

CHEMISTRY

Semester I

Paper Code	Title	Contact Hrs.		Credits
		Per semester	Per week	
CHY 121	Inorganic Reaction Mechanism and Bonding in Coordination Chemistry	60	4	4
CHY 122	Basics of Organic Chemistry	60	4	4
CHY 123	Quantum Chemistry and Surface Phenomena	60	4	4
CHY 124	Principles of Spectroscopy	60	4	4
CHY 125(a)	Mathematics for Chemists	30	2	2
CHY 125(b)	Biology for Chemists			
CHY 126	Laboratory Course I	180	12	6
CHY 127	Seminar	30	2	2
Total Credits for Semester I				26

Semester II

Paper Code	Title	Contact Hrs.		Credits
		Per semester	Per week	
CHY 221	Advanced Inorganic Chemistry	60	4	4
CHY 222	Mechanism of Organic Reactions	60	4	4
CHY 223	Chemical Kinetics and Electrochemistry	60	4	4
CHY 224	Applications of Spectroscopy	60	4	4
CHY 225	Computers for Chemists	30	2	2
CHY 226	Laboratory Course II	180	12	6
CHY 227	Seminar	30	2	2
Total Credits for Semester II				26

Semester III

Paper Code	Title	Contact Hrs.		Credits
		Per semester	Per week	
CHY 321	Photochemistry & Pericyclic Reactions	60	4	4
CHY 322	Organotransition Metal Chemistry	45	3	3
CHY 323	Thermodynamics	45	3	3
CHY 324	Instrumental Methods of Analysis.	45	3	3
CHY 325	(a) Tool and Technique of Literature Survey in Chemical Sciences (b) Report : Work Visit	30	2	2
CHY 326	Laboratory Course III (Inorganic Practical)	90	6	3
CHY 327	Laboratory Course IV (Organic Practical)	90	6	3
CHY 328	Laboratory Course V (Physical Practical)	90	6	3
Total Credits for Semester III				24

Semester IV

Paper Code	Title	Contact Hrs.		Credits
		Per semester	Per week	
CHY 421	Chemistry of Life Processes	45	3	3
CHY 422	Student is required to select any four papers	45	3	3

to CHY 433	from the list of electives provided on the next page.	45	3	3
		45	3	3
		45	3	3
CHY 434	Research Project/ Dissertation	180	12	12
Total Credits for Semester IV				27
Total Credits				103

Elective Courses

The following alternative groups of elective papers are available :

Elective Paper	I CHY 422	Polymers
Elective Paper	II CHY 423	Advanced Polymer Chemistry
Elective Paper	III CHY 424	Pharmaceutical Chemistry
Elective Paper	IV CHY 425	Environmental Chemistry
Elective Paper	V CHY 426	Environmental Pollution and its Treatment
Elective Paper	VI CHY 427	Bio-inorganic and Supramolecular Chemistry
Elective Paper	VII CHY 428	Nuclear and Radiation Chemistry
Elective Paper	VIII CHY 429	Heterocyclic Chemistry
Elective	IX CHY 430	Chemistry of Natural Products

Paper		
Elective Paper	X CHY 431	Organic Synthesis
Elective Paper	XI CHY 432	Bio-physical Chemistry
Elective Paper	XII CHY 433	Solid State Chemistry

* The electives will only be offered subject to a minimum of 10 students opting for it.

** **The students have to choose any four electives from the above basket.**