

Bio-Technology, on the other hand, is a research-oriented science, a combination of Biology and Technology. It covers a wide variety of subjects like Genetics, Biochemistry, Microbiology, Immunology, Virology, Chemistry and Engineering and is also concerned with many other subjects like Health and Medicine, Agriculture and Animal Husbandry, Cropping system and Crop Management, Ecology, Cell Biology, Soil science and Soil Conservation, Bio-statistics, Plant Physiology, Seed Technology etc. Bio-Technology is the use of living things, especially cells and bacteria in the industrial process. There is a great scope in this field as the demand for biotechnologist is growing in India as well as abroad. Therefore it is no doubt one of the fields that offer the maximum potential to the student's career.

A degree in biotechnology is not a one-way ticket into a lab coat. An education in biotechnology can set you up for a wide variety of careers including management, marketing, and of course, laboratory science.

The scope of biotechnology is rising in certain fields which include:

Gene therapy

Tissue culture

Immunotechnologies

Genetic Engineering

Plant-based drugs

Rational drug design

Stem cell techniques

New DNA technologies

Photosynthetic efficiency

Enzyme engineering and technology

You can read more about this course

here: <https://www.univariety.com/career/Biotechnology/be701362>

To get into B.Tech in Biotechnology specialization, you would require to take a common entrance test conducted by national, state and institute level boards.

Many of the national and state level board of entrance examinations do require math as a subject in your 12th. However, there are few institutes which offer B.Tech Biotechnology with Physics, chemistry and Biology. In order to get into these institutes, you would require taking the entrance examinations conducted by these institutes.

Please find the details below:

- ☐ ☐ ☐ ☐ ☐ All India Biotechnology Common Entrance Test (AIBTCET) Conducted by DPU (Dr. D. Y. Patil Vidyapeeth University). Eligibility is 10 +2 with Physics, Chemistry and Biology.

• ☐ ☐ ☐ ☐ ☐ JNU (Jawaharlal Nehru University): An All India Entrance Examination will be conducted by the examination cell established by Department of Biotechnology, at Jawaharlal Nehru University during the month of April/May at main centres like Bangalore, Mumbai, Calcutta, Chennai, Coimbatore, Hyderabad, Madurai and New Delhi.

An advertisement regarding the Entrance Examination will be published in all leading newspapers during February. Students who have taken the final examination at the plus 2 level with Physics, Chemistry and Biology are eligible to take this examination. The selection of candidates will be merit based on aggregate marks of the qualifying examination (67%)(Physics, Chemistry, Biology) and the entrance examination (33%). For the admission, the candidate has to apply separately after the entrance exam.

• ☐ ☐ ☐ ☐ ☐ Uttar Pradesh Technical University, Institute of Engineering, Lucknow offers admission through UPSEE entrance examination to B.Tech Biotechnology.

• ☐ ☐ ☐ ☐ ☐ Visvesvaraih Technological University, Karnataka, offers admissions through state level entrance examination for B.Tech.

Other universities which offer B.Tech Biotechnology with only Biology subject are

• ☐ ☐ ☐ ☐ ☐ SRM University,

• ☐ ☐ ☐ ☐ ☐ Anna University,

• ☐ ☐ ☐ ☐ ☐ Gitam University etc. these deemed universities conduct their own institute level entrance examinations.

Few state board entrance exams like EAMCET, K-CET you will have to take a bridge course examination in Mathematics conducted by the Board of Intermediate Education and once you clear this examination, you will be eligible for B.Tech Biotechnology even without Mathematics.

Also we have enlisted some of the widely available courses with the subjects you have:

- Anatomy
- Biochemistry
- Bioinformatics
- Biophysics
- Botany
- Ecology
- Evolution
- Marine biology
- Microbiology
- Molecular Biology
- Neuroscience
- Physiology
- Zoology
- Genetics

- Structural Biology
- Cell Biology
- Immunology