SEMESTER I

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	т	Р	С
THEO	RY				•		•	
1	HS1101	Communicative English (Common to all Branches of B.E. / B. Tech Programmes)	HSMC	3	3	0	0	3
2	MA1102	Engineering Mathematics – I (Common to all Branches of B.E. / B. Tech Programmes)	BSC	4	4	0	0	4
3	PH1103	Engineering Physics (Common to all Branches of B.E. / B. Tech Programmes)	BSC	3	3	0	0	3
4	CY1104	Engineering Chemistry (Common to all Branches of B.E. / B. Tech Programmes)	BSC	3	3	0	0	3
5	GE1105	Problem Solving and Python Programming (Common to all Branches of B.E. / B. Tech Programmes)	ESC	3	3	0	0	3
6	GE1106	Engineering Graphics (Common to all Branches of B.E. / B. Tech Programmes)	ESC	6	2	0	4	4
PRAC	TICAL							
7	GE1107	Python Programming Laboratory (Common to all Branches of B.E. / B. Tech Programmes)	ESC	4	0	0	4	2
8	BS1108	Physics and Chemistry Laboratory (Common to all Branches of B.E. / B. Tech Programmes)	BSC	4	0	0	4	2
	•		30	18	0	12	24	

SEMESTER II

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	Т	Р	С
THEO	RY							
1	HS1201	Professional English (Common to all Branches of B.E. / B. Tech Programmes)	HSMC	3	3	0	0	3
2	MA1202	Engineering Mathematics -II (Common to all Branches of B.E. / B. Tech Programmes Except AI-DS & AI-ML)	BSC	4	4	0	0	4
3	PH1252	Physics for Information Science (Common to CSE, IT, AI-DS & AI-ML)	BSC	3	3	0	0	3
4	GE1204	Environmental Science and Engineering (Common to all Branches of B.E. / B. Tech Programmes)	HSMC	3	3	0	0	3
5	BE1251	Basic Electrical, Electronics and Measurement Engineering (Common to CSE, IT, AI-DS & AI-ML)	ESC	3	3	0	0	3
6	CS1206	Programming in C (Common to CSE, IT, AI-DS & AI-ML)	PCC	4	3	1	0	3
PRAC	TICAL							
7	GE1207	Engineering Practice Laboratory (Common to all Branches of B.E. / B. Tech Programmes)	ESC	4	0	0	4	2
8	CS1208	Programming in C Laboratory (Common to CSE, IT, AI-DS & AI-ML)	PCC	4	0	0	4	2
	Total				19	1	8	23

SEMESTER III

S.No.	COURSE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	Т	Р	С
THEOI	RY							
1	MA1351	Probability and Statistics (Common to CSE, IT & AI-DS)	BSC	4	4	0	0	4
2	CS1301	Digital Principles and Logic Design (Lab Integrated) (Common to CSE & IT)	ESC	5	3	0	2	4
3	CS1302	Data Structures (Common to CSE, IT, AI-DS, AI-ML & ECE Semester IV)	PCC	3	3	0	0	3
4	CS1303	Object Oriented Programming (Common to CSE & IT)	PCC	3	3	0	0	3
5	CS1304	Computer Architecture (Common to CSE & IT)	PCC	4	3	1	0	3
6	CS1305	Software Engineering (Common to CSE & IT)	PCC	3	3	0	0	3
PRAC	TICAL							
7	CS1307	Data Structures Laboratory using C (Common to CSE, IT & ECE Semester IV)	PCC	4	0	0	4	2
8	CS1308	Object Oriented Programming Laboratory (Common to CSE & IT)	PCC	4	0	0	4	2
	Total			30	19	1	10	24

