Shrimathi Devkunvar Nanalal Bhatt Vaishnav College for Women (Autonomous)
Owned and Managed by Cork Industries Charities Trust
Affiliated to University of Madras - Re-Accredited with 'A+' Grade by NAAC
Chromepet Chennai-600044

57 YEARS

DEPARTMENT OF COMPUTER SCIENCE WITH COGNITIVE SYSTEMS

B.Sc Computer Science with Cognitive Systems

CHOICE BASED CREDIT SYSTEM (CBCS)

&

LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK (LOCF)

2023-2026 Batch

B.Sc Computer Science with Cognitive Systems

PROGRAMME OUTCOMES (PO)

After completion of the programme, the student will be able to

PO1	Develop sharp cognizance of concepts, apply the domain knowledge with utmost confidence and be assertive at any given opportunity.
PO2	Possess deeper understanding of life skills to appraise life and draw logical conclusions.
PO3	Design and develop solutions for challenging problems of society.
PO4	Acquire programme centric thought process facilitating further studies in the respective domain.
PO5	Engage in life-long learning to easily adapt to the dynamic environment and obtain clarity and preparedness for field specialization
PO6	Self-actualize and self-regulate, focusing on ethical and moral values to become a compassionate human being.

PROGRAMME SPECIFIC OUTCOMES (PSO)

The students at the time of graduation will

PSO1	Understand the programming concepts, methodologies and apply algorithms, mathematical and scientific reasoning to solve ranged computational problems.
PSO2	Apply emerging software development techniques and tools in providing real-time solutions through logical thinking, problem solving and cognitive skills.
PSO3	Build successful careers through the various recent technical tool knowledge, and have an edge in employment opportunities in the IT sector, as well in higher education

Curriculum 2022-2025

SEM	PART	COURSE COMPONENT	COURSE CODE	TIRLE OF THE PAPER	CREDITS	LECTURE HOURS		CIA	ESE	TOTAL
						TH	PR			
I Year I Semester	I	Foundation Course	20ULTFC1001 / 20ULHFC1001 / 20ULSFC1001 / 21ULFFC1001	Tamil/Hindi/ Sanskrit/French	3	6		40	60	100
	II	Foundation Course	20UGEFC1001	English	3	6		40	60	100
	III	CoreMajor1	21UCGCT1001	Core Major-I Operating Systems	2	5		40	60	100
	III	Core Practical 1	21UCGCP1001	Core Practical-I Programming Lab-Operating Systems	2		4	40	60	100
	III	Core Practical II	21UCGCP1002	Core Practical-II Programming Lab- Introduction to Worksheets	5		3	40	60	100
	III	Allied Theory 1	21UCGAT1001	Allied Theory- I Discrete Mathematics	3	6		40	60	100
	IV	Soft Skill	20USSLC1001	Essentials of Language and Communication Skills	3	-		50	-	50
				TOTAL	**21**					**650**
	I	Foundation Course	20ULTFC2002 / 20ULHFC2002 / 20ULSFC2002 / 21ULFFC2002	Tamil/Hindi/ Sanskrit/French	3	6		40	60	100
	II	Foundation Course	20UGEFC2002	English	3	6		40	60	100

I Year II Semester	III	Core Major II	23UCGCT2002	Core Major – II Java Programming	3	5		40	60	100
	III	Core Practical III	21UCGCP2003	Core Practical- III WEB Technology Lab	2		4	40	60	100
	III	Core Practical IV	23UCGCP2004	Core Practical- IV Java Programming Lab	2		3	40	60	100
	III	Allied Theory II	21UCGAT2002	Allied Theory – II Numerical Methods	5	6		40	60	100
	IV	Soft Skill	20ULSHV2002	Universal Human Values	2	-		50		50
	IV	Value Education	20UESVE2001	Environmental Studies	2	-		50		50
	IV	Value Education	20UYGVE2002	Yoga and Wellness	2	-		50		50
				TOTAL	**24**					**750**
II Year III Semester	I	Foundation Course	20ULTFC3003 / 20ULHFC3003 / 20ULSFC3003 / 21ULFFC3003	Tamil/Hindi/ Sanskrit/French	3	5		40	60	100
	II	Foundation Course	20UGEFC3003	English	3	5		40	60	100
	III	Core Major III	23UCGCT3003	Core Major- III Data Structures	3	4		40	60	100
	III	Core Major IV	23UCGCT3004	Core Major – IV Process Management	4	4		40	60	100
	III	Core Practical V	23UCGCP3005	Core Practical- V Data Structures using JAVA - Lab	2		4	40	60	100
	III	Core Practical VI	23UCGCP3006	Core Practical – VI Robotic Process Automation using UIPATH - Lab	2		3	40	60	100

