

SCHOOL OF INTEGRATED SCIENCES



B.Sc. (Hons.) / (Hons. with Research)
in **Biotechnology** (4 Years)



M.Sc. in Biotechnology (2 Years)



B.Sc. (Hons.) / (Hons. with Research)
in **Microbiology** (4 Years)



M.Sc. in Microbiology (2 Years)

Also Offered:
Ph.D. in
Biotechnology &
Microbiology



100% Placement
Assistance



3.84 Highest Salary
Lakhs/PA in Last Year



26+ Industry
Connect

Industry Partners for Placement & Internship

Suraksha
Clinic & Diagnostics

GeNei™



Center for Microbiology & Bio-technology
Research and Training Institute, Bhopal (MP)





Eligibility Criteria:

B.Sc. (Hons.) / (Hons. with Research) in Biotechnology / Microbiology: 12th standard pass with any three Science subjects and at least 55% marks.

M.Sc. in Biotechnology / Microbiology: B.Sc. in any Life Science Subjects in B.Sc. (Botany, Zoology, Microbiology, Biotechnology, Biochemistry, Agriculture Science, etc.) with at least 55% marks.

Fee Structure (in Rs.)

Fee Per Semester (Rs.)	One Time Fee (Rs.)	1st Semester Fee (Rs.)	Total Course Fee (Rs.)
B.Sc. (Hons.) / (Hons. with Research) in Biotechnology / Microbiology (4 Years)			
52,500	29,000	81,500	4,49,000
M.Sc. in Biotechnology / Microbiology (2 Years)			
40,000	29,000	69,000	1,89,000

Scope and Opportunities:

Biotechnology: The Neotia University (TNU) is designed to build a strong foundation in modern biological sciences and interdisciplinary technologies. The program integrates Molecular Biology, Genetics, Microbiology, Bioinformatics, and Bio-Processing with hands-on laboratory training.

With a strong emphasis on research, innovation, and industry exposure, the curriculum nurtures analytical thinking and problem-solving skills. Students gain practical experience through projects, internships, and research-oriented learning, preparing them for advanced studies and diverse professional roles in the life sciences sector.

Career Prospects after this course are:

- Research Associate / Laboratory Analyst
- Biotechnologist in Pharma & Biotech Industries
- Clinical Research Coordinator
- Quality Control & Quality Assurance Executive
- Bioinformatics Analyst
- Higher Studies (M.Sc., Ph.D, Research Careers)

Dean's Message

Prof. (Dr.) Prosun Tribedi
Dean of Academic Affairs,
The Neotia University



We find ourselves in a remarkably unique era in the history of our species, one in which scientific innovation is essential for tackling global challenges, from healthcare to environmental sustainability. Our curriculum is thoughtfully designed to equip students with a comprehensive and holistic understanding of both theoretical concepts and practical applications. Our dedicated faculty members, who are leaders in their respective fields, are devoted to creating an engaging and collaborative learning environment. They carefully guide students as they delve into the intricate and captivating world of living organisms and their interactions with the environment. Our state-of-the-art laboratories and research facilities offer hands-on experience, enabling students to apply their knowledge to address a plethora of real-world problems, including infectious and emergent diseases, antimicrobial resistance, terminal illnesses, climate change, renewable energy, and biofertilizers, among others. The students also have the opportunity to participate in groundbreaking research projects, collaborate with industry partners, and contribute to significant discoveries that can impact human lives.

We believe that the integration of disciplines enhances learning and innovation. Thus, our programs are designed to equip you with a diverse skill set that prepares students for a variety of career paths in academia, research, industry, and beyond. Whether a student aspires to work in health sciences, pharmaceuticals, agriculture, renewable energy, or environmental management, the School of Integrated Science will provide students with the foundation needed to excel. Our School provides three-tier programs, including undergraduate, postgraduate, and PhD courses in Microbiology and Biotechnology.

The **Dean** figures among the top 2% scientists in the world, according to a Stanford University survey.

Microbiology: The Neotia University (TNU) offers a strong foundation in microbial sciences, blending theoretical knowledge with extensive laboratory training. The programme covers bacteriology, virology, mycology, immunology, genetics, and molecular biology to build core scientific competence.

With a focus on research orientation, innovation, and industry relevance, the curriculum encourages critical thinking, hands-on experiments, projects, and internships. Modern lab facilities and experienced faculty prepare students for higher studies, research, and diverse professional roles in life sciences.

Career Prospects after this course are:

- Microbiologist in research and diagnostic laboratories
- Quality control analyst in pharma and biotech industries
- Research assistant in academic and R&D institutions
- Clinical and laboratory technologist
- Opportunities in food, dairy, and environmental industries
- Higher studies: M.Sc., Ph.D., and interdisciplinary research careers, etc.



