



PROSPECTUS - 2022

Bhaskaracharya College of Applied Sciences

NAAC accredited 'A' grade,
Star College Status by DBT (Govt. of India)
NIRF Ranking-25

"Celebrating 25 Years of Excellence in Education"



Sector-2, Phase-I, Dwarka, New Delhi-110075

Phone No: 011-25087597, Fax: 25081015.

website: www.bcas.du.ac.in

Email: bhaskaracharya.college@bcas.du.ac.in

From the Principal's Desk

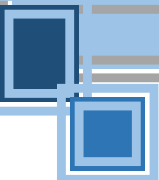


“We want the education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet.”

-Swami Vivekananda

Bhaskaracharya College of Applied Sciences is a well-established and reputed science college of the University of Delhi. The college takes pride in being amongst the top 100 science colleges in India. This college enjoys a ‘Star college’ status awarded by the Department of Biotechnology. This college provides a warm and friendly environment, which allows its faculty, students and staff to grow together as a perfectly synchronized community in pursuit of professional and academic excellence. The college has a healthy ecosystem to flourish and provides opportunities to students to explore their social skills and interdisciplinary interests.

The College has one of the best infrastructures and research facilities for students and faculty. The faculty are highly qualified and involved in multiple research and extramural projects. I am happy to inform you that we have a few patents to our credit. Our pedagogy has always been student centric. Our college strives to move beyond the traditional methods of teaching



and learning which trigger newer innovative ideas of science and technology in student's minds. The students take part in educational field trips conducted by departments and clubs for better and practical understanding. Interactive sessions are conducted throughout the year with many foreign universities for strengthening global awareness in the fields of research and technology. We have a highly qualified faculty involved in various research projects. We at BCAS strive to build a strong cohesive and inclusive temperament in students. This helps them in developing new skills with better reasoning and logical understanding. The college is committed in providing every possible facility to our students through Innovation and extramural projects, summer training, workshops, smart lab activities, industrial visits etc.

The college is celebrating 'Azadi ka Amrit Mahotsav' this year to commemorate the 75th year of our country's independence. We are also part of the centenary celebrations of University of Delhi which is also 100th year of its establishment. As a part of these celebrations we have undertaken activities like short-term courses on varied subjects like climate change, Food security, Immunological Techniques, Website Development Techniques, New education policy Innovative, Packaging, Fitness Management, Leadership and Management etc. The college has launched a Vidya Vista Scheme, 'Nadi Ko Janno' and many other outreach activities and projects which are very important for overall development and progress of the students for making them responsible citizens. We are in the process of erecting a 100 foot high national flag in our campus this year. We have also added eight new water coolers this year looking at the increased demand. We have added a synthetic badminton court to our sports infrastructure. In short we provide what it takes.

In the end I would like to reiterate that each member of this college strives to make this college as an institution of excellence in which the students get molded into an intelligent, wise human being and a responsible citizen. I would like to welcome the new batch of spirited young minds to our college with a quote:

'Education is the key to unlocking the world, a passport to freedom'.

Best wishes.

Prof. Avneesh Mittal

Officiating Principal

General Introduction

1. All Undergraduate degree courses are being taught in Undergraduate Curriculum Framework (UGCF) semester mode. Admission to all Undergraduate Programs at the University of Delhi will be based on the scores obtained in CUET 2022.
2. Candidate must appear in CUET in only subjects in which s(he) has passed class XII.
3. In case the subject studied at class XII is not mentioned in the CUET, the candidate must appear in the subject that is similar/ closely related to the subject s(he) has studied at class XII.
4. Merit will be based only on the 'combination of subjects in which a candidate has appeared in CUET' as mentioned in the respective Program-Specific Eligibility.
5. The candidate must have studied and passed class XII examination or its equivalent from a single recognized board.
6. Only the scores obtained in CUET 2022 will be considered for admissions to the academic year 2022-23.
7. Candidates must study the Program-Specific requirements carefully and then appear in subjects/papers of the CUET 2022.
8. Gap year will not be a bar for purpose of admission to undergraduate programs. However, such candidates must also appear in CUET 2022 for admissions in academic year 2022.
9. There is no minimum age bar for admission to undergraduate courses.
10. Admissions in all the courses including admission under reserved categories also are provisional and subject to verification of certificates and approval of the University of Delhi.
11. Applications for admission in the courses in respect of candidates belonging to the Examining bodies of Boards/Universities recognized/ accredited by the Association of Indian University/ UGC/MHRD shall be considered by the college in terms of the guidelines received from the University of Delhi. Grade conversion shall be in accordance of AC resolution no.319, dated 22.03.1976.
12. Applicants are advised to read carefully the College Prospectus and the Information Bulletin issued by the University of Delhi.
13. All the announcements regarding admission to the various courses will be put up on the college Notice Board as well as college website and no individual intimation will be sent.
14. **The College is a “No Smoking Zone” of the University of Delhi.**

