

**B.Sc. STATISTICS****CHOICE BASED CREDIT SYSTEM –****LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK (CBCS - LOCF)****(Applicable to the candidates admitted from the academic year 2022-23 onwards)****(Naan Mudhalvan scheme has been implemented from 2nd to 4th semester for the 2023-2024 Batch)**

Sem.	Part	Course	Title	Ins. Hrs.	Credi	Exam Hours	Marks		Total
							Int.	Ext.	
I	I	Language Course – I (Tamil \$ / Other Languages + #)		6	3	3	25	75	100
	II	English Course – I		6	3	3	25	75	100
	III	Core Course – I (CC)	Descriptive Statistics	5	5	3	25	75	100
		Core Practical – I (CP)	Statistics Practical I	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			30	21	-	-	-	600
II	I	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)	Probability Theory	5	5	3	25	75	100
		Core Practical – II (CP)	Statistics Practical II	4	4	3	40	60	100
		First Allied Course – II (AC)		3	2	3	25	75	100
		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			30	29	-	-	-	900

III	I	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)	Theoretical Discrete Distributions	5	5	3	25	75	100
		Core Practical – III (CP)	Statistics Practical III	4	4	3	40	60	100
		Second Allied Course – I (AC)		4	4	3	25	75	100
		Second Allied Practical (AP)		3	-	-	-	-	-
		Add on Course – II ##	Professional English - II	6*	4	3	25	75	100
	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 10 th & 12 th std.		2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Digital Skills for Employability – Microsoft Digital Skills	-	2	3	25	75	100
	TOTAL			30	27	-	-	-	800
IV	I	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)	Theoretical Continuous Distributions	5	5	3	25	75	100
		Core Practical – IV (CP)	Statistics Practical IV	4	4	3	40	60	100
		Second Allied Practical (AP)		3	2	3	40	60	100
		Second Allied Course – II (AC)		4	4	3	25	75	100
	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 a) Basic Tamil if Tamil language was not studied in school level or b) Special Tamil if Tamil language was studied up to 10 th & 12 th std.		2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Power BI	-	2	3	25	75	100
	TOTAL			30	25	-	-	-	800

V	III	Core Course –V (CC)	Sampling Theory	5	5	3	25	75	100
		Core Course – VI (CC)	Statistical Inference I	5	5	3	25	75	100
		Core Course – VII(CC)	Design of Experiments	5	5	3	25	75	100
		Core Practical –V (CP)	Statistics Practical V	4	4	3	40	60	100
		Major Based Elective – I (Any one)	1. Numerical Methods 2. Statistical Quality Control	5	4	3	25	75	100
	IV	Skill Based Elective I	Demography	4	2	3	25	75	100
		Soft Skills Development		2	2	3	25	75	100
	TOTAL			30	27	-	-	-	700
VI	III	Core Course – VIII (CC)	Statistical Inference II	6	5	3	25	75	100
		Core Course – IX (CC)	Operations Research	6	5	3	25	75	100
		Core Practical – VI(CP)	Statistics Practical VI	4	4	3	40	60	100
		Major Based Elective – II (Any one)	1. Applied Statistics 2. Regression Analysis	5	4	3	25	75	100
		Project		4	3	-	20	80	100
	IV	Skill Based Elective – II	Communication and Interpersonal Skills	4	2	3	25	75	100
	V	Extension Activities **		-	1	-	-	-	-
		Gender Studies		1	1	3	25	75	100
	TOTAL			30	25	-	-	-	700
GRAND TOTAL			180	154	-	-	-	4500	

List of Allied Courses

First Allied Course

Mathematics

Second Allied Course

Computer Science

- \$ For those who studied Tamil up to 10th+2 (Regular Stream).
- + Syllabus for other Languages should be on par with Tamil at degree level.
- # Those who studied Tamil up to 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.

SUMMARY OF CURRICULUM STRUCTURE OF UG PROGRAMMES

Sl. No.	Part	Types of the Courses	No. of Courses	No. of Credits	Marks
1.	I	Language Courses	4	12	400
2.	II	English Courses	4	12	400
3.	III	Core Courses	8	40	800
4.		Core Practical	7	29	700
5.		Allied Courses I & II	4	16	400
6.		Allied Practical	2	4	200
7.		Major Based Elective Courses	2	8	200
8.		Add on Courses	2	8	200
9.		Project	1	3	100
10.	IV	Non-Major Elective Courses (Practical)	2	4	200
11.		Skill Based Elective Courses	2	4	200
12.		Soft Skills Development	1	2	100
13.		Value Education	1	2	100
14.		Environmental Studies	1	2	100
15.	V	Gender Studies	1	1	100
16.		Extension Activities	1	1	0
17.	VI	Naan Mudhalvan Scheme	3	6	300
	Total		46	154	4500

PROGRAMME OUTCOMES:

The Courses in the Department of Statistics will enable the student

- To develop the skills to analyze complex statistical data coming from the various fields like industry, marketing, finance, agriculture and business.
- To implement data analysis strategies to develop efficient models for various theoretical postulations.
- Understand the intricacies of statistical testing and its applications in real life problems
- To develop, design and analyze experiments in empirical research.
- To develop soft skills and practicing professional ethics.
- Analyze every large data sets in the context of real-world problems and interpret results using data analytics.
- Understand the optimization and computational techniques for the solution of the real-life problems.

COURSE OUTCOMES:

- Each course, in all the Programmes, has been designed and kept in accordance with the instructions of UGC and fulfills the requirements of the academic and industrial needs. Byopting these courses students may be able to qualify the various esteemed competitive examinations like CSIR-NET, UGC-NET, GATE, ISS, IAS, PCS and many others.
- These programmes offered by the department are highly employable and enable the students to take positions in various Institutes / Universities / Industries for research and development and serve the society.

PROGRAM SPECIFIC OUTCOME:

- The courses in the Department are designed to inculcate analytic and decision-making aptitude among the students. Having an advanced and upgraded knowledge of Statistics from both the theoretical and practical aspects, the students who pass out are well equipped in managing and analyzing various types of data. The education imparted in Statistics is aimed to inculcate statistical thinking in young minds for better future planning and welfare of society and to contribute to the society through excellence in statistical education and research.
- Students after completing these courses may be able to start their career with various Academia and Industry Interface. It may provide a platform to all the students to get experiential learning in this material world. The students may also able to develop decision making problems and suggest the best solution to attain the decision in R&D sector jobs.
