

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

2 nd	4 th	CSL301	Database Management Systems	DC	3	0	2	4
2 nd	4 th	CSL214	Data Handling and Visualization	DC	1	0	2	2
2 nd	4 th	CSP204	AI/ML Workshop – II	DC	0	0	4	2
Subtotal					16	0	14	23
Total								45
THIRD YEAR								
3 rd	5 th	CSL421	Artificial Intelligence	DC	3	0	2	4
3 rd	5 th	CSL433	Natural Language Processing	DC	3	0	2	4
3 rd	5 th	CSL308	Computer Vision Techniques	DC	3	0	2	4
3 rd	5 th	CSL302	Computer Networks	DC	3	0	2	4
3 rd	5 th		Open Course – I	OC	3	0	0	3
3 rd	5 th	CSD301	Mini Project – I	DE	0	0	6	3
Subtotal					15	0	14	22
3 rd	6 th	CSL316	Reinforcement Learning	DC	3	0	2	4
		CSL446	Neural Network and Deep Learning	DC	3	0	0	3
3 rd	6 th	CSL317	Parallel and Distributed Computing	DC	3	0	0	3
3 rd	6 th		Open Course – II	OC	3	0	0	3
3 rd	6 th	CSL318	Optimization Techniques in ML	DC	3	0	0	3
3 rd	6 th	CSD302	Mini Project – II	DE	0	0	6	3
Subtotal					15	0	8	19
Total								41
FINAL YEAR								
4 th	7 th	CSD 401	Project	DE	0	0	16	8
4 th	7 th		Elective – I	DE	3	0	0	3
4 th	7 th		Elective – II	DE	3	0	0/2	3/4
4 th	7 th		Elective – III	DE	3	0	0/2	3/4
4 th	7 th		MooC Course / Open Course – III	OC	3	0	0	3
Subtotal					12	0	18	21-23
OR								
4 th	7 th	CSD 402	Internship	DE	0	0	16	8
Subtotal					0	0	16	8
Total								21-23/8
4 th	8 th	CSD 402	Internship	DE	0	0	16	8
OR								
4 th	8 th		Elective – I	DE	3	0	0	3
4 th	8 th		Elective – II	DE	3	0	0/2	3/4
4 th	8 th		Elective – III	DE	3	0	0/2	3/4
4 th	8 th		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	21-23
								8/21-23
Total								29
GRAND TOTAL								153-155

TYPE	CREDITS
BS	12
ES	04
HU	06
OC	09
DE	32/34
DC	90
Total	153/155