Every attempt has been made to verify the authenticity of the contents of the College Prospectus, 2022. However, the college will not be responsible for any wrong information and the consequences of using such information. The data contained in this Prospectus is indicative only and must not be used for legal purposes. Any information given here is subject to change without information as per the guidelines of the University of Delhi as and when received.

Contents

About Bhaskaracharya- The Great Mathematician	6
About the College	7
About University of Delhi	8
Undergraduate curriculum framework (2022)-2022	10
Admission Schedule	12
Course offered	13
Course Details	14
Staff Council Committees	15
GE Course selection/allotment and Online Allotment of Generic Elective Course	17
Departments	
-Biomedical Science	19
- Botany	22
-Chemistry	27
-Computer Science	29
-Electronics	31
-Food Technology	33
-Instrumentation	37
-Microbiology	40
-Physics	44
-Polymer Science	46
-Zoology	50
-Biochemistry	54
-Human Communication	56
-Mathematics	57
The Library	58
Star College Scheme	60
College Activities	62
College Clubs	77
Research at BCAS	83
Faculty Supervisors of Doctoral Program	84
College Rules	85
Library Rules and Regulations	86
Admission Procedure	88
Discipline	100
Admission under ECA category	102
Admission under Sports category	103
Relaxation and Reservation	104
Financial aid and awards	113
Fee Structure	114
Ordinances	115
Admission Committee	118
Committee for student counselling system and mentorship	119-123
Proctorial and Anti-Ragging Committee	
College helpdesk and Grievance Committee	
Student advisory and PR Committee	
General Format of Various Undertakings	
College Map and Prospectus Committee	

Bhaskaracharya - The Great Mathematician

“Bhaskaracharya feats are revered by both the wise and the learned. A poet endowed with fame and religious merit, he is like the crest on a peacock.”

An appropriate tribute to Bhaskaracharya, one of the most celebrated mathematician and astronomer of the 12th century.

Bhaskaracharya was born in Shaka 1036 (1114 A.D.). Bhaskaracharya's masterpiece, *Siddhanta-Siromani* (Sanskrit for crown of treatises), composed at the young age of 36 years in the year 1150 A.D, is aptly considered to be the pinnacle of those times. A mammoth work comprising of 1450 verses, *Siddhanta-Siromani*, is divided into four parts: *Lilavati*(arithmetic), *Bijaganita*(algebra), *Goladhyaya* (celestial globe), and *Grahaganita*(mathematics of the planets). Each part, considered to be a book, contains simplistic methods for calculations from arithmetic and astronomy. Bhaskaracharya was a born genius and an authority in Mathematics, especially in Algebra and Geometry. His unparalleled works substantiate his profound intelligence. His Astronomical findings on planetary position, occurrence of eclipses and cosmography, written in his treatise titled “*SiddhantaShiromani*”, stuns everyone.

Bhaskaracharya was the first to give that any number divided by zero gives infinity. He described easy methods to find the squares, square roots, cube, and cube roots of big numbers. The great mathematician developed a proof of the Pythagoras theorem and gave an approximate value of PI as $22/7$. He accurately calculated the time that earth took to revolve around the Sun as 365.2588 days that is a difference of 3 minutes of modern acceptance of 365.2563 days. This was much before Leibniz or Newton could come up with Differential or Integral Calculus and to explain the forces of gravity.