Program Objectives:

The program objectives of Biotechnology and Microbiology can be broadly categorized into two main areas: **Knowledge and Skill Development**, and **Career Preparation**.

Knowledge and Skill Development	Career Preparation
Strong foundation in life sciences: Gain a deep understanding of core biological principles like genetics, biochemistry, microbiology, and immunology.	Research and Development: Prepare for careers in research institutions or pharmaceutical companies, developing new drugs, vaccines, or bioremediation technologies.
Modern biology techniques: Master laboratory techniques in areas like genetic engineering, cell culture, bioinformatics, and bioprocess engineering.	Industry: Equip yourself for roles in various industries like agriculture (improving crop yields), food science (developing food products), vaccines, or biofuels.
Critical thinking and problem-solving: Develop the ability to analyze complex biological problems and design solutions using biotechnology tools.	Entrepreneurship: Develop the skills and knowledge needed to launch your own start up.
Effective communication: Learn to communicate scientific findings clearly and concisely, both verbally and in writing.	Teaching and Education: Pursue a career in teaching Biotechnology and/or Microbiology at the university or college level.

Department Highlights:

- **Research Excellence & Focus:** The department has published over 50 papers in reputed international journals. Key focus areas include Antimicrobial Resistance, Emergent and Infectious Diseases; Environmental & Industrial Biotechnology.
- Till date 7 students have completed their PhDs and 27 active researchers are pursuing their PhD in diverse interdisciplinary fields.
- **Centre of Excellence (Industry-academia Partnership):** Established with Susrut Eye Foundation & Research Centre, this initiative bridges the gap between industry and academia and focus on translational biomedical research, providing students with collaborative projects and internships.
- **Infrastructure & Facilities:** Modern state of the art laboratories supports high-quality, cutting-edge research which provide high-level training for UG, PG, and doctoral students.
- **Integration of Sciences & AI/ML:** The curriculum blends a foundation in basic and modern life sciences with emerging AI/ML applications utilizing bioinformatics and data-driven modeling.

Advantages of TNU

- **Innovation and Incubation:** The department fosters a culture of innovation and entrepreneurship, encouraging students to think creatively and develop solutions to real-world problems. This is evident in the numerous innovative projects undertaken by students, including the development of a DNA isolation kit, plastic-free sanitary napkins, algal jewelry, and even instruments like a UV Transilluminator. These achievements showcase the department's commitment to nurturing student creativity and problem-solving skills.
- **Campus Assistance:** The department actively facilitates job placements for students through on-campus recruitment drives. These drives attract various multinational companies, providing students with ample opportunities to secure positions after graduation.
- **Memorandum of Understanding:** The department has established a prestigious Memorandum of Understanding (MoU) with Suraksha Diagnostics centres, specifically their R&D wing located in New Town. This collaboration opens doors for potential research opportunities, faculty exchange programs, and internship placements for students, fostering valuable industry experience and connections.

Scholarships & Financial Aid:

At TNU, we offer numerous merit-based, as well as need-based scholarships (25% to 100% on Tuition Fees) to ensure that no student is left behind. There is no limit to the number of scholarships granted by the University, and if a student is eligible as per the given criteria, then he or she will get the "Guaranteed Scholarship".

NAME	CRITERIA
CHANCELLOR'S SCHOLARSHIP	i) Yearly Family income should be less than 2.5 Lakhs. ii) An interview and document verification will be done by an empowered committee decided by the University Management.
GRAMOTTHAN SCHOLARSHIP (Students from Gram Panchayat area of South 24 Parganas)	>= 60% marks in H.S Yearly Family Income less than 5.0 Lakhs
SPECIAL HILL STUDENTS' SCHOLARSHIP [Students from GTA Area (W.B), North-East States, Andaman and Nicobar Islands, Nepal & Bhutan]	>= 65% marks in H.S Yearly Family Income less than 5.0 Lakhs

NAME	CRITERIA
SAHODARYA SCHOLARSHIP (Siblings of all students – present or passed out)	>= 60% marks in H.S
MERE APNE SCHOLARSHIP (For Ambuja Neotia Group employees – in the memory of Late Vinod Kumar Neotia)	>= 60% marks in H.S Yearly Family Income less than 5.0 Lakhs
SPORTS SCHOLARSHIP	>= 60% marks in H.S State Level / National level Participant / Champion
CULTURAL SCHOLARSHIP	>= 60% marks in H.S State Level / National level Participant / Champion

All Scholarships are applicable for the UG Courses only

Lab & Experimental Equipment:

