



**D Y PATIL INTERNATIONAL UNIVERSITY, AKURDI, PUNE**

## **School of Biosciences & Bioengineering**

**DEPARTMENT OF BIOENGINEERING**

### **B.TECH. IN BIOENGINEERING**

*Engineering the Architecture of Living Systems for a Sustainable and Healthier Tomorrow*

★ 2025 Game Changer in Bioengineering Education

UGC 2(f) Recognized State Private University

Approved Intake: 120 Seats

3 Credited Internships

**D Y PATIL  
INTERNATIONAL  
UNIVERSITY**  
AKURDI PUNE

The School of Biosciences & Bioengineering (SoBB) at D Y Patil International University (DYPIU), Akurdi, Pune, delivers transformative undergraduate engineering education at the convergence of technology, biological systems, and computation. Established under Govt. of Maharashtra Act No. VI of 2018 and recognized by the UGC under Section 2(f), the department empowers students through experiential "learning-by-doing," design thinking, and early research immersion to solve urgent global healthcare, agricultural, and environmental challenges.

## Visionary University Leadership



**Hon. Dr. D. Y. Patil**

Founder President, DYP Group  
Former Governor (Bihar, WB)



**Hon. Dr. Sanjay D. Patil**

Chancellor, DYPIU Pune  
President, DYP Pratishthan



**Hon. Shri Tejas S. Patil**

Trustee  
DYPIU Pune



**Prof. (Dr.) Manish Bhalla**

Vice Chancellor, DYPIU Pune  
FRSC (Royal Society of Chem)

## Institutional Vision & Mission

### Vision

Creating technologically equipped action leaders of Future in a wide range of spheres by providing best-quality experiential training and value-based education.

### Mission

To impart futuristic transformative education in bioengineering through experiential learning, cutting-edge technology, and analytical thinking.

## Programme Structure & Intake (2026–27)

|                        |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Degree Awarded</b>  | Bachelor of Technology (B.Tech.) in Bioengineering                                                       |
| <b>Department</b>      | <b>Department of Bioengineering</b> (HoD: Dr. Babuskin Srinivasan)                                       |
| <b>Duration</b>        | 4 Years (8 Semesters) Full-Time   Optional 5-Year Integrated M.Tech.                                     |
| <b>Approved Intake</b> | <b>120 Seats</b>                                                                                         |
| <b>Eligibility</b>     | Passed 10+2 with Physics & Mathematics as compulsory, plus Chem/Bio/Biotech/CS (min 45% / 40% reserved). |
| <b>Entrance Exams</b>  | JEE (Main) / MHT-CET / DYPIU Entrance Evaluation                                                         |
| <b>Tuition Fee</b>     | Rs. 1,17,500/- per Semester (Rs. 2,35,000/- p.a.)   Caution Deposit: Rs. 10,000/-                        |

## Academic & Executive Leadership Desk



**Dr. Anupama V Patil**  
Dean, Faculty of Engg. & Tech.

*"Our focus is on building strong fundamentals while encouraging hands-on learning, modern laboratories, innovation, and interdisciplinary thinking."*



**Prof. (Dr.) Ramendra Pati Pandey**  
Deputy Dean (R&D) & Director, SoBB

*"SoBB couples engineering rigor with experiential discovery, nurturing translational leaders through active multi-crore funded research projects."*



**Dr. Babuskin Srinivasan, Ph.D.**  
Head, Department of Bioengineering

*"Our curriculum integrates bio-computation, tissue engineering, and bioprocess manufacturing for tomorrow's healthcare and biopharma industry."*

## Specialization Tracks (Offered from Semester IV)

### Biomedical Engineering

Medical devices, physiological modeling, biomechanics, biomedical sensors, hospital robotics, and clinical instrumentation.

### Bioinformatics & AI

Machine learning in biology, multi-omics sequencing pipelines, structural bioinformatics, and CADD drug screening.

### Food & Biochemical Engg.

Automated bioreactor design, industrial fermentation, downstream separation, bioprocess scale-up, and food technology.

## World-Class Laboratory Infrastructure



**Bioprocess Engineering Suite:** Students operating automated 5L stirred-tank bioreactors.



**Cellular Diagnostics Lab:** Hands-on student experimentation and micropipetting assays.

## 10 Specialized Laboratories Supporting Bioengineering

### Bioprocess & Fermentation

5L automated bioreactors & harvesting units.

### Bioinformatics HPC Suite

Linux/Python multi-core high-performance computing.

### Biomedical Sensors Lab

Multi-channel ECG/EMG signal acquisition rigs.

### Cell Culture Cleanroom

Class II Biosafety Cabinets & CO<sub>2</sub> incubators.

### Molecular Biology & PCR

Real-time qPCR & gel documentation systems.

### Extramural R&D Base

₹2.4+ Crores grants (ICMR, DST-SERB, UCOST).

- ✓ **Three Mandatory Credited Summer Internships:** Post-Sem II (Grassroots Problem-Solving), Post-Sem IV (Industrial Processes), Post-Sem VI (Corporate R&D).
- ✓ **Full-Semester Capstone Project:** 8th-semester industry thesis or translational departmental research dissertation.

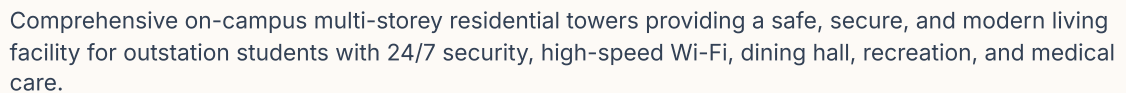
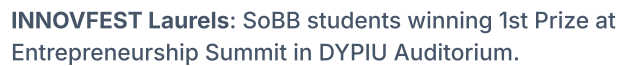
Over 93 completed internships, 4 active MoUs, and direct placement pipelines across leading bio-tech and tech enterprises.

### National Examination Laurels

Multiple GATE 2025/2026 qualifications (Aviha Joshi, Ritwika Sen, R K Hemdurga, Srushti Shinde, Unnati Ikhar) and high GRE scores.

### Innovation Milestones

1st Prize at university Shark Tank (Sanya Jain); FABA Innovation Cluster win (Manushree Bihade); 50 UG research manuscript drafts; *Scinion* magazine.



**D Y PATIL INTERNATIONAL UNIVERSITY**  
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**Vice Chancellor:** Prof. (Dr.) Manish Bhalla, FRSC ([vc@dypiu.ac.in](mailto:vc@dypiu.ac.in))  
**Dean, Faculty of Engg. & Tech.:** Dr. Anupama V Patil ([anupama.patil@dypiu.ac.in](mailto:anupama.patil@dypiu.ac.in))  
**Deputy Dean (R&D) & Director, SoBB:** Prof. (Dr.) Ramendra Pati Pandey ([dean.sobb@dypiu.ac.in](mailto:dean.sobb@dypiu.ac.in))  
**Head, Bioengineering:** Dr. Babuskin Srinivasan ([babuskin.srinivasan@dypiu.ac.in](mailto:babuskin.srinivasan@dypiu.ac.in))  
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