

M. Tech Curriculum (CSE)

Course Category	Course No.	Course Title	Contact			Credit	Prerequisites
			Hours				
			L	T	P		
Core Courses (12 credits)	CS 501	Mathematical Foundations of Computer Science	3	0	0	3	Basic Mathematics, Discrete Mathematics
	CS 502	Algorithms and Complexity	3	0	0	3	Introduction to Algorithms, Theory of Computation
	CS 503	Advanced Concepts in Operating Systems	3	0	0	3	Operating Systems
	CS 504	Theory of Computation	3	0	0	3	Discrete Mathematics
Lab Courses (6 credits)	CS 505	Advanced Programming, Operating System and Database Laboratory	0	0	6	3	Basic Programming, Database Management Systems
	CS 506	Network Programming Laboratory	0	0	6	3	Computer Networks
Electives (15 Credits)	CS 510	Artificial Intelligence	3	0	0	3	Discrete Mathematics, Principles of Programming Languages
	CS 511	Mobile Computing	3	0	0	3	Computer Networks, Data Communication
	CS 512	Image Processing	3	0	0	3	Engineering Mathematics, Mathematical Foundations of Computer Science
	CS 513	Software Defined Networking	3	0	0	3	Computer Networks
	CS 514	Foundations of Automatic Verification	3	0	0	3	Mathematical Foundations of Computer Science, Theory of Computation.
	CS 515	Distributed Computing	3	0	0	3	Introduction to Algorithms, Operating Systems, Computer Networks
	CS 516	Data Warehousing and Data Mining	3	0	0	3	Discrete Mathematics
	CS 517	Database Engineering	3	0	0	3	Database Management Systems
	CS 518	Information Security	3	0	0	3	Computer Networks, Data Communication
	CS 519	Cloud Computing	3	0	0	3	Computer Networks, Data Communication
	CS 520	Design and Analysis of Parallel Algorithms	3	0	0	3	Introduction to Algorithms
CS 521	Principles of Program Analysis	3	0	0	3	Discrete Mathematics, Basic Programming	
Electives shall include any other course of appropriate level offered in the Institute and recommended by the DAC							
Seminar	CS 507	Seminar-I	0	0	2	1	None

& Term paper (5 Credits)	CS 602	Seminar-II	0	0	4	2	None
	CS 601	Term Paper	0	0	4	2	None
Project Works (22 credits)	CS 508	Minor Project	0	0	4	2	None
	CS 603	Project I	0	0	16	8	None
	CS 604	Project II	0	0	24	12	None