M.Sc. 2 Years Chemistry (Curriculum)

Course Category	Course No.	Course Title	Credit Point			Credit	Prerequisites
			L	T	P		
Core Courses (53 Credits)	CY 401	Stereochemistry and Organic Reaction Mechanism	4	0	0	4	None
	CY 402	Pericyclic Reactions, Photochemistry and Applied Spectroscopy	4	0	0	4	None
	CY 403	Basic Inorganic and Main Group Chemistry	3	0	0	3	None
	CY 404	Transition and Post Transition Metal Chemistry and Reaction Mechanism	3	0	0	3	None
	CY 405	Chemical and Statistical Thermodynamics	3	0	0	3	None
	CY 406	Symmetry and Group Theory	3	0	0	3	None
	CY 407	Quantum Chemistry	4	0	0	4	None
	CY 408	Molecular Spectroscopy	3	0	0	3	None
	CY 409	Analytical and Environmental Chemistry	3	0	0	3	None
	CY 410	Surfaces and Electrochemistry	3	0	0	3	None
	CY 501	Advanced Organic Chemistry	3	0	0	3	None
	CY 503	Organometallic and Bioinorganic Chemistry	3	0	0	3	None
	CY 481	Organic Chemistry Laboratory	0	0	6	4	None
	CY 482	Inorganic Chemistry Laboratory	0	0	6	4	None
	CY 484	Analytical Chemistry Laboratory	0	0	3	2	None
	CY 581	Physical Chemistry Laboratory	0	0	6	4	None
Elective Courses (15 Credits)	**Basket – I (for semester III)**						
	CY 531	Chemical Kinetics, Reaction and Molecular Dynamics	3	0	0	3	None
	CY 533	Biochemistry and Medicinal Chemistry	3	0	0	3	None
	CY 535	Advance Topics in Catalysis	3	0	0	3	None
	CY 537	Polymer Chemistry	3	0	0	3	None
	CY 539	Drug Design and Drug Action	3	0	0	3	None
	CY 541	Crystallography	3	0	0	3	None
	Basket II (for semester IV)						
	CY 532	Chemistry of Natural Products and Heterocyclic Chemistry	3	0	0	3	None
	CY 534	Advanced Quantum Chemistry	3	0	0	3	CY 407
	CY 536	Computational Chemistry	2	0	2	3	None
	CY 538	Solid State Chemistry	3	0	0	3	None
	CY 540	Nano Science and Technology	3	0	0	3	None
	CY 542	Supramolecular Chemistry	3	0	0	3	None
Open Elective (1 Credit	XXXX	**Scientific Writing & Seminar**	0	0	2	1	None
Project Works (12 Credits)	CY 571	Project (Part I)	0	0	4	2	
	CY 572	Project (Part II)	0	0	20	10	

Electives shall include any other course of appropriate level offered in the institute and reference by the DAC