

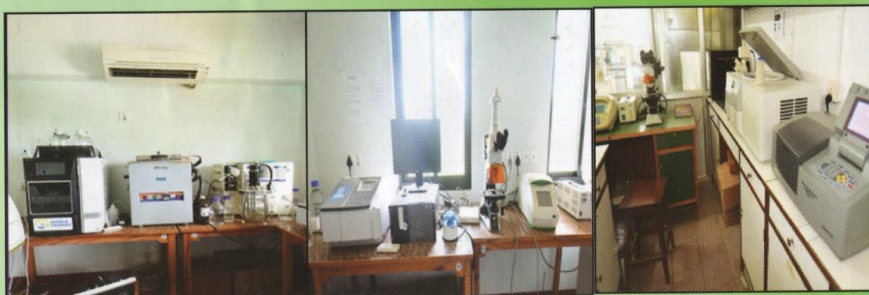
Admission Requirements

Candidates who have completed 4 years Undergraduate / Bachelors' degree with minimum 2.0 CGPA or 50% in aggregate marks are eligible to apply. Those from 3-years undergraduate programs in any basic science field of study will be required to take a 1-year bridge course which can be taken at the department.

Evaluation

Evaluation is based on continuous assessment. It will be done in internal (50 marks) and end-semester examination (50 marks) pattern. For internal evaluation, minimum of two assignments, presentations (as per syllabus requirements) and two internal tests are mandatory. At the end of the course, students are awarded letter grades on every subject as per the following grading system.

| Grade | A | A- | B+ | B | B- | C+ | C | F |
|-------------|-----|-----|-----|-----|-----|-----|---|---|
| Grade Point | 4.0 | 3.7 | 3.3 | 3.0 | 2.7 | 2.3 | 2 | 0 |



For detailed information

Department of Biotechnology
School of Science, KU

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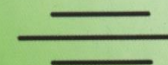


KATHMANDU UNIVERSITY

"Quality Education for Leadership"



Department of Biotechnology
School of Science



M. Tech.
in
Biotechnology

Introduction

Kathmandu University (KU) was established by the act of parliament of Nepal in November 1991, as an autonomous, not-for-profit, non-governmental institution dedicated to maintaining high standards of academic excellence. Most of the technical and professional programs run at KU are the first to be introduced in the country, with global recognition. The mission statement of the University is “to provide quality education for leadership”. The vision is “to become a world-class university devoted to bringing knowledge and technology to the service of mankind”.

The Department of Biotechnology, the first of its kind in Nepal, was established in 2003, in response to acute shortage of competent biotechnologist in the national bio-industries and allied areas with a mission to cater and supply steady stream of highly competent biotechnology graduates required for the country.

Currently, the department offers undergraduate, graduate as well as PhD degrees to produce capable human resources, who can contribute to advancing scientific solutions to societal problems.

Career Opportunities

Major avenues of career development opportunities are as follows:

- * Research and development in processing of diverse biological materials.
- * Managing bio-industries.
- * Employment opportunities are available in the industries such as chemicals, pharmaceuticals, food and beverages, and plant & animal biotechnology and other options are available in forensics, disease and diagnostic therapy, education and environmental protection bodies.

A career in biotechnology is not just a job; it is an invitation to participate in the development of new products and processes that also contribute to improving people's standards of living.

Scholarship

UGC Nepal formula based funding scholarship is available for M.Tech. students. Also, Silver Jubilee Graduate Assistantships are provided to needy and deserving students.

Course Structure

| Course No. | Title of the Course | Credits |
|---------------|-----------------------------------------|---------|
| I semester | | |
| BIOT551 | Cell Biology and Genetics | 3 |
| BIOT553 | Advanced Biochemistry | 3 |
| BIOT543 | Microbiology and Immunology | 3 |
| BIOT544 | Quality Management System and IPR | 3 |
| BIOT561 | Research Methodology and Biostatistics | 3 |
| BIOT591 | Laboratory Techniques I | 2 |
| Total credits | | 17 |
| II semester | | |
| BIOT556 | Bioinstrumentation | 3 |
| BIOT557 | Molecular Biology & Genetic Engineering | 3 |
| BIOT580 | Plant and Animal Cell Culture | 3 |
| BIOT545 | Advanced Environmental Biotechnology | 3 |
| BIOT546 | Bioinformatics | 3 |
| BIOT 590 | Seminar-I | 1 |
| BIOT592 | Laboratory Techniques II | 2 |
| Total credits | | 18 |
| III semester | | |
| BIOT577 | Plant Pathology and Pest Management | 3 |
| BIOT582 | Medical Biotechnology | 3 |
| BIOT576 | Agriculture Biotechnology | 3 |
| BIOT570 | Industrial Biotechnology | 3 |
| BIOT560 | Entrepreneurship and Project Management | 3 |
| BIOT594 | Laboratory Techniques III | 2 |
| Total credits | | 17 |
| IV semester | | |
| BIOT596 | Proposal & Manuscript Writing | 1 |
| BIOT595 | Seminar- II | 1 |
| BIOT599 | Dissertation | 9 |
| Total credits | | 11 |
| Grand Total | | 63 |