Bachelor of Science (Honors) in Data Science & Artificial Intelligence

MULTI-COHORT ADMISSION MODEL

AND TRIMESTER PROGRESSION FRAMEWORK

September Intake • January Intake

Different Entry Point — Same Complete Curriculum

Students enter at the trimester aligned to their admission month and continue through the same four-year curriculum in a cyclic sequence.

Multi-Cohort System at a Glance

The model permits entry through September and January admission cycles while the programme continues through three recurring academic sessions. The admission month determines the starting trimester; it does not change the curriculum. Each cohort then advances cyclically through all T1–T12 trimesters.

Academic session	Year 1	Year 2	Year 3	Year 4
September–December	T1	T4	T7	T10
January–April	T2	T5	T8	T11
May–August	T3	T6	T9	T12

Cohort-wise progression — central reference

Programme year	September Intake	January Intake
Year 1	T1 → T2 → T3	T2 → T3 → T1
Year 2	T4 → T5 → T6	T5 → T6 → T4
Year 3	T7 → T8 → T9	T8 → T9 → T7
Year 4	T10 → T11 → T12	T11 → T12 → T10

Different Entry Point — Same Complete Curriculum

September entry follows the natural order T1 → T2 → T3 and onward. January entry begins with the session-aligned T2, continues to T3, and formally reaches T1 in September–December. No trimester is skipped.

How a January-intake student completes the curriculum

A January entrant is formally enrolled in T2 during January–April. T1 is not lost: T1 course contents, including recorded video lectures and other applicable self-learning materials, are available for independent study while the student formally participates in T2. The student then takes T3 in May–August and receives T1 as the formal September–December offering. The same cyclic principle continues in later years.

Year	Formal Jan–Apr	Continuity support	Then formally
1	T2	T1 recorded/self-learning content	T3 → T1
2	T5	T4 content may be available as appropriate	T6 → T4
3	T8	T7 content may be available as appropriate	T9 → T7
4	T11	T10 content may be available as appropriate	T12 → T10

Formal participation vs recorded access

Formal Academic Participation is the trimester in which the student is officially enrolled and completing applicable academic requirements. Self-Learning / Recorded Content Access supports continuity and independent learning; it does not by itself establish formal completion, credit, assessment, or exemption.

In Simple Terms

September student

“I join in September, so I start with T1. I then move to T2, T3, T4, T5 and continue in sequence.”

January student

“I join in January, so I start with T2. I then move to T3 and T1. T1 recorded learning material is available to me while I am studying T2, and I formally take T1 when the September–December session arrives.”

Interpretation safeguards: the January sequence is cyclic, not a missing-course structure; recorded access is distinct from formal enrollment and completion; and the model changes only the entry point and sequence—not the curriculum in Annexure 1.

Annexure 1: Course Curriculum Structure

Credit Distribution:

	Year			
Trimester	**First**	**Second**	**Third**	**Fourth**
I	28	29	24	24
II	26	26	24	24
III	26	24	22	22
	80	**79**	**70**	**70**
Total Number of Credits: **299**				

Trimester Wise Course:

First Year - Trimester I

Title of the Course	L	T	P	C
DA 101 Basic English	3	0	0	6
DA 102 Data Analysis Basics	2	0	4	8
DA 103 Introduction to Statistics	3	0	0	6
DA 104 C Programming	2	0	4	8
	10	**0**	**8**	**28**

First Year – Trimester II

Title of the Course	L	T	P	C
DA 105 Linear Algebra	3	0	0	6
DA 106 Data Science: An Introduction	3	0	0	6
DA 107 Computer System Tools	1	0	4	6
DA 108 Python Programming	2	0	4	8
	9	**0**	**8**	**26**

First Year – Trimester III

Title of the Course	L	T	P	C
DA 109 AI Basics	3	0	0	6
DA 110 Data Structures	3	0	0	6
DA 111 Algorithm Design & Analysis	3	0	0	6
DA 112 Introduction to R	2	0	4	8
	11	**0**	**4**	**26**

Second Year – Trimester I

Title of the Course	L	T	P	C
DA 201 Relational Database Management Systems	3	0	3	9
DA 202 Java Programming	2	0	4	8
DA 203 Optimization	3	0	0	6
DA 204 Basic Econometrics	3	0	0	6
	11	**0**	**7**	**29**

Second Year – Trimester II

Title of the Course	L	T	P	C
DA 205 Data Mining & Warehousing	3	0	0	6
DA 206 Statistical Inferencing	3	0	0	6
DA 207 Signal and systems	3	0	0	6
DA 208 Social Media Tools and Techniques	3	0	2	8
	12	**0**	**2**	**26**

Second Year – Trimester III

Title of the Course	L	T	P	C
DA 209 Data Modeling & Visualization	3	0	0	6
DA 210 Time Series Analysis & Forecasting	3	0	0	6
DA 261 Machine Learning Fundamentals	3	0	0	6
DA 262 Recommender Systems	3	0	0	6
	12	**0**	**0**	**24**

Third Year – Trimester I

Title of the Course	L	T	P	C
DA 301 Cloud Computing	3	0	0	6
DA 302 Deep Learning Essentials	3	0	0	6
DA 3xx Elective 1 (Theory/Systems/Business Applications/Online bucket)	3	0	0	6
DA 377 Internship-I/ Term-Project-I	0	0	6	6
	9	**0**	**6**	**24**

Third Year – Trimester II

Title of the Course	L	T	P	C
DA 303 Ethics in AI	3	0	0	6
DA 3xx Elective 2 (Theory/Systems/Business Applications/ Online buckets)	3	0	0	6
DA 3xx Elective 3 (Theory/Systems/Business Applications/ Online buckets)	3	0	0	6
DA 378 Internship-II/ Term-Project-II	0	0	6	6
	9	**0**	**6**	**24**

Third Year – Trimester III

Title of the Course	L	T	P	C
DA 304 Soft Skill Enhancement	2	0	0	4
DA 3xx Elective 4 (Theory/Systems/Business Applications/Online buckets)	3	0	0	6
DA 3xx Elective5 (Theory/Systems/ Business Applications/ Online buckets)	3	0	0	6
DA 379 Internship-III/ Term-Project-III	0	0	6	6
	8	**0**	**6**	**22**

Fourth Year – Trimester I

Title of the Course	L	T	P	C
DA 401 Big Data Analytics	3	0	0	6
DA 3xx Elective6 (Theory/Systems/Business Applications/Online bucket)	**3**	**0**	**0**	**6**
DA 487 Capstone Project - Phase I	0	0	12	12
	6	**0**	**12**	**24**

Fourth Year – Trimester II

Title of the Course	L	T	P	C
DA 405 Basics of Reinforcement Learning	3	0	0	6
DA 4xx Elective 7 (Theory/Systems/Business Applications/Online bucket)	3	0	0	6
DA 488 Capstone Project - Phase II	0	0	12	12
	6	**0**	**12**	**24**

Fourth Year – Trimester III

Title of the Course	L	T	P	C
DA 406 Entrepreneurship and Startup	2	0	0	4
DA 4xx Elective 8 (Theory/Systems/Business Applications/Online bucket)	3	0	0	6
DA 489 Capstone Project – Phase III	0	0	12	12
	5	**0**	**12**	**22**