SEMESTER IV

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	Т	Р	С	
THEOI	THEORY								
1	MA1453	Discrete Mathematics (Common to CSE, IT & AI-DS)	BSC	4	4	0	0	4	
2	CS1401	Design and Analysis of Algorithms (Common to CSE, IT, AI-DS & AI-ML)	PCC	3	3	0	0	3	
3	CS1402	Operating Systems (Common to CSE, IT, AI-DS & AI-ML)	PCC	3	3	0	0	3	
4	CS1403	Database Design and Management (Lab Integrated) (Common to CSE, IT, AI-DS & AI-ML)	PCC	5	3	0	2	4	
5	CS1404	Computer Networks	PCC	3	3	0	0	3	
6	EC1601	Microprocessors and Microcontrollers (Common to CSE and ECE Semester VI)	ESC	3	3	0	0	3	
PRAC	TICAL								
7	CS1407	Operating Systems Laboratory (Common to CSE, IT & AI-ML)	PCC	4	0	0	4	2	
8	CS1408	Networks Laboratory	PCC	4	0	0	4	2	
9	HS1310	Professional Skills Laboratory (Common to CSE & Al-DS)	HSMC	2	0	0	2	1	
		Total		31	19	0	12	25	

SEMESTER V

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	Т	P	O
THEO	RY							
1	MA1501	Algebra and Number Theory (Common to CSE & IT)	BSC	4	4	0	0	4
2	CS1501	Internet Programming	PCC	4	3	1	0	3
3	CS1502	Object Oriented Analysis and Design (Common to CSE & IT)	PCC	3	3	0	0	3
4	CS1503	Artificial Intelligence (Lab Integrated)	PCC	5	3	0	2	4
5		Open Elective - I	OEC	3	3	0	0	3
6		Professional Elective - I	PEC	3	3	0	0	3
PRAC	TICAL							
7	CS1507	Internet Programming Laboratory	PCC	4	0	0	4	2
8	CS1508	Object Oriented Analysis and Design Laboratory (Common to CSE & IT)	PCC	4	0	0	4	2
		Total		30	19	1	10	24
9	9 Value Added Course Audit Course Two Weeks		1					

SEMESTER VI

S.No.	COURSE	COURSE TITLE	CATEGOR Y	CONTACT PERIODS	L	Т	Р	С		
	THEORY									
1	CS1601	Compiler Design	PCC	4	3	1	0	3		
2	CS1602	Mobile Computing	PCC	4	3	1	0	3		
3	CS1603	Distributed Systems	PCC	4	3	1	0	3		
4	CS1604	Data Science and Analytics	PCC	4	3	1	0	3		
5		Open Elective - II	OEC	3	3	0	0	3		
6		Professional Electives - II	PEC	3	3	0	0	3		
		PRAC	ΓΙCAL							
7	CS1607	Mobile Application Laboratory	PCC	4	0	0	4	2		
8	CS1608	Mini Project - I	EEC	4	0	0	4	2		
	Total			30	18	4	8	22		
9		Audit Course (Optional)	AC							

SEMESTER VII

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	Т	Р	С			
THEOI	RY										
1	1 CS1701 Graph Theory PCC 4 3 1 0 3										
2	CS1702	Cloud Computing	PCC	4	3	1	0	3			
3	CS1703	Cryptography and Network Security	PCC	4	3	1	0	3			
4	CS1704	Internet of Things	PCC	4	3	1	0	3			
5		Professional Electives - III	PEC	3	3	0	0	3			
6		Professional Electives - IV	PEC	3	3	0	0	3			
PRAC	TICAL										
7	CS1707	Cloud Computing Laboratory	PCC	4	0	0	4	2			
8	CS1708	Mini Project - II	EEC	4	0	0	4	2			
		Total		30	18	4	8	22			

SEMESTER VIII

S.No.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	Т	Р	С
THEO	RY							
1		Professional Elective - V	PEC	3	3	0	0	3
2		Professional Elective - VI	PEC	3	3	0	0	3
PRAC	TICAL							
3	CS1807	Project Work	EEC	20	0	0	20	10
		Total		26	6	0	20	16

TOTAL NO. OF CREDITS: 180

HUMANITICS SCIENCE AND MANAGEMENT COURSES (HSMC)

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	С
1	HS1101	Communicative English	3	3	0	0	3
2	HS1201	Professional English	3	3	0	0	3
3	GE1204	Environmental Science and Engineering	3	3	0	0	3
4	HS1310	Professional Skills Laboratory	2	0	0	2	1

BASIC SCIENCE COURSES (BSC)

