



# PLACEMENT BROCHURE

DEPARTMENT OF BIOENGINEERING AND BIOTECHNOLOGY

BIRLA INSTITUTE OF TECHNOLOGY

2024-2025





## **ABOUT THE DEPARTMENT**

The Department of Biotechnology and Bioengineering was established in 2002 with financial support from the Department of Agriculture, Government of Jharkhand, with objectives like providing education and training facilities, carrying out application-oriented research, developing inhouse technologies, and promoting consultancy services in various areas of Biotechnology.

- Independent building about 47000 sq. ft.
- Young, dynamic and learned faculty.
- 1 UG, 2 PG and, Ph.D. Program .
- A Center of Excellence (COE) under TEQIP, Phase II sponsored by World Bank.
- BTISnet SubDIC Bioinformatics center for Jharkhand.
- More than 50 externally funded projects from funding agencies by DST, DBT, UGC, AICTE, ICMR, CSIR, SERB, etc.
- A mixed balanced of well recognized faculty members.
- Rich academic and research profile.
- All faculties with minimum Doctoral degree.



# PROGRAMS OFFERED

## UG PROGRAMMES

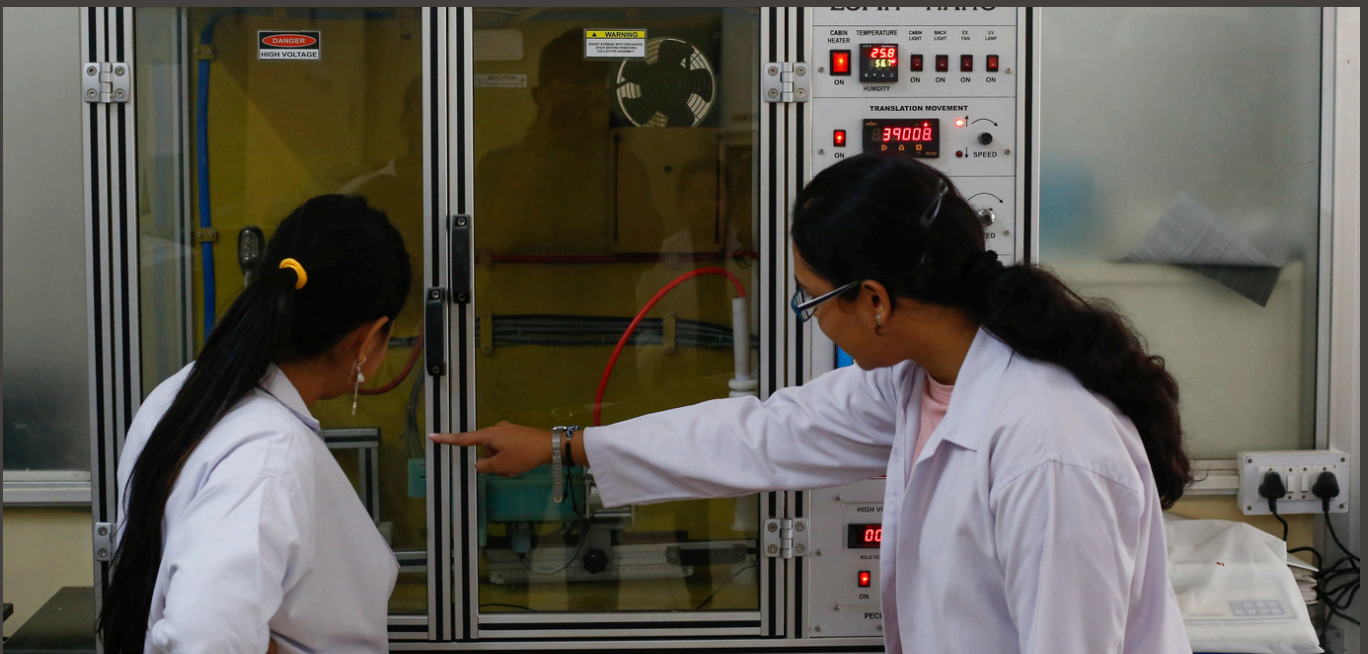
**B.Tech. Biotechnology  
(4 years)**

## PG PROGRAMMES

**M.Sc. Biotechnology  
(2years)  
M.Tech. Biotechnology  
(2years)**

## DOCTRAL PROGRAMMES

**Ph.D**



# LABORATORIES

12 well equipped high end research laboratories dedicated to Molecular Biology, Genetic Engineering and Cell Biology, Plant and Animal Biotechnology, Microbiology, Biochemistry, Proteomics, Bioinformatics, Bioprocess Engineering, Chemical Engineering, Environmental Biotechnology, Biomedical Instrumentation and Imaging.