In one of his work, Bhaskaracharya wrote, “*The hundredth part of the circumference of a circle seems to be straight. Our earth is a big sphere and that's why it appears to be flat.*” He also headed the Astronomical Observatory in Ujjain that was the learning Centre of India. His contribution to Astronomy and Mathematics was unparalleled and significant. He was bestowed an apt title for his genius work in Astronomy and Mathematics Bhaskaracharya “*Ganakachakrachudamani*” which means “a Gem among all the calculators of astronomical phenomena”. On 20 November 1981 the Indian Space Research Organization launched the Bhaskara II satellite honouring the mathematician and astronomer.



About the College

Bhaskaracharya College of Applied Sciences, named after the great mathematician of 12th Century was set up in October, 1995. This is a constituent college of University of Delhi and is fully supported and funded by Government of NCT, Delhi. The sprawling campus of the college spans about eight acres of land with exquisite landscaping and captivating architecture. The college has well-equipped state of the art well ventilated laboratories, extensive library facility, classrooms with LCD projectors, auditorium, open air theatre and a spacious sports ground. The campus of the college is Wi-Fi enabled. It is a tobacco free campus. The college provides a stimulating environment for holistic development of the students. They are motivated to excel in academics and attain University positions in their respective disciplines. They are provided with ample opportunities through participation in several extracurricular activities organized by various clubs, societies and committees. The societies of various Departments provide a platform for interaction with renowned academicians and scientists from their respective fields. Besides this, in order to inculcate research aptitude, skills and synergy among students and faculties, various research and innovation projects are being carried out in the college. The college is a member of the Star College Scheme of Department of Biotechnology, Government of India. In this new session more Departments have come under this status. Under this scheme, the college conducts various academic activities such as workshops, lectures, industrial visits, research projects and outreach programs. College motivates students to get involved in outreach programs and work for the upliftment of weaker sections. The college has a dedicated NSS cell which organizes various activities like blood donation camps, medical check-up camps, awareness programs and drives. Every year, college organizes various inter Departmental, inter college and Inter- University sports activities and encourages the students to participate in inter-college and open tournaments. This year we have added an open air gym and a multi utility AstroTurf facility. College also organizes cultural events like “SRIJAN” through ECA committee. The college has a well-established and active Training and Placement Cell which works in tandem with Central Placement Cell of University of Delhi for internship as well as placement of deserving students. The dynamic and dedicated faculty of the College is not only involved in teaching but also guiding Ph.D. students of various renowned universities. The faculty also proved their mettle during the Corona virus pandemic! They worked closely with the students to finish the syllabus and mentored them in these difficult times.

About University of Delhi

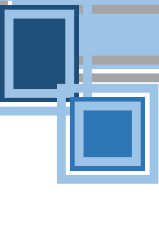
2022 – The Centenary Year



This year is a landmark year in the historical journey of the University of Delhi. On the 1st of May in the year 1922, the University was founded with three colleges, namely St. Stephens College, Ramjas College and Hindu College and comprised 750 students. And now, a century later, the University has expanded to include 90 Colleges, 16 Faculties and 86 Academic Departments, spread over 407 acres across Delhi and with a student strength of more than 6.7 lakhs. Indeed, in its composition and ethos, the university aptly represents a microcosm of the spectacular diversity of India. It is a matter of great pride for us that over the last one hundred years of its glorious presence, the University has charted a distinguished path to emerge as an institution of great eminence, both nationally and internationally. All its constituent members take great pride in its rich legacy, which dates back to the pre-independence times and which also witnessed its engagement with the national movement. From then to now, the University has moved from strength to strength to establish exemplary landmarks in all domains, including academics, research, extra-curricular engagement and social outreach.

Students and research scholars have always been considered the university's core stakeholders. Placed in such momentous times, we feel very happy to note that all those of you who choose to seek admission to one or the other courses at the university will not only get to become a part of one of the most distinguished institutions of higher learning in the country but will also acquire the privilege of being present on the most historic occasion of its Centenary. You are indeed fortunate that you will be that special Centenary batch that will get an opportunity to share in and play a meaningful role in the rollout of the Centenary celebrations, which have been planned as yearlong programs and initiatives, beginning on the Centenary Foundation Day of 1st May 2022 and culminating with the Foundation Day of 2023. In this context, you will be pleased to know that the Centenary Logo for the yearlong celebration has also been selected from the entries received through an open competition held for university students. Ms. Kratika Khinchi, a second-year student of Gargi College, is the creator of the Centenary Logo.

