

SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

COURSE STRUCTURE

M. TECH.

in

CYBER SECURITY

2 YEAR PROGRAMME



**GAUTAM BUDDHA UNIVERSITY
GAUTAM BUDH NAGAR, GREATER NOIDA**

SEMESTER - I

Sr. No.	Courses Code	Courses	L-T-P	Credits
1	MS101	Fundamentals of Cyber Security	3-1-0	4
2	MS103	Mathematical Foundation of Cyber Security	3-1-0	4
3	MS105	Cyber Crime, Cyber Laws & IPRs	3-1-0	4
4	MS107	Computers & Programming Concepts	3-1-0	4
5		Open Elective (OE1)	3-0-0	3
6	MS181	Computers & Programming Concepts Lab	0-0-3	2
7	MS183	Fundamentals of Cyber Security Lab	0-0-3	2
8	GP	General Proficiency	Non Credit	
Total Credits			23	
Total Contact Hours			15-4-6 = 25	

SEMESTER - II

Sr. No.	Courses Code	Courses	L-T-P	Credits
1	MS102	Information Warfare	3-0-0	3
2	MS104	Digital Forensics and Incident Response	3-0-0	3
3	MS106	Ethical Hacking and Penetration Testing	3-0-0	3
4	MS108	Research Techniques & Methods	3-0-0	3
5		Generic Elective (GE1)	3-1-0	4
5	MS182	Ethical Hacking and Penetration Testing Lab	0-0-3	2
6	MS592	Major Project	0-0-10	5
7	GP	General Proficiency	Non Credit	
Total Credits			23	
Total Contact Hours			15-1-13 = 29	

SEMESTER - III

Sr. No.	Courses Code	Courses	L-T-P	Credits
1	MS109	Operating Systems Security	3-0-0	3
2	MS111	Risk Management and Audit	3-0-0	3
3		Elective-I	3-0-0	3
4		Elective-II	3-0-0	3
5	MS185	Operating Systems Security Lab	0-0-3	2
6	MS691	Dissertation Part I	0-0-14	7
7	GP	General Proficiency	Non Credit	
Total Credits			21	
Total Contact Hours			12-0-17 = 29	

SEMESTER - IV

Sr. No.	Courses Code	Courses	L-T-P	Credits
1	MS690	Dissertation Part-II	-----	23
2	GP	General Proficiency	Non Credit	
Total Credits			23	

GRAND TOTAL CREDITS = 90

OPEN ELECTIVE

Sr. No.	Courses Code	Courses	L-T-P	Credits
1	CH503	Patent Laws and IPR Issues	3-0-0	3
2	HU501	Advanced Course in Professional Communication	3-0-0	3

GENERIC ELECTIVE

Sr. No.	Courses Code	Courses	L-T-P	Credits
1	MA402	Modeling and Simulation	3-1-0	4
2	MA416	Probability and Stochastic Process	3-1-0	4

ELECTIVE-I

Sr. No.	Courses Code	Courses	L-T-P	Credits
1	MS113	Mobile and Wireless Network Security	3-0-0	3
2	MS115	Access Control and Identity Management	3-0-0	3
3	MS117	Enterprise Security & Management	3-0-0	3
4	MS119	Applied Cryptography	3-0-0	3
5	MS121	Analysis of Social Networks	3-0-0	3
6	MS123	Physical Security of IT Infrastructure	3-0-0	3
7	MS125	TCP/IP Packet Analysis	3-0-0	3

ELECTIVE-II

Sr. No.	Courses Code	Courses	L-T-P	Credits
1	MS127	Biometric Systems & Security	3-0-0	3
2	MS129	Blockchain Technology	3-0-0	3
3	MS131	Android Security Design and Internals	3-0-0	3
4	MS133	Malware Analysis	3-0-0	3
5	MS135	Principles of Secure Coding	3-0-0	3
6	MS137	Intrusion Detection and Prevention Systems	3-0-0	3
7	MS139	Cloud Architectures and Security	3-0-0	3