MAULANA AZAD
NATIONAL INSTITUTE OF TECHNOLOGY, BHOPAL – 462003
Centre of Artificial Intelligence
M. Tech. in Artificial Intelligence (FULL TIME) - Proposed for 2025

FIRST SEMESTER

Course No.	Subject	Scheme of Studies Periods per Week			Total Credit
		L	T	P	
AI 1101	Statistical Methods	3	-	-	3
AI 1102	Machine Learning and Deep Learning	3	-	-	3
AI 1103	Soft Computing	3	-	-	3
AI 1151-1159	Department Elective -1	3	-	-	3
AI 1161-1169	Department Elective -2	3	-	-	3
AI 1104	LAB-I (ML & DL Lab)	-	-	2	1
AI 1105	LAB-II (Programming Lab-I)	-	-	2	1
AI 1106	Seminar-I	-	-	2	1
AI 1107	Project-I (Self Learning)	-	-	-	2
HUM 1101	Communication Skills	2	-	-	0
Total Hours: 23 Total Cumulative Credits: 20		Total Semester Credits			20

- Communication skills will be Audit Course of 2 credits which will not be counted in SGPA/CGPA Calculations

SECOND SEMESTER

Course No.	Subject	Scheme of Studies Periods per Week			Total Credit
		L	**T**	**P**	
AI 1201	Generative AI	3	-	-	3
AI 1202	Computer Vision	3	-	-	3
AI 1251-1259	Department Elective -3	3	-	-	3
AI 1261-1269	Department Elective -4	3	-	-	3
	Open Elective	3	-	-	3
AI 1203	LAB-III (Generative AI Lab)	-	-	2	1
AI 1204	LAB-IV (Programming Lab-II)	-	-	2	1
AI 1205	Seminar-II	-	-	2	1
AI 1206	Project-II (Self Learning)	-	-	-	2
Total Hours: 23 Total Cumulative Credits: 40		Total Semester Credits			20

THIRD SEMESTER

Course No.	Subject	Scheme of Studies Periods per Week			Total Credit
		L	**T**	**P**	
AI 2101	Dissertation Phase – I	-	-	40	20
Total Hours: 40 Total Cumulative Credits: 60		Total Semester Credits			20

FOURTH SEMESTER

Course No.	Subject	Scheme of Studies Periods per Week			Total Credit
		L	**T**	**P**	
AI 2201	Dissertation Phase – II	-	-	40	20
Total Hours: 40 Total Cumulative Credits: 80		Total Semester Credits			20

DEPARTMENT ELECTIVES 1 AND 2

Department Elective 1		Department Elective 2	
Subject Code	Subject	Subject Code	Subject
AI 1151	Web Search & Information Retrieval	AI 1161	Reinforcement Learning
AI 1152	Computer and Network Security	AI 1162	Cryptography
AI 1153	Cluster and Grid Computing	AI 1163	Wireless Networking
AI 1154	Knowledge base systems	AI 1164	Game Theory
AI 1155	Fundamentals of Robotics	AI 1165	Sensors, Microcontrollers and Embedded System
AI 1156	Advance Data Structures	AI 1166	Quantum Computing
AI 1157	Expert Systems	AI 1167	Scalable system for data science
		AI 1168	Architecture of Large System

DEPARTMENT ELECTIVES 3 AND 4

Department Elective 3		Department Elective 4	
Subject Code	Subject	Subject Code	Subject
AI 1251	Artificial & Evolutionary Algorithms	AI 1261	Parallel Algorithms
AI 1252	Brain Computer Interface	AI 1262	Big Data Technologies
AI 1253	Internet of Things (IoT)	AI 1263	Graph Theory and Network algorithms
AI 1254	Natural Language Processing	AI 1264	Stochastic Processes and Queuing Theory
AI 1255	Advanced Machine Learning	AI 1265	Privacy & Database Security
AI 1256	High Performance Computing	AI 1266	Operating System Design
AI 1257	Optimization Techniques		