## Birla Institute of Technology & Science Pilani, Rajasthan

## M.Sc. (Hons) Chemistry

Semester wise pattern for students admitted to First degree program - M.Sc. (Hons) Chemistry:

Year	First Semester	Second Semester
1	General Biology	Probability and Statistics
	Chemistry I	Chemistry II
	Thermodynamics	Mathematics II
	Mathematics I	Physics II
	Physics I	Workshop Practice
	Engineering Graphics	Computer Programming I
2	Electrical Sciences I	Structure and Properties of Materials
	Mathematics III	Electrical Sciences II
	Computer Programming II	Atomic & Molecular Structures
	Principles of Management	Chemistry of Organic Compounds
	Measurement Techniques I	Measurement Techniques II
	One Elective	Technical Report Writing
Summer	Practice School I	
3	<b>Instrumental Methods of Analysis</b>	Synthetic Organic Chemistry
	Chemical Kinetics	<b>Bonding in Inorganic Compounds</b>
	Chemical Thermodynamics	Chemical Experimentation
	<b>Quantum Chemistry</b>	Biophysical Chemistry
	Structure and Reactivity of Organic	Computational Chemistry
	Compounds	Polymer Chemistry
	Optimisation	Stereochemistry and Reaction Mechanisms
	One Elective	StatisticalThermodynamics
		Operations Research
		Numerical Analysis
4	Six Elective Courses	Practice School II
		or
		Dissertation

## **Elective Courses Offered:**

Chemistry of Nontransitional Elements Elements, Coordination Chemistry, Chemistry of Inorganic Compounds, Photochemistry and Laser Spectroscopy, Theoretical Inorganic Chemistry, Biochemical Engineering, Physical Pharmacy, Nuclear & Radiochemistry, Special Projects,