	III	Allied Theory Ill	21UCGAT3003	Allied Theory – III Operational Research	5	5		40	60	100
	IV	Non Major Elective	21UCGNE3001	HTML	2	-		50	-	50
				TOTAL	**21**					**750**
II Year IV Semester	I	Foundation Course	20ULTFC4004 / 20ULHFC4004 / 20ULSFC4004 / 21ULFFC4004	Tamil/Hindi/ Sanskrit/French	3	5		40	60	100
	II	Foundation Course	20UGEFC4004	English	3	5		40	60	100
	III	Core Major V	23UCGCT4005	Core Major- V Relational Database Management System	4	4		40	60	100
	III	Core Practical- VII	23UCGCP4007	Core Practical- VII RDBMS- Lab	2		5	40	60	100
	III	Core Practical VIII	23UCGCP4008	Core Practical VIII Mobile Application Development - Lab	3		4	40	60	100
	III	Allied Theory lV	21UCGAT4004	Allied Theory- IV Statistical Methods	3	5		40	60	100
	III	Allied Practical 1	21UCGAP4001	Allied Practical I: Statistical Methods	2		2	40	60	100
	IV	Non Major Elective	21UCGNE4002	HTML	2	-		50	-	50
				TOTAL	**22**					**750**
	III	CoreTheory VI	23UCGCT5006	Core Theory- VI Software Engineering and Testing	4	4		40	60	100
	III	Core Theory VII	23UCGCT5007	Core Theory- VII Client	3	4		40	60	100

				Relationship Management						
III Year V Semester	III	Core Theory VIII	23UCGCT5008	Core Theory- VIII Computer Networks	3	4		40	60	100
	III	Elective I-Theory Classroom / Coursera	24UCGET5A01/ 24UCGET5B01/ 24UCGET5C01	IT Cognition And Problem Solving / Data Mining / Natural Language Processing	5	6		40	60	100
	III	Core Practical IX	23UCGCP5009	Core Practical- IX Software Testing Lab Using Selenium	2		4	40	60	100
	III	Core Practical XI	23UCGCP5011	Core Practical- X Client Relationship Management - lab	2		5	40	60	100
	III	Core Practical X	21UCGCP5010	Core Practical- XI Computer Networks - Lab	2		5	40	60	100
	IV	Skill Based Elective	23USSSB5SM3/ 23USSSB5ST3	SWAYAM – MOOC / NPTEL / Spoken Tutorials	3	-		50		50
				TOTAL	**24**					**750**
III Year VI Semester	III	CorevTheory IX	21UCGCT6010	Core Theory- IX Virtualization And Cloud Computing	2	4		40	60	100
	III	CorevTheory X	21UCGCT6011	Core Theory- X Machine Learning using Python	3	4		40	60	100
	III	Elective II-Theory Coursera	Will allot code in next academic year 2025-2026	IoT /Human Computer Interaction / Ethics and Social Implications of AI	5	6		40	60	100
	III	Core Practical XII	21UCGCP0611	Core Practical- XII Virtualization	2		5	40	60	100

				and Cloud Computing Lab						
	III	Core Practical- XII		Data Analytics Lab	3		5			
	III	Elective Ill-Project	21UCGCPR6001	Mini project	5	6		40	60	100
	IV	Skill Enhancement	23USSSE6CR4	Skill Enhancement –Coursera	3			50	-	50
	IV	Ability Enhancement	23UAECS6002	Essential of Computing Skill	2			50	-	50
			23UAD 6001	Add on Courses	2			50	-	50
	V	Extra-Curricular Activity	XSP	Sports	1				-	
				TOTAL	**28**					**650**
				GRAND TOTAL	**140**					**4300**

*** Spoken Tutorial- Introduction to Bootstrap course offered from IIT Mumbai**

***Coursera– LMS course offered from Coursera Course**

Core Electives

List of Courses Offered in V Semester	List of Courses Offered in VI semester
1. IT Cognition And Problem Solving 2. Data Mining 3. Natural Language Processing	**1.** IoT **2.** Human Computer Interaction **3.** Ethics and Social Implications of AI