

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. Mathematics

Sl. No.	Course Category	Course Code	Course	Credits	Hours/ Week	Marks		
						CIA	ESE	Total
Semester I								
1	Part - I	U1R4TL1/HL1/FL1	Language Course – I	3	6	30	70	100
2	Part - II	U1R4EL1	English Language Course – I	3	6	30	70	100
3	Part - III	U1R4MACC1	Algebra and Trigonometry	5	5	30	70	100
4		U1R4MACC2	Differential Calculus	5	5	30	70	100
5		U1R4MAAC1	Mathematical Statistics – I	3	3	30	70	100
6		U1R4MAAC2P	R-Programming – Practical	3	3	40	60	100
7	Part - IV	U1R4_ GEC1	To be opted from other Department	2	2	30	70	100
Total				24	30	-	-	700
Semester II								
1	Part - I	U2R4TL2/HL2/FL2	Language Course – II	3	6	30	70	100
2	Part - II	U2R4EL2	English Language Course – II	3	6	30	70	100
3	Part - III	U2R4MACC3	Analytical Geometry (2D &3D)	5	5	30	70	100
4		U2R4MACC4	Integral Calculus	5	5	30	70	100
5		U2R4MAAC3	Mathematical Statistics – II	3	3	30	70	100
6		U2R4MAAC4P	SPSS - Practical	3	3	40	60	100
7	Part - IV	U2R4_ GEC2	To be opted from other Department	2	2	30	70	100
Total				24	30	-	-	700
Semester III								
1	Part - I	U3R4TL3/HL3/FL3	Language Course – III	3	5	30	70	100
2	Part - II	U3R4EL3	English Language Course – III	3	5	30	70	100
3	Part - III	U3R4MACC5	Vector Calculus and Fourier Series	5	5	30	70	100
4		U3R4MACC6	Differential Equations and Laplace Transforms	5	5	30	70	100
5		U3R4MAAC5	Allied Physics-I	3	4	30	70	100
6	Part - IV	U3R4MASEC1:1 /1:2	Quantitative Aptitude / Computational Mathematics	2	2	30	70	100
7		U3R4VE	Value Education	2	2	30	70	100
8	Part - V	U3R4HW	Health and Wellness	1	2	-	-	100
Total				24	30	-	-	800
Semester IV								

O. Uma

A. A.

Pranav

M. Harish

1	Part - I	U4R4TL4/HL4/FL4	Language Course – IV	3	5	30	70	100
2	Part - II	U4R4EL4	English Course – IV	3	5	30	70	100
3	Part - III	U4R4MACC7	Sequences and Series	5	6	30	70	100
4		U4R4MACC8	Classical Algebra and Theory of Numbers	5	5	30	70	100
5		U4R4MAAC6P	Allied Physics-II – Practical	3	5	40	60	100
6	Part - IV	U4R4MASEC2:1 / 2:2	Theory of Games and Decision Theory/ Introduction to Geogebra	2	2	30	70	100
7		U4R4MASLC1	Online Course (SWAYAM-MOOC's/ SWAYAM Plus/ NPTEL/ COURSERA)	2	-	-	-	100
8		U4R4ES	Environmental Studies	2	2	30	70	100
Total				25	30	-	-	800
Semester V								
1	Part - III	U5R4MACC9	Mechanics	5	5	30	70	100
2		U5R4MACC10	Modern Algebra	4	5	30	70	100
3		U5R4MACC11	Real Analysis	4	5	30	70	100
4		U5R4MACC12P	Programming in C++ - Practical	4	5	40	60	100
5		U5R4MADSE1:1 / 1:2	Numerical Methods / Introduction to Data Science	3	5	30	70	100
6	Part - IV	U5R4MAINT	Internship	2	-	-	-	100
7		U5R4MASEC3:1 / 3:2	Graph theory and its Applications / Fuzzy Mathematics	2	3	30	70	100
8		U5R4SLC2:1 / 2:2	Logics and Boolean Algebra/ Number Theory	2	-	50	50	100
9	Part - V	U5R4IDM	Introduction to Disaster Management	2	2	30	70	100
Total				28	30	-	-	900
Semester VI								
1	Part - III	U6R4MACC13	Complex Analysis	4	5	30	70	100
2		U6R4MACC14P	Numerical Methods with MATHLAB – Practical	4	5	40	60	100
3		U6R4MACC15PW	Project Work	4	6	-	-	100
4		U6R4MADSE2:1 / 2:2	Operations Research / Discrete Mathematics	3	5	30	70	100
5		U6R4MADSE3:1 /3:2	Astronomy / Combinatorial Mathematics	3	5	30	70	100
6	Part - IV	U6R4MAVAC	Vedic Mathematics	2	2	-	-	100
7		U6R4GS	Gender Studies	2	2	30	70	100
	Part - V	Extension Activity		1	-	-	-	-
Total				23	30	-	-	700
Grand Total				148				4600

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

Statement of Marks.

O. Uma

A. A

B. B

M. M