

BIOINFORMATICS ENGINEERING

Bioinformatics combines Computer Science, Big Data and Life Science to provide solutions to experts working with huge volumes of genetic information. It focuses on molecules like DNA. These Engineers have an expertise in Genetics, Laboratory techniques, and Research protocols, and use Bioinformatics methodology to analyse Biological data.

PERSONAL COMPETENCIES

- You enjoy Science and Maths
- You like to do experiments
- You are good with computers
- You like to analyse things



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 also available in institutes 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 fee ranges between **INR 40,000-3,25,000*** for the full course.

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

ENTRY PATHWAY

1. Complete 10+2 in the Science stream (Physics, Chemistry and Biology)
 2. Complete Bachelor's (B.Tech/B.E./B.Sc) in Bioinformatics
- OR**
- Complete Bachelor's followed by a Master's (M.Tech/M.E./M.Sc) in the same discipline
- OR**
- Complete Diploma in Bioinformatics

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 Bioinformatic Engineer ranges from **INR 10,200 - 83,334*** per month

Source : <https://www.payscale.com/research/IN/Job=Bioinformatician/Salary>

WHERE WILL YOU WORK

Places of Work: You can work in the Academic sector with Researchers and Universities as well as with Pharmaceutical companies*

Work Environment: Companies usually work for 5 to 6 days a week and 8 to 9 hours everyday. This may vary from company to company. Shift system might be applicable.

Opportunities for differently abled exist in this field

EXPECTED GROWTH PATH



Bioinformatics Research Trainee → Bioinformatics Engineer → Bioinformatics Research Lead → Senior Bioinformatics Engineer → Head of Bioinformatics

Search keywords...



bioinformatician, bioinformatics

WHERE WILL YOU STUDY?

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

GOVERNMENT INSTITUTES

1. Buxi Jagabandhu Bidyadhar Autonomous College, Bhubaneswar
2. Government Holkar Science College, Indore
3. Post Graduate Government College for Girls Sector 42, Chandigarh
4. Jamal Mohamed College, Tiruchirappalli
5. Agricultural College and Research Institute, Tamil Nadu
6. Madras Veterinary College, Chennai
7. Government Kamla Raja Girls Post Graduate College, Gwalior
8. Andhra University College of Engineering, Visakhapatnam

PRIVATE INSTITUTES

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

1. Dr DY Patil Arts Commerce and Science College, Pune
2. Sri Krishna Arts and Science College, Coimbatore
3. St Xaviers College, Mumbai (offers a diploma in Bioinformatics)
4. Anwarul Uloom College, Hyderabad
5. Stella Maris College, Chennai
6. St Aloysius College Autonomous, Mangaluru
7. UC College Aluva - Union Christian College
8. Guru Nanak Khalsa College of Arts Science and Commerce, Mumbai

Information on the institute rankings can be found at - <https://www.nirfindia.org/2022/Ranking.html>

DISTANCE LEARNING INSTITUTE

Indira Gandhi National Open University (IGNOU)

ONLINE COURSES

- NPTEL* Swayam : https://onlinecourses.nptel.ac.in/noc21_bt06/preview
- Udemy - <https://bit.ly/3ZhSrYu>

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

