



**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



**DEPARTMENT OF COMPUTER APPLICATIONS**

**BCA**

**CHOICE BASED CREDIT SYSTEM (CBCS)**

**&**

**LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK (LOCF)**

**2022 - 2025 Batch**



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### PROGRAMME OUTCOMES (PO)

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

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

### PROGRAMME SPECIFIC OUTCOMES (PSO)

The students at the time of graduation will

<b>PSO1</b>	Attain the ability to understand the basic principles and concepts to acquire knowledge of mathematical foundations and computer applications.
<b>PSO2</b>	Ability to adopt the rapid changes in tools and technology and to explore technical skills in diverse areas of computer applications.
<b>PSO3</b>	Explore technical comprehension in varied areas of computer applications and experience a conducive environment in cultivating skills for thriving career and higher studies.



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## CURRICULUM 2022 – 2025 Batch

SEM	PART	COURSE COMPONENT	COURSE CODE	TITLE OF THE PAPER	CREDITS	LECTURE HOURS		CIA	ESE	TOTAL
						TH	PR			
I Year - Semester I	I	Foundation Course	22ULTFC1001/ 22ULHFC1001/ 22ULSFC1001/ 21ULFFC1001	Tamil –I/ Hindi –I/ Sanskrit-I/ French-I	3	6		40	60	100
	II	Foundation Course	20UGEFC1001	English -I	3	6		40	60	100
	III	Core Theory -I	22UACT1001	Programming in C and C++	4	4		40	60	100
		Core Practical-I	22UCACP1001	Programming in C and C++ Lab	2		3	40	60	100
		Core Practical-II	20UCACP1002	Web Designing Lab	2		3	40	60	100
		Allied I	20UCAAT1001	Allied Mathematics-I	5	6		40	60	100
	IV	Soft Skill I	20USSLC1001	Soft Skills - Essentials of Communication Skills	3	2		50	-	50
Total					22					650
I Year - Semester II	I	Foundation Course	22ULTFC2002 22ULHFC2002 22ULSFC2002 21ULFFC2002	Tamil –II/ Hindi –II/ Sanskrit-II/ French-II	3	6		40	60	100
	II	Foundation Course	20UGEFC2002	English -II	3	6		40	60	100
	III	Core Theory -II	22UACT2002	Python Programming	4	4		40	60	100
		Core Practical-III	22UCACP2003	Python Lab	2		3	40	60	100
		Core Practical-IV	20UCACP2004	UNIX Lab	2		3	40	60	100
		Allied II	20UCAAT2002	Allied Mathematics-II	5	6		40	60	100



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	IV	Soft Skill II	20USSLC2002	Soft Skills - Essentials of Spoken and Presentation Skills	3	2		50	-	50
		Value Education(as Applicable)	20UESVE2001	Environmental Studies	2			50	-	50
		Value Education(as Applicable)	20UYGVE2002	Yoga and Wellness	2			50	-	50
Total					26					750
II Ye ar - Se m es te r III	III	Core Theory -III	22UACT3003	Programming in Kotlin	4	5		40	60	100
		Core Theory - IV	20UACT3004	Data Structures and algorithms	4	5		40	60	100
		Core Theory -V	20UACT3005	Computer Architecture	4	4		40	60	100
		Core Practical-V	22UCACP3005	Kotlin Lab	2		4	40	60	100
		Core Practical-VI	20UCACP3006	Data structures Using C++ Lab	2		4	40	60	100
		Allied III	20UCAAT3003	Financial Accounting	5	6		40	60	100
	IV	NME I	20UCANE3001	Introduction to Cyber Security	2	2		50	-	50
Total					23					650
II Ye ar - Se m es te r IV	III	Core Theory -VI	23UACT4006	Programming in Java	4	4		40	60	100
		Core Theory -VII	20UACT4007	Data Communication and Networking	4	5		40	60	100
		Core Theory -VIII	20UACT4008	Relational Database Management System(RDBMS)	4	5		40	60	100
		Core Practical-VII	20UCACP4007	RDBMS Lab	2		4	40	60	100
		Core Practical-VIII	23UCACP4008	Java Programming Lab	2		4	40	60	100
		Allied IV	20UCAAT4004	Cost and Management Accounting	5	6		40	60	100



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	IV	NME II	20UCANE4002	Introduction to Cyber Security	2	2		50	-	50
<b>Total</b>					<b>23</b>					<b>650</b>
III Year - Semester V	III	Core Theory -IX	23UACT5009	Operating System	4	5		40	60	100
		Core Theory -X	20UACT5010	Programming in PHP and MYSQL	4	5		40	60	100
		Core Theory -XI	20UACT5011	Software Engineering and Testing	4	5		40	60	100
		Core Practical-IX	23UCACP5009	Accounting software and Data Analytics Lab	2		4	40	60	100
		Core Practical-X	20UCACP5010	PHP and MYSQL Lab	2		4	40	60	100
		Elective I – Theory Coursera	24UCAET5A01/ 24UCAET5B01	Data mining / Internet of Things	5	5		40	60	100
	IV	Skill Based Elective	23USSSB5LT3	Skill Based Elective – Spoken Tutorial LaTeX	3	2		50	-	50
<b>Total</b>					<b>24</b>					<b>650</b>
III Year - Semester VI	III	Core Theory-XII	20UACT6012	Web Technology	4	6		40	60	100
		Core Practical-X1	20UCACP6011	Web Technology Lab	2		5	40	60	100
		Core Practical-XII	22UCACP6012	Node.js Lab	2		5	40	60	100
		Elective II -Theory Coursera	24UCAET6A02/ 24UCAET6B02	Security in Information Technology /Computer Graphics	5	6		40	60	100
		Elective III - Project	20UCAPR6001	Mini Project	5		6	40	60	100
	IV	Skill Enhancement	23USSSE6CR4	Coursera	3	2		50	-	50
	V	Extra Curricular Activity	XSP	Sports	1			-	-	-
<b>Total</b>					<b>22</b>					<b>550</b>



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Grand Total	140				3900
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\* Spoken Tutorial- LMS course offered from IIT Mumbai

\* Coursera– LMS course offered from Coursera

## List of Electives :

1. Resource Management Techniques
2. Internet of Things
3. Artificial Intelligence
4. Security in Information Technology
5. Computer Graphics
6. Data Mining