The yearlong celebrations shall see the organization of multifarious programs at the university, department and college levels. These will include programs of institutional social responsibility like community outreach initiatives and plantation work, among others; programs of academic engagement like seminars, conferences, workshops and lecture series; cultural events in myriad realms; sports competitions and events; book



fairs; exhibition of rare books and manuscripts; organization of seminars, conferences, workshops and lecture series; initiatives in the domain of research & development; green initiatives; innovative practices and a plethora of student-centric activities.

The wide-ranging celebrations, spread across campuses, departments and colleges, and encompassing curricular and extra-curricular spectrums shall surely provide ample opportunities for students of all interests and aptitudes to participate. We look forward to your being a part of the University of Delhi and sharing in its Centenary Celebrations. We also await your valued role and contribution to furthering the prestige and glory of this much- acclaimed institution.

Undergraduate Curriculum Framework (UGCF) – 2022

The UGCF - 2022 underlines the historical perspective, philosophical basis, and contemporary realities of higher education as enshrined in the National Education Policy (NEP) - 2020 and endeavours to synchronize these cornerstones while charting the road ahead for the state of higher education.

The University of Delhi, a premier seat of teaching, learning, and research in higher education, acclaimed nationally and internationally, has nurtured the quest for reaching the peak in every sphere of education, in its true sense, in its contribution to the nation-building. Moreover, being a Central University mandated to act as the torch bearer in expanding the horizons of human resource development through the expansion of higher education, it has always paid an adequate premium towards constructive and meaningful innovation as a regular feature in its undergraduate curriculum development over the years.

A reflection of such sustained and continued endeavour is amply exemplified in the successive revision of undergraduate curricular framework over the decades and especially in the last two decades, keeping pace with the emerging trends in higher education in the new millennium globally and its critical importance in enriching the youth of our nation, well equipped with the prevailing priorities of skill development through innovative and practical oriented teaching-learning more than anything else.

To actualise the noble objective, as succinctly brought out in the NEP -2020, the university has endeavored to explore the possibility of further restructuring and refinement of its undergraduate curriculum framework in line with the objective and underlying philosophy of the NEP - 2020 to capture the imagination of the youth of our nation which depicts the contemporary realities of our demographic advantage globally.

The resultant outcome of this comprehensive exercise undertaken by the university is the UGCF -2022 which not only underlines the heart and soul of the NEP 2020 in letter and spirit but also goes on to create a teaching-learning framework at the undergraduate level to attract the young minds towards research, innovation, apprenticeship, social outreach, entrepreneurship and similar such areas of human knowledge and endeavour while imbining the truly charged academic environ of the university and its constituent colleges.



The complete a Bachelor's degree programme in UGCF mode consists of multiple exit options, which are listed in Table.

Sl. No.	Type of Award	Stage of exit	Mandatory credits to be secured for the award
1	<i>Undergraduate Certificate in the field of Study/Discipline</i>	After successful completion of Semester II	44
2	<i>Undergraduate Diploma in the field of Study/Discipline</i>	After successful completion of Semester IV	88
3	<i>Bachelor of (field of Study) (Honours) Discipline</i> (for single core discipline course of study)	After successful completion of Semester VI	132
4	<i>Bachelor of (field of Multidisciplinary courses of Study) (for multiple core disciplines courses of study)</i>	After successful completion of Semester VI	132
5	<i>Bachelor of (Field of Study/ Discipline) (Honours with Research / Academic Projects/Entrepreneurship) Discipline</i> (for single core discipline course of study)	After successful completion of Semester VIII	176
6	<i>Bachelor of (field of Multidisciplinary courses of Study) (Honours)</i>	After successful completion of Semester VIII	176

Admission Schedule

Schedule for UG Admission Process

The candidates are requested to visit the University of Delhi website ("admission.uod.ac.in") and the college website (www.bcas.du.ac.in) on regular basis for admission schedule and other related information.

CSAS-2022:

https://admission.uod.ac.in/userfiles/downloads/2022_DUCSAS.pdf

CSAS Allocation-cum-Admission Schedule:

Schedule for Allocation-cum-Admission to Undergraduate Programs through Common Seat Allocation System (CSAS)-2022 is available on below mentioned link.

