

## MS (Computer Science and Information Technology)

Deficiency Courses		
Course Code	Course Title	Credit Hours
CT-491	Operating System.	0
CT-492	Object Oriented Programming.	0
CT-493	Data Structure and Algorithm Design.	0
CT-494	Introduction to Databases.	0
Note: For those candidates who have qualifications other than BS (CSIT) or equivalent, a departmental admission committee shall decide on the number and the particular deficiency courses (non-credit) which a candidate shall have to take based on his/her previous qualification		
Compulsory Courses		
Course Code	Course Title	Credit Hours
CT-501	Software Project Management.	3
CT-504	Advanced Numerical Analysis.	3
CT-506	Advanced Analysis of Algorithms.	3
CT-576	Advanced Operating Systems.	3
CT-577	Advanced Theory of Automata.	3
Elective Courses		
Course Code	Course Title	Credit Hours
CT-511	Information System Development Methodologies.	3
CT-512	Principles of Marketing.	3
CT-513	Quality Information System.	3
CT-514	Software Development Methodologies using UML.	3
CT-515	Internet Banking.	3
CT-516	Multimedia Communications.	3
CT-517	Internet Techniques and their Application.	3
CT-518	Web Authoring.	3
CT-519	Business Process Reengineering.	3
CT-520	E-Commerce.	3
CT-521	Distributed Intelligent System.	3
CT-522	Cryptography & Network Security.	3
CT-523	Fuzzy Control & Neural Networks.	3
CT-524	Knowledge Based Systems.	3
CT-525	Modelling & Simulation.	3
CT-526	Logic Programming.	3
CT-527	Image Processing & Computer Vision.	3
CT-528	Advanced Database Techniques.	3
CT-529	Object Oriented Databases.	3
CT-530	Data Mining.	3
CT-531	Theory of Information System Design.	3
CT-532	Information System Audit.	3
CT-533	Information System Management.	3
CT-534	Software Quality Assurance.	3
CT-535	Compiler Construction & Techniques.	3
CT-536	Object Oriented Designing for Application Techniques.	3
CT-537	Wireless & Mobile Communication.	3
CT-538	Introduction to Robotics.	3
CT-539	Advanced Computer Networking.	3
CT-540	Broadband Networks.	3
CT-558	Distributed Blockchain Technologies	3
CT-559	Artificial Neural Networks.	3
CT-560	Deep Learning	3
CT-561	Natural Language Processing.	3
CT-562	Machine Learning.	3
CT-563	Business Intelligence.	3
CT-564	Web Intelligence and Big Data.	3
CT-565	Computational Journalism.	3
CT-566	Digital Image Processing.	3
CT-567	Computer Vision.	3
CT-568	Soft Computing.	3
CT-569	Virtualization and Cloud Computing.	3
CT-570	Wireless Communication.	3
CT-571	Nature Inspired Optimisation Algorithms	3
CT-572	Parallel Computing	3
CT-573	GPU Programming	3
CT-5002	Thesis.	6