

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M. Tech. COMPUTER NETWORKS AND INFORMATION SECURITY/
COMPUTER NETWORKS/ CYBER SECURITY

EFFECTIVE FROM ACADEMIC YEAR 2022 - 23 ADMITTED BATCH
R22 COURSE STRUCTURE AND SYLLABUS

I YEAR I – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Core - I	Advanced Computer Networks	3	0	0	3
Professional Core - II	Advanced Data Structures	3	0	0	3
Professional Elective - I	1. Information Security 2. Vulnerability Assessment & Penetration Testing 3. Mobile Application Security	3	0	0	3
Professional Elective - II	1. Network Coding Theory 2. Advanced Wireless Networks 3. Digital Forensics	3	0	0	3
Lab - I	Advanced Data Structures Lab	0	0	4	2
Lab - II	Professional Elective - I Lab	0	0	4	2
	Research Methodology & IPR	2	0	0	2
Audit - I	Audit Course- I	2	0	0	0
	Total	16	0	8	18

I YEAR II – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Core - III	Distributed Systems	3	0	0	3
Professional Core - IV	Web & Database Security	3	0	0	3
Professional Elective - III	1. Intrusion Detection & Prevention Systems 2. Cloud Security 3. Block chain Technology	3	0	0	3
Professional Elective - IV	1. Digital Payment Systems 2. User Authentication Techniques 3. Data Analytics for Fraud Detection	3	0	0	3
Lab - III	Web & Database Security Lab	0	0	4	2
Lab - IV	Professional Elective - III Lab	0	0	4	2
	Mini Project with Seminar	0	0	4	2
Audit - II	Audit Course- II	2	0	0	0
	Total	14	0	12	18

II YEAR I – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Elective - V	1. Cyber Security 2. Network Management Systems and Operations 3. Vehicular Ad-Hoc Networks	3	0	0	3
Open Elective	Open Elective	3	0	0	3
Dissertation	Dissertation Work Review - II	0	0	12	6
	Total	6	0	12	12

II YEAR II - SEMESTER

Course Code	Course Title	L	T	P	Credits
Dissertation	Dissertation Work Review - III	0	0	12	6
Dissertation	Dissertation Viva-Voce	0	0	28	14
	Total	0	0	40	20

***For Dissertation Work Review - I, Please refer 7.8 in R19 Academic Regulations.**

Audit Course I&II:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by yoga
8. Personality Development Through Life Enlightenment Skills