



Graphic Era
Deemed to be University
DEHRADUN

APPLY NOW



DEPARTMENT OF MICROBIOLOGY

Programs Offered —

- * B.Sc. (Hons.) Microbiology
- * M.Sc. Microbiology
- * Ph.D. in Microbiology

BROCHURE 2026-27

About the University

A Legacy of Excellence

Founded by Prof. (Dr.) Kamal Ghanshala with a vision to transform youth through quality education, Graphic Era began its journey in 1993 and evolved into Graphic Era Institute of Technology (GEIT) in 1997. In 2008, it was granted Deemed to be University status by the Government of India.

Today, Graphic Era stands as a NAAC 'A+' accredited university, ranked 52nd in Engineering, 52nd in Management, and 48th in the University Category by NIRF, Ministry of Education. With 6 NBA-accredited programs, the university fosters an industry-academia partnership through collaborations with Tata Technologies and IBM and hosts a DST-sponsored Technology Business Incubator for startups.

With global academic partnerships and student exchange programs across US, Europe, Australia, and Asia, Graphic Era provides a world-class learning experience. Its alumni shine at Apple, Google, Microsoft, HSBC, TCS, Wipro, Infosys, and the Indian Armed Forces, shaping the future with innovation and excellence.

Be a part of this legacy!



Welcome to the Department of Microbiology

The Department of Microbiology at Graphic Era (Deemed to be University) is a dynamic academic unit dedicated to advancing education and research in microbiology. It offers B.Sc. (Hons.), M.Sc., and Ph.D. programs designed to blend strong theoretical foundations with extensive practical training.

Our interdisciplinary curriculum integrates microbiology with emerging technologies, preparing students for evolving industry and research demands. State-of-the-art laboratories and modern research facilities support hands-on learning, experimental studies, and industry-oriented projects.

We emphasize research-driven education, encouraging students to engage in internships, workshops, and collaborative projects to build professional competence. With a holistic and future-ready approach, the department equips graduates with the analytical, technical, and problem-solving skills essential for success in academia, industry, and research.

Our Department

Vision

Department of Microbiology aspires to become a centre of excellence in microbial research, both nationally and internationally, through the pursuit of cutting-edge interdisciplinary research and innovation aimed at understanding and harnessing the power of microbes to improve human health and achieve a sustainable future.

Mission

M1: The mission of the Department of Microbiology is to advance science for preventing, treating and curing infectious diseases, and providing green solutions for environmental sustainability.

M2: The department aims to develop knowledge and innovative microbial approaches for conserving biodiversity and natural resources to achieve a sustainable future.

M3: The department will provide an optimum learning environment for students to realize their true potential, and to develop their intellectual, academic and entrepreneurial skills through its rigorous and hands-on training.

Key Facts & Achievements

RANKINGS

#48 University Category

#52 Engineering Category

#52 Management Category



Source: **NIRF 2025 Ranking**
Ministry of Education,
Govt. of India

#02 in India for Research Quality

#03 in India for Engineering

#04 in India for Life Sciences

#04 in India for Business & Economics

#16 in India for Computer Science

#645

World University Ranking



World University Rankings 2026

#41 Sustainability Rank in India

#138 Southern Asia 2026

Diamond

I-Gauge Rating



ACCREDITATIONS

NAAC A+

Grade Accredited



Source: National Assessment & Accreditation Council (NAAC)

UGC, AICTE, BCI, NMC, INC

Programs approved by University Grants Commission (**UGC**), All India Council for Technical Education (**AICTE**), Bar Council of India (**BCI**), National Medical Commission (**NMC**), and Indian Nursing Council (**INC**)



06 NBA

Courses Accredited

The only University in the region to have **B.Tech (CSE, ECE, ME, CE, Biotechnology)** and **MBA** accredited by NBA



Source: National Board of Accreditation (**NBA**)

STARTUPS

₹500+ Cr Valuation of Startup's

100+ Incubated Startups

90+ Startups Recognised

8000+ Beneficiaries in 2025

1000+ Interns Enrolled

ACADEMIC SNAPSHOT

900+ Distinguished Faculty Members

14K+ Students

22 Departments (8 Engineering & 14 Non-Engineering)

100+ Programmes

RESEARCH & INNOVATION

Top 2%

34 faculty members of Graphic Era University included in Stanford-Elsevier-list.

₹2648.99 Lac

Research Project Funding from leading government agencies including DST, DBT, SERB, CSIR, UCOST, MoEF&CC and ISRO.

₹3472.17 Lac

Consultancy Project Funding

15500+

Research Publications

240+

Patents Granted

2100+

Patents Published

Courses Offered

B.Sc. (Hons.) Microbiology

Duration —
4 Years /
8 Semesters

Eligibility —
Candidates who had passed 12th with PCB from a recognized board of examination.

