

BIOTECHNOLOGY ENGINEER

Biotechnology Engineers use Biology, Chemistry, Physics, Engineering and Information Technology to develop tools and products to improve human life. They help in fighting against diseases, protecting the environment and utilizing cleaner energy among others.

PERSONAL COMPETENCIES

- You enjoy Science and Maths
- You like to work in a team
- You enjoy figuring how things work and pay attention to details
- You like to solve problems



SCHOLARSHIPS

- **Merit-cum-Means based Scholarship** - About 20,000 such engineering scholarships are awarded by the Ministry of Minority Affairs every year. The full course fees of awardees is directly paid to their institutions under this scheme. *
- **Indian Oil Educational Scholarship** - The IOC Ltd offers 300 scholarships every year to eligible students. Students need to be enrolled in an undergraduate course. The scholarship particularly focuses on students with physical disabilities, women and students from North East and J&K*
- **Ishan Uday" Special Scholarship Scheme** - For promoting higher education and for encouraging children belonging to economically weaker section of the NE region, the UGC has launched "Ishan Uday" Special Scholarship Scheme for North Eastern Region students.
- Visit www.scholarships.gov.in the National Scholarship Portal. Under this portal there are other central government schemes offered by different departments, UGC/AICTE Schemes and State Schemes.*

- Visit www.buddy4study.com a gateway to scholarships starting from Class XI*
- Scholarships are made available by institutes themselves based on merit*

*(Availability of these scholarships vary from time to time)

LOANS

• VidyaLakshmi, www.vidyalakshmi.co.in, is a portal for students seeking education loan. This portal has been developed under the guidance of the Department of Financial Services, (Ministry of Finance), Department of Higher Education (Ministry of Human Resource Development) and Indian Banks Association (IBA). Students can view, apply and track the education loan applications on the website.

- Some states have student credit cards with low interest rates, for instance, West Bengal, Odisha, Bihar, etc.
- All banks give education loans.



The approx. course fees range between **INR 1,112 to 9,32,000*** for one year.

*(The above mentioned figures are approximate numbers. This will vary from Institute to Institute)

ENTRY PATHWAY

1. Complete 10+2 in the Science stream
2. Complete Bachelor's degree in Biotechnology

OR

Complete Bachelor's degree in Biotechnology and follow it up with Master's in the same or allied field

OR

Complete Bachelor's degree in Biotechnology, followed by an online course related to the field

For admissions, you must qualify entrance examination conducted at national level (JEE Main, JEE Advanced etc.) or state level (WBJEE, AP EAMCET etc.) or institute level (VET, IP etc.)

Please check the duration of the course during enrolment



EXPECTED INCOME

**The figures are indicative & subject to change*

The approx. salary of a Biotechnology Engineer ranges between **INR 10,000 - 78,000*** per month.

Source:

<https://www.ambitionbox.com/profile/biotechnology-engineer-salary>



WHERE WILL YOU WORK

Places of Work: They may work in medical equipment manufacturing, pharmaceutical and medicine manufacturing, research and development and educational sector among others.

Work Environment: Most biotechnology engineers work in lab surroundings. It entails intense research work. You will have to work with other engineers or technicians.

Opportunities for differently abled exist in this field

EXPECTED GROWTH PATH



Research Technicians → Research Scientists → Research Project/Team Lead → Laboratory Manager → Laboratory Director

Search keywords...



biotech engineer, medical coding, laboratory technician

WHERE WILL YOU STUDY?

The course is offered by the Department of Biotechnology
This list of institutes is indicative only

GOVERNMENT INSTITUTES

1. IIT Madras
2. IIT Guwahati
3. IIT Kanpur
4. IIT Kharagpur
5. IIT Roorkee
6. Gauhati University Institute of Science and Technology
7. IIT Delhi
8. NIT Arunachal Pradesh

PRIVATE INSTITUTES

(Please check if institute is affiliated and accredited with UGC and AICTE before applying)

1. Thapar Institute of Engineering and Technology, Punjab
2. Manipal Institute of Technology, Karnataka
3. RV College of Engineering, Bangalore
4. Haldia Institute of Technology
5. SRM Institute of Science and Technology
6. BITS Pilani, Rajasthan
7. Vellore Institute of Technology
8. Christ University, Bangalore

Information on institute rankings is available at -
www.nirfindia.org/2022/Ranking.html

DISTANCE LEARNING INSTITUTE

Indira Gandhi National Open University (IGNOU)

ONLINE COURSES • NPTEL* Swayam - https://onlinecourse.in/noc21_bt36/preview

*NPTEL stands for National Programme on Technology Enhanced Learning. It is by the Government of India and offers numerous a variety of courses on an audio and video form.



EXAMPLE FROM THE FIELD

Varsha Biswal is an entrepreneur and the founder of Truptee diary. She is a biotechnologist by profession. She persuaded her BTech and MTech from Kalinga Institute of Industrial Technology, Odisha. She is currently a J.R.F at Odisha University of Agriculture & Technology and has recently got her Ph.D from Utkal University."

Source: <https://interviewtimes.net/77184-2/>

*The above information is for training purposes only and will not be used for any commercial gains.