

DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY, MIT, MANIPAL

M.TECH COMPUTER SCIENCE AND ENGINEERING(CYBERSECURITY)

Course Structure (Applicable to 2025 admission onwards)

Year	FIRST SEMESTER						SECOND SEMESTER						
	Sub Code	Subject Name	L	T	P	C	Sub Code	Subject Name	L	T	P	C	
I	MAT ****	Mathematical Foundations of Cybersecurity	4	0	0	4	ICT ****	Mobile and Web Application Security	3	0	2	4	
	ICT ****	Applied Cryptography	4	0	0	4	ICT ****	Digital Forensics and Incident Response	3	0	2	4	
	ICT ****	Zero Trust Security	3	0	2	4	ICT ****	Elective I	3	0	2	4	
	ICT ****	AI for Cybersecurity	3	0	2	4	ICT ****	Elective II	3	0	2	4	
	ICT ****	Principles of Secure Coding	3	0	2	4	ICT ****	Elective III	3	0	2	4	
	HUM 5101	Research Methodology and Technical Communication	1	0	3	2	***.****	Open Elective	3	0	0	3	
	ICT ****	Applied Cryptography and Secure Coding Lab	0	1	3	2	ICT ****	Mobile and Web Application Security Lab	0	0	3	1	
		Information Security Mini Project	0	0	3	1		Digital Forensics Mini Project	0	0	3	1	
		Total	18	1	15	25	Total		18	0	16	25	
II	THIRD AND FOURTH SEMESTERS												
	ICT 6099	Project Work								0	0	0	25
		Total								0	0	0	25

Program Electives

1. ICT*** Quantum Cryptography
2. ICT*** Threat Intelligence
3. ICT*** Cyber Physical Systems Security
4. ICT*** Software Defined Networking Security
5. ICT*** Mobile and Wireless Security
6. ICT*** Blockchain Technology
7. ICT*** Ethical hacking
8. ICT*** Cloud Security
9. ICT*** Malware Analysis and Intrusion Detection (MA & ID)
10. ICT*** Security architecture
11. ICT*** Secure Network Design
12. ICT*** Identity and Access Management

Open Electives

1. ICT **** Game Theory and Applications
2. ICT **** Real Time Systems
3. ICT **** IoT Security