

Maulana Azad

NATIONAL INSTITUTE OF TECHNOLOGY, Bhopal-462003

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

M. Tech. in *Information Security*

SCHEME OF STUDY (Revised April 2020)



First Semester

Course No.	Subject	Schemes of Studies Periods per week			Total Credits
		L	T	P	
IS 101	Mathematical Foundations of Information Security	3	1	-	4
IS 102	Computer & Network Security	3	1	-	4
IS 103	Cybercrime & Information Warfare	3	1	-	4
IS 104	Malware Analysis & Reverse Engineering	3	1	-	4
	Elective 1(A)	3	1	-	4
	Elective 2(B)	3	1	-	4
IS 105	NPTEL/MOOC Communication Skills	2	-	-	2
IS 106	Lab-I	-	-	2	1
IS 107	Seminar-I	-	-	2	1
Total Hours 30		Total credits			28
Total Credits (Cumulative) 28					

Second Semester

Course No.	Subject	Schemes of Studies Periods per week			Total Credits
		L	T	P	
IS 201	Applied Cryptography	3	1	-	4
IS 202	Database Security & Access Control	3	1	-	4
IS 203	Digital Forensics	3	1	-	4
	Elective 3(A)	3	1	-	4
	Elective 4(A)	3	1	-	4
	Elective 5(C)	3	1	-	4
IS 204	Lab - II	-	-	2	1
IS 205	Research Methodology, Technical Report and Paper Writing	-	2	-	1
IS 206	Seminar-II	-	-	2	2
Total Hours 24		Total credits			28
Total Credits (Cumulative) 56					

Third Semester

Course No.	Subject	Schemes of Studies Periods per week			Total Credits
		L	T	P	
IS 301	Project Phase -I	-	-	24	12
Total Hours 24 Total Credits (Cumulative) 68		Total credits			12

Fourth Semester

Course No.	Subject	Schemes of Studies Periods per week			Total Credits
		L	T	P	
IS 401	Project Phase –II / Dissertation	-	-	24	12
Total Hours 24 Total Credits (Cumulative) 80		Total credits			12

List of Electives

Group A: Program Electives

Subject Code	Name
IS 501	Biometric
IS 502	Privacy: Data & User Protection
IS 503	Secure Software Engineering
IS 504	Steganography & Digital Watermarking
IS 505	Security Threats & Modelling
IS 506	Penetration Testing and Vulnerability Analysis
IS 507	Ethical Hacking
IS 508	Security Operations and Incidence Response
IS 509	Internet Security, Tools and Techniques
IS 510	Information Risk Management and Compliance
IS 511	Intellectual Property and Espionage

Group B: Department Electives (for other programs of same department only)

Subject Code	Name
IS 601	Steganography & Digital Watermarking
IS 602	Ethical Hacking
IS 603	Internet Security, Tools and Techniques
IS 604	Intellectual Property and Espionage

Group C: Institute Electives (for other departments only)

Subject Code	Name
IS 701	Internet Security, Tools and Techniques
IS 702	Intellectual Property and Espionage