

COURSE OVERVIEW

M.Sc. in Biotechnology is a two years postgraduate program that focuses on the advance knowledge of the application of various areas of science including, Medical and Health Care Industries, Agricultural and Industrial Sectors, Environment Conservation, and Forensics in the field of Technology, Design and Engineering.

M.Sc. in Biotechnology is a career-oriented advance course that covers topics like Molecular Biology, Genetics, Genetic Engineering, Nano-Technology, Plant and Animal Biotechnology, Drug Design & Discovery, Immunology, Biochemistry, etc. The curriculum is a mixture of both highly interactive theoretical and practical sessions along with the seminars, training program & mini projects that help students learn the implementation of the course.

PROGRAM OBJECTIVES:

- To provide high quality teaching and innovative research in the frontier areas of biotechnology.
- To recruit, nurture and develop specialized academicians and scientists with expertise in molecular biology, immunology, molecular genetics, plant and animal biotechnology, and cutting-edge research.
- To translate the knowledge into innovative tools in various fields like medical and health care, food industry, agriculture industry etc.
- To address environmental issues by providing integrated platform for basic and clinical research.

PROGRAM OUTCOMES

PO1: Understand the basic and advance knowledge and concepts of biotechnology and other related areas.

PO2: Gain the ability of implementing theoretical knowledge into practical aspects.

PO3: Gain the ability of problem solving and critical thinking.

PO4: Speak, read, write and listen clearly in person and through electronic media in English.

PO5: Understand the issues of environmental contexts and sustainable development.

PROGRAM SPECIFIC OUTCOMES

PSO1: To understand fundamental principles of molecular and cellular biology, biochemistry, genetics, immunology and bioinformatics.

PSO2: Gain in-depth knowledge of various subjects related to Biotechnology and also covers few basic concepts of Computer, Chemistry, Bioethics, and Critical thinking.

PSO3: Understand the potential of Biotechnology through knowledge of Medicine, Environment, Agriculture, and Bioinformatics.

PSO4: Recognize the importance of Bioethics, IPR, and Entrepreneurship, using statistical tools, Communication and management skills, written and oral reports, scientific publications so as to usher next generation of Indian biotechnologists.