Chemistry

B.Sc. Chemistry

Students will be able to

- Discuss the fundamental and application of current chemical and scientific theories in the core areas such as inorganic, organic and physical chemistry and applied areas of chemistry such as Agricultural chemistry, Nutritional chemistry, Drug Chemistry and Water Chemistry.
- Design, carry out chemical experiments in laboratory following using modern instruments and classical techniques safe use of equipments and chemicals, interpretation and documentation of the results and communicate through thesis writing and research publications.
- Apply appropriate techniques for the analysis of chemicals in research and development laboratories and industries, leading to employment opportunities in chemical industries as a chemist.
- Formulate solutions to address current problems through chemical principles in a variety of fields and evaluate the potential impact chemistry may have on society, health, and the environment.
- Explain, integrate and apply relevant knowledge to problems that emerge from the broader interdisciplinary subfields and probable solutions for environmental problems.

M.Sc. Chemistry

Students will be able to

- Explain advanced concepts of Inorganic, Organic and Physical Chemistry and integrate knowledge in discipline specific areas.
- Design chemical reactions and their mechanism using a variety of chemical instrumentation, laboratory techniques, statistical and computational methods and interpret it as scientific reports through oral and written means.
- Apply modern instruments and technologies and classical equipments in execution of chemical experiments, recognizing the uncertainties and error in experimental measurements following the ethical standards as chemists.
- Examine the importance of chemistry in dealing with political, social, environmental and societal problems due to chemicals and plausible remedial measures for sustainable society.
- Identify career prospects as chemists in research and development organizations or through entrepreneurial associateship.

M.Phil

Student will be able to

- Identify current topics of chemical research, and perform either basic, applied or transdisciplinary research based on theoretical concepts and facts.
- Examine the possibilities of solutions to societal problems caused through hazardous chemicals through scientific research conducted with appropriate use of safety measures and ethical considerations.
- Apply the teaching learning knowledge for personal and professional growth in the classroom and affiliated setup.
- Describe the instrumental and computational methods of chemical research.
- Devise employment openings, foundational on theoretical and applied understanding of chemicals and chemical reactions by getting through competitive exams or as an entrepreneur.