JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M. Tech. ARTIFICIAL INTELLIGENCE& DATA SCIENCE
COURSE STRUCTURE AND SYLLABUS (R22)

EFFECTIVE FROM ACADEMIC YEAR 2022-23 ADMITTED BATCH

I YEAR ISEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Core – I	Artificial Intelligence and Intelligent Systems	3	0	0	3
Professional Core – II	Statistical Foundations for Data Science	3	0	0	3
Professional Elective – I	1. Advanced Data Structures using Python 2. Machine Learning 3. Database Programming with PL/SQL	3	0	0	3
Professional Elective – II	1. Functional Programming 2. Game Theory and Applications 3. Computational Neuro Science	3	0	0	3
Lab – I	Artificial Intelligence and Intelligent Systems 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 IISEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Core – III	Deep Learning	3	0	0	3
Professional Core – IV	Data Analytics	3	0	0	3
Professional Elective – III	1. Social Media Mining 2. Visual Analytics 3. Enterprise Cloud Concepts	3	0	0	3
Professional Elective – IV	1. Reinforcement Learning 2. Machine Translation 3. Nature Inspired Computing	3	0	0	3
Lab – III	Deep Learning 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. Predictive Analytics 2. Conversational AI 3. Computer Vision and Robotics	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**

Note: 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

Open Electives for other Departments:
1. IPR in Artificial Intelligence
2. Fault Tolerance Systems
3. Intrusion Detection Systems
4. Digital Forensics
5. Optimization Techniques
6. Cyber Physical Systems
7. Graph Analytics