

Online BSc(Hons) in Data Science and Artificial Intelligence

Curriculum Structure

Credit Distribution:

Trimester	Year			
	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