

J.J. College of Arts and Science (Autonomous)

Proposed Course Structure based on TANSCH and UGC - LOCF (Choice Based Credit System)

(Applicable for the Candidates admitted from the academic year 2026-2027 Onwards)

B.Sc. Data Science

Sl. No.	Course Category	Course Code	Course	Credits	Hours/ Week	Marks		
						CIA	ESE	Total
Semester I								
1	Part – I	U1R4TL1/ HL1/FL1/SL1	Tamil/Hindi/French/Sanskrit	3	5	30	70	100
2	Part – II	U1R4EL1	English Language Course – I	3	5	30	70	100
3	Part – III	U1R4DSCC1	Fundamentals of Data Science	5	5	30	70	100
4		U1R4DSCC2P	Data Analytics Practical	4	4	40	60	100
5		U1R4DSAC1	Essentials of Mathematics	3	5	30	70	100
6		U1R4DSAC2	Numerical Methods	3	4	40	60	100
7	Part – IV	U1R4_GEC1	To be opted from other Department	2	2	30	70	100
Total				23	30	-	-	700
Semester II								
1	Part – I	U2R4TL2/ HL2/FL2/SL2	Tamil/Hindi/French/Sanskrit	3	5	30	70	100
2	Part – II	U2R4EL2	English Language Course - II	3	5	30	70	100
3	Part – III	U2R4DSCC3	Data Structures	5	5	30	70	100
4		U2R4DSCC4P	Data Structures Practical	4	4	40	60	100
5		U2R4DSAC3	Mathematical Statistics	3	4	30	70	100
6		U2R4DSAC4	Discrete Mathematics	3	5	40	60	100
7	Part – IV	U2R4_GEC2	To be opted from other Department	2	2	30	70	100
Total				23	30	-	-	700
Semester III								
1	Part – I	U3R4TL3/HL3/F L3/SL3	Tamil/Hindi/French/Sanskrit	3	5	30	70	100
2	Part – II	U3R4EL3	English Language Course – III	3	5	30	70	100
3	Part – III	U3R4DSCC5	Database Systems	5	5	30	70	100
4		U3R4DSCC6P	Database Systems Practical	4	4	40	60	100
5		U3R4DSAC5	Probability and Statistics	3	4	30	70	100
6	Part – IV	U3R4DSSEC1:1 /1:2	Shell Programming/ Web Technology	2	3	30	70	100
7		U3R4VE	Value Education	2	2	30	70	100
8	Part – V	U3R4HW	Health and Wellness	1	2	-	-	100
Total				23	30	-	-	800



Dr. S. SUDHA

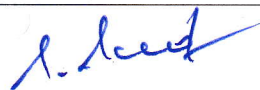
Vice Principal and Head

Department of Computer Science

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Pudukkottai- 622 422.

Semester IV								
1	Part - I	U4R4TL4/HL4/FL4/SL4	Tamil/Hindi/French/Sanskrit	3	5	30	70	100
2	Part - II	U4R4EL4	English Language Course – IV	3	5	30	70	100
3	Part - III	U4R4DSCC7	Artificial Intelligence and Machine Learning	5	5	30	70	100
4		U4R4DSCC8P	Artificial Intelligence Practical	4	4	40	60	100
5		U4R4DSAC6	Operations Research	3	5	30	70	100
6	Part - IV	U4R4DSSEC2:1/2:2	Data Visualization / Web Scraping and Data Collection	2	4	30	70	100
7		U4R4DSSLC1:1	Online Course (MOOCs/ NPTEL/Course era/SWAYAM/ SWAYAM PLUS) * /	2	-	-	-	100
8		U4R4ES	Environmental Studies	2	2	30	70	100
Total				24	30	-	-	800
Semester V								
1	Part - III	U5R4DSCC9	Computer Networks	5	5	30	70	100
2		U5R4DSCC10	Operating System	5	5	30	70	100
3		U5R4DSCC11	Problem Solving using Python	5	5	30	70	100
4		U5R4DSCC12P	Python Programming Practical	4	4	40	60	100
5		U5R4DSDSE1:1/1:2	Cloud Computing/ Internet of Things	3	5	30	70	100
6	Part- IV	U5R4DSINT	Internship**	2	-	-	-	100
7		U5R4DSSEC3:1/3:2	Software Engineering/ Software Project Management	2	4	30	70	100
8		U5R4DSSLC2:1/2:2	Business Analytics for Decision Making / Business Intelligence and Analytics	2	-	50	50	100
		U5R4IDM	Introduction to Disaster Management	2	2	30	70	100
Total				30	30	-	-	900
Semester VI								
1	Part - III	U6R4DSCC13	Big Data Analytics	5	6	30	70	100
2		U6R4DSCC14P	Big Data Analytics Practical	4	4	40	60	100
3		U6R4DSCC15PW	Project Work	5	6	-	-	100
4		U6R4DSDSE2:1/2:2	Natural Language Processing / Social Media Analytics	3	5	30	70	100
5		U6R4DSDSE3:1/3:2	Principles of Deep Learning/ Information Security	3	5	30	70	100
6	Part - IV	U6R4DSVAC	Soft Skills	2	2	-	-	100
7		U6R4GS	Gender Studies	2	2	30	70	100
	Part - V		Extension Activity	1	-	-	-	-
Total				25	30	-	-	700
Grand Total				148				4600



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***A minimum 4 weeks will be the Course duration.**

**** Internship during Semester – IV Summer Vacation. The Credits shall be awarded in Semester - V Statement of Marks.**

Generic Elective Course (offered by the Department)

1. Digital Literacy and Office Automation
2. Data Science for Entrepreneurship Development



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