

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

Pudukkottai.

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. Physics

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	U1R4PHCC1	Properties of matter and sound	5	5	30	70	100
4		U1R4PHCC2P	Major Practical-I(Covering CC1)	5	5	40	60	100
5		U1R4PHAC1	Mathematics-I	3	3	30	70	100
6		U1R4PHAC2	Allied chemistry –I	3	3	30	70	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	U2R4PHCC3	Mechanics	5	5	30	70	100
4		U2R4PHCC4P	Major Practical-II (Covering CC3)	5	5	40	60	100
5		U2R4PHAC3	Mathematics-II	3	3	30	70	100
6		U2R4PHAC4P	Allied Chemistry practical-I	3	3	30	70	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	U3R4PHCC5	Heat, Thermodynamics and Statistical Physics	5	5	30	70	100
4		U3R4PHCC6P	Major Practical-III (Covering CC5)	5	5	40	60	100
5		U3R4PHAC5	Allied chemistry-II	3	4	30	70	100
6	Part - IV	U3R4PHSEC1: 1 /1:2	Fundamentals of Home Appliances / Physics of Household Equipments	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								

T. K. S. 18/4/2026
 M. S. 18/4/26
 S. S. 18/4/2026
 S. S. 18/4/2026
 G. B. 18/04/2026

1	Part - I	U4R4TL4/HL4/FL4	Language Course – IV	3	5	30	70	100
2	Part - II	U4R4EL4	English Language Course - IV	3	5	30	70	100
3	Part - III	U4R4PHCC7	Electricity, Magnetism and Electro Magnetism	5	6	30	70	100
4		U4R4PHCC8P	Major Practical-IV (Covering CC7)	5	5	40	60	100
5		U4R4PHAC6P	Allied chemistry practical-II	3	5	30	70	100
6	Part - IV	U4R4PHSEC2:1 / 2:2	Laser and its Application / Communication system	2	2	30	70	100
7		U4R4PHSLC1	Online Courses(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	U5R4PHCC9	Optics and Spectroscopy	5	6	30	70	100
2		U5R4PHCC10	Atomic and Nuclear Physics	4	6	30	70	100
3		U5R4PHCC11	Analog Electronics	4	5	30	70	100
4		U5R4PHCC12P	Major Practical-V (Covering CC9 and CC11)	4	5	40	60	100
5		U5R4PHDSE1:1 / 1:2	Solid state physics / Materials Science	3	5	30	70	100
6	Part - IV	U5R4PHINT	Internship	2	-	-	-	100
7		U5R4PHSEC3:1 / 3:2	Nano Science / Weather forecasting	2	3	30	70	100
8		U5R4PHSLC2:1 / 2:2	Energy physics / Astrophysics	2	-	50	50	100
		U5R4IDM	Introduction to Disaster Management	2	-	-	-	100
Total				28	30	-	-	900
Semester VI								
1	Part - III	U6R4PHCC13	Quantum Mechanics and Relativity	4	5	30	70	100
2		U6R4PHCC14P	Major Practical-VI (Covering DSE 2:1)	4	5	40	60	100
3		U6R4PHCC15PW	Project Work	4	6	-	-	100
4		U6R4PHDSE2:1 / 2:2	Digital Electronics and Micro processor / Opto electronics	3	5	30	70	100
5		U6R4PHDSE3:1 /3:2	Computer programming-C Language / Basic instrumentation skill	3	5	30	70	100
6	Part - IV	U6R4PHVAC	Lab Equipments and Maintenance Service	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.

PRU 18/4/2026
 K. Bulleli 18/4/2026
 P. Pansmesha 18/4/2026
 S. 18/4/2026
 S. Nam 18/4/2026
 B. Bala 18/04/2026