	Second Year											
Course No.	Course Name	L	T	P	С		Course No.	Course Name	L	T	P	С
Semester – 3							Semester – 4					
MA201	Mathematics III	3	0	0	6		CS202	Formal Languages and Automata Theory	3	1	0	8
CS201	Data Structures	3	0	0	6		CS204	Algorithms	3	0	0	6
CS203	Discrete Structures	3	1	0	8		CS206	Computer Organization and Architecture	3	0	0	6
CS205	Digital Logic Design	3	0	0	6		CS208	Object Oriented Programming with JAVA	3	0	0	6
HS201	Engineering Economics & Accountancy	2	0	0	4		MA202	Probability and Random Processes	3	0	0	6
CS231	Data Structures Lab	0	0	3	3		CS232	Algorithms Lab	0	0	3	3
CS233	Digital Logic Design Lab	0	0	3	3		CS234	Object Oriented Programming with JAVA Lab	0	0	3	3
							CS236	Peripherals and Accessories Lab	0	0	3	3
		14	1	6	36				15	1	9	41

	Third Year											
Course No.	Course Name	L	Т	P	C		Course No.	Course Name	L	T	P	C
Semester – 5						Semester – 6						
MA301	Optimization	3	0	0	6		HS302	Management and Managerial Economics	2	0	0	4
CS301	Software Engineering	3	0	0	6		CS302	Databases	3	0	0	6
CS303	Operating Systems	3	0	0	6		CS304	Compilers	3	0	0	6
CS305	Data Communication	3	1	0	8		CS306	Computer Networks	3	0	0	6
MA303	Numerical Technique	3	0	0	6		CS308	Information Storage and Retrieval	3	1	0	8
CS331	Software Engineering and System Software Lab	0	0	3	3		CS332	Databases Lab	0	0	3	3
CS333	Operating Systems Lab	0	0	3	3		CS334	Compilers and System Programming Lab	0	0	3	3
							CS336	Computer Networks Lab	0	0	3	3
		15	1	9	38				14	1	9	39

					Fin	al	Year					
Course No.	Course Name	L	Т	P	C		Course No.	Course Name	L	T	P	C
Semester – 7						Semester – 8						
CS401	Computer Graphics	3	0	0	6		CS4XX	Department Elective - IV	3	0	0	6
CS403	Machine Learning	3	0	0	6		CS4XX	Department Elective - V	3	0	0	6
CS4XX	Department Elective - I	3	0	0	6		CS4XX	Department Elective - VI	3	0	0	6
CS4XX	Department Elective - II	3	0	0	6		CS422	Project - II	0	0	0	9
CS4XX	Department Elective - III	3	0	0	6							
CS431	Computer Graphics Lab	0	0	3	3							
CS433	Machine Learning Lab	0	0	3	3							
CS421	Project – I	0	0	0	9							
		15	0	6	45				9	0	0	27

### **Department Electives**

Course ID	Course Name	Credit
CS 452	Optimization methods	6
CS 454	Computation number theory & cryptography	6
CS 456	Information & randomness	6
CS 458	Advanced operating systems	6
CS 460	Information transmission & security	6
CS 462	Topics in networks	6
CS 464	Web development technologies	6
CS466	Big Data	6
CS 468	Wireless networks	6
CS 470	Linux Kernals: Implementation & security	6
CS 472	Enterprise systems	6
CS 474	Performance modelling of communication & computer systems	8
CS 476	Artificial intelligence	6
CS 478	Principles of robotics	6
CS 480	Intelligences systems & interfaces	6
CS 482	Pattern recognition	6
CS 484	Fundamental of information retrieval	8
CS 486	Digital Watermarking	6
CS 488	Steganography	6
CS490	Video Processing	6
CS492	Natural Language Processing	6
CS494	Cloud Computing	6
CS496	Internet of Things	6

CS 451	Parallel algorithms	6
CS 453	Computational geometry	6
CS 455	Structural complexity	6
CS 457	Hierarchial memory algorithm	6
CS 459	Logic in computer science	6
CS 461	Learning with Kernals	6
CS 463	Computational topology	6
CS 465	Advanced computer architecture	6
CS 467	Formal methods for system verification	6
CS 469	Semantics for programming languages	6
CS 471	Functional & logic programming	6
CS 473	Advanced compilers	6
CS 475	Distributed systems	6
CS 477	Internet protocols	6
CS 479	Wireless sensor networks	6
CS 481	Machine learning	6
CS 483	Data mining	6
CS 485	Multimedia systems	6
CS 487	Human computer interaction	8
CS 489	Computational system biology	6
CS 491	Digital Image Processing	6
CS 493	Mobile robotics	6
CS 495	Computer & network security	6