

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
**M. Tech. (ARTIFICIAL INTELLIGENCE)**  
**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	Artificial Intelligence and Intelligent Systems	3	0	0	3
Professional Core – II	Statistical Foundations for Artificial Intelligence	3	0	0	3
Professional Elective – I	1. Advanced Data Structures 2. Machine Learning 3. Database Programming with PL/SQL	3	0	0	3
Professional Elective – II	1. Cognitive Systems 2. Game Theory and Applications 3. Computer Vision and Robotics	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
	<b>Total</b>	<b>16</b>	<b>0</b>	<b>8</b>	<b>18</b>

Professional Elective- I and Professional Elective- I Lab must be of same course.

**I YEAR II SEMESTER**

Course Code	Course Title	L	T	P	Credits
Professional Core – III	Deep Learning	3	0	0	3
Professional Core – IV	Speech Information Processing	3	0	0	3
Professional Elective – III	1. Big Data Analytics 2. Functional Programming 3. Enterprise Cloud Concepts	3	0	0	3
Professional Elective – IV	1. Reinforcement Learning 2. Machine Translation 3. Cyber Security	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
	<b>Total</b>	<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>

Professional Elective- III and Professional Elective- III Lab must be of same course.

**II YEAR I SEMESTER**

Course Code	Course Title	L	T	P	Credits
Professional Elective – V	1. Block chain Technology 2. Nature Inspired Computing 3. Conversational AI	3	0	0	3
Open Elective	Open Elective	3	0	0	3
Dissertation	Dissertation Work Review – II	0	0	12	6
	<b>Total</b>	<b>6</b>	<b>0</b>	<b>12</b>	<b>12</b>

**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
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>20</b>

**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:**

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