

B.Sc. Electronics: 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)

Semester	Part	Course	Title	Inst. Hours/ Week	Credit	Exam	Marks		Total
						Hours	Interna	Externa	
I	I	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
	III	Core Course–I (CC)	Electronic Devices	6	6	3	25	75	100
		Core Practical – I (CP)	Electronics I (P)	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
II	I	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)	Electric and Electronic Circuits	6	6	3	25	75	100
		Core Practical – I (CP)	Electronics II (P)	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

III	I	Language Course – III (LC)– Tamil*/Other Languages + #		6	3	3	25	75	100
	II	English Language Course-III (ELC)		6	3	3	25	75	100
	III	Core Course – III (CC)	Digital Electronics	6	6	3	25	75	100
		Core Practical – II (CP)	Electronics - II (P)	3	-	-	-	-	-
		Second Allied Course – I (AC)		4	4	3	25	75	100
		Second Allied Course-II (AP)		3	-	-	-	-	-
	IV	Non Major Elective I - for those who studied Tamil under Part-I a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme	Principles of Electronics @	2	2	3	25	75	100
Total			30	18				500	
IV	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
	III	Core Course – IV (CC)	Principles of Communication Systems	5	5	3	25	75	100
		Core Practical – II (CP)	Electronics - II (P)	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 a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme	Everyday Electronics @	2	2	3	25	75	100
		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

V	III	Core Course – V (CC)	Linear Integrated Circuits	5	5	3	25	75	100
		Core Course – VI (CC)	Microprocessor and its Applications	5	5	3	25	75	100
		Core Course – VII (CC)	Control Systems	5	5	3	25	75	100
		Core Practical – III (CP)	Electronics III (P)	4	3	3	40	60	100
		Major Based Elective – I	Mobile Communication / Sensors, Transducers and Measurements	5	5	3	25	75	100
	IV	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	NaanMudhalvan Scheme (NMS) @@	Technical Skills for Employability	-	2	3	25	75	100
	Total			30	31				900
VI	III	Core Course – VIII (CC)	Power Electronics	6	6	3	25	75	100
		Core Course – IX (CC)	Microcontroller and Embedded Systems	6	6	3	25	75	100
		Core Practical – IV (CP)	Electronics IV (P)	5	4	3	40	60	100
		Major Based Elective II	Fiber Optic Communication / Electronic Instrumentation	6	6	3	25	75	100
		Major Based Elective III	Digital Signal Processing / Very Large Scale Integration (VLSI)	6	6	3	25	75	100
	V	Extension Activities **	Extension Activities	-	1	-	-	-	-
		Gender Studies	Gender Studies	1	1	3	25	75	100
	VI	NaanMudhalvan Scheme (NMS) @@	Data Analytics for Employability	-	2	3	25	75	100
	Total			30	32				700
	Grand Total			180	154				4400

List of Allied Courses

Allied Course I (First Year)

Mathematics

Language Part – I	-	4
English Part –II	-	4
Core Paper	-	9
Core Practical	-	4
Add-on Course	-	2
Allied Paper	-	4
Allied Practical	-	2
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
NaanMudhalvan Scheme	-	3

Allied Course II (Second Year)

Chemistry / Computer Science

- * 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.
- @@ 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]