M.Sc. Microbiology

Duration —
2 Years /
4 Semesters

Eligibility —
Bachelor's degree in any relevant area of Life Science

Ph.D. in Microbiology

Eligibility —

Master's Degree from any UGC recognized University/ Institutions or any other qualification recognized as equivalent thereto in the fields of study notified from time to time by the University.

Why Choose Us?

- Advanced Laboratories & Research Facilities
- Industry Collaborations & Internships
- Expert Faculty & Specialized Knowledge
- Focus on Research, Innovation & Entrepreneurship
- Future-Ready Curriculum



Industry-Academia Collaboration: Joint Research Laboratory

The Department of Microbiology at Graphic Era (Deemed to be University) is committed to pioneering research and innovation. In collaboration with Origin LIFE Healthcare Solutions & Research Centre LLP, we are establishing a state-of-the-art Joint Research Laboratory focused on clinical diagnosis and protein engineering. This industry-supported facility will integrate R&D, quality control, and scientific research, equipping students with hands-on experience in cutting-edge microbiological and biotechnological advancements.

Global Connection

Graphic Era (Deemed to be University), Dehradun, India, has forged global collaborations with Instituto Tecnológico de Sonora (ITSON), Mexico, and the Institute of Genetics and Plant Experimental Biology, Uzbekistan. These

landmark agreements strengthen academic linkages, enrich cultural and educational exchange, and advance joint research, innovation, and knowledge sharing in microbiology, genetics, and plant experimental biology.



MoU with ITSON, Mexico



MoU with Institute of Institute of Genetics and Plant Experimental Biology, Academy of Sciences of the Republic of Uzbekistan

Key Highlights

- 🌟 **Industry-Academia Partnership:** Joint efforts with Origin LIFE Healthcare Solutions & Research Centre LLP for clinical research.
- 🌟 **Advanced Research & Development:** Focused on Protein Engineering, Molecular Biology, Immunology, Cell Biology, Biodiversity, Bioinformatics, Genetic Engineering.

- 🌟 **Hands-On Training:** Students and research scholars gain real-world experience.
- 🌟 **State-of-the-Art Infrastructure:** Industry-provided instruments & university expertise.
- 🌟 **Experiential Learning:** Managed by faculty, scholars, and project students.

This collaboration bridges the gap between academic excellence and industry needs, fostering innovation and enhancing career prospects for our students.

Academic Career Paths

The **B.Sc (Hons.) Microbiology** program includes a wide range of courses to cover the diversity of microbiology specializations. Graduates in microbiology have a wide range of career opportunities in:

- ✔ Pharmaceutical Companies
- ✔ Healthcare Institutions
- ✔ Research Institutes
- ✔ Food and Beverage Industries
- ✔ Pollution Control Boards (at state and central levels)
- ✔ Environmental consulting firms
- ✔ NGOs working in environmental health and sanitation
- ✔ Diagnostic Laboratories

The **M.Sc Microbiology** program is focused on hands-on experience and practical exposure to students through labs, internship and research project. It offers a wide range of career pathways to explore, such as:

- ✔ **Research and Development:** Pursue a research career in microbiology, immunology, or related fields.
- ✔ **Clinical Microbiology:** Diagnose and treat infections, and develop therapies in medical settings.
- ✔ **Public Health:** Work with public or private organizations on disease control and health policy.
- ✔ **Food Safety and Quality Control:** Ensure food safety and quality in public or private sectors.
- ✔ **Environmental Microbiology:** Pursue careers in environmental management with a focus on microbes and pollution control.
- ✔ **Using microbiological principles to** innovate products and processes in key industries.
- ✔ **Academia and Teaching:** Teach, mentor, and advance research in academia.

Faculty Research Areas

- ✔ Environmental Microbiology
- ✔ Medical Microbiology
- ✔ Bioprocess Technology
- ✔ Agriculture Microbiology
- ✔ Microbial Pathogenesis and Molecular Diagnostics
- ✔ Microbial Ecology and Application
- ✔ Infectious Disease and Antimicrobial Resistance (AMR) Group

Faculty Recognitions

Top 2% of Scientists in the World for the Year 2025, announced by Elsevier and Stanford University.

