

Curriculum - M.Sc Chemistry

First Semester

S.N o.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	25M11CH111	Group Theory and Photoinorganic Chemistry	3	1	-	4	4
2	25M11CH112	Stereochemistry and Reactive intermediates	3	1	-	4	4
3	25M11CH113	Chemical Dynamics and Electrochemistry	3	1	-	4	4
4	25M11CH114	Quantum Chemistry	3	1	-	4	4
5	25M15CH111	Inorganic Chemistry Lab-I	-	-	4	4	2
6	25M15CH112	Physical Chemistry Lab-I	-	-	4	4	2
7	19M21HS111	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	25M11CH115	Organometallics and Bioinorganic Chemistry	3	1	-	4	4
2	25M11CH116	Organic Reagents and Pericyclic Reactions	3	1	-	4	4
3	25M11CH117	Molecular Spectroscopy	3	1	-	4	4
4	25M11CH118	Supramolecular Chemistry	3	1	-	4	4
5	xxxxxxxxx	DE-I	3	-	-	3	3
6	25M15CH113	Inorganic Chemistry Lab-II	-	-	4	4	2
7	25M15CH114	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	25M11CH211	Nanomaterials and Their Applications	3	1	-	4	4
2	25M11CH212	Industrial Chemistry	3	1	-	4	4
3	25M11CH213	Organic Spectroscopic Techniques	3	-	-	3	3
4	xxxxxxxxx	DE-II	3		-	3	3
5	xxxxxxxxx	DE-III	3		-	3	3
6	xxxxxxxxx	DE-IV	3		-	3	3
7	25M15CH211	Organic Chemistry Lab-II	-	-	4	4	2
8	25M15CH212	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	xxxxxxxxx	DE-V	3	-	-	3	3
2	25M17CH211	Project Work/Dissertation	-	-	20	20	10
		Total	3	-	20	23	13

Total Credits: 80

Tentative List of Proposed Electives

DE I

XXXXXXXX	Frontiers in Inorganic Chemistry
XXXXXXXX	Environmental Chemistry
XXXXXXXX	Nuclear Chemistry
XXXXXXXX	Green Chemistry

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

DE V

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