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	ပ
1	MA1102	Engineering Mathematics - I	4	4	0	0	4
2	PH1103	Engineering Physics	3	3	0	0	3
3	CY1104	Engineering Chemistry	3	3	0	0	3
4	BS1108	Physics and Chemistry Laboratory	4	0	0	4	2
5	MA1202	Engineering Mathematics -II	4	4	0	0	4
6	PH1252	Physics for Information Science	3	3	0	0	3
7	MA1351	Probability and Statistics	4	4	0	0	4
8	MA1453	Discrete Mathematics	4	4	0	0	4
9	MA1501	Algebra and Number Theory	4	4	0	0	4

ENGINEERING SCIENCE COURSES (ESC)

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	С
1	GE1105	Problem Solving and Python Programming	4	3	1	0	3
2	GE1106	Engineering Graphics	6	2	0	4	4
3	GE1107	Python Programming Laboratory	4	0	0	4	2
4	BE1251	Basic Electrical, Electronics and Measurement Engineering	3	3	0	0	3
5	GE1207	Engineering Practice Laboratory	4	0	0	4	2
6	CS1301	Digital Principles and Logic Design (Lab Integrated)	5	3	0	2	4
7	EC1601	Microprocessors and Microcontrollers	3	3	0	0	3

PROFESSIONAL CORE COURSES (PCC)

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	С
1	CS1206	Programming in C	4	3	1	0	3
2	CS1208	Programming in C Laboratory	4	0	0	4	2
3	CS1302	Data Structures	4	3	1	0	3
4	CS1303	Object Oriented Programming	3	3	0	0	3
5	CS1304	Computer Architecture	3	3	0	0	3
6	CS1305	Software Engineering	3	3	0	0	3
7	CS1307	Data Structures Laboratory using C	4	0	0	4	2
8	CS1308	Object Oriented Programming Laboratory	4	0	0	4	2
9	CS1401	Design and Analysis of Algorithms	3	3	0	0	3
10	CS1402	Operating Systems	3	3	0	0	3
11	CS1403	Database Design and Management (Lab Integrated)	5	3	0	2	4
12	CS1404	Computer Networks	3	3	0	0	3
13	CS1407	Operating Systems Laboratory	4	0	0	4	2
14	CS1408	Networks Laboratory	4	0	0	4	2
15	CS1501	Internet Programming	4	3	1	0	3
16	CS1502	Object Oriented Analysis and Design	3	3	0	0	3
17	CS1503	Artificial Intelligence (Lab Integrated)	5	3	0	2	4
18	CS1507	Internet Programming Laboratory	4	0	0	4	2
19	CS1508	Object Oriented Analysis and Design Laboratory	4	0	0	4	2
20	CS1601	Compiler Design	4	3	1	0	3
21	CS1602	Mobile Computing	4	3	1	0	3
22	CS1603	Distributed Systems	4	3	1	0	3
23	CS1604	Data Science and Analytics	4	3	1	0	3
24	CS1607	Mobile Application Laboratory	4	0	0	4	2
25	CS1701	Graph Theory	4	3	1	0	3
26	CS1702	Cloud Computing	4	3	1	0	3
27	CS1703	Cryptography and Network Security	4	3	1	0	3
28	CS1704	Internet of Things	4	3	1	0	3
29	CS1707	Cloud Computing Laboratory	4	0	0	4	2

PROFESSIONAL ELECTIVE COURSES (PEC)

PROFESSIONAL ELECTIVE - I

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS		Т	Р	С
1	CS1511	Computer Graphics	3	3	0	0	3
2	CS1512	Machine Learning Techniques	3	3	0	0	3
3	CS1513	Computer Vision	3	3	0	0	3
4	CS1514	Multicore Architecture	3	3	0	0	3
5	CS1515	Fundamentals of Digital Image Processing	3	3	0	0	3

PROFESSIONAL ELECTIVE – II

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	С
1	CS1611	Theory of Computation	3	3	0	0	3
2	CS1612	Software Testing	3	3	0	0	3
3	CS1613	Advanced Java Programming	3	3	0	0	3
4	ML1601	Deep Learning	3	3	0	0	3
5	GE1003	Professional Ethics in Engineering	3	3	0	0	3

PROFESSIONAL ELECTIVE - III

S.No.	COURSE CODE	COURSE TITLE	L	Т	Р	С	
1	CS1711	Software Project Management	3	3	0	0	3
2	CS1712	Virtualization Techniques	3	3	0	0	3
3	CS1713	GPU Architecture and Programming	3	3	0	0	3
4	CS1714	Resource Management Techniques	3	3	0	0	3
5	MG1001	Principles of Management	3	3	0	0	3

