



Department of Biomedical Science
Bhaskaracharya College of Applied Sciences
(University of Delhi)
Sec -2, Phase - 1, Dwarka, New Delhi -110075

B. Sc. (Hons.) Biomedical Science program is an interdisciplinary course that prepares students for areas ranging from basic to translational research. Under the Learning Outcome Based Curriculum Framework (LOCF) of the Choice Based Credit System (CBCS), students study diverse subjects such as cellular and molecular biology, biochemistry, bioorganic chemistry, human physiology, pathology, human genetics, computational biology, biostatistics, medicinal chemistry, biophysics, pharmacology, toxicology and immunology. All the courses are classified under Core, Skill Enhancement Courses (SEC), and Discipline Selective Courses (DSE). The Generic Elective (GE) Courses that are offered to the students of other departments are designed to give students essential exposure to the interdisciplinary nature of Biomedical Science.

The aim of the department is to expose students to advanced learning and help them explore research opportunities. They are encouraged to work on a research project in reputed institutions, hospitals, or even within the college. This rigorous training not only gives an early exposure to research but also helps them to gauge their research aptitude. Ample learning and research opportunities have also been provided through innovations/minor projects and other events organized under the aegis of Star College Scheme of Department of Biotechnology (DBT), Government of India. Concepts of peer learning and team spirit are emphasized among the students. In the current pandemic situation, when teaching has shifted to the online mode, all faculty members of the department smoothly transitioned to adopt methods, tools and applications that are important and useful for online teaching. All faculty members ensure that they are easily reachable and there is close interaction among the teachers and students.

The students from the department are absorbed into various research institutions of repute like the Indian Institutes of Technology (IITs), Indian Institute of Science (IISc), National Center for Biological Sciences (NCBS), Tata Institute of Fundamental Research (TIFR), Indian Institutes of Science Education and Research (IISERs), Jawaharlal Nehru University (JNU), Jamia Hamdard and Dr. B. R. Ambedkar Center for Biomedical Research, University of Delhi, etc.

About the Department

The laboratories of the department are well equipped with instruments such as UV-Visible spectrophotometers, thermal cyclers, gel documentation system, refrigerated high-speed centrifuges, orbital shaker incubators, microtomes, UV transilluminator, microplate ELISA reader, digital colony counter, digital viscometer, melting point apparatus, binocular microscopes with camera and projection system as well as other instruments including electronic balances, autoclave, colorimeters, vertical and horizontal electrophoresis units, electro-blotting system, laminar hood, magnetic stirrers, vortex shakers, ice flaking machine, ovens, etc. In short, the department has all facilities to help students gather practical skills.

The department of Biomedical Science has its Society 'DNAmics', a joint enterprise of the students and teachers. The society has been formulated to educate the students about the latest findings, developments, and avenues in the field of Biomedical Science. To broaden the horizons of its stakeholders, the departmental society conducts events and activities to promote academic, extra-curricular, and socio-cultural linkages with peers in other colleges and institutions. To promote 'Learning beyond the classroom', students are encouraged to organize and participate in various co-curricular and extra-curricular activities. The department of Biomedical Science is one of the few departments that have been awarded the Star status by the Department of Biotechnology. This award facilitates the department in conducting new experiments, short research projects/ activities, lecture series and many such activities.

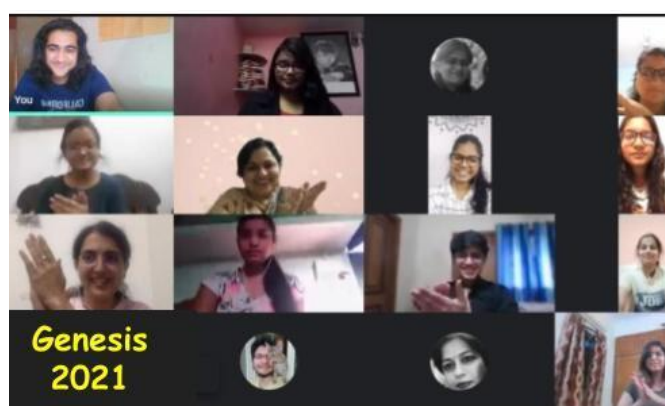
Admission Eligibility Criteria

- ❖ An aggregate of at least 55% in Physics, Chemistry, Biology/ Biotechnology (PCB/BT) subjects is required.
- ❖ At least 50% marks in English (compulsory subject).
- ❖ Students having PCB/BT with Mathematics (at least 60% marks) will be given an advantage of 3% over and above their PCB/BT aggregate.

Faculty Details

S. No.	Name	Qualification	Specialization
1	Dr Uma Chaudhry	PhD (DU)	Medical Biotechnology
2	Dr Shivani G Varmani	PhD (AIIMS)	Medical Biochemistry and Biotechnology
3	Dr Uma Dhawan (Teacher-in-charge)	PhD (DU)	Human Genetics and Bioinformatics

Any information given here is subject to change as per the guidelines of DU as and when received.



Semester-wise Distribution of Courses LOCF

SEMESTER I		SEMESTER II	
C1	Bioorganic Chemistry	C3	Principles of Genetics
C2	Cell and Radiation Biology	C4	Human Physiology and Anatomy I
AECC1	English/MIL Communication or EVS	AECC2	EVS or English/MIL Communication
GE1	Generic Elective	GE2	Generic Elective
SEMESTER III		SEMESTER IV	
C5	Biochemistry	C8	Immunobiology
C6	Human Physiology and Anatomy II	C9	Molecular Biology
C7	Medical Microbiology	C10	Medicinal Chemistry
SEC1	Skill-Enhancement Elective Course	SEC2	Skill-Enhancement Elective Course
GE3	Generic Elective	GE4	Generic Elective
SEMESTER V		SEMESTER VI	
C11	Biophysics	C13	Human Pathology
C12	Pharmacology	C14	Toxicology
DSE1	Discipline Specific Elective	DSE3	Discipline Specific Elective
DSE2	Discipline Specific Elective	DSE4	Discipline Specific Elective

C: Core Courses; **AECC:** Ability Enhancement Compulsory Course; **SEC:** Skill-Enhancement Elective Courses; **DSE:** Discipline Specific Elective; **GE:** Generic Elective

SEC 1-2: Skill-Enhancement Elective Courses (any one per semester in semesters 3-4)

1. Methods in Epidemiological Data Analysis (EDA)
2. Medical Laboratory Diagnostics (MLD)
3. Techniques for Forensic Science
4. Tools in Modern Biology

DSE 1-4: Discipline Specific Elective (any two per semester in semesters 5-6)

1. Computational Biology and Drug Design
2. Genome Organization and Function
3. Human Genetics
4. Medical Biochemistry
5. Medical Biotechnology
6. Project Work (can be chosen only in semester 6)

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GE 1-4: Generic Electives (any one per semester in semesters 1-4)

1. Basics of Immunology
2. Biological Chemistry
3. Biosafety and Bioethics
4. Biostatistics
5. Bridging Information Technology and Biotechnology
6. Concepts in Biotechnology
7. Concepts in Medicinal Chemistry and Drug Development
8. Intellectual Property Rights (IPR) for Biologists
9. Pathological Basis of Diseases
10. Pharmacology and Toxicology
11. Tools and Model Organisms in Biomedical Research

Category-wise Seat Distribution					
Total Seats	UR	SC	ST	OBC	EWS
59	24	9	4	16	6