

B.Tech. Biotechnology programme at Thapar Institute of Engineering & Technology, Patiala

The Department of Biotechnology at Thapar Institute of Engineering & Technology, Patiala is committed to provide quality education and research at UG, PG, and PhD levels. The department offers a 4-Year B.Tech. Biotechnology programme to the prospective students. This programme received recognition in terms of NBA accreditation for six years in 2022. The course curriculum is aligned to the national education policy to facilitate a holistic development of the students with industry-relevant components for societal impact. The overall scheme and the course contents of this programme are based on the fundamentals of Biotechnological engineering along with emerging trends of modern biology. Various courses of this programme cover frontier areas of Biotechnology namely recombinant DNA technology, medical biotechnology, plant and animal biotechnology, stem cell technology, cancer biology, bioinformatics, computational and systems biology, biopharma, bioprocess engineering, molecular diagnostics & therapeutics, food technology along with chemistry, applied physics, basic mathematics, computer programming, communication skills, IPR and entrepreneurship, and some core engineering courses. Students are also exposed to experiential learning through ELC activity and capstone projects, which are aimed to integrate the knowledge and skills acquired in the entire programme to create an improved product and develop skills related to analysis, design, synthesis and soft skills. In addition, we also offer exciting opportunity for the UG students to undertake minor research components under trained and experienced faculty members. Gaining hands-on training experience in the renowned industries/research institutes and involvement in the research-based activities to address current Biotechnological challenges are major value additions to this programme. The meritorious students of B. Tech. Biotechnology are offered a chance to opt for 3+2 Masters in Biotechnology programme at Tel Aviv University (Israel), George Mason University (USA), and University of Queensland (Australia). The young undergraduates find placements in the biotech, food and pharmaceutical industries besides getting opportunities for advanced studies in India and abroad.