MSc in Chemistry (2-Year)

with specialization in <u>Medicinal Chemistry</u>

<u>Curriculum:</u>

SEMESTER I							
Sl. No	Type	Course No.	Course Name	L	T	P	Credits
THEORY							
1	Core	TBD	Advanced Organic Chemistry	3	1	0	4
2	Core	TBD	Advanced Inorganic Chemistry	3	1	0	4
3	Core	TBD	Photochemistry and Electrochemistry	3	1	0	4
4	CBCS	TBD	Chemistry of Biomolecules	4	0	0	4
PRACTICAL							
5	Lab	TBD	Lab-I (Organic Chemistry)	0	0	3	2
6	Lab	TBD	Lab-II (Inorganic Chemistry)	0	0	3	2
TOTAL				12	4	6	**20**
7	Non-Credit	TBD	Seminar / SkillX	-	-	-	2

SEMESTER II							
Sl. No	Type	Course No.	Course Name	L	T	P	Credits
THEORY							
1	Core	TBD	Advanced Physical Chemistry	3	1	0	4
2	Core	TBD	Organometallics and Bioinorganic Chemistry	3	1	0	4
3	Core	TBD	Spectroscopy for Structure Determination and Analysis	3	1	0	4
4	CBCS	TBD	Molecular Dynamics Simulations and Docking	4	0	0	4
PRACTICAL							
5	Lab	TBD	Lab-III (Analytical Chemistry)	0	0	3	2
6	Lab	TBD	Lab-IV (Physical Chemistry)	0	0	3	2
TOTAL				12	4	6	**20**
7	Non-Credit	TBD	Seminar / SkillX	-	-	-	2

SEMESTER III							
Sl. No	**Type**	**Course No.**	**Course Name**	**L**	**T**	**P**	**Credits**
THEORY							
1	Core	TBD	Medicinal Chemistry of Natural Products	3	1	0	4
2	Core	TBD	Drug Design and Development	3	1	0	4
3	Core	TBD	Drug Delivery, Action and Metabolism	3	1	0	4
4	Core	TBD	Industrial Process and Scale up Techniques of Drugs	3	1	0	4
PRACTICAL							
5	Lab	TBD	Term Paper on Medicinal Chemistry	0	0	6	4
			TOTAL	12	4	6	**20**
6	Non-Credit	TBD	Seminar / SkillX	-	-	-	2

SEMESTER IV							
Sl. No	**Type**	**Course No.**	**Course Name**	**L**	**T**	**P**	**Credits**
PRACTICAL							
1	Lab	TBD	Project	0	0	27	18
2	-	TBD	Comprehensive Viva-Voce	-	-	-	2
			TOTAL	0	0	27	**20**
3	Non-Credit	TBD	Seminar / SkillX	-	-	-	2

Total Credit = $(4 \times 20) + (4 \times 2) = 80 + 8$