## **Department of Biotechnology**

**Indian Institute of Technology Hyderabad** 

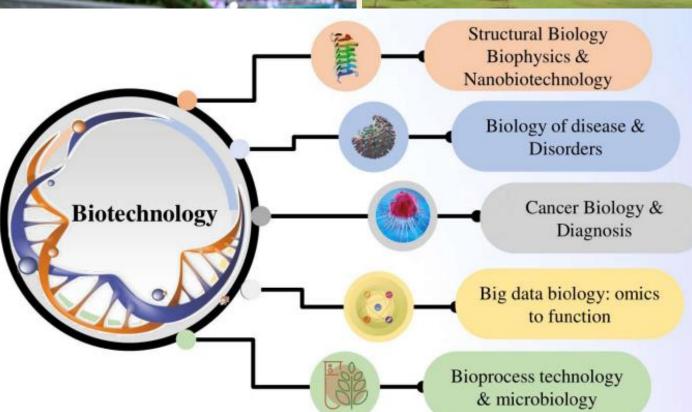


# Ph.D. Admissions Brochure [October 2024]

Website: <a href="https://biotech.iith.ac.in/">https://biotech.iith.ac.in/</a>







## Department of Biotechnology

(Overview)

The Department of Biotechnology, established in 2010, offers outstanding research programs in the frontier areas of Biotechnology encompassing both applied and basic research spanning various experimental and computational frontiers. Research activities in the department are funded by national agencies such as DBT, DST, ICMR, CSIR, etc.

The mission of the Ph.D. program is to develop a new generation of scientific leaders with scientific vigor, critical thinking, ethics, and multitasking managerial skills to thrive in the fast-paced technology-driven industry and academia. We foster innovations through cutting-edge technologies and interdisciplinary research.

For more details visit: <a href="https://biotech.iith.ac.in/">https://biotech.iith.ac.in/</a>

### Research Areas open for the October 2024 round

Applications are invited from suitably qualified & motivated candidates for admission to the Ph.D. program in the Department of Biotechnology, IITH, in the following research areas:

Experimental PhD openings	
Faculty	Research Areas
Dr. N.K. Raghavendra <a href="https://shorturl.at/8mWiM">https://shorturl.at/8mWiM</a>	Human-Virus protein-protein interaction.
Dr. Ashish Misra <a href="https://shorturl.at/NQRMs">https://shorturl.at/NQRMs</a>	Cancer genomics and biomarker discovery, 3D cancer model development, Drug resistance and repurposing, Long noncoding RNAs, Alternative splicing and RNA metabolism in cancer, Protein Engineering.
Computational PhD openings	
Faculty	Research Areas
Dr. Thenmalarchelvi Rathinavelan <a href="https://shorturl.at/PpqPZ">https://shorturl.at/PpqPZ</a>	Computational microbial 'omics; Biomolecular interaction prediction using machine learning
Dr. Rahul Kumar https://shorturl.at/HPQbl	Computational genomics and transcriptomics, AI for precision medicine, predictive biomarkers in cancer, epigenomics, genome wide drugs and CRISPR/sh-RNA screens.
Dr. Himanshu Joshi <a href="https://shorturl.at/QiRSj">https://shorturl.at/QiRSj</a>	Biomolecular modeling and simulations, DNA Nanotechnology, Nanoparticles interaction with biological matter, Lipid-DNA interaction, Computational biophysics, Computational Virology.
Dr. Abhishek Subramanian <a href="https://tinyurl.com/yeyzs253">https://tinyurl.com/yeyzs253</a>	Computational biology, bioinformatics, Transcriptomics / proteomics / metabolomics data-driven & machine-learning models, Biological networks, Metabolism, Parasitology & Immunology
Dr. G. Narahari Sastry	Artificial Intelligence and Machine Learning, Software Development for Drug Discovery, Protein-Protein,

Chemoinformatics,

Protein-Ligand

Interactions,

Quantum Chemistry, Non-covalent interactions.

Bioinformatics and Health Informatics, Computational

Dr. G. Narahari Sastry

https://gnsastry.com/

## Minimum Eligibility Criteria

#### Eligibility

- MTech in any area of Life Sciences/Biotechnology/Physical Sciences
- MSc degree in any allied area of Life Sciences/Biotechnology, Physical or Chemical Sciences and possessing a valid National level JRF qualification (or) qualified GATE (need not be valid).
- BTech/BE in any allied area of Life Sciences/Biotechnology/Physical Sciences
  (or) MBBS and qualified GATE (need not be valid) or with a valid National
  level JRF qualification.

#### Candidates should also possess:

- General category: at least 63% marks in the highest qualifying degree
- OBC category: at least 62% marks in the highest qualifying degree
- SC/ST category: at least 60% marks in the highest qualifying degree
- For those who have not yet completed their qualifying examination, the marks obtained up to the 3<sup>rd</sup> semester for M.Sc./M.Tech. and 7<sup>th</sup> semester for B Tech/BE Students will be considered.

#### **Category of admission**

- I. Full-time Institute Fellowship (funded by MoE): Any candidates with MTech/MSc/BTech/MBBS degree can apply.
- II. Fellowship from external funding agency: Candidates with valid CSIR-NET-JRF/UGC-NET-JRF/ICMR-JRF/DBT-JRF/ (Category-I) award or any other equivalent national level qualification for research fellowship (e.g., DST-INSPIRE fellowship) can apply under this category.

<u>Note:</u> Prospective applicant has to ensure he/she meets all eligibility criteria before applying. Shortlisting criteria are usually higher than minimum eligibility criteria. The department reserves the right to set any cut-off criteria for shortlisting the candidates.

## **Selection Procedure**

- Candidates will be shortlisted according to the criteria set by a shortlisting committee and called for an interview subsequently.
- Selection to the Ph.D. program will be based on the performance in the interview.
- Request to change the interview date/time will not be entertained.

Interested candidates can apply online through IIT Hyderabad's website: <a href="http://www.iith.ac.in/phdadmissions/">http://www.iith.ac.in/phdadmissions/</a>

For any further information, please contact by email: phd biotech@iith.ac.in

**Note:** The department has the right not to select any candidate if appropriate candidates are not found.

## **Career Prospects**

#### **Biotechnology/Bioinformatics Research & Teaching (Academics)**





Pharmaceuticals and **Healthcare Industries** 







#### **Top Companies and Institutes**



























