FIRST SEMESTER CHEMISTRY CYCLE

CS & CV STREAMS: (AI, BT, CS, CD, CY & IS) & (CV)

SL. NO.	BoS	Course Code	Course Title	Credits	Stream
1	MA	22MA11C	Fundamentals of Linear Algebra, Calculus And Statistics	4	CS
	MA	22MA11D	Applied Mathematics – I	4	CV
2	CHY	22CHY12A	Chemistry Of Smart Materials And Devices	4	CS
	CHY	22CHY12B	Engineering And Environmental Chemistry	4	CV
3	ME	22MED13	Computer Aided Engineering Graphics	3	CS & CV
4	XX	22ES14X	Engineering Science Courses-I	3	CS & CV
5	XX	22PL15X	Programming Language Courses	3	CS & CV
6	HSS	22HSE16	Communicative English-I	1	CS & CV
7	HSS	22HSI17	Fundamentals of Indian Constitution	1	CS & CV
8	HSS	22HSYI8	Scientific Foundations of Health-Yoga Practice	1	CS & CV
				20	

SECOND SEMESTER PHYSICS CYCLE

CS & CV STREAMS: (AI, BT, CS, CD, CY & IS) & (CV)

SL. NO.	BoS	Course Code	Course Title	Credits	Stream
1	MA	22MA21C	Number Theory, Vector Calculus And Computational Methods	4	CS
	MA	22MA21D	Applied Mathematics – II	4	CV
2	PHY	22PHY22C	Quantum Physics for Engineers	4	CS
	PHY	22PHY22D	Applied Physics for Engineers	4	CV
3	XX	22XX23	Professional Core Courses	3	CS & CV
4	XX	22ES24X	Engineering Science Courses-II	3	CS & CV
5	XX	22EM2XX	Emerging Technology Courses-II	3	CS & CV
6	HSS	22HSE26	Communicative English-II	1	CS & CV
7	HSS	22HSSK27/ 22HSBK27	Samskruthika Kannada Balake Kannada	1	CS & CV
8	ME	22ME28	IDEA LAB (Idea Development, Evaluation & Application)	1	CS & CV
				20	

III SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	Total	BoS	Category	CIE Duration (H)	Max Marks CIE Theory	Max Marks CIE Lab	SEE Duration (H)	Max Marks SEE Theory	Max Marks SEE Lab
1	21MA31A	Linear algebra, Integral transforms and Number theory	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	21IS33	Data Structure and Applications (Common to CS & IS)	3	0	1	**4**	IS	Theory+Lab	1.5	**100**	**50**	3	**100**	**50**
4	21IS34	Digital Design and Computer Organization	3	1	0	**4**	IS	Theory	1.5	**100**	****	3	**100**	****
5	21CS35	Operating Systems (Common to CS, IS & AI)	2	0	1	**3**	CS	Theory+Lab	1.5	**100**	**50**	3	**100**	**50**
6	21CS36	Discrete Mathematical Structures (Common to CS, IS & AI)	3	0	0	**3**	CS	Theory	1.5	**100**	****	2	**100**	****
7	21DCS37*	Bridge Course: C Programming	2(A)	0	0	**AUDIT**	CS	Theory	1	**50**	****	-	***	****
8	21HS38A / 21HS38V	Kannada Course: AADALITHA KANNADA / VYAVAHARIKA KANNADA	1	0	0	**1**	HSS	Theory	1	**50**	****	2	**50**	****
9	21HSAE39A/ B/ C/D/E**	Ability Enhancement course	0	0	1	**1**	HSS	**Lab**	1	****	**50**	2	****	**50**
10	21ISI310	Summer Internship- I	0	0	1	**1**	IS	Internship	1	****	**50**	1	****	**50**
						23								

