



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 is an interdisciplinary three-year degree course offered by University of Delhi. Three colleges, Bhaskaracharya College of Applied Sciences, Acharya Narendra Dev College and Shaheed Rajguru College of Applied Sciences for Women offer the course. The new Learning Outcome-based Curriculum Framework (LOCF) curriculum of the course offers comprehensive skills and the knowledge base for the students keeping in mind the employability of the students.

The Biomedical Science program has been meticulously structured to cover a wide spectrum of subjects. Papers are classified as Core, Skill Enhancement Courses (SEC), Discipline Selective Courses (DSE). The first year of this course is designed to give a basic knowledge of the course followed by further step-wise introduction of specialized papers in subsequent years. The Generic elective (GE) courses are designed to give the essential exposure to the interdisciplinary nature of Biomedical Science. This gradual increase in the knowledge base provides a platform to students for their future endeavors in academics, research or in industry.

The theoretical classroom experience of Biomedical Science is supplemented with well-designed laboratory practices. Besides regular lectures and close interactions with faculty members, assignments, presentations, seminars and field studies form the mandates of the course. Concepts of peer learning and team spirit are emphasized and imbibed among the students. In this undergraduate program, students are encouraged to work on a project under the supervision of a distinguished scientist in a reputed institution, hospital or in house faculty. This rigorous training not only gives an early exposure to research, but also helps the student to gauge his/her research aptitude and attitude. Ample learning and research opportunities have also been provided to the faculty and students through innovation/minor projects of the faculty and other events organized under the aegis of Star College Scheme of Department of Biotechnology (DBT), Government of India. Capacity building and manpower development is a formidable task, both from educational and infrastructural perspective. Department has highly qualified faculty members devoted to make this difficult task easier. Students are frequently absorbed into institutions such as TIFR, Mumbai; University of Delhi, South Campus; IIT; Jamia Hamdard, Delhi; Jawaharlal Nehru University; South Asian University and Dr. B. R. Ambedkar Center for Biomedical Research, University of Delhi to name a few.

About the Department

Biomedical Science laboratories of the college are well-equipped with various sophisticated instruments including computer-based UV-Visible spectrophotometers, carbon dioxide incubator, digital viscometer, PCR machines, gel documentation systems, refrigerated high speed centrifuges, orbital shaker incubator, microtomes, UV transilluminator, ELISA plate reader, digital colony counter, digital melting point apparatus, binocular microscopes with camera and projection system as well as other regular 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.

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 of Faculty	Qualifications	Specialization
1)	Dr. Uma Chaudhry (Teacher-in-Charge)	Ph.D (DU)	Medical Biotechnology
2)	Dr. Shivani G Varmani	Ph.D (AIIMS)	Medical Biochemistry and Biotechnology
3)	Dr. Uma Dhawan	Ph.D (DU)	Human Genetics and Bioinformatics

Department of Biomedical Science, BCAS, Dwarka



Semester-wise distribution of Courses under CBCS (Revised)

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
Abbreviations used for Course			
C	Core Course		
AECC	Ability Enhancement compulsory Course		
GE	Generic Elective course		
SEC	Skill Enhancement Elective Course		
DSE	Discipline Specific Elective course		

Information about Department of Biomedical Science (BMS), BCAS, Dwarka, New Delhi 75
Any information given here is subjected to change as per the guidelines of DU as and when received

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SEC: Skill-Enhancement Elective Courses <i>(any one paper per semester in semesters 3rd and 4th)</i>	<ol style="list-style-type: none"> 1. Methods in Epidemiological Data Analysis (EDA) 2. Medical Laboratory Diagnostics (MLD) 3. Techniques for Forensic Science 4. Tools in Modern Biology 				
DSE: Discipline Specific Elective <i>(any two paper per semester in semesters 5th and 6th)</i>	<ol style="list-style-type: none"> 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) 				
GE : Generic Electives <i>(any one paper per semester in semesters 1st to 4th.</i>	<ol style="list-style-type: none"> 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