PROFESSIONAL ELECTIVE - IV

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	С
1	CS1721	Soft Computing	3	3	0	0	3
2	CS1722	Quantum Computing	3	3	0	0	3
3	CS1723	Software Architecture	3	3	0	0	3
4	CS1724	Multimedia and Graphics Packages	3	3	0	0	3
5	CS1725	Human Computer Interaction	3	3	0	0	3

PROFESSIONAL ELECTIVE - V

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	P	С
1	CS1811	Natural Language Processing	3	0	0	3	
2	CS1812	Microcontroller Based System Design	3	3	0	0	3
3	CS1813	Forensics and Cyber Law	3	3	0	0	3
4	CS1814	Data Warehousing and Data Mining	3	3	0	0	3
5	CS1815	Software Quality Assurance	3	3	0	0	3

PROFESSIONAL ELECTIVE - VI

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	С
1	CS1821	Software Defined Networks	3	3	0	0	3
2	CS1822	iOS Application Development	3	3	0	0	3
3	CS1823	Network Simulation using ns3	3	3	0	0	3
4	CS1824	Blockchain Technologies	3	3	0	0	3
5	CS1825	Information Retrieval Techniques	3	3	0	0	3

EMPLOYABILITY ENHANCEMENT COURSES (EEC)

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	С
1	CS1608	Mini Project	4	0	0	4	2
2	CS1708	Mini Project	4	0	0	4	2
3	CS1807	Project Work	20	0	0	20	10

OPEN ELECTIVE COURSES - I & II

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	P	С
1	OBT101	Industrial Biotechnology	3	3	0	0	3
2	OBT104	Bio Sensors	3	3	0	0	3
3	OBT105	Introduction to Nano Science and Nano Technology	3	3	0	0	3
4	OCE102	Introduction to Geographic Information System	3	0	0	3	
5	OCH101	Hospital Management	3	0	0	3	
6	OEC103	Basics of Embedded Systems and IoT	3	3	0	0	3
7	OEE101	Basic Circuit Theory	3	3	0	0	3
8	OEE103	Introduction to Renewable Energy Systems	3	3	0	0	3
9	OEI102	Robotics	3	3	0	0	3
10	OMB101	Total Quality Management	3	3	0	0	3
11	OME104	Industrial Safety Engineering	3	3	0	0	3

OPEN ELECTIVE COURSES OFFERED BY CSE

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	Р	С
1	OCS101	Introduction to C Programming	3	0	0	3	
2	OCS102	Programming and Data Structures	თ	0	0	3	
3	OCS103	Introduction to Cloud Computing	3	3	0	0	3
4	OCS104	Fundamentals of Database Design	3	3	0	0	3
5	OCS105	Data Analytics with R Programming	3	3	0	0	3
6	OCS106	Data Communications and Networking	3	3	0	0	3

AUDIT COURSES (AC)

S.No.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	Т	P	С
1	AD1001	Constitution of India	2	0	0	0	
2	AD1002	Value Education	2	0	0	0	
3	AD1003	Pedagogy Studies	2	0	0	0	
4	AD1004	Stress Management by Yoga	2	0	0	0	
5	AD1005	Personality Development Through Life EnlightenmentSkills	2	0	0	0	
6	AD1006	Unnat Bharat Abhiyan	2	2	0	0	0
7	AD1007	Essence of Indian Knowledge Tradition	2	2	0	0	0
8	AD1008	Sanga Tamil LiteratureAppreciation	2	2	0	0	0

^{*} Registration for any of these courses is optional to students

CREDIT SUMMARY

S. No.	SUBJECT AREA	I	II	111	IV	v	VI	VII	VIII	TOTAL CREDIT	PERCENTAGE
1	нѕмс	3	6		1					10	5.56
2	BSC	12	7	4	4	4				31	17.22
3	ESC	9	5	4	3					21	11.67
4	PCC		5	16	17	14	14	14		80	44.44
5	PEC					3	3	6	6	18	10.00
6	OEC					3	3			6	3.33
7	EEC						2	2	10	14	7.78
TOTA	L CREDIT	24	23	24	25	24	22	22	16	180	100