

Master of Science in Chemistry
Master of Science in Chemistry (Specialisation in Analytical Chemistry)
Master of Science in Chemistry (Specialisation in Pharmaceutical Chemistry)
School of Advanced Sciences

Programme Credit Structure		M.Sc.							
University Core Courses		14			CHY4208	Applied Analytical Chemistry	4	0	4
Programme Core Courses		36			CHY4302	Biological and Medicinal Chemistry	4	0	4
Programme Elective		16			CHY4303	Chemical Sensors	4	0	4
University Elective		03			CHYxxxx	Instrumental Methods of Chemical Analysis	4	0	4
Total Graded Credit Requirement		69			CHYxxxx	Advanced Catalysis	4	0	4
					CHYxxxx	Industrial Chemistry Lab	0	4	2
					XXXxxxx	Industrial Certification	0	0	2
University Core [14 Credits]					Programme Electives (PE) Basket 01				
Course Code	Course Title	T	P	C	CHY4301	Interpretive Molecular Spectroscopy	4	0	4
BIC4002	Internship/CO-OP/Design Project	0	0	8	CHY4208	Applied Analytical Chemistry	4	0	4
SET5001	Conference Paper Presentation	0	0	2	CHYxxxx	Instrumental Methods of Chemical Analysis	4	0	4
ENG5001	Technical and Research Writing	1	2	2	CHYxxxx	Industrial Chemical Analysis	4	0	4
STS5001	Essentials of Business Etiquette and Problem Solving	0	2	1	CHYxxxx	Advanced Synthetic Techniques Lab	0	4	2
STS6001	Preparing for Industry	0	2	1	CHYxxxx	Industrial Chemistry Lab	0	4	2
					XXXxxxx	Industrial Certification	0	0	2
Programme Core (36 Credits)					Programme Electives (PE) Basket 02				
CHY4102	Quantum Chemistry and Chemical Bonding	4	0	4	CHYxxxx	Modern Synthetic Strategies Towards Bioactive Molecules	4	0	4
CHY4103	Main Group and Coordination Chemistry	4	0	4	CHYxxxx	Spectroscopic Tools for Pharmaceutical Industry	4	0	4
CHY4104	Structure, Stereochemistry, and Reactivity	4	0	4	CHYxxxx	Contemporary Concepts of Pharmaceutical Chemistry	4	0	4
CHY4100	Inorganic Chemistry Lab	0	4	2	CHYxxxx	Drug Development - Design, Synthesis, and Action	4	0	4
CHY4101	Organic Chemistry Lab	0	4	2	CHYxxxx	Advanced Synthetic Techniques Lab	0	4	2
CHY4204	Thermodynamics, Kinetics, and Electrochemistry	4	0	4	CHYxxxx	Industrial Chemistry Lab	0	4	2
CHY4205	Group Theory and Molecular Spectroscopy	4	0	4	XXXxxxx	Industrial Certification	0	0	2
CHY4206	Organic Reactions and Synthesis	4	0	4	University Electives (3 Credits)				
CHY4201	Physical Chemistry Lab	0	4	2	CSE0101	Introduction to Python Programming	2	2	3
CHY4202	Computational Chemistry Lab	0	4	2	MGT1013	Fundamentals of Enterprise Systems	3	0	3
CHY4200	Laboratory Safety Practices and Ethics	1	2	2	MGT1020	Fundamentals of Services Marketing	3	0	3
CHY4207	Analytical Chemistry Lab	0	4	2	MGT1023	Fundamentals of Human Resource Management	3	0	3
Programme Electives (16 Credits)					MGT1027	Fundamentals of Team Building and Leadership	3	0	3
CHY4301	Interpretive Molecular Spectroscopy	4	0	4					