Master of Science (M.Sc.) in Chemistry

Programme Outcome:

The purpose of the master's program is to further develop knowledge and skills in Chemistry and to prepare students for a professional career in academia, industry or for doctoral studies. This is achieved through various fundamental as well as advanced theory courses coupled with a number of laboratory courses that allows students to gain hands-on experience with chemical phenomena, gather data and propose models and explanations for their observations. The program provides an opportunity for students to take modules from a wide range of cutting-edge fields in chemistry, encompassing sessions on theory, laboratory, scientific writing, communication and presentation, besides a semester long research project.

Specific Program Objectives:

- To provide a broad foundation in Chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective.
- To deliver advanced concepts in Chemistry covering topics in Analytical, Inorganic, Organic and Physical Chemistry, while also reinforcing the fundamental concepts.
- To make the Department a growing center of excellence in teaching, cutting-edge research, curriculum development and popularizing Chemistry.
- To make students proficient in advanced laboratory techniques, enabling them to independently plan and conduct experiments at a higher level as well as to work as a team.
- To expose the students to a range of analytical methods using modern instrumentation, enabling them to analyze results at a higher level.
- The Department also endeavors to contribute towards environment sustainability and sustainable chemical practices.
- To enable students, develop the skills required in chemical industry or any government organization.
- To develop critical thinking and skills like effective scientific communication, time management, and multi-tasking aptitude.