

**B.SC CHEMISTRY**  
**COURSE OUTCOMES**

**B.Sc I**

**Course- Atomic Structure, Bonding, General Organic chemistry & Aliphatic hydrocarbons (CHEM101TH)**

- Understanding the basic building block of matter their structure and bonding.
- Gaining insights into the basics of organic chemistry and synthetic organic chemistry of Alkanes, Alkenes and Alkynes

**Course- States of Matter, Chemical Kinetics & Functional Organic Chemistry (CHEM102TH)**

- Gaining the knowledge about the various states of matter i.e., solid, liquid and gases.
- Understanding the synthetic organic chemistry of Alkyl halides, Alcohols Aldehydes and Ketones

**B.Sc II**

**Course- Solutions, Phase Equilibrium, Conductance, Electrochemistry & Organic chemistry (CHEM201TH)**

- This course gives in-depth knowledge about various solution and their importance in our daily life.
- Understanding about the various phases and effect of various physical conditions over phase. Electro chemistry part gives knowledge about the reduction, oxidation and about the various types of cells

**Course- Chemistry of Main Group Elements, Chemical Energetics and Equilibria (CHEM202TH)**

- Familiarisation the students about main group elements of periodic table.
- Understanding the various heat changes in physical and chemical reactions

**Course- Basic analytical Chemistry [CHEM203 SEC]**

- To provide an understanding of chemical methods employed for elemental and compound analysis.
- To develop some understanding of the professional and safety responsibilities residing in working on chemical analysis.

**Course-Fuel Chemistry & Chemistry of Cosmetics & Perfumes (SEC)[CHEM203TH]**

- Learn basics of cosmetics, various cosmetic formulation, ingredients and their roles in cosmetic products.

- Learn the use of safe, economic and body-friendly cosmetics and prepare new innovative formulations.

### **B.Sc- III**

#### **Course-Polynuclear Hydrocarbons, Dyes, Heterocyclic Compounds and Spectroscopy (UV, IR, NMR) (CHEM 301TH)**

- Learn about basic principles of UV, IR and NMR spectroscopic techniques to interpret the spectra to determine structure and stereochemistry of known and unknown compounds.
- Understand thoroughly the chemistry of heterocyclic compounds, polynuclear hydrocarbons which include various methods for synthesis through application of the synthetic organic chemistry concepts learnt so far.

#### **Course- Chemistry of Transition and Inner Transition Elements, Coordination Chemistry, Organometallics, Acids and Bases (CHEM 304TH)**

- To understand the metal ligand interaction in coordination compounds.
- To impart knowledge of chemistry of inner transition elements, organometallic compounds and acid-base strengths.

#### **Course- Chemical Technology & Society and Business Skills for Chemistry (CHEM307SEC)**

- This course will help students to connect chemical technology for societal benefits.
- Students will be able to learn basics skills of business and project management.

#### **Course- Pesticide Chemistry & Pharmaceutical Chemistry (CHEM308SEC)**

- Helps to understand the preparation, structures, properties, reactions, benefits and adverse effects of pesticide compounds.
- Basic knowledge regarding general methods of preparation of organic compounds.