

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M. Tech. COMPUTER SCIENCE AND ENGINEERING/ COMPUTER SCIENCE
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	Mathematical Foundations of Computer Science	3	0	0	3
Professional Core - II	Advanced Data Structures	3	0	0	3
Professional Elective - I	1. Database Programming with PL/SQL 2. Deep Learning 3. Natural Language Processing	3	0	0	3
Professional Elective - II	1. Applied Cryptography 2. Software Quality Engineering 3. Mining Massive Datasets	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	Advanced Algorithms	3	0	0	3
Professional Core - IV	Advanced Computer Architecture	3	0	0	3
Professional Elective - III	1. Enterprise Cloud Concepts 2. Advanced Computer Networks 3. Edge Analytics	3	0	0	3
Professional Elective - IV	1. Bio Informatics 2. Nature Inspired Computing 3. Robotic Process Automation	3	0	0	3
Lab - III	Advanced Algorithms 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 III – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Elective - V	1. Digital Forensics 2. High Performance Computing 3. Quantum Computing	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