

## MS (Information Security)

<b>Deficiency Courses</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credit Hours</b>
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
<p>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</p>		

<b>Compulsory Courses</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credit Hours</b>
CT-506	Advanced Analysis of Algorithms	3
CT-508/CT-575	Cryptography.	3
CT-509	Distributed Systems.	3
CT-539	Advanced Computer Networking .	3
CT-574	Information Privacy and Security.	3

<b>Elective Courses</b>		
<b>Course Code</b>	<b>Course Title</b>	<b>Credit Hours</b>
CT-507	Wireless and Mobile Communication Networks.	3
CT-532	Information System Audit.	3
CT-541	Network Security.	3
CT-542	Information Security Management.	3
CT-543	Database Security .	3
CT-544	Cyber Crimes and Security.	3
CT-545	Digital Forensics.	3
CT-546	Secure E-Commerce.	3
CT-547	Secure Programming.	3
CT-548	Security Testing Theory and Practice.	3
CT-549	Multimedia Security and Privacy.	3
CT-550	Trusted Computing.	3
CT-551	Fault Tolerance and Reliability.	3
CT-552	Quantum Cryptography.	3
CT-553	Emerging Trends in Information Security.	3
CT-554	Ethical Hacking.	3
CT-555	Cloud Security	3
CT-556	Intrusion Detection.	3
CT-557	Privacy Engineering.	3
CT-558	Distributed Blockchain Technologies	3
CT-571	Nature Inspired Optimisation Algorithms.	3
CT-5002	Thesis.	6