

Scheme for M.Tech. (CSE) with specialisation in Advanced Computing
M.Tech I Semester

Course number	Subject	Schemes of Studies Periods per week			Credits
		L	T	P	
AC 511	Mathematical Foundations of Computer Science	3	-	-	3
AC 512	Advanced Data Structures	3	-	-	3
AC 513	Architecture of Large Systems	3	-	-	3
AC 531-535	Elective – I	3	-	-	3
AC 541- 544	Elective – II	3	-	-	3
AC 571- 576	Open Elective – I	3	-	-	3
AC 514	Laboratory I (Advanced Data Structures)	-	-	2	1
AC 515	Laboratory II (Based on Electives)	-	-	2	1
AC 516	Seminar-I	-	-	2	2
Total credit 22					

List of Departmental Electives & Open Electives

M.Tech I Semester

SEMESTER I	
Course number	Departmental Elective I
AC 531	Data Mining
AC 532	Operating System & Design
AC 533	Web Search & Information Retrieval
AC 534	Digital Image Processing
AC 535	Internet of Things (IoT)
Course number	Departmental Elective II
AC 541	Stochastic Process & Queuing Theory
AC 542	Information Theory & Coding
AC 543	Computer & Network Security
AC 544	Embedded Systems
Course number	Open Elective I
AC 571	Distributed Systems
AC 572	Object Oriented Design & Modeling
AC 573	Optimization Techniques
AC 574	Cloud Computing
AC 575	Data Science
AC 576	Neural Networks

M.Tech II Semester

Course number	Subject	Schemes of Studies Periods per week			Credits
		L	T	P	
AC 521	High Performance Scientific Computing	3	-	-	3
AC 522	Graph Theory & Algorithms	3	-	-	3
AC 523	Soft Computing	3	-	-	3
AC 551- 555	Elective – III	3	-	-	3
AC 561 - 564	Elective – IV	3	-	-	3
AC 581 - 586	Open Elective – II	3	-	-	3
AC 524	Laboratory - III (High Performance Scientific Computing)	-	-	2	1
AC 525	Laboratory- IV (Based on Electives)	-	-	2	1
AC 526	Seminar-II	-	-	2	2
Total credit 22					

List of Departmental Electives & Open Electives
M.Tech II Semester

SEMESTER II	
Course number	Departmental Elective III
AC 551	Cluster & Grid Computing
AC 552	Natural Language Processing
AC 553	Secure Software Development
AC 554	Machine Learning
AC 555	Professional Communication
Course number	Departmental Elective IV
AC 561	Distributed Databases
AC 562	Ad hoc & Sensor Networks
AC 563	Semantic Web
AC 564	Parallel Algorithms
AC 565	--
Course number	Open Elective II
AC 581	Image Analysis
AC 582	Statistical Methods
AC 583	Big Data Technologies
AC 584	Technical Foundation for e-Commerce
AC 585	Integer Programming
AC 586	Support Vector Machine

M.Tech III Semester

Course number	Subject	Scheme of Studies Period per week			Credits
		L	T	P	
As Applied by Department(600 series) AC - 611	Project Phase -I	-	-	23	23
Total					23

M.Tech IV Semester

Course number	Subject	Scheme of Studies Period per week			Credits
		L	T	P	
As Applied by Department(600 series) AC - 621	Project Phase -II / Dissertation	-	-	23	23
Total					23