

**COURSES TO BE OFFERED TO STUDENTS TO BE ADMITTED TO THE MCA, MTECH AND PHD PROGRAMMES OF THE SCHOOL IN THE ACADEMIC YEAR 2020-21**

<b>MCA - Semester-I</b>				
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>	<b>Type</b>	<b>Name of the Faculty Member</b>
CS-401	Programming in C	2	Core	Dr. Saurabh Kumar Sharma
CS-402	Computer Fundamentals	2	Core	Dr. Poonam Agarwal
CS-403	Data Structures	4	Core	Dr. Ratneshwer
CS-404	Discrete Mathematics	4	Core	Prof. Satish Chand
CS-405	Computer Architecture	4	Core	Dr. Asutosh Srivastava
CS-406	Numerical Methods	4	Core	Dr. Ayesha Choudhary

<b>MTech (Statistical Computing) – Semester I</b>				
<b>Note: Data Science Stream students have to choose CS-805 (Big Data Systems). Data Communication Stream students have to choose CS-806(Data Communication &amp; Computer Networks).</b>				
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>	<b>Type</b>	<b>Name of the Faculty Member</b>
CS-802	Data Structure & Algorithms (for both Data Science and Data Communication stream students)	3	Core	Dr. Aditi Sharan
CS-803	Optimization Techniques (for both Data Science and Data Communication stream students)	3	Core	Guest Faculty
CS-804	Probability & Stochastic Processes (for both Data Science and Data Communication stream students)	3	Core	Dr. Krishnan Rajkumar
CS-805	<b>*Big Data Systems (only for Data Science Stream students)</b>	3	Core	Dr. Saurabh Kumar Sharma
CS-806	<b>*Data Communication &amp; Computer Networks (only for Data Communication Stream students)</b>	3	Core	Dr. Sushil Kumar
CS-808	Statistical Computing Lab (for both Data Science and Data Communication stream students)	3	Core	Dr. Krishnan Rajkumar

<b>MTech (Computer Science and Technology), MPhil – Semester – I</b>				
<b>Note: Students have to choose 1 Core and 4 Electives from the following courses</b>				
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>	<b>Type</b>	<b>Name of the Faculty Member</b>
CS-773	Design and Analysis of Algorithms	3	Core	Prof. Rajeev Kumar
CS-761	Network Security	3	Elective	Dr. Karan Singh
CS-714	Machine Learning	3	Elective	Prof. R.K. Agrawal
CS-771	Grid and Cloud Computing	3	Elective	Dr. Zahid Raza
CS-756	Graph Theory	3	Elective	D.P. Vidyarthi
CS-777	Large Scale Graph Algorithms and Applications	3	Elective	Dr. Buddha Singh
CS-706	Database Management Systems	3	Elective	Prof. T.V. Vijay Kumar
CS-726	VLSI Technology	3	Elective	Dr. Poonam Agarwal

<b>PhD – Semester – I</b>				
<b>Note: Students have to choose the core courses given below and at least one and at most two elective courses for the list of electives offered to M.Tech (Computer Science and Technology) students.</b>				
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>	<b>Type</b>	<b>Name of the Faculty Member</b>
CS-765	Research Methodology	3	Core	Prof. D.K. Lobiyal
CS-774	Academic Ethics and Technical Writing	3	Core	Dr. Tirthankar Gayen

