

Department of Chemistry

Program Structure of F. Y. B. Sc. Chemistry

(NEP Version II)

Semester	Paper Code	Code and Title	Credits, Lectures
I	24CHE11101	DSC Fundamentals of Chemistry	Credit-2, 30 hrs
	24CHE11102	DSC Introduction to Practical Chemistry	Credit-2, 60 hrs
	24CHE11303	OE Agro Industry	Credit-2, 30 hrs
	24CHE11404	SEC Analytical Practical Skills in Chemistry-I	Credit-2, 60 hrs
II	24CHE12101	DSC General Chemistry	Credit-2, 30 hrs
	24CHE12102	DSC Techniques in Practical Chemistry	Credit-2, 30 hrs
	24CHE12303	OE Agro Industry	Credit-2, 30 hrs
	24CHE12404	SEC Analytical Practical Skills in Chemistry-II	Credit-2, 30 hrs

Program Structure of S. Y. B. Sc. Chemistry
(NEP Version II)

Semester	Paper Code	Code and Title	Credits, Lectures
III	24CHE23101	DSC Chemistry of Functional Groups	Credit-2, 30 hrs
	24CHE23102	DSC Industrial Analytical Techniques	Credit-2, 30 hrs
	24CHE23103	DSC Practical Course in General Chemistry	Credit-2, 60 hrs
	24CHE23104	Major Specific IKS Chemistry in Ancient India	Credit-2, 30 hrs
	24CHE23205	Minor Fundamentals of Biochemistry	Credit-2, 30 hrs
	24CHE23206	Minor Practical Course on Biochemistry	Credit-2, 60 hrs
	24CHE23307	OE Food and Health	Credit-2, 30 hrs
	24CHE23408	VSEC Practical Course on Binary Mixture Analysis	Credit-2, 60 hrs
	24CHE23609	Field Project	Credit-2, 60 hrs
IV	24CHE24101	DSC Concepts in Physical Chemistry	Credit-2, 30 hrs
	24CHE24102	DSC Introduction to Coordination Chemistry	Credit-2, 30 hrs
	24CHE24103	DSC Practical Course in Physical and Inorganic Chemistry	Credit-2, 60 hrs
	24CHE24204	Minor Chemistry of Biomolecules	Credit-2, 30 hrs
	24CHE24205	Minor Practical Course on Natural Products	Credit-2, 60 hrs
	24CHE24306	OE Practical Course on Food and Health	Credit-2, 60 hrs
	24CHE24407	VSEC Practical Course on Industrial Analytical Techniques	Credit-2, 60 hrs
	24CHE24408	SEC Practical Course on Biomolecules	Credit-2, 60 hrs
	24CHE24609	CEP	Credit-2, 60 hrs

Program Structure of T. Y. B. Sc. Chemistry
(NEP Version II)

Semester	Paper Code	Code and Title	Credits, Lectures
V	24CHE35101	DSC Advanced Physical Chemistry-I	Credit-2, 30 hrs
	24CHE35102	DSC Advanced Inorganic Chemistry-I	Credit-2, 30 hrs
	24CHE35103	DSC Advanced Organic Chemistry - I	Credit-2, 30 hrs
	24CHE35104	DSC Biomolecules - I	Credit-2, 30 hrs
	24CHE35105	DSC Physical Chemistry Practical - I	Credit-2, 60 hrs
	24CHE35106	DSC Organic Chemistry Practical - I	Credit-2, 60 hrs
	24CHE35107	DSE Environmental Chemistry	Credit-2, 30 hrs
	24CHE35108	DSE Inorganic Chemistry Practical-I	Credit-2, 60 hrs
	24CHE35209	Minor Analytical Techniques	Credit-2, 30 hrs
	24CHE35410	VSEC Chemistry Software Practical	Credit-2, 60 hrs
	24CHE35611	FP/CEP	Credit-2, 60 hrs
VI	24CHE36101	DSC Advanced Physical Chemistry-II	Credit-2, 30 hrs
	24CHE36102	DSC Advanced Inorganic Chemistry-II	Credit-2, 30 hrs
	24CHE36103	DSC Advanced Organic Chemistry - II	Credit-2, 30 hrs
	24CHE36104	DSC Biomolecules - II	Credit-2, 30 hrs
	24CHE-36105	DSC Physical Chemistry Practical - II	Credit-2, 60 hrs
	24CHE36106	DSC Organic Chemistry Practical - II	Credit-2, 60 hrs
	24CHE36107	DSE Analytical Chemistry	Credit-2, 30 hrs
	24CHE36108	DSE Inorganic Chemistry Practical-II	Credit-2, 60 hrs
	24CHE36409	VSEC Chromatographic Practical Techniques	Credit-2, 60 hrs
	24CHE36610	OJT	Credit-2, 60 hrs

Program Structure of M.Sc.- I Organic Chemistry (NEP)

Semester I		
Course Code	Course Name	Credit
CHE51101	DSC Thermodynamics, Quantum Chemistry and Chemical Kinetics	4
CHE51102	DSC Stereochemistry and Organic Synthesis	4
CHE51103	DSE Molecular Symmetry and Chemistry of Main Group Elements	4
CHE51104	DSC Physical Chemistry Practical – I	2
CHE51105	DSC Inorganic Chemistry Practical – I	2
CHE51106	DSC Organic Chemistry Practical – I	2
CHE51207	RM Research Methodology (Theory)	2
CHE51208	RM Research Methodology (Practical)	2
Semester II		
Course Code	Course Name	Credit
CHE52101	DSC Coordination and Bioinorganic Chemistry	4
CHE52102	DSC Photochemistry and Organic Spectroscopy	4
CHE52106	DSE Molecular Spectroscopy, Nuclear and Radiation Chemistry	4
CHE52103	DSC Physical Chemistry Practical – II	2
CHE52104	DSC Inorganic Chemistry Practical – II	2
CHE52105	DSC Organic Chemistry Practical – II	2
CHE52607	OJT On Job Training	4
Total Subject Course credits for the M.Sc. – I		4 4

Program Structure of M.Sc. (II) Organic Chemistry (NEP)

Sr. No.	Course Code		Course Name	Credits
SEMESTER III				
1.	CHE63101	DSC	Organic Reaction Mechanisms and Pericyclic Chemistry	4
2.	CHE63102	DSC	Advanced Organic Spectroscopy	4
3.	CHE63103	DSC	Heterocyclic Chemistry	2
4.	CHE63104	DSC	Ternary Mixture Separation	2
5.	CHE63105	DSC	Convergent and Divergent Organic Syntheses.	2
6.	CHE63106	DSE	Stereochemistry of Organic Compounds and Asymmetric Synthesis	4
7.	CHE63407	RP	Research Project	4
SEMESTER IV				
8.	CHE64101	DSC	Chemistry of Natural Products	4
9.	CHE64102	DSC	Synthetic Organic Chemistry	4
10.	CHE64103	DSC	Medicinal Chemistry	2
11.	CHE64104	DSC	Practical Organic Synthesis	2
12.	CHE64105	DSE	Retrosynthesis and Protecting- Deprotecting reagents	4
13.	CHE64406	RP	Research Project	6
Total Subject Course credits for the M.Sc. – II				44