

ALAGAPPA UNIVERSITY, KARAIKUDI
NEW SYLLABUS FOR AFFILIATED COLLEGES
UNDER CBCS PATTERN WITH EFFECT FROM 2022-23 ONWARDS

B.Sc., PHYSICS
Programme Structure

Sem.	Part	Course Code	Courses	Title of the Paper	T/P	Credits	Hours/Week	Max. Marks		
								Int.	Ext.	Total
I	I	2211T	T/OL	Tamil / Other Language - I	T	3	6	25	75	100
	II	712CE	E	Communicative English –I	T	3	6	25	75	100
	III	22BPH1C1	CC	Mechanics and Properties of Matter	T	5	5	25	75	100
		22BPH1P1	CC	General Physics Practical-I	P	4	4	40	60	100
		-	AL-IA	Mathematics/ Chemistry/ Electronics/Computer Science	T	3	3	25	75	100
		-	AL-IA	Practical - Respective Allied Theory Course	P	2	2	40	60	100
	IV	22BVE1	SEC-I	Value Education	T	2	2	25	75	100
		-		Library		--	2	--	--	--
				Total		22	30	205	495	700
II	I	2221T	T/OL	Tamil / Other Language-II	T	3	6	25	75	100
	II	722CE	E	Communicative English –II	T	3	6	25	75	100
	III	22BPH2C1	CC	Electricity and Electromagnetism	T	5	5	25	75	100
		22BPH2P1	CC	General Physics Practical-II	P	4	4	40	60	100
		-	AL-IB	Mathematics/ Chemistry/ Electronics/Computer Science	T	3	3	25	75	100
		-	AL-IB	Practical - Respective Allied Theory Course	P	2	2	40	60	100
	IV	22BES2	SEC-II	Environmental Studies	T	2	2	25	75	100
			Naan Mudhalvan Course	Language Proficiency for Employability(Effective English)	-	2	2	25	75	100
				Total		24	30	230	570	800
III	I	2231T	T/OL	Tamil / Other Language-III	T	3	6	25	75	100
	II	2232E	E	English for Enrichment –I	T	3	6	25	75	100
	III	22BPH3C1	CC	Heat and Thermodynamics	T	3	3	25	75	100
		22BPH3C2	CC	Optics	T	3	3	25	75	100
		22BPH3P1	CC	General Physics Practical-III	P	3	3	40	60	100
		-	AL-IIA	Mathematics/ Chemistry/ Electronics/Computer Science	T	3	3	25	75	100
-	AL-IIA	Practical - Respective Allied Theory Course	P	2	2	40	60	100		

	IV	22BE3	SEC-III	Entrepreneurship		2	2	25	75	100	
		-	NME-I	Adipadai Tamil/ Advance Tamil/ IT Skill for employment/ MOOC's	T	2	2	25	75	100	
				Total		24	30	255	645	900	
IV	I	2241T	T/OL	Tamil / Other Language-III	T	3	6	25	75	100	
	II	2242E	E	English for Enrichment –II	T	3	3	25	75	100	
	III	22BPH4C1	CC	Atomic Physics	T	4	4	25	75	100	
		22BPH4C2	CC	Nuclear Physics	T	4	4	25	75	100	
		22BPH4P1	CC	General Physics Practical-IV	P	3	3	40	60	100	
		-	AL-IIB	Mathematics/ Chemistry/ Electronics/Computer Science	T	3	3	25	75	100	
		-	AL-IIB	Practical – Respective Allied Theory Course	P	2	2	40	60	100	
	IV	-	NME-II	Adipadai Tamil/ Advance Tamil/ Small Business management/ MOOC's	T	2	2	25	75	100	
		Naan Mudhalvan Course		Digital Skills for Employability – (Microsoft-Office Fundamentals)	T	2	3	25	75	100	
					Total		26	30	255	645	900
V	III	22BPH5C1	CC	Analog Electronics	T	4	4	25	75	100	
		22BPH5C2	CC	Computer Programming in C	T	4	4	25	75	100	
		22BPH5C3	CC	Classical and Statistical Mechanics	T	4	4	25	75	100	
		22BPH5C4	CC	Solid State Physics	T	4	4	25	75	100	
		22BPH5P1	CC	General Physics Practical-V	P	4	6	40	60	100	
		22BPH5P2	CC	General Physics Practical-VI	P	4	6	40	60	100	
	IV	-		Carrier development / employability skills	-	-	2	-	-	-	
				Total		24	30	180	420	600	
VI	III	22BPH5I	DSE	Internship		24	26	150	250	400	
	IV	Naan Mudhalvan Course		Advanced Platform Technology for Employability (Project-based learning*)/ Data Analytics with Advanced Tools for Employability (Project-based learning-Data Analytics & Visualization**)	-	2	4	25	75	100	
					Total		26	30	175	325	500
		(OR)									
III	22BPH6E1	DSE	Integrated Electronics		T	6	6	25	75	100	
	22BPH6E2		Relativity and Quantum		T	6	6	25	75	100	

