BHARATHIDASAN UNIVERSITY



TIRUCHIRAPPALLI-620 024.

B.Sc. INFORMATION TECHNOLOGY

CHOICE BASED CREDIT SYSTEM -

LEARNING OUTCOMES-BASED CURRICULUM FRAMEWORK (CBCS - LOCF)

(Applicable to the candidates admitted from the academic year 2022-2023 onwards)

(Naan Mudhalvan scheme has been implemented from 2nd to 4th semester for the 2023-2024 Batch)

Sem.	Part	Course	Title	Ins. Hrs	Credits	ts Exam Marks Hours Int. Ext			Total
Ι	Ι	Language Course – I Tamil \$ / Other Languages + #		6	3	3	25	75	100
	II	English Course - I		6	3	3	25	75	100
		Core Course – I (CC)	Programming in C and Data Structures	5	5	3	25	75	100
	III	Core Practical – I (CP)	Programming in C Lab	4	4	3	40	60	100
		First Allied Course – I (AC)		4	4	3	25	75	100
		First Allied Course – II (AC)		3	-	-	-	-	-
	IV	Value Education		2	2	3	25	75	100
		TOTAL				I	-	-	600
	Ι	Language Course - II Tamil \$ / Other Languages + #		6	3	3	25	75	100
	II	English Course - II		4	3	3	25	75	100
	III	Core Course – II (CC)	Programming in Java	5	5	3	25	75	100
		Core Practical - II(CP)	Programming in Java Lab	4	4	3	40	60	100
		First Allied Course – II (AC)		3	2	3	25	75	100
II II		First Allied Course – III (AC)		4	4	3	25	75	100
		Add on Course – I ##	Professional English I	6*	4	3	25	75	100
	IV	Environmental Studies		2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Language Proficiency for Employability – Overview of English Language Communication	2	2	3	25	75	100
		TOTAL				-	-	-	900

		Language Course III							
	Ι	Language Course – III Tamil \$ / Other Languages + #		6	3	3	25	75	100
	II	English Course - III		6	3	3	25	75	100
	III	Core Course – III (CC)	Database Management Systems	5	5	3	25	75	100
		Core Practical - III (CP)	Database Management Systems Lab	4	4	3	40	60	100
		Second Allied Course – I (AC)		4	4	3	25	75	100
		Second Allied Practical – II (AP)		3	-	-	-	-	-
		Add on Course – II ##	Professional English II	6*	4	3	25	75	100
III	IV	 Non-Major Elective I @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level or b) Special Tamil if Tamil language was studied upto 10th & 12th std. 	Fundamentals of Information Technology	2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Computational Skills for Employability - Foundation of Coding & Cloud Using Python	-	2	3	25	75	100
		TOTAL	30	27	-	-	-	800	
	Ι	Language Course –IV Tamil \$ / Other Languages + #		6	3	3	25	75	100
	II	English Course – IV		6	3	3	25	75	100
	III	Core Course - IV (CC)	ASP Dot Net	5	5	3	25	75	100
		Core Practical - IV (CP)	ASP Dot Net Lab	4	4	3	40	60	100
		Second Allied Practical – II (AP)		3	2	3	40	60	100
		Second Allied Course – III (AC)		4	4	3	25	75	100
IV	IV	Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either Basic Tamil if Tamil language was not studied in school level or Special Tamil if Tamil language was studied upto 10 th & 12 th std	Working Principles of Internet	2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme	Fundamentals of Web	-	2	3	25	75	100
	• 1		Development	30	25				
	TOTAL					-	-	-	800

		Core Course - V (CC)	Principles of Information Technology	5	5	3	25	75	100
V	III	Core Course – VI (CC)	Operating System	5	5	3	25	75	100
		Core Course – VII (CC)	Software Engineering	5	5	3	25	75	100
		Core Practical -V (CP)	Linux Lab	4	4	3	40	60	100
		Major Based Elective – I	Internet of Things	5	4	3	25	75	100
	IV	(Any one)	Multimedia System	5	4	5	23	15	100
		Skill Based Elective I	Programming in Python	4	2	3	25	75	100
	1 V	Soft Skills Development		2	2	3	25	75	100
		TOTAL			27	-	-	-	700
		Core Course - VIII (CC)	Computer Networks	6	5	3	25	75	100
	III	Core Course - IX (CC)	Mean Stack Webapp	6	5	3	25	75	100
			Development	0	5	5	23	15	100
		Core Practical – VI (CP)	Mean Stack Webapp Lab	4	4	3	40	60	100
		Major Based Elective – II	Cyber Security	5	4	3	25	75	100
VI		(Any one)	Cloud Computing	5	-	5	23	15	100
V I	IV	Project		4	3	-	20	80	100
		/ Skill Based Elective – II	Mobile Application	4	2	3	25	75	100
	1 1		Development		2				
	V	Gender Studies		1	1	3	25	75	100
		Extension Activities **		-	1	-	-	-	-
	TOTAL			30	25	-	-	-	700
	GRAND TOTAL			180	154	-	-	-	4500

List of Allied Courses

First Allied Course

Second Allied Course

Mathematics

Applied Physics

- For those who studied Tamil upto 10^{th} +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 2nd and 3rd Semester (only for 2022-2023 Batch) 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. (As per G.O. No. 76, Higher Education (K2) Department dated: 18.07.2020).
- * The Extra 6 hrs / cycle as per the G.O. 76/2020 will be utilized for the Add on Professional English Course.
- @ 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.

S1. No.	Part	Types of the Courses	No. of Courses	No. of Credits	Marks
1.	Ι	Language Courses	4	12	400
2.	II	English Courses	4	12	400
3.		Core Courses	9	45	900
4.] [Core Practical	6	24	600
5.] [Allied Courses I & II	4	16	400
6.		Allied Practical	2	4	200
7.	III	Major Based Elective Courses	2	8	200
8.		Add –on Course (Professional English I & II)	2	8	200
9.] [Project	1	3	100
10.		Non-Major Elective Courses	2	4	200
11.] [Skill Based Elective Courses	2	4	200
12.	IV	Soft Skills Development	1	2	100
13.] [Value Education	1	2	100
14.] [Environmental Studies	1	2	100
15.		Gender Studies	1	1	100
16.	V	Extension Activities	1	1	
17.	VI	Naan Mudhalvan Scheme	3	6	300
		154	4500		

SUMMARY OF CURRICULUM STRUCTURE OF UG PROGRAMMES

PROGRAMME OUTCOMES:

- Graduates will be able to comprehend the basic concepts learnt and apply inreal life situations with analytical skills.
- Graduates with acquired skills and enhanced knowledge will be employable / become entrepreneurs or will pursue higher Education.
- Graduates with acquired knowledge of modern software tools will be able to contribute effectively as software engineers.
- Graduates will be able to comprehend the related concepts to Computer Science with Allied papers
- Graduates will be imbibed with ethical values and social concerns to ensurepeaceful society.

PROGRAMME SPECIFIC OUTCOMES:

- After completing the B.Sc. Information Technology Programme, the graduateswould have
- Acquired the required knowledge in the Hardware and Software aspects of Computer Science domain and the art of programming.
- Understood the development methodologies of software systems and the ability to analyze design and develop computer applications for real life problems.
- Gained knowledge and skills to collaborate and communicate with peers in IT / ITES industries
- The ability to understand, adjust and adapt with the dynamic technical environment for the growth of IT industry.
- The capability to transfer, with the skills gained, to provide innovative and novel solutions by maintaining ethical norms for the betterment of human society.