI43	Microcontroller & Programming (Common with EC/EE/ EI/ET)	3	0	1	4	EI	Theory+Lab	1.5	100	50	3	100	50
4	21ET44	Communication Engineering-I	3	0	1	4	ET	Theory+Lab	1.5	100	50	3	100	50
5	21ET45	Principles of Electromagnetics (Common to ET/EE)	3	1	0	4	ET	Theory	1.5	100	****	3	100	****
6	21ET4AX	Professional Core Elective – Group A	2	0	0	2	ET	MOOC	1.5	50	****	2	50	****
7	21ET46	Design Thinking Lab	0	0	2	2	ET	Lab	1	****	50	2	****	50
	21DCS47	Bridge Course: C Programming (A)	2	1	0	AUDIT	CS	Theory	1.5	50	****	****	****	****
8	21HSU48	Universal Human Values and Professional Ethics	2	0	0	2	HSS	Theory	1	50	****	2	50	****
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* Summer Internship-II will be done after the IV Semester 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 and Entrepreneurship	HSS	3	0	0	3
2.	18TE52	Digital Modulation & Coding (Theory & Practice)	TE	3	1	1	5
3.	18TE53	Digital Signal Processing (Common to TE, EE, EI) (Theory & Practice)	TE	3	0	1	4
4.	18TE54	Microwave Engineering	TE	3	0	0	3
5.	18TE55	Telecommunication Switching Systems	TE	3	0	0	3
6.	18TE5AX	Group A: Professional Electives (MOOC Courses)	TE	3	0	0	3
7.	18G5BXX	Group B: Global Electives	Respective BoS	3	0	0	3
Total Number of Credits				21	1	2	24
Total number of Hours/Week				21	2	5	28

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.	18TE62	Antenna & Propagation (Theory & Practice)	TE	4	0	1	5
3.	18TE63	Computer Communication Networks (Theory & Practice)	TE	3	0	1	4
4.	18TE64	Minor Project	TE	0	0	2	2
5.	18TE6CX	Group C (PE)	TE	3	0	0	3
6.	18TE6DX	Group D (PE)	TE	3	0	0	3
7.	18G6EXX	Group E (GE)	Respective BoS	3	0	0	3
8.	18HS68	Professional Practice-II Employability Skills and Professional Development of Engineers	HSS	0	0	1*	1
Total Number of Credits				19	0	5	24
Total number of Hours/Week				19	0	10+2*	29+2*

SEVENTH SEMESTER CREDIT SCHEME							
Sl. No.	Course Code	Course Title	BoS	Credit Allocation			Total Credits
				L	T	P	
1.	18HSC71	Constitution of India & Professional Ethics	HSS	3	0	0	3
2.	18TE72	Wireless Communication	TE	3	1	1	5
3.	18TE73	Optical Fiber Communication	TE	3	0	1	4
4.	18TE74	Internship *	TE	0	0	2	2
5.	18TE7FX	Elective F (PE)	TE	3	0	0	3
6.	18TE7GX	Elective G (PE)	TE	3	0	0	3
7.	18G7HXX	Elective H (GE)**	Res. BoS	3	0	0	3
Total Number of Credits				18	1	4	23
Total number of Hours/Week				18	2	10	

Note: * Internship (6 weeks) is to be carried during the vacation after 6th semester and evaluation shall be conducted during 7th semester for 2 credits.

** 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.	18TEP81	Major Project	TE	0	0	16	16
Total Number of Credits				0	0	16	16
Total number of Hours/Week						32	