Scheme Document

B. Tech. in CSE (Artificial Intelligence & Machine Learning)

For 2022 Batch onwards

Year	Semester	Course Code	Course Name	Type	L	T	P	Credits
FIRST YEAR								
1ST	1ST	MAL105	Calculus for Data Science	BS	3	1	0	4
1ST	1ST	CSL110	Conversational AI	DC	2	0	2	3
1ST	1ST	CSL101	Computer Programming	DC	3	0	2	4
1ST	1ST	CSL111	AI, Ethics and Society	DC	2	0	0	2
1ST	1ST	ECL103	Applied Electronics	ES	3	0	2	4
1ST	1ST	HUL102	Environmental Studies	HU	2	0	0	0
1ST	1ST	SAP101	Health, Sports and Safety	HU	0	0	2	0
			Subtotal		**15**	**1**	**8**	**17**
1ST	2nd	MAL106	Probability and Statistics	BS	3	1	0	4
1ST	2nd	MAL107	Introduction to Linear Algebra	BS	3	1	0	4
1ST	2nd	CSL102	Data Structures	DC	3	0	2	4
1ST	2nd	CSL103	Application Programming	DC	3	0	2	4
1ST	2nd	HUL 101	Communication Skills	HU	2	0	2	3
1ST	2nd	CSP201	IT Workshop – I	DC	0	0	4	2
			Subtotal		**14**	**2**	**10**	**21**
Total								**38**
SECOND YEAR								
2nd	3rd	CSL202	Introduction to Object Oriented Programming	DC	3	0	2	4
2nd	3rd	CSL210	Data Structures with Applications	DC	2	0	2	3
2nd	3rd	CSL204	Discrete Maths and Graph Theory	DC	3	1	0	4
2nd	3rd	CSL216	Foundations of Computing	DC	3	0	0	3
2nd	3rd	CSL203	Computer System Organization	DC	3	0	0	3
2nd	3rd	HUL103	Introduction to Entrepreneurship	HU	3	0	0	3
2nd	3rd	CSP203	AI/ML Workshop - I	DC	0	0	4	2
			Subtotal		**17**	**1**	**8**	**22**
2nd	4th	CSL422	Machine Learning	DC	3	0	2	4
2nd	4th	CSL205	Design and Analysis of Algorithms	DC	3	0	2	4
2nd	4th	CSL206	Software Engineering	DC	3	0	0	3
2nd	4th	CSL207	Operating Systems	DC	3	0	2	4

2nd	4th	CSL301	Database Management Systems	DC	3	0	2	4
2nd	4th	CSL214	Data Handling and Visualization	DC	1	0	2	2
2nd	4th	CSP204	AI/ML Workshop – II	DC	0	0	4	2
			Subtotal		**16**	**0**	**14**	**23**
			Total					**45**
			THIRD YEAR					
3rd	5th	CSL421	Artificial Intelligence	DC	3	0	2	4
3rd	5th	CSL433	Natural Language Processing	DC	3	0	2	4
3rd	5th	CSL308	Computer Vision Techniques	DC	3	0	2	4
3rd	5th	CSL302	Computer Networks	DC	3	0	2	4
3rd	5th		Open Course –I	OC	3	0	0	3
3rd	5th	CSD301	Mini Project – I	DE	0	0	6	3
			Subtotal		**15**	**0**	**14**	**22**
3rd	6th	CSL454	Reinforcement Learning	DC	3	0	2	4
		CSL446	Neural Networks and Deep Learning	DC	3	0	0	3
3rd	6th	CSL317	Parallel and Distributed Computing	DC	3	0	0	3
3rd	6th		Open Course – II	OC	3	0	0	3
3rd	6th	CSL318	Optimization Techniques in ML	DC	3	0	0	3
3rd	6th	CSD302	Mini Project – II	DE	0	0	6	3
			Subtotal		**15**	**0**	**8**	**19**
			Total					**41**
			FINAL YEAR					

4th	7th	CSD 401	Project	DE	0	0	16	8
4th	7th		Elective – I	DE	3	0	0	3
4th	7th		Elective – II	DE	3	0	0	3
4th	7th		Elective – III	DE	3	0	2	4
4th	7th		MooC Course / Open Course – III	OC	3	0	0	3
			Subtotal		**12**	**0**	**18**	**21**
			OR					
4th	7th	CSD 402	Internship	DE	0	0	16	8
			Subtotal		**0**	**0**	**16**	**8**
Total								**21/8**
4th	8th	CSD 402	Internship	DE	0	0	16	8
			OR					
4th	8th		Elective – I	DE	3	0	0	3
4th	8th		Elective – II	DE	3	0	0	3
4th	8th		Elective – III	DE	3	0	2	4

4th	8th		MooC Course / Open Course – III	OC	3	0	0	3
4th	8th	CSD 401/ CSD 403	Project / Internship - II	DE	0	0	16	8
Subtotal					**12**	**0**	**18**	**21**
								8/21
Total								**29**
GRAND TOTAL								**153**

TYPE	CREDITS
BS	12
ES	04
HU	06
OC	09
DE	32
DC	90
Total	**153**