



**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 UG CHEMISTRY (AIDED)

B.Sc. CHEMISTRY

CHOICE BASED CREDIT SYSTEM (CBCS)

&

LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK (LOCF)

2023-2026 Batch



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B.Sc. CHEMISTRY CURRICULUM FRAMEWORK 2023–2026 Batch

Year/semester	Part No.	Course components	Course code	Title of the paper	credits	CIA	ESE	Total
I yr I semester	I	Foundation course	22ULTFC1001/ 22ULHFC1001/ 22ULSFC1001	Tamil-I/ Hindi-I/ Sanskrit -I	3	40	60	100
	II	Foundation course	22UGEFC1001	General English-I	3	40	60	100
	III	Core theory-I	22UCHCT1001	Basics concepts in Inorganic Chemistry	3	40	60	100
		Core theory-II	22UCHCT1002	Analytical chemistry-I	3	40	60	100
		Core practical-I	22UCHCP1001	Inorganic Qualitative Analysis	2	40	60	100
		Allied Theory-I	20UCHAT1001	Allied Mathematics-I	5	40	60	100
	IV	Soft skill	22USSLC1001	Essentials of Language and communication skills	3	50	-	50
I yr II semester	I	Foundation course	22ULTFC2002/ 22ULHFC2002/ 22ULSFC2002	Tamil-II/ Hindi-II/ Sanskrit -II	3	40	60	100
	II	Foundation course	22UGEFC2002	General English-II	3	40	60	100
	III	Core theory-III	22UCHCT2003	Basics of Organic Chemistry	3	40	60	100
		Core theory-IV	22UCHCT2004	Analytical chemistry-II	3	40	60	100
		Core practical-II	22UCHCP2002	Preparation and Tests for purity	2	40	60	100
		Allied Theory-II	20UCHAT2002	Allied Mathematics-II	5	40	60	100
	IV	Soft skill	22USSSP2002	Essentials of spoken and presentation skills	3	50	-	50
		Value education	20UESVE2001	Environmental studies	2	50	-	50
			20UYGVE2002	Yoga and wellness	2	50	-	50



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Year/ semester	Part No.	Course components	Course code	Title of the paper	credits	CIA	ESE	Total
II yr III semester	I	Foundation course	22ULTFC3003/ 22ULHFC3003/ 22ULSFC3003	Tamil-III/ Hindi-III/ Sanskrit -III	3	40	60	100
	II	Foundation course	22UGEFC3003	General English-III	3	40	60	100
	III	Core theory-V	22UCHCT3005	Organic functional Groups and Heterocyclic compounds	3	40	60	100
		Core theory-VI	22UCHCT3006	Chemistry of s And p block elements	3	40	60	100
		Core practical-III	22UCHCP3003	Volumetric Analysis	2	40	60	100
		Allied Theory-III	20UCHAT3003	Allied Physics-I	4	40	60	100
	IV	Non major elective	20UCHND3001	Chemistry in Everyday life	2	50	-	50
II yr IV semester	I	Foundation course	22ULTFC4004/ 22ULHFC4004/ 22ULSFC4004	Tamil-IV/ Hindi-IV/ Sanskrit -IV	3	40	60	100
	II	Foundation course	22UGEFC4004	General English-IV	3	40	60	100
	III	Core theory-VII	22UCHCT4007	Thermodynam ics	3	40	60	100
		Core theory-VIII	22UCHCT4008	Transition ,Inner Transition Elements and Metallurgy	3	40	60	100
		Core practical-IV	22UCHCP4004	Organic Qualitative analysis	2	40	60	100
		Allied Theory-IV	20UCHAT4004	Allied Physics- II	5	40	60	100
		Allied Practicals -I	20UCHAP4001	Allied Physics- practical	2	40	60	100
	IV	Non major elective	20UCHND4002	Chemistry in Everyday life	2	50	-	50



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IIIyr V semester		Core theory-IX	22UCHCT5009	Co ordination Chemistry	3	40	60	100
		Core theory-X	22UCHCT5010	Stereo chemistry, Reaction Mechanism and rearrangement	3	40	60	100
	III	Core theory-XI	22UCHCT5011	Phase equilibria and Chemical Kinetics	3	40	60	100
		Core theory-XII	22UCHCT5012	Spectroscopy	3	40	60	100
		Core practical-V	22UCHCP5005	Organic Quantitative analysis	2	40	60	100
				*physical Chemistry practical				
		Elective Theory- I(classroom)	24UCHET5A01 24UCHET5B01	Pharmaceutical Chemistry Dairy Chemistry	5	40	60	100
	IV	Skill Based elective	23USSSB5SM3	SWAYAM MOOC/NPTEL	3	50	-	50
IIIyr VI semester	III	Core theory-XIII	22UCHCT6013	Nuclear Chemistry and Organometallic chemistry	3	40	60	100
		Core theory-XIV	22UCHCT6014	Chemistry of Bio molecules and Natural products	3	40	60	100
		Core theory-XV	22UCHCT6015	Electrochemistry	3	40	60	100
		Core theory-XII	22UCHCT5012	Spectroscopy	3	40	60	100
		Core practical-VI	22UCHCP6006	Gravimetric Analysis And Organic preparation	2	40	60	100
		Core practical-VII	22UCHCP6007	Physical Chemistry practical	3	40	60	100
		Elective Theory- II(classroom)	24UCHET6A02 24UCHET6B02	Medicinal Chemistry Leather Chemistry	5	40	60	100
		Elective Theory- III(classroom)	22UCHET6003	Applied Chemistry-	3	40	60	100
		Elective project	22UCHPR6001	Applied Chemistry- PROJECT	2	40	60	100
	IV	Skill Enhancement	23USSSE6CR4	Coursera	3	50	-	50
	V	Extra curicullar activities	XSP	Sports	1			