			Mechanics								
		22BPH6E3	Nano Physics	T	6	6	25	75	100		
		22BPH6E4	Laser Physics and Fibre Optics	T	6	6	25	75	100		
		-	Library / Yoga etc.		-	2	-	-	-		
IV		Naan Mudhalvan Course	Advanced Platform Technology for Employability (Project-based learning*)/ Data Analytics with Advanced Tools for Employability (Project-based learning-Data Analytics & Visualization**)	-	2	4	25	75	100		
					26	30	125	375	500		
			(OR)								
III		22BPH6PR	Project		6	8	25	75	100		
		22BPH6E1	Integrated Electronics	T	6	6	25	75	100		
		22BPH6E2	Relativity and Quantum Mechanics	T	6	6	25	75	100		
		22BPH6E3	Nano Physics	T	6	6	25	75	100		
IV		Naan Mudhalvan Course	Advanced Platform Technology for Employability* (Project-based learning)/ Data Analytics with Advanced Tools for Employability** (Project-based learning-Data Analytics & Visualization)	-	2	4	25	75	10		
			Total		26	30	125	375	500		
			Grand Total		146	-	-	-	4400		

* Advanced Platform Technology for Employability – Government Colleges

** Data Analytics with Advanced Tools for Employability – Government Aided and Self financing Colleges

Sem.	Part	Course Code	Title of the Paper	Credits	Hrs./ Week	Max. Marks		
						Int.	Ext.	Total
I	III	71BEPP	Professional English for Physical Science - I	4	5	25	75	100
II		72BEPP	Professional English for Physical Science -II	4	5	25	75	100
III		*	Professional English for Physical Science - III	4	5	25	75	100
IV		*	Professional English for Physical Science - IV	4	5	25	75	100

*The Syllabus of Professional English for III & IV Semester will be provided after Receiving the syllabus from TANSCHÉ.

As per TANSCHÉ, the Professional English book will be taught to all four streams apart from the existing hours of teaching/additional hours of teaching (1hour/day) as a 4 credit paper as an add on course on par with Major paper and completion of the paper is a must to continue his/her studies further.

- T/OL-Tamil or Other Language,
- E – English
- CC-Core course –Core competency, critical thinking, analytical reasoning, research skill & team work
- Allied / GEC -Exposure beyond the discipline
- AECC- -Ability Enhancement Compulsory Course (Professional English & Environmental Studies) - Additional academic knowledge, psychology and problem solving etc.,
- SEC-Skill Enhancement Course - Exposure beyond the discipline (Value Education, Entrepreneurship Course, Computer application for Science, etc.,
- NME -Non Major Elective – Exposure beyond the discipline
- DSE – Discipline specific elective –Additional academic knowledge, critical thinking, and analytical reasoning-Student choice - either Internship or Theory papers or Project + 2 theory paper.
 - If internship – Marks = Internal- 150 (75+75) two midterm evaluation through Viva voce + Report- 150+ External Viva voce- 100 = 400.
 - If Project – Marks = Internal- 50 +Thesis- 100 + Viva voce- 50 = 200 + 2 theory paper- 200 = 400
- MOOCs – Massive Open Online Courses
 - * T-Theory, P- Practical