M. Tech Curriculum (CSE)

Course Title Mathematical Foundations of Computer Science Algorithms and Complexity	L	Hours T	Р	Credit	Prerequisites
Computer Science		1	P		
Algorithms and Complexity		0	0	3	Basic Mathematics, Discrete Mathematics
	3	0	0	3	Introduction to Algorithms, Theory of Computation
Advanced Concepts in Operating Systems	3	0	0	3	Operating Systems
Theory of Computation	3	0	0	3	Discrete Mathematics
Advanced Programming, Operating System and Database Laboratory	0	0	6	3	Basic Programming, Database Management Systems
Network Programming Laboratory	0	0	6	3	Computer Networks
Artificial Intelligence	3	0	0	3	Discrete Mathematics, Principles of Programming Languages
Mobile Computing	3	0	0	3	Computer Networks, Data Communication
Image Processing	3	0	0	3	Engineering Mathematics, Mathematical Foundations of Computer Science
Software Defined Networking	3	0	0	3	Computer Networks
Foundations of Automatic Verification	3	0	0	3	Mathematical Foundations of Computer Science, Theory of Computation.
Distributed Computing	3	0	0	3	Introduction to Algorithms, Operating Systems, Computer Networks
Data Warehousing and Data Mining	3	0	0	3	Discrete Mathematics
Database Engineering	3	0	0	3	Database Management Systems
Information Security	3	0	0	3	Computer Networks, Data Communication
Cloud Computing	3	0	0	3	Computer Networks, Data Communication
Design and Analysis of Parallel Algorithms	3	0	0	3	Introduction to Algorithms
Principles of Program Analysis	3	0	0	3	Discrete Mathematics, Basic Programming
e any other course of appropriate lev	el offer	ed in the	e Institu	ite and rec	ommended by the DAC
Seminar-I	0	0	2	1	None
	Theory of Computation Advanced Programming, Operating System and Database Laboratory Network Programming Laboratory Artificial Intelligence Mobile Computing Image Processing Software Defined Networking Foundations of Automatic Verification Distributed Computing Data Warehousing and Data Mining Database Engineering Information Security Cloud Computing Design and Analysis of Parallel Algorithms Principles of Program Analysis	Theory of Computation 3 Advanced Programming, Operating System and Database Laboratory Network Programming Laboratory Artificial Intelligence 3 Mobile Computing 3 Image Processing 3 Software Defined Networking 3 Foundations of Automatic Verification 3 Distributed Computing 3 Data Warehousing and Data Mining 3 Database Engineering 3 Information Security 3 Cloud Computing 3 Design and Analysis of Parallel Algorithms 3 Principles of Program Analysis 3 e any other course of appropriate level offered	Systems 3 0 Theory of Computation 3 0 Advanced Programming, Operating System and Database Laboratory Network Programming Laboratory Artificial Intelligence 3 0 Mobile Computing 3 0 Image Processing 3 0 Software Defined Networking 3 0 Foundations of Automatic Verification 3 0 Distributed Computing 3 0 Data Warehousing and Data Mining 3 0 Database Engineering 3 0 Information Security 3 0 Cloud Computing 3 0 Design and Analysis of Parallel Algorithms 3 0 Principles of Program Analysis 3 0	Systems 3 0 0 Theory of Computation 3 0 0 Advanced Programming, Operating System and Database Laboratory Network Programming 0 0 6 Artificial Intelligence 3 0 0 Mobile Computing 3 0 0 Image Processing 3 0 0 Software Defined Networking 3 0 0 Foundations of Automatic Verification 3 0 0 Distributed Computing 3 0 0 Data Warehousing and Data Mining 3 0 0 Information Security 3 0 0 Cloud Computing 3 0 0 Cloud Computing 3 0 0 Principles of Program Analysis 3 0 0 any other course of appropriate level offered in the Institute any other course of appropriate level offered in the Instit	Systems 3 0 0 3 Theory of Computation 3 0 0 3 Advanced Programming, Operating System and Database Laboratory Network Programming Laboratory 0 0 6 3 Artificial Intelligence 3 0 0 3 Mobile Computing 3 0 0 3 Image Processing 3 0 0 3 Software Defined Networking 3 0 0 3 Foundations of Automatic Verification 3 0 0 3 Distributed Computing 3 0 0 3 Data Warehousing and Data Mining 3 0 0 3 Information Security 3 0 0 3 Information Security 3 0 0 3 Cloud Computing 3 0 0 3 Principles of Program Analysis 3 0 0 3 er any other course of appropriate level offered in the Institute and received.

& 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