MANIPAL UNIVERSITY JAIPUR
Department of Computer Science and Engineering
B Tech (Hons) Computer Science and Engineering with specialization in Artificial Intelligence & Machine Learning

Year	Sub. Code	Subject Name (THIRD SEMESTER)	L	T	P	C	Sub. Code	Subject Name (FOURTH SEMESTER)	L	T	P	C
II	EO2001	Economics	3	0	0	3	BB0025	Value, Ethics and Governance	2	0	0	2
	MA2101	Engineering Mathematics - III	3	0	0	3	MA2201	Engineering Mathematics - IV	3	0	0	3
	AI2101	Relational Database Management Systems	3	1	0	4	AI2201	Software Engineering & Project Management	3	1	0	4
	AI2102	Computer Organization and Architecture	3	1	0	4	AI2202	Operating Systems	3	1	0	4
	AI2103	Data Structures and Algorithms	3	1	0	4	AI2203	Principles of Artificial Intelligence	3	1	0	4
	AI2104	Object Oriented Programming	3	1	0	4	AI2204	Automata Theory	3	0	0	3
	AI2130	Relational Database Management Systems Lab	0	0	2	1	*** ***	Open Elective - I	3	0	0	3
	AI2131	Data Structures and Algorithms Lab	0	0	2	1	AI2230	Operating System Lab	0	0	2	1
	AI2132	Object Oriented Programming Lab using Python	0	0	2	1	AI2231	Web Technology Lab	0	0	2	1
	AI2170	Project Based Learning – I	0	0	2	2	AI2232	Principles of Artificial Intelligence Lab	0	0	2	1
							AI2270	Project Based Learning - II	0	0	2	2
		Total	**18**	**4**	**8**	**27**		**Total**	**20**	**3**	**8**	**28**

Year	Sub. Code	Subject Name (FIFTH SEMESTER)	L	T	P	C	Sub. Code	Subject Name (SIXTH SEMESTER)	L	T	P	C
III	AI3101	Soft Computing Methods	3	1	0	4	BB0026	Organization and Management	3	0	0	3
	AI3102	Design and Analysis of Algorithms	3	1	0	4	AI3201	Machine Learning	3	1	0	4
	AI3103	Computer Networks	3	1	0	4	AI3202	Computer Vision and Pattern Recognition	3	1	0	4
	AI3104	Foundation of Data Science	3	1	0	4	AI3204	Natural Language Processing	3	1	0	4
	AI3105	Game Theory	3	1	0	4	AI32XX	Program Elective - I	3	0	0	3
	******	Open Elective – II	3	0	0	3	*** ****	Open Elective - III	3	0	0	3
	AI3130	Design and Analysis of Algorithm Lab	0	0	2	1	AI3230	Machine Learning Lab	0	0	2	1
	AI3131	Computer Networks Lab	0	0	2	1	AI3231	Computer Vision and Pattern Recognition Lab	0	0	2	1
	AI3132	Foundation of Data Science Lab	0	0	2	1	AI3270	Minor Project (Thematic projects)	0	0	6	3
	AI3170	Project Based Learning - III	0	0	2	2						
		Total	**18**	**5**	**8**	**28**		**Total**	**18**	**3**	**10**	**26**

		SEVENTH SEMESTER						EIGHTH SEMESTER				
IV	AI4101	Deep Learning	3	1	0	4	AI4270	Major Project	-	-	-	12
	AI4102	Text Mining	3	1	0	4						
	AI4103	Recommender Systems	3	1	0	4						
	AI41XX	Program Elective - II	3	0	0	3						
	AI41XX	Program Elective - III	3	0	0	3						
	AI41XX	Program Elective - IV	3	0	0	3						
	AI4170	Industrial Training	0	0	2	1						
		Total	**18**	**3**	**2**	**22**		**Total**	**0**	**0**	**0**	**12**

3rd Year Programme Electives (PE-I)	Programme Electives (PE-II, PE-III, PE-IV)	Open Electives (OE)
AI3240: Machine Learning Applications in IOT AI3241: Reinforcement Learning AI3242: Data Mining AI3243: Compiler Construction	AI4140: Information Retrieval AI4141: Augmented & Virtual Reality AI4142: Speech Synthesis & Recognition AI4143: Artificial Intelligence in Healthcare AI4144: Social Network Analysis AI4145: AI For Cyber Security AI4146: Big Data Analytics AI4147: Data Privacy & Security AI4148: Image & Video Analytics	AI0001: Introduction to Artificial Intelligence AI0051: C For Everyone AI0052: Cybersecurity Fundamentals