

Department of Chemistry (UG)

Programme outcome

B.Sc. Chemistry introduces basic concepts, experimental techniques and applications of chemical sciences and introduces cheminformatics, Green chemistry and micro analytical techniques.

B.Sc. Chemistry

Programme Specific Outcome

- ✓ Inorganic Chemistry
- ✓ Methodology and Perspectives of Sciences and General Informatics
- ✓ Organic Chemistry
- ✓ Physical Chemistry
- ✓ Practical papers– Inorganic, Volumetric, Organic, Physical and Gravimetric experiments

Course Outcome

Course Code	Name of Course	Outcome
B-2143	Inorganic Chemistry I	The student will acquire knowledge in <ul style="list-style-type: none">✓ Atomic Structure✓ Periodic properties✓ Electronic Configuration and Periodicity✓ S block element✓ P block element
B-2144	Organic Chemistry II	The student will acquire knowledge in <ul style="list-style-type: none">✓ Structure and bonding✓ Reaction Mechanisms✓ Stereochemistry✓ Alkane and alkene✓ Arenes and Aromaticity✓ Alkyl and Aryl halides
	Lab course I	<ul style="list-style-type: none">✓ Volumetric analysis✓ Qualitative Analysis by microscale methods of a mixture containing two acidic and two basic radicals✓ Eudiometer, viscometer, Ostwald viscometer✓ Chemical kinetics

L-2001	Physical Chemistry IV	<p>The student will acquire knowledge in</p> <ul style="list-style-type: none"> ✓ Mathematical concept ✓ Gaseous states ✓ Liquid states ✓ Solids states ✓ Colloidal states ✓ Chemical kinetics and catalysis
L-2002	Inorganic Chemistry V	<p>The student will acquire knowledge in</p> <ul style="list-style-type: none"> ✓ Chemistry of Nobel gases ✓ Chemical bonding ✓ Nuclear chemistry ✓ Theory of volumetric analysis
	Lab course II	<ul style="list-style-type: none"> ✓ Organic qualitative analysis ✓ Organic estimation
L-2145	Organic Chemistry VII	<p>The student will acquire knowledge in</p> <ul style="list-style-type: none"> ✓ Alcohols, Phenols ✓ Aldehydes and Ketones ✓ Carboxylic acids ✓ Organic compounds of nitrogen
L-2146	Physical Chemistry VIII	<ul style="list-style-type: none"> ✓ Thermodynamic I ✓ Thermodynamic II ✓ Chemical Equilibrium
	Lab course III	<ul style="list-style-type: none"> ✓ Non instrumental experiment ✓ Inorganic gravimetric estimation ✓ Coplexometric titration
L-2005	Inorganic Chemistry X	<p>The student will acquire knowledge in</p> <ul style="list-style-type: none"> ✓ Chemistry of element of first Transition series ✓ Co-ordination compounds ✓ Chemistry of lanthanides ✓ Chemistry of actinides ✓ Acids and bases ✓ Non aqueous solution
L-2006	Physical Chemistry XI	<p>The student will acquire knowledge in</p> <ul style="list-style-type: none"> ✓ Phase Equilibrium ✓ Electro-chemistry I ✓ Electro-chemistry II

	Lab course IV	<ul style="list-style-type: none"> ✓ Instrumentation – ✓ Conductometric, pH, Polarimetric, Colourimetric ✓ Organic derivatives ✓ Organic estimation
L-2143	Physical Chemistry XIII	<p>The student will acquire knowledge in</p> <ul style="list-style-type: none"> ✓ Elementary quantum mechanics ✓ Spectroscopy ✓ Photo chemistry ✓ Physical properties and molecular structure ✓ Nano material
L-2144	Organic Chemistry XIV	<ul style="list-style-type: none"> ✓ Spectroscopy ✓ Organometallic compound ✓ Organic synthesis via enolates ✓ Fats, oils, Detergents
	Lab course V	<ul style="list-style-type: none"> ✓ Binary mixture ✓ Inorganic qualitative analysis ✓ Gravimetric estimation ✓ Volumetric estimation
L-2003	Inorganic Chemistry XVI	<ul style="list-style-type: none"> ✓ Metal ligand bonding in transition metal complexes ✓ Electronic spectra of transition metal complexes ✓ Organometallic chemistry ✓ Bioinorganic chemistry ✓ Chromatography
L-2004	Organic Chemistry XVII	<p>The student will acquire knowledge in</p> <ul style="list-style-type: none"> ✓ Heterocyclic Compounds ✓ Carbohydrate ✓ Synthetic Polymers ✓ Synthetic dyes and Drugs
	Practical VI	<ul style="list-style-type: none"> ✓ Organic estimation ✓ Organic preparation ✓ Instrumental and Non instrumental experiment