# BHARATHIDASAN UNIVERSITY, B.Sc. Physics:



# TIRUCHIRAPPALLI - 620 024. **Course Structure under CBCS**

(For the candidates admitted from the academic year 2016-2017 onwards) (NAAN MUDHALVAN SCHEME was Implemented in 6th semester alone for 2020-21 Batch)

Sem	Part	Course	Title	Inst.	Credit	Exam Hours	Marks		
				Hours/ Week			Int	Ext	Total
							1111	LXt	I
I	I	Language Course–I (LC) –		6	3	3	25	75	100
		Tamil*/Other Languages + # English Language Course - I							
	II	(ELC)	Communicative English I	6	3	3	25	75	100
	III	Core Course–I (CC)	Properties of Matter and Acoustics	6	6	3	25	75	100
		Core Practical – I (CP)	Practical I	3	-	-	-	-	-
		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		30	22				600
	I	Language Course–II (LC)– Tamil*/Other Languages + #		6	3	3	25	75	100
	II	English Language Course–II (ELC)	Communicative English II	6	3	3	25	75	100
		Core Course–II (CC)	Mechanics	6	6	3	25	75	100
II	III	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)	D C : 1E 1:1 H	4	2	3	25	75	100
	13.7	Add on Course – II ##	Professional English II Environmental Studies	6	4	3	25 25	75 75	100
	IV	Environmental Studies		2	2	3	23	13	
		Total		30	26				800
	I	Language Course – III (LC)– Tamil*/Other Languages + #		6	3	3	25	75	100
	II	English Language Course-III		6	3	3	25	75	100
		(ELC)							
	III IV	Core Course – III (CC)	Thermal Physics	6	6	3	25	75	100
		Core Practical – II (CP)	Practical II	3	-	-	-	-	-
III		Second Allied Course – I (AC)		4	4	3	25	75	100
		Second Allied Course-II (AP)		3	-	-	-	-	-
		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			30	18				500

	I	Language Course –IV (LC) - Tamil*/Other Languages + #		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	IV	<ul> <li>Non Major Elective II-for those who studied Tamil under Part I</li> <li>a) Basic Tamil for other language students</li> <li>b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme</li> </ul>	Laser Physics @	2	2	3	25	75	100
		Skill Based Elective - I	Skill Based Elective - I	2	2	3	25	75	100
	Total				23				800
		Core Course – V (CC)	Optics	5	5	3	25	75	100
	III	Core Course – VI (CC)	Atomic and Molecular Physics	5	5	3	25	75	100
		Core Course – VII (CC)	Electronics	6	5	3	25	75	100
V		Core Practical – III (CP)	Practical III	3	3	3	40	60	100
V	IV	Major Based Elective - I	Material Science	5	5	3	25	75	100
		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	30	2 29	3	25	75	100
		Total							800
		Core Course – VIII (CC)	Nuclear Physics	6	6	3	25	75	100
	III	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		Major Based Elective III	Communication Physics	6	6	3	25	75	100
	V	Extension Activities **	Extension Activities	-	1	-	-	-	-
-		Gender Studies	Gender Studies	1	1	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Project-Based Learning	30	2 <b>32</b>	-	25	75	100
	Total								700
Grand Total				180	150				4200

## **List of Allied Courses**

First Allied Course Second Allied Course

Mathematics Chemistry / Computer Science

4 Language Part – I 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 Soft Skill Development 1 Gender Studies 1 **Extension Activities** 1 (Credit only)

NaanMudhalvan Scheme -

- \* For those who studied Tamil upto 10<sup>th</sup> +2 (Regular Stream).
- + Syllabus for other Languages should be on par with Tamil at degree level.
- # Those who studied Tamil upto 10<sup>th</sup> +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.
- @@ 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:

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]

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