



Department of Biotechnology

Institute of Engineering and Technology

I. Vision

- Be an international standard organization leading technological and socioeconomic development of the region and country-
 1. By ensuring high quality technical education in the field of Biotechnology to all sections of the society.
 2. By enhancing the goal competitiveness of technical manpower.
- To remain a leading centre in education, research, entrepreneurship in biotechnology guided by sound technical and ethical principles

II. Mission

M1	To develop high quality engineering professional by offering B.Tech. Biotechnology program and to develop a premier Biotechnology teaching and research department to cater the needs and challenges of the region and country.
M2	To provide globally acceptable technical education in Biotechnology.
M3	To promote collaboration with academia, industries and research organizations.
M4	To contribute to socio-economics development through education and bio-entrepreneurship.
M5	To contribute to the all-round development of students through various activities and program and enrich their capacities and potentials.

III. Program Outcomes (POs)

Graduate Students of B. Tech. (Biotechnology) program will be able to:

Program Outcomes (POs)		Graduate Attributes (GAs)
PO1	Apply the knowledge of physical sciences, biological sciences, mathematics, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.	Engineering knowledge
PO2	Review research literature, formulates identify and analysis complex engineering problems using principles of mathematics, science, natural science and bioengineering.	Problem analysis



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PO3	Select and apply appropriate technique, resources and IT tools including production and modelling to complex engineering activities.	Modern tool usage
PO4	Function effectively as a member or leader in diverse team and in multidisciplinary settings.	Team work
PO5	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.	The engineer and society
PO6	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.	Environment and sustainability
PO7	Apply ethical principle and commit to professional ethics and responsibilities and norms of the engineering practice.	Ethics
PO8	Communication effectively on complex engineering activities with the engineering community.	Communication
PO9	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.	Life-long learning

IV. Program Educational objectives (PEOs)

The educational objectives are:

PEO1	Graduates will be able to implement the engineering principles to biological systems for the development of industrial applications as well as Entrepreneurship skills to start biotech industries.
PEO2	Graduates will think critically and creatively about the use of biotechnology to address local and global problems with ethical values with holistic approach.
PEO3	Graduate of the program will be able to serve the nation as academician, government professional, entrepreneur by implication of their work as it affects the health, safety and environment of human population.



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V. Program specific outcomes (PSOs)

Graduate students of B. Tech. Biotechnology program will be able:

PSO1	To implement technical knowledge practically in the field of strain improvement, fermentation, recovery of the product, Treatment of waste materials and commercial production of primary and secondary metabolites specially in application areas of engineering and technology in biotech industries.
PSO2	To take up career in biotech industries, pharma industries, food industries, IT sector and national and international research institutes to pursue higher studies.