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

IV SEMESTER

Sl. No.	Course Code	Course Title	L	T	P	Total	BoS	Category	CIE Duration (H)	Max Marks CIE Theory	Max Marks CIE Lab	SEE Duration (H)	Max Marks SEE Theory	Max Marks SEE Lab
1	21MA41	Statistics and Probability for Data Science	2	1	0	**3**	MA	Theory	1.5	**100**	****	3	**100**	****
2	21BT42	Bioinspired Engineering	2	0	0	**2**	BT	Theory	1	**50**	****	2	**50**	****
3	21CS43	Design and Analysis of Algorithms (Common to CS, IS & AI)	3	0	1	**4**	CS	Theory+Lab	1.5	**100**	**50**	3	**100**	**50**
4	21IS44	Theory of Computation	3	0	0	**3**	IS	Theory	1.5	**100**	***	3	**100**	***
5	21CS45	Computer Networks (Common to CS, IS & AI)	3	0	0	**3**	CS	Theory	1.5	**100**	****	3	**100**	****
6	21IS4AX	Professional Elective – Group A	2	0	0	**2**	IS	MOOC	1	**50**	****	2	**50**	****
7	21IS46	Design Thinking Lab	0	0	2	**2**	IS	Lab	1	****	**50**	2	****	**50**
8	21DMA47	Bridge Course: Mathematics ***	2 (A)	1	0	**AUDIT**	MA	Theory	1.5	**50**	****	***	***	****
9	21HSU48	Universal Human Values and Professional Ethics	2	0	0	**2**	HSS	Theory	1	**50**	****	2	**50**	****
10	21IS49	Programming in JAVA	1	0	1	**2**	IS	Theory+Lab	1	**50**	**50**	2	**50**	**50**
						23								

* 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 and Entrepreneurship	HSS	3	0	0	3
2.	18IS52	Computer Networks	IS	3	0	0	3
3.	18CS53	Database Design (Common to CS & IS)	CS	3	0	1	4
4.	18IS54	Compiler Design	IS	4	0	0	4
5.	18IS55	Software Engineering (Common to CS & IS)	IS	3	0	1	4
6.	18IS5AX	Group A: Professional Electives (MOOC Courses)	IS	3	0	0	3
7.	18G5BXX	Group B: Global Elective	Respective BOS	3	0	0	3
		Total Number of Credits		21	0	2	24
		Total number of Hours/Week		21	0	7.5+2	

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.	18CS62	Artificial Intelligence and Machine Learning (Common to CS & IS)	CS	3	1	1	5
3.	18IS63	Cryptography and Network Security (Theory & Practice)	IS	3	0	1	4
4.	18IS64	Minor Project**	IS	0	0	2	2
5.	18IS6CX	Elective C: Professional Electives	IS	3	0	0	3
6.	18IS6DX	Elective D: Professional Electives	IS	3	0	0	3
7.	18G6EXX	Elective E: Global Elective	IS	3	0	0	3
8.	18HSE68	Professional Practice-II	HSS	0	0	1	1
		Total Number of Credits		19	00	05	24
		Total number of Hours/Week		19	0	5+2+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.	18IS72	Virtual Reality and Augmented Reality (Theory and Practice)	IS	3	0	1	4
3.	18IS73	Cyber Security and Digital Forensics (Theory and Practice)	IS	3	1	1	5
4.	18IS74	Internship	IS	0	0	2	2
5.	18IS7FX	Elective F (PE)	IS	3	0	0	3
6.	18IS7GX	Elective G (PE)	IS	3	0	0	3
7.	18G7HXX	Elective H (OE)*	Res. BOS	3	0	0	3
		Total Number of Credits		18	1	4	23
		Total number of Hours/Week		18	2	10	

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

EIGHT SEMESTER CREDIT SCHEME

Sl. No.	Course Code	Course Title	BoS	Credit Allocation			Total Credits
				L	T	P	
1.	18ISP81	Major Project	IS	0	0	16	16
		Total Number of Credits		0	0	16	16
		Total number of Hours/Week				32	