- ✔ Dr. Anju Rani
- ✔ Dr. Arun Karnwal
- ✔ Dr. Saurabh Gangola
- ✔ Dr. Debasis Mitra



Facilities and Infrastructure

Lecture Rooms

Information and Communications Technology (ICT) enabled and Central/ Departmental Library

Central Instrumentation Facility

Microscopes, Centrifuge, Gel Documentation system, spectrophotometer, Millipore water purification, HPLC, FT-IR, ELISA Plate Reader

Downstream Processing Laboratory

Microscope, Fermenter, Laminar air flow, Shaker incubators, Binocular light microscope, -80°C Deep freezer

Microbiology Laboratory

BOD incubator, Laminar, Rotatory evaporator

Cell Biology & Recombinant DNA Technology

Thermocycler, Electrophoresis unit, Gel-Doc system

Departmental Library

Course Books, Dissertation & Mini Project Reports for reference

Central Library

Course books available and online books database DELNET, NIMBUS, NDL India. Journal/ Subscription: Medicinal & Aromatic Plants Abstracts, Journal of Genetics, Journal of Biosciences, Indian Journal of Experimental Biology, Indian Journal of Traditional Knowledge, Science Reporter, Vigyan Pragati, Current Science, Indian Journal of Natural of Natural Products and Resources

Biochemistry & Molecular Biology

CO₂ Incubators, Laminar air flow, Microscope (Inverted) Liquid Nitrogen Tank, Shaking Incubator and incubator, Cooling centrifuge

Bioinformatics

MATLAB, Data Mining software's, Molecular Modeling and Molecular Dynamics simulation software.

Biosafety and Molecular Diagnostic Laboratory

Biosafety Cabin- A2, RT-PCR (Real-Time Polymerase Chain Reaction) System (IVD-CFX-96, USFDA approved), Refrigerated Incubator Shaker, Tabletop Centrifuge, Laminar (Horizontal)



Student Opportunities and Placement



Ahmad Hamza



Ankita Narang



Anshika Sharma



Shradha Singh



Divya Thalwal



Prakash Kumar



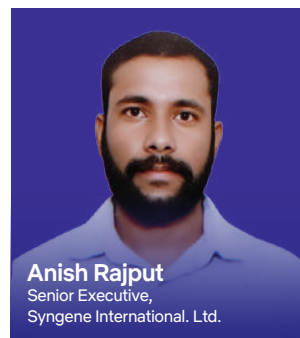
Saurav Chand



Pooja Vyas



Paths to Excellence



Events and Activities



1



2



3



4



5



6

1. Microbiology and Chemistry Departments held a MIND 2.0 workshop promoting mindfulness, focus, and well-being.
2. The Department of Microbiology hosted a guest lecture on November 12, 2025, by Prof. Sivakumar Uthandi, who discussed the gut microbiome, its role in health, and plant-microbe interactions, highlighting key research trends.
3. The Department of Microbiology hosted a three-day national conference, "CIM-2025," highlighting sustainability and emerging trends in microbial research, with participation from leading scientists and institutions across India.
4. The Microbios Club held Rangshala 2025, a donation and art activity where children's creativity and smiles lit up the event, while essential items like groceries and toys brought comfort to families.
5. Mohd. Kaif becomes Overall Champion at Eurasia Championship.
6. The Department of Microbiology and GEU MUN hosted a Petri Plate Art Competition for GRAFEST 2025, where students creatively blended science with art.



Beyond Classrooms

Where Every Event Tells a Story



Career Counselling Services

The Department of Microbiology equips students with the guidance, skills, and opportunities needed for career success. Our Career Counseling and Professional Development Services prepare them for every stage of their professional journey.

Domain-Specific Mentorship

We have dedicated Chair Heads for Marketing, Finance, and Human Resources, providing students with:

- Expert Mentorship
- Counseling Support

Professional Development Program (PDP)

Placement Support

Our Placement Department plays a vital role in shaping students' careers by providing:

- Support for Summer Internships (SIP) and Final Placements
- Internship Guidance

Alumni Mentorship

Graphic Era Common Entrance Test (GECET)

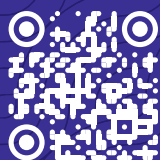
Scholarship upto

₹ **100** Cr 

Unlock up to 100% scholarships with GECET – Graphic Era Common Entrance Test.

Secure your admission & financial support for a brighter future!

Apply Now – gecet.geu.ac.in



Scholarships & Support Benefits

- Upto **100%** Scholarship based on 12th or UG marks
- Upto **100%** Merit-based Sports Scholarship
- 10%** Scholarship to the Girl Candidates
- 10%** Alumni Loyalty Scholarship
- 10%** Scholarship for Parentless Child
- 7.5%** Current Sibling Student Scholarship
- 05%** Passed out Sibling Student Scholarship
- 05%** Scholarship to the children of Defense Personnel
- 05%** Single Parent Scholarship
- 05%** Yearly Payment of Fees
- All students are covered under a comprehensive health insurance plan.
- Medical services are provided through the state-of-the-art Graphic Era Hospital.
- Student loan facilities are available to support financial needs.

Student Facilities & Engagement



Well-equipped and comfortable hostel facilities



Efficient transportation services



Extensive sports facilities



Free student uniform



Vibrant student clubs and extracurricular activities



Multiple hygienic and student-friendly cafeterias



Green, eco-friendly campus environment



ICT-enabled smart classrooms



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