SVKM's NMIMS
Mukesh Patel School of Technology Management & Engineering
Department of Information Technology

Course Structure for B.Tech Computer Science and Engineering (Cybersecurity)

Batch admitted in AY 2024-25

Semester - I		Semester -II	
Sr No.	Course Name	Sr No.	Course Name
1	Calculus	1	Linear Algebra and Ordinary Differential Equations
2	Physics	2	Quantum and Statistical Physics
3	Elements of Biology	3	English Communication
4	Programming for Problem Solving	4	Environmental Science
5	Engineering Graphics and Design	5	Basic Electrical and Electronics Engineering
6	Professional Ethics	6	Principles of Economics and Management
8	Constitution of India	7	Python Programming
9	Critical Thinking	8	Digital Manufacturing Laboratory
		9	Electrical and Electronics Workshop
		10	Design Thinking

Semester -III		Semester -IV	
Sr No.	Course Name	Sr No.	Course Name
1	Discrete Mathematics	1	Probability and Statistics
2	Signals and Systems	2	Management Accounting for Engineers
3	Technical Communication	3	Operating Systems
4	Data Structures and Algorithms	4	Computer Organisation and Architecture
5	Digital Logic Design	5	Introduction to Cryptography
6	Database Management Systems	6	Data Warehousing and Mining
7	Computer Networks	7	Object Oriented Programming
8	Web Programming	8	Mobile Application Development
9	Community Service		

Semester -V		Semester -VI	
Sr No.	Course Name	Sr No.	Course Name
1	Cybersecurity Fundamentals	1	Interpersonal Skills
2	Network Security	2	Vulnerability Assessment and Penetration Testing
3	Software Engineering	3	Digital Forensics and Incident Response
4	Department Elective I	4	System Administration
5	Visual Analytics	5	Department Elective II
6	Open Elective - I	6	Department Elective III
7	Open Elective - II	7	Open Elective - III
		8	Open Elective - IV

Semester -VII		Semester -VIII	
Sr No.	Course Name	Sr No.	Course Name
1	Department Elective IV	1	Project
2	Department Elective V		
3	Human and Legal Aspects of Cybersecurity		
4	Cybersecurity Risk management		
5	Open Elective - V		
6	Capstone Project		

Department Electives

Department Elective I (Sem V)
Secure Coding
Cloud Security
Data Privacy
AI and ML for Cybersecurity

Department Elective II (Sem VI)	Department Elective III (Sem VI)
Name of the course	Name of the course
Application Security Testing	Threat Modelling and Intelligence
Mobile Device Security and Forensics	Reverse Engineering and Malware Analysis
Elliptic Curve Cryptography	Blockchain Security and Forensics
Digital Watermarking and Steganography	IoT Security

Department Elective IV (Sem VII)	Department Elective V (Sem VII)
Cyber Physical Systems Security	Information Systems Audit
DevSecOps	Human Centered Cybersecurity
Digital Image and Video Forensics	