

THIRD SEMESTER :CSE								
Sl. No.	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1.	12MA31	Applied Mathematics-III	Sc	3	0	1	0	4
2.	12EM32	Engineering Material Science	ME	3	0	0	0	3
3.	12CS/ IS33	Data Structures in C(Theory & Practice)	ISE	3	1	0	1	5
4.	12 CS/EE/ IS/IT/TE 34	Digital Logic Design using HDL(Theory & Practice)	TE	3	1	0	1	5
5.	12CS35	Computer Organization & Architecture	CSE	3	0	1	1	5
6.	12CS/ IS36	Discrete Mathematical Structures	CSE	3	0	1	1	5
7.	12DMA37	Bridge Course Mathematics-I**	Sc					
								27
		No. of Hrs.		18	04	06	16	44
FOURTH SEMESTER :CSE								
Sl. No.	Course Code	Course	BoS	Credit Allocation				Total Credits
				Theory	Practical	Tutorial	Self Study	
1.	12MA41	Applied Mathematics IV	Sc	3	0	1	0	4
2.	12EB42	Environmental Science & Biology for Engineers	Sc	3	0	0	1	4
3.	12CS/ IS43	Theory of Computation	ISE	3	0	0	1	4
4	12CS44	Operating Systems (Theory & Practice)	CSE	3	1	0	0	4
5	12CS/IS45	Design & Analysis of Algorithms(Theory & Practice)	CSE	3	1	0	1	5
6	12CS46	Object Oriented Programming with C++(Theory & Practice)	CSE	3	1	0	1	5
7	12HSS47	Innovation and Social skills	HSS	0	1	0	0	1
8	12DMA48	Bridge Course Mathematics-II**	Sc					
								27
		No. of Hrs.		18	08	02	16	44

FIFTH SEMESTER								
Sl. No.	Course Code	Course Title	BoS	Credit Allocation				Total Credits
				Lecture	Tutorial	Practical	Self - Study	
1.	12HSI51	Intellectual Property Rights & Entrepreneurship	HSS	3	0	0	0	3
2.	12CS52	Computer Networks-I	CSE	3	1	0	1	5
3.	12CS53	Microprocessor & Microcontroller	CSE	3	0	1	1	5
4.	12CS54	Database Management System	CSE	3	0	1	1	5
5.	12CS5A X	Elective A	CSE	3	0	0	1	4
6.	12CS5B X	Elective B	CSE	3	1	0	0	4
Credit Total				18	02	02	4	26
No. of Hrs.				18	04	04	16	42

Subject Code	Professional Elective 12CS5AX - Group A
12CS5A1	System Simulation & Modeling
12CS5A2	Probability & Statistics
12CS5A3	OOAD
12CS5A4	Introduction to machine Learning
12CS5A5	Distributed Operating System
12CS5A6	Artificial Intelligence
12CS5A7	Graph Theory and Applications

Subject Code	Professional Elective 12CS5BX
12CS5B1	Java & JEE
12CS5B2	Introduction to mainframes
12CS5B3	Middleware Technologies
12CS5B4	Advanced Algorithms
12CS5B5	Fundamentals of Computer Vision
12CS5B6	Multimedia Computing
12CS5B7	Distributed Systems

SIXTH SEMESTER								
Sl. No.	Course Code	Course Title	BoS	Credit Allocation				Total Credits
				Lecture	Tutorial	Practical	Self-Study	
1.	12HSM61	Management & Organizational Behaviour	HSS	3	0	0	0	3
2.	12CS62	Software Engineering	ISE	3	0	0	1	4
3.	12CS63	Computer Networks-II	CSE	3	0	1	1	5
4.	12CS64	System Software & Compiler Design	CSE	3	0	1	1	5
5.	12CS65	Emerging Technology in Computational Sciences	CSE	2	0	0	0	2
6.	12CS6CX	Elective C	CSE	3	1	0	0	4
7.	12CS6DX	Elective D	CSE	3	0	0	0	3
Credit Total				20	1	2	3	26
No. of Hrs.				20	02	04	12	38

