M. Sc. Bioinformatics (5-year Integrated Course)

Vision

The Department seeks to create holistic development through teaching, research and extension activities to solve the biological issues through computational approach.

Mission

- Providing technical education and research by imparting biological and computational knowledge through updated curriculum
- Enable in developing algorithms for solving biological problems
- Inculcate values to serve the society with professional ethics

Programme Outcomes

1. Comprehend knowledge of advanced concepts, theories, scientific phenomena, technology and relating to living organisms
2. Apply the knowledge of scientific concepts for solving problems related to corporate world and environmental world
3. Critically analyse the information in different domain and interpret data for developing solutions with valid justifications
4. Exhibit the analytical skills to solve the problems in health sector, IT sector and environmental sector through developing new algorithms and coding using different programming languages
5. Acquire ability to comprehend and write effective reports and communicate confidently to share their ideas
6. Able to handle societal problems and develop entrepreneurship skills by strategical thinking
7. Build leadership and teamwork to contribute their expertise to different sectors and extend their support in nation building.
8. Ability to adapt according to the technological change and demands of work place through their life-long learning to update their knowledge and developmental skills
9. Apply professional ethics and be responsible to pursue the projects related to diverse domains in life science.

Programme Specific Outcomes

1. Acquire knowledge and understand the advanced concepts of mathematical science, structural and computational science, biological science and biophysical chemistry of living organisms including their biodiversity.
2. Perform protocols as per the laboratory standards in the area related to molecular bioscience, computational biology, high-end programming languages and structural and medicinal chemistry
3. Analyse and interpret the biological data and serve as facilitator to provide bioinformatics solutions using software packages and databases
4. Develop professional skills and acquire ethics fostering for career, research and developmental activities and higher studies in emerging areas of biotechnology and bioinformatics corporate sectors.