<https://admission.uod.ac.in/userfiles/downloads/2022ScheduleforPhaseIIofCSASforUGAdmissions.pdf>

Courses Offered

List of B.Sc. (Hons.) Courses, 2022-2023

S.No	Courses offered
1	Biomedical Science
2	Botany
3	Chemistry
4	Computer Science
5	Electronics
6	Food Technology
7	Instrumentation
8	Microbiology
9	Physics
10	Polymer Science
11	Zoology

Syllabus:

Detailed syllabus of different Courses of First Semester is available on below mentioned link.

[“http://www.du.ac.in/uploads/images/06102022_ordini_1.pdf”](http://www.du.ac.in/uploads/images/06102022_ordini_1.pdf)

[“http://www.du.ac.in/uploads/new-web/21092022_SEC.pdf”](http://www.du.ac.in/uploads/new-web/21092022_SEC.pdf)

[“http://www.du.ac.in/uploads/new-web/21092022_VAC.pdf”](http://www.du.ac.in/uploads/new-web/21092022_VAC.pdf)

*Course Details**

Course	(No. of Seats) **Gen/SC/ST/OBC/EWS	First Cutoff (for General Category) % in 2021
B.Sc.(H)Biomedical Science	(59) 24/9/4/16/6	95% PCB/ PCBt
B.Sc.(H)Botany	(40) 16/6/3/11/4	91% PCB/ PCBt
B.Sc.(H)Chemistry	(40) 16/6/3/11/4	92.00% PCM
B.Sc.(H)Computer Science	(59) 24/9/4/16/6	92.00% (PCM+ language)
B.Sc.(H)Electronics	(59) 24/9/4/16/6	91% PCM
B.Sc.(H) Food Technology	(59) 24/9/4/16/6	92% PCM/PCB/PCBt(which ever is higher)
B.Sc.(H)Instrumentation	(59) 24/9/4/16/6	90% PCM
B.Sc.(H) Microbiology	(40) 16/6/3/11/4	92% PCB/PCBt
B.Sc.(H) Physics	(40) 16/6/3/11/4	93% PCM
B.Sc.(H) Polymer Science	(59) 24/9/4/16/6	90% PCM
B.Sc.(H) Zoology	(40) 16/6/3/11/4	91% PCB/ PCBt

*** Subject to any change as per guidelines of University of Delhi as and when received.
For details on eligibility criteria, refer to University of Delhi, Bulletin of Information
(2022- 2023).**

****Reservations are as per rules of the University of Delhi.**

Staff Council Committees

Conveners of Few Staff Council Committees	
1. Academic	Dr. Meetu Luthra
2. Admission	Prof. Sangeeta Srivastava
3. Alumni	Dr. Rizwana
4. Annual Day	Principal
5. AMC	Dr. Anita Sondhi
6. Annual Report	Dr. Geeta Mongia
7. Anti-Discriminatory Cell	Prof. Anil K. Bali
8. Bhaskaracharya Cell	Dr. Krishna Dutt
9. Biological & Chemical Waste Management	Dr. Shalini Sehgal
10. Building Maintenance Committee	Dr. Sandeep Kumar
11. Canteen Committee	Dr. Meenakshi Garg
12. Career Counselling Cell	Dr. Uma Dhawan
13. Central Purchase Committee	Dr. Jitender Kumar
14. College Monitoring Committee for Internal Assessment	Principal
15. Committee for Student Mentoring system	Prof. Avneesh Mittal
16. Departmental Moderation Committee for Internal Assessment	Present TIC
17. Digitization & Automation Committee	Dr. Partha S. Pal
18. ECO	Dr. Gunjan Sirohi
19. Equal Opportunity Cell	Dr. Pawas Goswami
20. Extra- Curricular Activity(ECA)	Dr. Vijaya Kumar Nalla
21. Garden	Dr. Eram S Rao
22. Gender Sensitization and Presiding Officer, Internal Complaint Committee	Dr. Inderbir Kaur (Faculty representatives in ICC)
23. Library	Prof. Sidhharth Sirohi
24. Magazine and e-Newsletter Committee	Dr. Shvetambari
25. NAAC	Prof. Uma Chaudhry
26. National Service Scheme(NSS)	Dr. Amit Kumar
27. North East Cell	Dr. Sonia Salam
28. NIRF	Dr. Purnima Anand
29. Proctorial & Anti- Ragging	Dr. Sujata Bhardwaj

