

Curriculum - M.Sc Chemistry

First Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	xxxxxxxx	Organometallics and Bioinorganic Chemistry	3	1	-	4	4
2	xxxxxxxx	Stereochemistry and Reactive intermediates	3	1	-	4	4
3	xxxxxxxx	Chemical Dynamics and Electrochemistry	3	1	-	4	4
4	xxxxxxxx	Quantum Chemistry	3	1	-	4	4
5	xxxxxxxx	Inorganic Chemistry Lab-I	-	-	4	4	2
6	xxxxxxxx	Physical Chemistry Lab-I	-	-	4	4	2
7	xxxxxxxx	Presentation and Communication Skills	2	-	-	2	Audit
		Total	14	4	8	26	20

Second Semester

S.No	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	xxxxxxxx	Group Theory and Photoinorganic Chemistry	3	1	-	4	4
2	xxxxxxxx	Organic Reagents and Pericyclic Reactions	3	1	-	4	4
3	xxxxxxxx	Molecular Spectroscopy	3	1	-	4	4
4	xxxxxxxx	Supramolecular Chemistry	3	1	-	4	4
5	xxxxxxxx	DE-I	3	-	-	3	3
6	xxxxxxxx	Inorganic Chemistry Lab-II	-	-	4	4	2
7	xxxxxxxx	Organic Chemistry Lab-I	-	-	4	4	2
		Total	15	4	8	27	23

Third Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	xxxxxxxx	Nanomaterials and Their Applications	3	1	-	4	4
2	xxxxxxxx	Industrial Chemistry	3	1	-	4	4
3	xxxxxxxx	Organic Spectroscopic Techniques	3	-	-	3	3
4	xxxxxxxx	DE-II	3		-	3	3
5	xxxxxxxx	DE-III	3		-	3	3
6	xxxxxxxx	DE-IV	3		-	3	3
7	xxxxxxxx	Organic Chemistry Lab-II	-	-	4	4	2
8	xxxxxxxx	Physical Chemistry Lab-II	-	-	4	4	2
		Total	18	2	8	28	24

Fourth Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	xxxxxxxx	DE-V	3	-	-	3	3
2	xxxxxxxx	Project Work/Dissertation	-	-	20	20	10
		Total	3	-	20	23	13

Total Credits: 80

Tentative List of Proposed Electives

Semester II

DE-I

xxxxxxxx	Frontiers in Inorganic Chemistry
xxxxxxxx	Environmental Chemistry
xxxxxxxx	Nuclear Chemistry
xxxxxxxx	Green Chemistry

Semester III

DE-II

XXXXXXXX	Food Chemistry
XXXXXXXX	Chemistry of Natural products
XXXXXXXX	Computational Chemistry
XXXXXXXX	Inorganic Polymers

DE-III

XXXXXXXX	Chemoinformatics
XXXXXXXX	Bioorganic Chemistry
XXXXXXXX	Physical Organic Chemistry- Advanced
XXXXXXXX	Pharmaceutical Technologies
XXXXXXXX	Advanced Quantum Chemistry

DE-IV

XXXXXXXX	Biopolymers
XXXXXXXX	Surface Chemistry and Catalysis
XXXXXXXX	Computer Aided Drug Design
XXXXXXXX	X-ray Crystallography
XXXXXXXX	Biosensors

Semester IV

DE-V

XXXXXXXX	Chemistry of Surfactant and Pesticides
XXXXXXXX	IPR
XXXXXXXX	Medicinal Chemistry
XXXXXXXX	Non-equilibrium Thermodynamics