Department of Computer Science and Engineering

For Batch 2016 onwards

Course Category	Course No.	Course Title	Contact Hours			Credit	Prerequisites
			L	T	P		
Science Core Courses (SC)	MA 101	Mathematics-I	3	1	0	4	None
	MA 102	Mathematics-II	3	1	0	4	None
	PH 101	Engineering Physics	3	1	0	4	None
	CH 101	Engineering Chemistry	3	1	0	4	None
	ES 101	Environmental Science	2	0	0	2	None
	PH 151	Engineering Physics Laboratory	0	0	2	1	None
	CH 151	Engineering Chemistry Laboratory	0	0	2	1	None
	MA 202	Probability & Statistics	3	0	0	3	None
	MA 204	Discrete Mathematics	3	1	0	4	None
	MA 210	Mathematics Laboratory	0	0	4	2	CS101, MA101, MA102
Science Elective Courses (SE)	BT 201	Elements of Modern Biology	3	0	0	3	None
	PH 201	Physics of Materials	3	0	0	3	None
	CH 201	Introduction to Material Science	3	0	0	3	None
	Any other subject offered by Sc. departments and recommended by the Course Adviser.						
Engineering Sc. Core Courses (ESC)	CE 101	Engineering Drawing	1	0	0	1	None
	EE 101	Basic Electrical Engineering	3	0	0	3	None
	EC 101	Basic Electronics	3	0	0	3	EE 101
	ME 101	Engineering Mechanics	3	0	0	3	None
	ME 102	Engineering Thermodynamics	2	0	0	2	None
	CS 101	Computer Programming	2	1	0	3	None
	ME 103	Workshop Practice-I	0	0	4	2	None
	EE 151	Basic Electrical Engineering Laboratory	0	0	2	1	None
	EC 151	Basic Electronics Laboratory	0	0	2	1	EE 151
	CS 151	Computer Programming Laboratory	0	0	2	1	None
	CE 151	Engineering Drawing laboratory	0	0	4	2	None
Discipline Core Courses (DC)	CS 201	Digital Logic Design	3	1	0	4	EC 101
	CS 202	Data Structures	3	1	0	4	CS 101
	CS 203	Automata and Formal Languages	3	1	0	4	CS 101
	CS 204	Computer Organization & Architecture	3	1	0	4	CS 201
	CS 205	Algorithms	3	1	0	4	CS 202
	CS 206	Database Systems	3	0	0	3	CS 202
	CS 208	Data Communication	3	0	0	3	
	CS 251	Digital Logic Design Laboratory	0	0	2	1	EC 151
	CS 252	Data Structures Laboratory	0	0	2	1	CS 151
	CS 254	Computer Organization Laboratory	0	0	2	1	CS 251
	CS 255	Algorithms Laboratory	0	0	2	1	CS 252
	CS 256	Database Systems Laboratory	0	0	2	1	CS 252
	CS 258	Data Communication Laboratory	0	0	2	1	
	CS 302	Computer Networks	3	0	0	3	CS 208
	CS 311	Object Oriented Programming and Design	3	0	0	3	CS 202
	CS 304	Operating System	3	1	0	4	CS 202, CS 204

	CS 305	Software Engineering	3	0	0	3	CS 202
	CS 306	Compiler Design	3	0	0	3	CS 202, CS 203
	CS 352	Computer Networks Laboratory	0	0	2	1	CS 258
	CS 354	Operating System Laboratory	0	0	2	1	CS 252, CS 254
	CS 355	Software Engineering Laboratory	0	0	2	1	CS 252
	CS 356	Compiler Design Laboratory	0	0	2	1	CS 252
	CS 361	Object Oriented Programming and Design Laboratory	0	0	2	1	CS 252
Discipline Elective Courses (DE)	CS 207	Principles of Programming Languages	3	0	0	3	CS 101
	CS 210	Data Structure and Algorithm	3	0	0	3	CS 101
	CS 211	Object Oriented Programming	3	0	0	3	CS 101
	CS 261	Object Oriented Programming Lab	0	0	2	1	CS 151
	CS 312	Computer Graphics	3	0	0	3	CS 202
	CS 314	Testing of Digital Systems	3	1	0	4	CS 204
	CS 362	Computer Graphics Laboratory	0	0	2	1	CS 252
	CS 411	Cryptography and Network Security	3	0	0	3	CS 302, CS 304
	CS 412	Artificial Intelligence	3	0	0	3	CS 203, CS 207
	CS 413	High Performance Architectures	3	0	0	3	CS 204
	CS 414	Web Technology	3	0	0	3	CS 312
	CS 415	Data Mining	3	0	0	3	CS 205, CS 206
	CS 416	Computational Geometry	3	0	0	3	CS 205
	CS 511	Mobile Computing	3	0	0	3	CS 302
	CS 512	Image Processing	3	0	0	3	CS 202
	CS 513	Software Defined Networking	3	0	0	3	CS 302
	CS 515	Distributed Computing	3	0	0	3	CS 304
	CS 516	Data Warehousing and Data Mining	3	0	0	3	CS 205, CS 206
	CS 519	Cloud Computing	3	0	0	3	CS 302, CS 304
	CS 521	Principles of Program Analysis	3	0	0	3	MA204, CS101
	CS 522	Pattern Recognition	3	0	0	3	None
	Plus any other course of level 300 and above offered by the department and recommended by it.						
Open Elective Courses	Any course of appropriate level offered in the Institute and recommended by the Course Adviser						
	CS 313	Embedded Systems	3	0	0	3	CS 204
	CS 363	Embedded System laboratory	0	0	2	1	CS 254
Project Works	CS 401	Project-I	0	0	8	4	100 or more credits earned
	CS 402	Project-II	0	0	16	8	120 or more credits earned
HSS Core Courses	HS 101	English Language Skills	2	0	0	2	None
	HS 301	Foundations of Management	3	0	0	3	None
	HS 302	Accounting and Financial Methods	3	0	0	3	HS 301
	HS 401	Professional Ethics	2	0	0	2	HS 301
	HS 151	English language skills laboratory	0	0	2	1	None
HSS Elective Courses	HS 402	Introduction to Economics	3	0	0	3	None
	HS 403	Introduction to Sociology	3	0	0	3	None
	HS 403	Introduction to Psychology	3	0	0	3	None
	HS 405	Introduction to Behavioural Sc.	3	0	0	3	None