30. Prospectus Report	Dr. Saroj K. Shukla
31. Public Grievance Redressal	Mr. Bhavya Deep
32. Research & Project Assessment Committee	Prof. N.S. Abbas
33. SC/ST Cell	(Liasion Officer, Ex-Officio)
34. Special Categories Admission Enabling	(Liasion Officer, Ex-Officio)
35. Sports	Prof. Anand Bharadvaja
36. Student Advisory & PR Committee	Dr. Susmita Dey Sadhu
37. Swacchata & e-Waste Management	Mr. Bhavya Deep
38. Time Table	Dr. Partha S. Pal
39. Training, Placement and Enterprenurship	Dr. Manoj Tiwari
40. Website & Internet Committee	Dr. Ragini Jindal
41. Gandhian Study Centre	Dr. Ramesh Kumar
42. Women Development Cell	Prof. Eram S Rao

Appellate Authority	Prof. Avneesh Mittal (Principal)
Public Information Officer	Prof. Eram S Rao
Assistant Public Information Officer	Ms. Ira Sharma

Bursar	Prof. Sidhharth Sirohi
Section Officer (Administration)	Ms. Ira Sharma
Section Officer (Accounts)	Mr. Rajiv Dawar
Sr. P. A. to Principal	Ms. Ritu Sareen



Generic Elective (GE) Course Selection/Allotment

The college offers GE based on for various courses as per university syllabus from first to six semesters.

Based on your interest, you have to choose GE papers in order of your preference. These papers will be selected amongst different papers floated by all the departments other than your parent department (where you are enrolled in the college for studies) e.g. If you are enrolled for B.Sc.(H) Electronics, Department of Electronics will be your parent department. GE can be selected by any course offered by Departments other than Electronics like Mathematics, Chemistry, Computer Science, Polymer Science etc.

Online Allotment of Generic Elective (GE) Course

Following norms will be adopted for the online GE allotment.

- I. Preferences will be taken from each student for GE-1/ GE-2/ GE-3/ GE-4 etc. through Google form at the beginning of each semester, if not fixed as per Table I above.
- II. Allotment is purely based on Merit cum Preference basis as per the number of seats offered by a Department concerned. Remember this allotment will only be semester based and not fixed in all semester.
- III. Last available normalized result will be used for deciding the merit of the student with a penalty of 5% in case of Essential Repeat/ Compartment (ER), if any.
- IV. The result of XII class (Four subjects viz Course Eligibility Criteria + One Best Language) will be considered for GE-1 and GE-2.
- V. Online preferences will be considered for GE-1 only upto Fifth cutoff.
- VI. To avoid any further fluctuations in the already allotted GE-1, the GE option will be allotted manually for the students admitting later based on the vacant seats only.
- VII. Total result of I Semester exams will be used for GE-3 respectively.
- VIII. Total result of I year exams will be used for GE-4 respectively.
- IX. In case of result on the CGPA basis, available result will be multiplied by a factor of 9.5 to fill the result in percentage or total marks.
- X. For students whose result is not available or declared by the University, for whatever reasons, at the time of filling GE form, the result of last annual examination passed will be considered.
- XI. The allotted GE will be visible on the college website and in no case it will be changed after allotment.

***Students need to check the GE1 options available in the college at the time of taking admission**

1. **Ability Enhancement Compulsory Courses:** These courses are mandatory for all the disciplines.
2. **Skill Enhancement Courses:** These courses may be chosen from a pool of courses offered by the College which are designed to provide value-based and/or skill-based knowledge.
3. **Value Addition Course:** These courses are common pool of courses offered by different disciplines and aimed toward personality building; embedding ethical, cultural and constitutional values; promote critical thinking, Indian knowledge systems, scientific temperament, communication skills, creative writing, presentation skills, sports and physical education and team work which will help in all round development of students.

