



MTECH (by Research) IN CYBER SECURITY

Semester wise Courses

SEMESTER 1	SEMESTER 2
Mathematical Foundations	Advance Cryptography and Polymorphic Data Encryption
Literature Review and Technical Writing	Penetration Testing using Python
Security Threats and Malware Analysis	Incident Response and Redressal Methods
Critical Information Infrastructure and Attack Modeling	Data Wiping and Destruction
Open Elective 1	Course Elective - 2
<ul style="list-style-type: none"> • Yoga and Meditation for Digital Citizens / World Adressing Social Problems through Technology Proliferation 	<ul style="list-style-type: none"> • Data Encoding and Comnpression Techniques
	<ul style="list-style-type: none"> • Web Services and Service Oriented Architecture
	<ul style="list-style-type: none"> • Multidimensional Data Modelling
Course Elective 1	Open Elective - 2
<ul style="list-style-type: none"> • Computational Intelligence 	<ul style="list-style-type: none"> • Digital Journalism
<ul style="list-style-type: none"> • Game Theory 	<ul style="list-style-type: none"> • Mental Conditioning and Stress Management
<ul style="list-style-type: none"> • Man Machine Interface and IoT 	Specialization Elective 2
Specialization Elective	<ul style="list-style-type: none"> • Digital Devices Security
<ul style="list-style-type: none"> • Security Metrics and Key Performnce Indiactors 	<ul style="list-style-type: none"> • Information Security Management Certification
<ul style="list-style-type: none"> • Cyber Crime, Cyber Law and IT Act 	Practical
<ul style="list-style-type: none"> • Cyber Forensics Aaudit and Investigation 	Advance Cryptography and Polymorphic Data Encryption Lab
Practical	
Engineering in Industry / working	Penetration Testing using Python Lab
Security Threats and Malware Analysis Lab	Basics of Incidence Response and Malware Analysis Lab
Critical Information Infrastructure and Attack Modeling Lab	
Literature Review and Technical Writing Lab	

SEMESTER 3	SEMESTER 4
Research Methodology	Internship and Dissertation
Hardware and Firmware Security	
Project Ideation and Designing DPR	
Specialization Elective	
<ul style="list-style-type: none"> ● Working on Security Issues in BFSI 	
<ul style="list-style-type: none"> ● Working on Security Issues in Homeland Security 	
<ul style="list-style-type: none"> ● Working on Security Issues in Governance 	
<ul style="list-style-type: none"> ● Working on Security Issues in General Public 	
<ul style="list-style-type: none"> ● Working on Security Issues in Any other open area of interest 	
Practical	
Research Methodology Lab	
Hardware and Firmware Security Lab	
Project Ideation and Designing DPR Lab	