



## **B. Sc. Biotechnology**

### **Vision**

The Department seeks to create holistic development through teaching, research and extension activities with mutual love, social commitment and conscience.

### **Mission**

The Department of Biotechnology & Bioinformatics aims,

- To develop students in technical education and research by imparting knowledge and skill to attain academic excellence and professional competence.
- To serve humanity with exemplary values and professional ethics

### **Programme Outcomes**

1. Exhibit advanced knowledge in the biotechnological concepts and principles in real life in both orally and in writing, with confidence and share their views/ideas.
2. Critically analyze and evaluate existing hypotheses and knowledge gained through various sources, to solve long standing problems and discover new breakthrough
3. Display research-related skills through practical and project work as they are trained to plan, execute, analyze and report their experiments and also publish their findings.
4. Apply skills necessary to analyze and interpret qualitative as well as quantitative data independently to develop models with an open mind.
5. Demonstrate the outcomes of holistic education for their employment in biotechnology-related jobs and for pursuing higher education in reputed institutions by developing technical and communication skills.
6. Trained to identify and address the socially relevant pressing problems both in the national and global setting by using the skills acquired from the programme.
7. Explore and engage in lifelong learning by accessing library and ICT facilities to evolve new technologies based on the need of the job market.
8. Exhibit the art of teamwork and to conduct themselves with responsibility and character while they pursue shared/group projects and assignments.
9. Practice moral and social values in personal and social life to meet the needs of the society as responsible citizens.

### **Programme Specific Outcomes**

1. Relate the connections between Cell biology, Biochemistry, Genetics and Immunology
2. Apply animals, plants and microbes in the field of biotechnology to meet the industrial needs and improve the level of commercialization of bioproducts.
3. Choose and perform the relevant experimental techniques in the area of Biochemistry, Molecular biology, Cell biology, Microbiology, Genomics, Immunology, Food Biotechnology, Plant and Animal Biotechnology with skill and ease by following standard laboratory protocols.
4. Practice professional skills and ethical values in personal and social life to serve the society at large.



## **M. Sc. Biotechnology**

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### **Programme Specific Outcomes**

1. Apply the knowledge of advanced concepts of Biotechnology to solve problems related to different fields of Biotechnology, Genomics, Proteomics, Stem cell biology, Cell biology, DNA technology and biochemistry
2. Analyze and relate the impact of biotechnological solutions for animals, plants and microbes and understand biotechnology management
3. Develop practical expertise in the area of Biochemistry, Molecular biology, Cell biology, Microbiology, Genomics, Immunology, Food Biotechnology, Plant and Animal Biotechnology and apply statistical methods.
4. Understand the applications of Biotechnology in Agriculture, Pharma Industry, Food industry, R&D activities, Clinical research and novel product development to address the societal problems.