Department of Biomedical Science

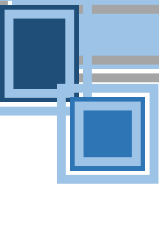
Faculty

Name	Qualification	Specialization
Dr. Uma Chaudhry	Ph.D. (DU)	Medical Biotechnology
Dr. Shivani G. Varmani	Ph.D. (AIIMS)	Medical Biochemistry and Biotechnology
Dr. Uma Dhawan <i>(Teacher-In-Charge)</i>	Ph.D. (DU)	Human Genetics and Bioinformatics
Dr Kapil Roy	Ph.D. (DU)	Biophysics
Dr. Neha Singh	Ph.D. (NII)	Human Physiology
Dr. Shvetambri Arora	Ph.D. (DU)	Medical Biochemistry
Dr. Shubhra Barwa	Ph.D. (CCSHAU)	Cell Biology

B. Sc. (Hons.) Biomedical Science program is an interdisciplinary course offered by University of Delhi that prepares students for areas ranging from basic to translational research. 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 in Undergraduate Curriculum Framework (UGCF) – 2022 base on National Education Policy 2020 are classified as:

- Discipline Specific Core (DSC)
- Discipline Specific Elective (DSE)
- Skill Enhancement Course (SEC)
- Value Addition Course (VAC)
- Generic Elective (GE)
- Ability Enhancement Course (AEC)

Discipline specific core courses offered by the Department of Biomedical Science are mandatory for the students studying B. Sc. (Hons.) Biomedical Science. Discipline specific electives are a pool of courses offered by the Department from which the students may choose to study. Skill enhancement courses are designed to provide hands-on-training and skills to the students. On the other hand, Generic elective courses of Biomedical Science are designed to give essential exposure to the interdisciplinary nature of Biomedical Science to the students of other disciplines. Besides lecturing and close interactions with the well qualified faculty, regular assignments, presentations, seminars and field studies form the mandates of the course. All faculty members ensure that they are easily reachable and there is close interaction among



the teachers and students. Concepts of peer learning and team spirit are emphasized among the students.

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 minor projects and other events organized under the aegis of Star College Scheme of Department of Biotechnology (DBT), Government of India. 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. The department prides itself on giving the students hands-on laboratory experience. 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 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.

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 organized following activities during 2021-22:

1. DNAmics, the society of the Department of Biomedical Science celebrated its Annual Fest, Genesis 2022 on April 22, 2022. Dr. Beena Pillai, Senior Principal Scientist at CSIR-Institute of Genomics and Integrative Biology, Delhi delivered the invited talk on “Life Lessons from Cells”. Various co-curricular and extra-curricular events along with the alumni meet were also organized.

2. A National webinar on “Essentials of Bio-entrepreneurship and Supporting Ecosystem” by Ms. Suman Gupta, Chief Operations Officer, BSC BioNEST Bio-Incubator, Regional Centre for Biotechnology on March 9, 2022.
3. A Talk Show – Let’s Talk Ethics to spread awareness about ethical issues among students of different departments of the college on February 26, 2022.
4. An intercollege online Essay Writing Competition on ‘World Peace through the Lens of Science’ to commemorate International Week of Science and Peace from November 8-14, 2021.
5. The department in collaboration with the Career Counselling Cell of the college organized ‘Brain Awareness Day’ jointly with Amity Institute of Neuropsychology and Neurosciences, Amity University, U.P. as a part of the International Brain Research Organization (IBRO)-DANA foundation funded Brain Awareness week on November 11, 2021.
6. The department in collaboration with the Career Counselling Cell of the college organized an International workshop on ‘Science Communication and the Art of Writing about Science’ by Dr. Anusha Krishnan, Science Writer and Editor on October 9, 2021.

The students of the department are doing exceedingly well in academics. Following are some of the achievements of our students of the batch 2019-22:

- Divya Suri selected in Integrated PhD program in Biological Sciences at Indian Institute of Science, Bangalore.
- Jhanvi Sareen and Tanmay Devgan selected for MSc Programme in Biotechnology & Bioinformatics at Institute of Bioinformatics and Applied Biotechnology (IBAB) Bangalore.
- Garmia got admission in MSc Biotechnology in IIT Mumbai.
- Rashmi Anand and Pranshu Tyagi got admission in MSc Biotechnology in South Asian University (SAU), New Delhi.

Sudiksha Gupta got admission in MBA in Hospital and Health Management at International Institute of Health Management Research (IIHMR), Delhi.



