

FACILITIES

Well-equipped laboratories of Microbiology, Molecular biology, Animal cell culture, Plant tissue culture, Immunology, Biochemistry, Bioinformatics, Bio-process, and Food technology.

Central library with a collection of over **70,000** books and national and international journals.

On-campus accommodation facility for national and international students.

Canteen, sports and various clubs for **extracurricular activities**.

24/7 access to laboratories for students.

MESSAGE FROM HoD

Dear Students,

Welcome to the department of Biotechnology at KU, a pioneer institute in academics of Nepal. Biotechnology often called as 'technology of hope', has wide range of applications in healthcare and agricultural sectors. So, get ready to explore the potential of this interdisciplinary science. Together let's embark on a journey of innovation and career opportunity in the field of biotechnology.



Prof. Subodh K Upadhyaya, PhD

STUDENTS TESTIMONIAL

As kids, we aspire to leave marks in the world we live in. We believe ourselves to be the future rebels and changemakers. We build ourselves so high that no limitations can shake us, no orthodoxy can break us. But then, one day, out of nowhere, reality crashes our faith and hope of changing the world. Reality brings down our plane of aspirations, inspirations, and imaginations. But then, this is life. There is no roller coaster that only goes up. Success is all about rising up every time you fall and trying again every time we fail.

Studying at Kathmandu University is all about enjoying your freedom, whilst fulfilling your responsibilities. Once you realize that, there is no stopping you. Cheerio.

Sandesh Acharya (Batch 2014)



PROFESSOR

Dr. Janardan Lamichhane (Dean, School of Science)
Dr. Subodh K. Upadhyaya (Head of the Department)
Dr. Dhurva P. Gauchan

ASSOCIATE PROFESSOR

Dr. Sangita Shakya
Dr. Bhupal G. Shrestha
Dr. Parash Mani Timilsina

ASSISTANT PROFESSOR

Ms. Ashna Dhakal
Dr. Hitesh K. Bhattarai
Dr. Amol Dahal
Mr. Simon K. Shrestha (Coordinator, B.Sc. in Bioinformatics)

TEACHING ASSISTANT

Mr. Samrat Paudel

LAB & OFFICE STAFF

Mr. Sunil Maharjan
Mrs. Pramila K.C.
Mrs. Nimu Karmacharya
Ms. Radhika Pun



For Detailed Information

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DEPARTMENT OF BIOTECHNOLOGY

School of Science

Program Information 2023

BACHELOR OF TECHNOLOGY IN BIOTECHNOLOGY

Quality education for leadership

KATHMANDU UNIVERSITY

ku.edu.np



Kathmandu University (KU), established in November 1991 as an autonomous not-for-profit, non-governmental institution, is dedicated to maintaining high standards of academic excellence. Most of the technical and professional programs introduced at KU are the first of their kind in the country.

BIOTECHNOLOGY AT KU

Biotechnology is a field focused on conducting advanced research to comprehend living organisms at a molecular level. It involves decoding and manipulating genetic and protein information with the aim of benefiting humanity.

The Department of Biotechnology, the first of its kind in Nepal, was established in 2003 to supply manpower to establish biotechnology industries and to conduct research and professional activities in the area. The graduates from department of biotechnology can conduct research and carry out professional activities in fields ranging from agriculture to medicine.

The Department of Biotechnology provides students with a solid theoretical and practical foundation in modern biology. Through a dynamic and interdisciplinary approach, students receive rigorous training that includes hands-on laboratory experience.



DURATION OF THE PROGRAM

The total duration of the program is four years. Each year consists of two semesters. The academic year starts in August.

CAREER OPPORTUNITIES

- In-campus job placement as teaching and research assistant.
- Employment in industries like chemicals, pharmaceuticals, food and beverages, agriculture, forensics, disease and diagnosis, environmental protection bodies.
- Prepare students for Masters or Doctoral Levels.
- Entrepreneurship opportunities.



KEY FEATURES OF PROGRAM

- Project work and internship during the final year, Four years program compatible with international standards,
- Regular tutorial classes,
- Field trips and industrial tours,
- A foundation of laboratory skills with theoretical knowledge.

MAJOR COURSES

- Recombinant DNA Technology
- Molecular Biology
- Industrial Biotechnology
- Bioinformatics
- Plant Biotechnology
- Animal Cell Culture Technology
- Microbial Biotechnology
- Immunotechnology
- Environmental Biotechnology



ADMISSION ELIGIBILITY

10+2 level (or equivalent) with a minimum aggregate CGPA of 2.0 (50% in percentage scale), Should have passed in Physics, Chemistry and (Mathematics or Biology or Computer Science)

COST OF PROGRAM

The total cost of the program is **Rs. 8,72,000** which can be paid in 16 installments.



SCHOLARSHIP

- Each semester GPA merit based full tuition fee waiver scholarships per 30 students intake capacity
- Need-based partial tuition fee waiver scholarships as per KU provision
- Loan scholarship.

EVALUATION SCHEME

Continuous assessment of student performance is carried out through in-semester and end-semester examinations.

Grades are given on a four-point scale, and failing more than two courses requires permission to repeat the semester.

Students failing in two or fewer courses have up to three chances to pass.

Maintaining a GPA of 2.0 or higher is essential, and failure to do so may lead to program withdrawal.

The maximum completion time for the undergraduate program is seven years from admission.



STUDENT ACTIVITIES

Our students are involved in various extra-curricular activities through departmental club, KUBiC (Kathmandu University Biotechnology Creatives).

Various events carried out by KUBiC are:

- Genesis - Biggest Life Science Event
- Conferences and workshops
- BioHackathon
- All Nepal Bio-tech Cup, etc

