

M Tech in Information Security

SCHEME OF STUDY (wef July 2021)

First Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
IS 511	Mathematical Foundations of Information Security	3	-	-	3
IS 512	Computer&Network Security	3	-	-	3
IS 513	Cybercrime & Information Warfare	3	-	-	3
IS 514	Malware Analysis & Reverse Engineering	3	-	-	3
HUM 511	Communication Skills	2	-	-	2
	Elective-1 (A)	3	-	-	3
	Elective-2 (B)	3	-	-	3
IS 515	Lab-I	-	-	2	1
IS 516	Seminar-I	-	-	2	1
Total Hours: 24 Total Credits: 22		Total Semester Credits			22

Second Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
IS 521	Applied Cryptography	3	-	-	3
IS 522	Database Security & Access Control	3	-	-	3
IS 523	Digital Forensics	3	-	-	3
	Elective-3 (A)	3	-	-	3
	Elective-4 (A)	3	-	-	3
	Elective-5 (C)	3	-	-	3
MTH 524	Research Methodology	1	1	-	2
IS 525	Lab-II	-	-	2	1
IS 526	Seminar-II	-	-	2	1
Total Hours: 24 Total Credits: 44		Total Semester Credits			22

Maulana Azad National Institute of Technology, Bhopal – 462003
Computer Science and Engineering Department

M Tech in Information Security

Third Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
IS 611	Dissertation Phase - I	-	-	32	16
Total Hours: 32 Total Credits: 60		Total Semester Credits			16

Fourth Semester:

Course No.	Subject	Schemes of studies periods per week			Total Credits
		L	T	P	
IS 621	Dissertation Phase - II	-	-	40	20
Total Hours: 40 Total Credits: 80		Total Semester Credits			20

Maulana Azad National Institute of Technology, Bhopal – 462003
Computer Science and Engineering Department

M Tech in Information Security

List of Program Electives A		List of Open Electives C	
IS 551	Biometric	ARP - 581	Introduction to Urban Planning
IS 552	Privacy: Data & User Protection	BSE – 581	Bioprocess Engineering
IS 553	Secure Software Engineering	BSE – 582	Biophysics Tools and Techniques
IS 554	Steganography & Digital Watermarking	CHE – 581	Analytical Techniques
IS 555	Security Threats & Modelling	CHE – 582	Green Technology & Processes
IS 556	Penetration Testing and Vulnerability Analysis	CE – 581	Solid Waste Management
IS 557	Ethical Hacking	CE – 582	Basic Concept of GIS
IS 558	Security Operations and Incidence Response	CE – 583	Road Safety
IS 559	Internet Security, Tools and Techniques	PHY – 581	Nanotechnology and Nanoscience
IS 560	Information Risk Management and Compliance	EE – 581	Electric Machines & Applications
IS 561	Intellectual Property and Espionage	EE – 582	Control and Instrumentation
		ECE – 581	Introduction to Fuzzy Logic
		ECE – 582	Neural Networks and its Applications
List of Departmental Electives B		EC - 581	Energy Resource Technologies
AC 512	Advanced Data Structures	HUM – 581	Intellectual Property Rights for Engineers
AC 514	Soft Computing	HUM – 582	Applied Psychology: Human Centered Design and Engineering
AI 513	Machine Learning	MTH – 581	Advanced Operations Research
AI 552	Reinforcement Learning	MTH – 582	Computing Technologies
CN 514	Wireless Networking	ME – 581	Value Engineering
CN 555	Information Theory and Coding	ME – 582	Design Thinking
		ME - 583	Mechatronics and NDT in Engineering
		MME – 581	Advanced Instrumentation Methods for Material Analysis
		MME – 582	Smart Materials and their Application
		MBA-581	Engineering Startup Management