Subject code	Professional Elective 12CS6CX	Subject Code	Professional Elective 12CS6DX
12CS6C1	Embedded System	12CS6D1	Linux Internal
12CS6C2	Grid Computing	12CS6D2	Mobile Application Development
12CS6C3	Natural Language Processing	12CS6D3	Network Programming
12CS6C4	Artificial Neural Networks	12CS6D4	Fuzzy Logic
12CS6C5	Data warehousing and mining	12CS6D5	Software Architecture & Testing
12CS6C6	Game Theory	12CS6D6	Genetic Algorithm
12CS6C7	Unix System Programming		

SEVENTH SEMESTER								
Sl. No.	Course Code	Course Title	BoS	Credit Allocation				Total Credits
				Lecture	Tutorial	Practical	Self-Study	
1	12CS71	High Performance Computing	CSE	4	0	1	0	5
2	12SC72	Computer Graphics	CSE	3	1	1	0	5
3	12HSC73*	Legal Studies & Professional Ethics for Engineers	HSS	2	0	0	0	2
4	12CS74	Minor Project	CSE	0	0	3	0	3
5	12CS7EX	Elective E	CSE	4	0	0	0	4
6	12GF7XX	Elective F	Respective BoS	4	0	0	0	4
7	12GG7XX	Elective G	Respective BoS	3	0	0	0	3
Credit Total				20	01	05	0	26
No. of Hrs.				20	02	10	00	32

12HSC73* is a mandatory Audit Course for lateral entry Diploma student.

Subject code	Professional Elective 12CS7EX	Professional Elective 12GF7XX	Professional Elective 12GG7XX
12CS7E1	Information Retrieval	To be opted from electives offered by other Departments, please see the list in following pages	To be opted from electives offered by other Departments, please see the list in following pages
12CS7E2	Information Security		
12CS7E3	Information Storage and Management		
12CS7E4	Big Data Analytics		
12CS7E5	Computer System Performance Analysis		
12CS7E6	Adhoc Wireless Networks		
12CS7E7	Fuzzy Graph Theory and Applications		
12CS7E8	Human Computer Interaction		

EIGHT SEMESTER								
Sl. No.	Course Code	Course Title	BoS	Credit Allocation				Total Credits
				Lecture	Tutorial	Practical	Self Study	
1	12CS81	Major Project	CSE	0	0	18	0	18
2	12CS82	Technical Seminar	CSE	0	0	1	0	1
3	12HSS83	Innovation and Social Skills	HSS	0	0	1	0	1
Credit Total				0	0	20	0	20
No. of Hrs.				-	-	40	-	40

Sl.No.	BoS	Group F			Group G		
		Course Code	Course Title	Credits	Course Code	Course Title	Credits
1	BT	12GF701	Nanomaterials: Process and Applications	4	12GG701	Bioinformatics	3
2	CH	12GF702	Green Technology	4	12GG702	Industrial safety & risk management	3
3	CS	12GF703	Mobile Application Development	4	12GG703	Intelligent Systems	3
4	CV	12GF704	Disaster Management	4	12GG704	Solid Waste Management	3
5	EC	12GF705	Artificial Neural Networks	4	12GG705	Automotive Electronics	3
6	EE	12GF706	Design of Renewable Energy Systems	4	12GG706	Industrial electronics	3
7	IM	12GF707	Optimization Techniques	4	12GG707	Systems Engineering	3
8	IM	12GF708	Project Management	4			
9	IS	12GF709	Java & J2EE	4	12GG708	Cloud Computing	3
10	IT	12GF710	Virtual instrumentation	4	12GG709	MEMS	3
11	ME	12GF711	Automotive Engineering	4	12GG710	Mechatronics	3
12	TE	12GF712	Telecommunication Systems	4	12GG711	Space Technology and Applications	3
13	Science			4	12GG712	Linear Algebra	3
14		12GF713	Thin films and surface engineering	4			
15		12GF714	Engineering materials for advanced technology	4			
16	HSS	12GF715	Applied Psychology for Engineers	4			