

## Detailed Course Structure for the M.Sc. Chemistry

### Course Name: M.Sc. in Chemistry – First Semester

Subject Code	Paper Type	Subject	L	T	P	C
CHM21080	Major (Compulsory)	Physical Chemistry I	2	1	0	3
CHM21081	Major (Compulsory)	Inorganic Chemistry I	2	1	0	3
CHM21082	Major (Compulsory)	Organic Chemistry I	2	1	0	3
CHM21083	Minor (Compulsory)	Analytical Chemistry	2	0	0	2
CHM22084	Major (Compulsory)	Physical Chemistry Lab	0	0	4	4
CHM22085	Major (Compulsory)	Inorganic Chemistry Lab	0	0	4	4
CHM21086	Allied Minor Elective	Mathematics for Chemistry	2	0	0	2
	<b>Or</b>					
CHM21099	Allied Minor Elective	Geo chemistry	2	0	0	2
ENV21101	Ability Enhancement Course (Compulsory)	Energy and Environmental Science	2	0	0	2
		TOTAL CREDIT				<b>23</b>

**Course Name: M.Sc. in Chemistry – Second Semester**

Subject Code	Paper Type	Subject	L	T	P	C
CHM21087	Major Compulsory	Physical Chemistry II	2	1	0	3
CHM21088	Major Compulsory	Inorganic Chemistry II	2	1	0	3
CHM21089	Major Compulsory	Organic Chemistry II	2	1	0	3
CHM22095	Major Compulsory	Analytical Chemistry Lab	0	0	4	4
CHM22096	Major Compulsory	Organic Chemistry Lab	0	0	4	4
CHM21090	Major Compulsory	Molecular Spectroscopy	2	1	0	4
CHM21097	Allied Minor Elective	Bioinformatics	2	0	0	2
		Or				
CHM21098	Allied Minor Elective	Intellectual Property Right and Patent law	2	1	0	2
		Or				
CHM21092	Allied Minor Elective	Forensic Chemistry	2	1	0	2
		TOTAL CREDIT				<b>23</b>

**Course Name: M.Sc. in Chemistry – Third Semester:**

Subject Code	Paper Type	Subject	L	T	P	C
CHM21100	Minor Compulsory	Electronic and Resonance Spectroscopy	2	1	0	2
CHM21102	Major Elective-I	Advance Physical Special -I	2	1	0	3
CHM21103	Major Elective-II	Advance Physical Special-II	2	1	0	3
<b>OR</b>						
CHM21104	Major Elective-I	Advance Inorganic Special -I	2	1	0	3
CHM21105	Major Elective-II	Advance Inorganic Special -II	2	1	0	3
<b>OR</b>						
CHM21106	Major Elective-I	Advance Organic Special -I	2	1	0	3
CHM21107	Major Elective-II	Advance Organic Special -II	2	1	0	3
CHM22108	Major Elective	Advance Special Practical-1	0	0	4	4
CHM25109	Major Elective	Project and Dissertation-I	0	0	6	6
CHM21110	Minor Elective	Corrosion and Corrosion control system	2	0	0	2
<b>OR</b>						
CHM21111	Minor Elective	Organic Synthetic Strategy	2	0	0	2
<b>OR</b>						
CHM21112	Minor Elective	Bioinorganic Chemistry	2	0	0	2
<b>OR</b>						
CHM21113	Minor Elective	Any Suitable UGC-MOOCs Course <sup>1</sup>	2	0	0	2
CHM21514	Minor Compulsory	Industrial Visit	0	0	2	2
		TOTAL CREDIT				<b>22</b>

## Course Name: M.Sc. in Chemistry – Fourth Semester

Subject Code	Paper Type	Subject	L	T	P	C
CHM21115	Minor Elective	Material Science and Nanotechnology	2	0	0	2
<b>OR</b>						
CHM21116	Minor Elective	Natural Product and Bioorganic Chemistry	2	0	0	2
<b>OR</b>						
CHM21117	Minor Elective	Any Suitable UGC-MOOCs Course <sup>1</sup>	2	0	0	2
CHM23120	Major Compulsory	Computational Chemistry	1	1	1	3
CHM21121	Major Elective	Advance Physical Special - III	2	1	0	3
CHM21122	Major Elective	Advance Physical Special-IV	2	1	0	3
<b>OR</b>						
CHM21123	Major Elective	Advance Inorganic Special -III	2	1	0	3
CHM21124	Major Elective	Advance Inorganic Special -IV	2	1	0	3
<b>OR</b>						
CHM21125	Major Elective	Advance Organic Special - III	2	1	0	3
CHM21126	Major Elective	Advance Organic Special - IV	2	1	0	3
CHM22127	Major Elective	Advance Special Practical-II	0	0	4	4
CHM25128	Major Elective	Project Work and Dissertation-II	0	0	8	8
<b>OR</b>						
		TOTAL CREDIT				<b>23</b>