

## M.Sc. CHEMISTRY

<b>PROGRAMME EDUCATIONAL OBJECTIVES (PEO)</b>	
<b>PEO1</b>	Apply chemical principles and theories and acquire skills in synthesis, instrumentation and characterization.
<b>PEO2</b>	Apply laboratory skills and critical thinking to develop applications for solving Industry oriented problems.
<b>PEO3</b>	Function as a team member and develop projects in a multi-disciplinary environment by emulating leadership skills.
<b>PEO4</b>	Work productively as chemistry professional by adopting to environment with lifelong learning and adhering to ethical standards and apply the knowledge acquired for the improvement of the society.

<b>PROGRAMME OUTCOMES (PO)</b>	
<b>PO1</b>	Understand and appreciate the importance of Chemistry as a central science by the knowledge of its diverse applications.
<b>PO2</b>	Have sound knowledge of the fundamental and advanced concepts of applications of chemical and scientific theories.
<b>PO3</b>	Acquire experimental skills required for employment in chemical and pharmaceutical industry.
<b>PO4</b>	Develop analytical and problem-solving skills
<b>PO5</b>	Acquire the ability to synthesize, separate and characterize compounds using laboratory and instrumentation techniques.
<b>PO6</b>	Identify the major problems of the society and environment for which Chemistry has offered and can provide solutions and get motivated to further work on it by pursuing research with social responsibility.

<b>PROGRAMME SPECIFIC OUTCOMES (PSO)</b>	
<b>PSO-1</b>	Apply the knowledge acquired about chemical reactions and their mechanisms to design  new synthetic pathways
<b>PSO-2</b>	Design and synthesize new compounds which have potential applications in Industry and Medicine.
<b>PSO-3</b>	Carry out experiments and analysis in the area of organic analysis, estimation, separation, inorganic semi micro analysis, preparation
<b>PSO-4</b>	Apply the concepts and applications of kinetics thermodynamics
<b>PSO-5</b>	Open up new methods for environmental pollution&apply green/sustainable chemistry  approach towards planning and execution of research in frontier areas of chemical sciences
<b>PSO-6</b>	Deduce the structure of compounds using various characterization techniques
<b>PSO 7</b>	Analyze & appreciate the different types polymers, supramolecular materials, naturally  available chemicals and their synthetic congeners
<b>PSO-8</b>	Apply appropriate techniques for the qualitative and quantitative analysis of chemicals in laboratories
<b>PSO-9</b>	Perform estimation experiments relating to electrochemistry, thermodynamics and  Kinetics
<b>PSO-10</b>	Apply the concepts of quantum mechanics and group theory