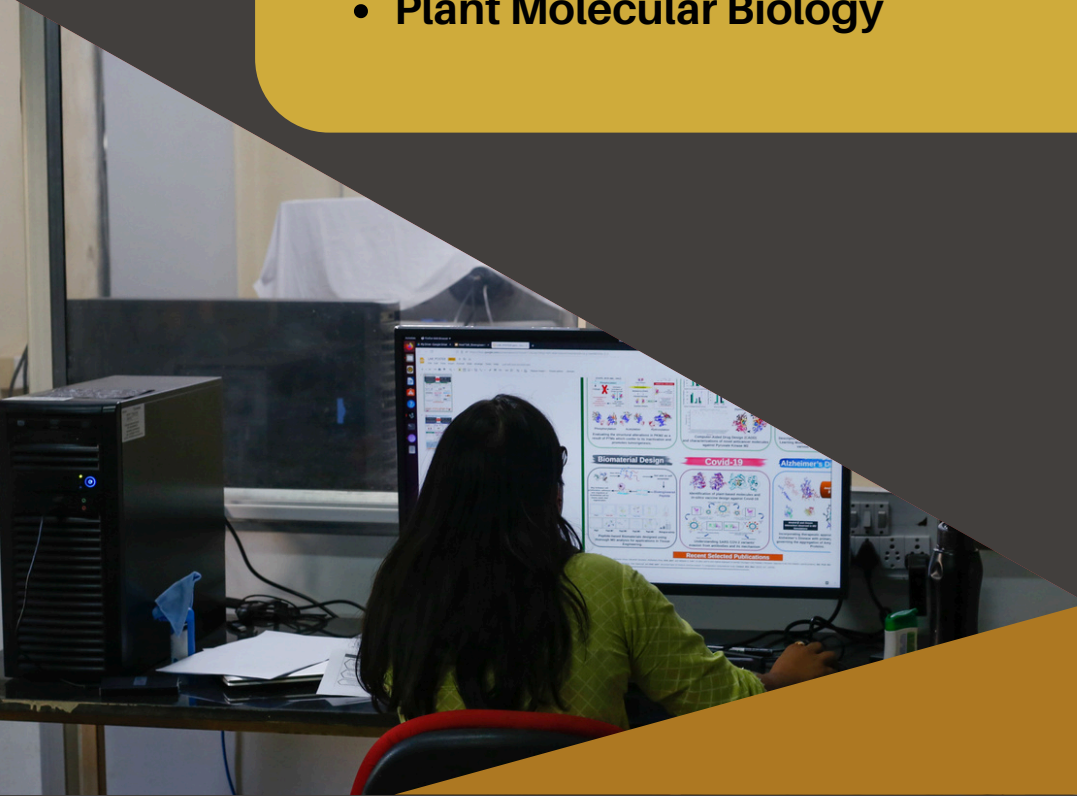
- GC-Mass Spectrophotometer
- Nanodrop Spectrophotometer
- Real-Time PCR
- HPLC-MS/MS
- Lypholizer
- Thermal cyclers
- Gene Pulser
- Microplate reader
- 2D electrophoresis systems
- Chromatography systems
- Spectrophotometers
- Fluorimeters
- Leica microscope with colony counter
- Leica fluorescence microscope
- Lab and Pilot scale Bioreactors
- Cross-flow filtration systems
- Probe Sonicator





# RESEARCH AREAS

- **Self-fitting 4D-Printed Smart Scaffolds with Efficient Bone Regenerative Potential**
- **Algal Biotechnology**
- **Artificial Intelligence in Healthcare**
- **Animal & Plant Tissue Culture**
- **Biofuel Production**
- **Bioinformatics**
- **Bioprocess Engineering**
- **Biosensor & Nano-biotechnology**
- **DownStream Processing**
- **Environmental Biotechnology**
- **Food Biotechnology**
- **Industrial Biotechnology**
- **Medicinal Plant**
- **Microbial Resources**
- **Microbial Biotransformation**
- **Biosignal Analysis**
- **Biomedical Instrumentation**
- **Systems Biology**
- **Electrophysiology**
- **Plant Molecular Biology**



# ACHIVEMENTS

- Nishita Hiremath has received offers for MS in biotechnology from Prudue University, McGill University.
- Hrithik Shankar received an offer to work at the University of British Columbia - Okanagan Campus.
- Akshat Raj Sharma has received summer internship from Illinois Institute of Technology under SURE program.
- Simran kumari has received Mitacs scholarship
- Undergraduate students have secured summer internships at IISC Bangalore.
- Hrithik Baradia (BTECH) has cleared GATE 2021 with an AIR of 24
- Alumni students Ujjwal Kant and Hrithik Shankar cleared GATE 2022.
- Pre-final year student Chinmay Patade cleared GATE 2024.

## **Some well-recognized Databases and Software developed by the Department:**

- Predict @proteommetal - A tool for prediction of metal binding domains in proteins.
- Swift - Modeller - Java based GUI application for Molecular Modelling.
- Infectious Disease Database (Best viewed in Mozilla Firefox and Opera)
- Rice Single Exon Gene Database.

# OUR RECRUITERS



Let's Get In Touch

# CONTACT US



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