BHARATHIDASAN UNIVERSITY,



TIRUCHIRAPPALLI – 620 024.

B.Sc. Physics: Course Structure under CBCS

(For the candidates admitted from the academic year 2016-2017 onwards)

(NAAN MUDHALVAN SCHEME was Implemented from 4th onwards for 2021-22 Batch)

	Part			Inst.	Inst. 😐		Ma	rks	
Sem		Course Tit	Title	Hours/ Week	Credit	Exam Hours	Int	Ext	Total
	Ι	Language Course–I (LC) – Tamil*/Other Languages + #		6	3	3	25	75	100
	II	English Language Course - I (ELC)		6	3	3	25	75	100
		Core Course–I (CC)	Properties of Matter and Acoustics	6	6	3	25	75	100
Ι		Core Practical – I (CP)	Practical I	3	-	-	-	-	-
	III	First Allied Course–I (AC)		4	4	3	25	75	100
		First Allied Course–II (AC)		3	-	-	-	-	-
		Add on Course – I ##	Professional English I	6	4	3	25	75	100
	IV	Value Education	Value Education	2	2	3	25	75	100
	Total				22				600
	Ι	Language Course–II (LC)– Tamil*/Other Languages + #		6	3	3	25	75	100
	II	English Language Course–II (ELC)		6	3	3	25	75	100
	III	Core Course–II (CC)	Mechanics	6	6	3	25	75	100
II		Core Practical – I (CP)	Practical I	3	3	3	40	60	100
		First Allied Course–II (AC)		3	3	3	25	75	100
		First Allied Course–III (AC)		4	2	3	25	75	100
		Add on Course – II ##	Professional English II	6	4	3	25	75	100
	IV	Environmental Studies	Environmental Studies	2	2	3	25	75	100
		Total		30	26				800

	т	Language Course – III (LC) –		6	3	3	25	75	100
	Ι	Tamil*/Other Languages + #		6	3	3	23	/3	100
	Π	English Language Course-III (ELC)		6	3	3	25	75	100
		Core Course – III (CC)	Thermal Physics	6	6	3	25	75	100
	III	Core Practical – II (CP)	Practical II	3	-	-	-	-	-
		Second Allied Course – I (AC)		4	4	3	25	75	100
		Second Allied Course-II (AP)		3	-	-	-	-	-
III	IV	Non Major Elective I - for those who studied Tamil under Part-I							
		a) Basic Tamil for other language students	Energy Physics @	2	2	3	25	75	100
		b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in							
	degree programme Total				18				500
	Ι	Language Course –IV (LC) - Tamil*/Other Languages + #		30 6	3	3	25	75	100
	II	English Language Course – IV (ELC)		6	3	3	25	75	100
		Core Course – IV (CC)	Electricity, Magnetism and Electro Magnetism	5	5	3	25	75	100
	III	Core Practical – II (CP)	Practical II	3	3	3	40	60	100
		Second Allied Course - II (AP)		3	3	3	40	60	100
		Second Allied Course - III		3	2	3	25	75	100
IV		Non Major Elective II-for those who studied Tamil under Part I							
	IV	a) Basic Tamil for other language studentsb) Special Tamil for those	Laser Physics @	2	2	3	25	75	100
		who studied Tamil upto +2 but opt for other languages in degree programme							
		Skill Based Elective - I	Skill Based Elective - I	2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Digital Skills for Employability	-	2	3	25	75	100
		Total		30	25				900

		Core Course – V (CC)	Optics	5	5	3	25	75	100
		Core Course – VI (CC)	Atomic and Molecular Physics	5	5	3	25	75	100
	III	Core Course – VII (CC)	Electronics	6	5	3	25	75	100
	IV	Core Practical – III (CP)	Practical III	3	3	3	40	60	100
v		Major Based Elective – I	Material Science	5	5	3	25	75	100
ľ		Skill Based Elective – II	Skill Based Elective - II	2	2	3	25	75	100
		Skill Based Elective – III	Skill Based Elective - III	2	2	3	25	75	100
		Soft Skills Development	Soft Skills Development	2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme	Technical Skills for		2	3	25	75	100
	VI	(NMS) @@	Employability	-		5	23	13	100
	Total			30	31				900
	III	Core Course – VIII (CC)	Nuclear Physics	6	6	3	25	75	100
		Core Course – IX (CC)	Theoretical Physics	6	6	3	25	75	100
		Core Practical – IV (CP)	Practical IV	5	4	3	40	60	100
		Major Based Elective II	Microprocessor and 'C' Programming	6	6	3	25	75	100
VI	v	Major Based Elective III	Communication Physics	6	6	3	25	75	100
		Extension Activities **	Extension Activities	-	1	-	-	-	-
	v	Gender Studies	Gender Studies	1	1	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Data Analytics for Employability	-	2	3	25	75	100
	Total			30	32				700
	1	Grand Tota	1	180	154				4400

List of Allied Courses

Allied Course I (First Year)

Allied Course II (Second Year)

Mathematics

Chemistry / Computer Science

Language Part – I	-	4	
English Part –II	-	4	
Core Paper	-	9	
Core Practical	-	4	
Add-on Course	-	2	
Allied Paper	-	5	
Allied Practical	-	1	
Non-Major Elective	-	2	
Skill Based Elective	-	3	
Major Based Elective	-	3	
Environmental Studies	-	1	
Value Education	-	1	
Soft Skill Development	-	1	
Gender Studies	-	1	
Extension Activities	-	1	(Credit only)
NaanMudhalvan Scheme	-	3	

* For those who studied Tamil upto 10th +2 (Regular Stream).
+ Syllabus for other Languages should be on par with Tamil at degree level.

- # Those who studied Tamil upto 10th +2 but opt for other languages in degree level under Part- I should study special Tamil in Part IV.
- ## The Professional English Four Streams Course is offered in the 1st and 2nd Semester in all UG Courses. It will be taught apart from the Existing hours of teaching / additional hours of teaching (1 hour /day) as a 4 credit paper as an add on course on par with Major Paper and completion of the paper is must to continue his / her studies further. The Extra 6 hrs / cycle will be utilized for the Add on Professional English Course. (As per G.O. No. 76, Higher Education (K2) Department dated: 18.07.2020).
- @ NCC Course is one of the Choices in Non-Major Elective Course. Only the NCC cadets are eligible to choose this course. However, NCC Course is not a Compulsory Course for the NCC Cadets.
- ** Extension Activities shall be outside instruction hours.

(a) Naan Mudhalvan Scheme as per Government instruction.

Non Major Elective I & II – for those who studied Tamil under Part I

- a) Basic Tamil I & II for other language students
- b) Special Tamil I & II for those who studied Tamil upto 10th or +2 but opt for other languages in degree programme

Note:

	Internal Marks	External Marks
1. Theory	25	75
2. Practical	40	60

3. Separate passing minimum is prescribed for Internal and External marks

FOR THEORY

The passing minimum for CIA shall be 40% out of 25 marks [i.e. 10 marks] the passing minimum for University Examinations shall be 40% out of 75 marks [i.e. 30 marks]

FOR PRACTICAL

The passing minimum for CIA shall be 40% out of 40 marks [i.e. 16 marks] the passing minimum for University Examinations shall be 40% out of 60 marks [i.e. 24 marks]
