

Department of Computer Science Engineering

M.Tech. Cyber Security

Curriculum

**(Applicable to the students admitted from AY 2025
onwards)**



School of Engineering and Sciences

SRM University - AP, Andhra Pradesh.

ABBREVIATIONS

AEC	Ability Enhancement Courses
VAC	Value Added Courses
SEC	Skill Enhancement Courses
FIC	Foundation & Interdisciplinary Courses
OE	Open Elective
RDIP	Research / Design / Industrial Practice / Project / Thesis / Internship
CE	Core Elective
CC	Core Course
SE	Stream Elective
TE	Technical Elective

SEMESTER - I							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	AEC	AEC	Research Seminar	0	0	1	1*
2	VAC	VAC	Community Engagement and Social Responsibility	0	0	1	1*
3	SEC	SEC	Design Thinking	1	0	1	2
4	FIC	FIC	Mathematical Foundation for Cyber Security	0	2	1	3
5	Core	CC	Network Security and Programming	3	0	1	4
6	Core	CC	Web Application Penetration Testing	3	0	1	4
7	Core	CC	Advanced Algorithms and Analysis	3	0	1	4
8	Core	CC	Applied Cryptography	3	0	1	4
9	Core	CC	Advanced Python Programming Lab	0	0	2	2
Semester Total				13	2	8	23

SEMESTER - II							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	AEC	AEC	Research Seminar	0	0	1	1
2	VAC	VAC	Community Engagement and Social Responsibility	0	0	1	1
3	SEC	SEC	Entrepreneurial mindset	1	0	1	2
4	Core	CC	Security in Cloud Computing and IoT	3	0	1	4
5	Core	CC	Digital Forensics and Incident Response	3	0	1	4
6	Core	CC	Blockchain Technology and Applications	3	0	1	4
7	Elective	CE	Core Elective – I	3	0	0	3
8	Elective	CE	Core Elective – II	3	0	0	3
9	RDIP	RDIP	Project Management	0	2	1	3
Semester Total				16	2	7	25

SEMESTER - III							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	RDIP	RDIP	Thesis - I	0	0	14	14
2	RDIP	RDIP	Industrial Practice	0	0	3	3
Semester Total				0	0	17	17

SEMESTER - IV							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	RDIP	RDIP	Thesis II	0	0	15	15
Semester Total				0	0	15	15

Core Elective							
S. No	Category	Sub-Category	Course Title	L	T/D	P/Pr	C
1	Elective	CE	Information Theory and Coding	3	0	0	3
2	Elective	CE	Biometric Security	3	0	0	3
3	Elective	CE	Intrusion Detection and Prevention Systems	3	0	0	3
4	Elective	CE	Software and System Security	3	0	0	3
5	Elective	CE	Big Data Security and Privacy	3	0	0	3
6	Elective	CE	Digital Watermarking and Steganography	3	0	0	3
7	Elective	CE	Ethical Hacking	3	0	0	3
8	Elective	CE	Software Vulnerability Analysis	3	0	0	3
9	Elective	CE	Information Security and Privacy	3	0	0	3
10	Elective	CE	Information Retrieval	3	0	0	3
11	Elective	CE	Soft Computing	3	0	0	3
12	Elective	CE	Optimization Paradigms: Exploring Methods and Strategic Frameworks	3	0	0	3