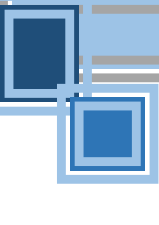
Department of Botany

Faculty

Name	Qualification	Specialization
Prof. N. S. Abbas <i>(Teacher-In-Charge)</i>	Ph.D. (D.U.)	Plant Biotechnology
Dr. Sujata Bhardwaj	Ph.D. (M.D.U.)	Ethnobotany and Ecology
Dr. Shikha Srivastava	Ph.D. (DU)	Applied Microbiology and Biotechnology
Dr. J. Dinakaran	Ph.D. (M. S. University of Baroda)	Ecology
Dr. Julie Thakur	Ph.D. (DU)	Conservation Biology and Biotechnology
Dr. Gurumayun Suraj Sharma	Ph.D. (DU)	Biophysics
Dr. Salam Sonia Devi	Ph.D. (DU)	Phycology

The Department traces its origin back to 1995 when it supported the requirement of the Biology Department. It elevated itself to offer B.Sc. (Hons.) Botany since the year 2017. The emphasis of the UG program at present is to give comprehensive professional training in the field of Plant Biology and Plant Biotechnology. Botany is the branch of biology that deals with the scientific study of plants. It is one of the preferred choices of study among science students in India. Botany focuses on an extensive plant study ranging from their structures, growth, uses, and processes of plant life- to their evolution, aging, decaying, and death. The plants which range from the smallest bacterium to the largest Sequoia tree, provide food, clothing, and shelter to mankind. Considering the current scenario, various factors like urbanization, population explosion, pollution, etc. are affecting the flora worldwide. Therefore, apart from the in-depth study of flora, a botanist is needed to explore all the possible ways to deal with issues related to agriculture, horticulture, and the environment. Thus, a career in Botany can be highly rewarding for those, who are allured to the aesthetic beauty of nature and flora. Botany has become such an extensive research enterprise that now it is not only restricted to a single discipline but encompasses several clustered sub-disciplines. The multi-disciplinary initiative is significant for several reasons. First of all, it represents the culmination of a long-cherished aspiration of the Institute. Equally significant is its historical moment, namely, the beginning of the new century that is aptly called the post-genome era. Botany is currently experiencing a golden age of research-driven discoveries. The application of plant sciences improves the yield and supply of medicines, food, fibres, building materials, and other plant products. The knowledge of plant sciences is essential for the development and management of forests, parks, wastelands, sea wealth, etc.

Careers in botany are vast and variable because of their interdisciplinary nature. After completing the course, one can be a part of any reputed organization as an academia, scientist,



plant explorer, conservationist, ecologist, environment consultant, horticulturist, plant biochemist, molecular biologist, taxonomist, plant pathologist, farming consultant, sericulturist, marine/freshwater biologist, forest service employee, Environmental impact specialist, Greenhouse specialist, Agricultural Research Service, Botanical gardens and arboreta such as the National Arboretum, Lumber and paper industries, Biotechnical regulatory agencies, National Park Service Employee, National forestry or conservation expert, Science columnist, Researcher in food-based plants, Ayurveda, Entrepreneurs/startups in above-mentioned fields, R&D, Forensic science, business and industry. One can be a part of more recent and interesting fields like space travel agriculture, artificial environments, hydroponics, and various other interesting areas of research. The demand for botanists is increasing in areas such as medical plant research, plant diseases, plant breeding, plant genetics, molecular biology, plant biotechnology, etc. Some botanists work in administration and also in marketing for biological supply in and from companies' viz., seed companies, biotechnology firms and pharmaceutical manufacturers.

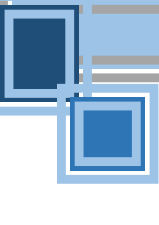
The vision of the Department is to think big and achieve the same with the vision of the faculty and the hard work of the students, as told by his highness Dr. A.P.J. Abdul Kalam, the former President of India- "To explore and not to exploit the plant world". The objectives of the Department are to bring forth disciplined, competent, spiritually and socially committed, and morally upright students through quality education and research. The department trains the students to face challenges with the best teaching methods and strives to shape and mould students as worthy citizens, build self-confidence in the students, infuse ethics, values, and responsibilities in them, provide academic excellence, develop an exemplary Department in the University and Country and to make the Department a center of excellence in thrust areas of Biological Science. Additional inputs are inserted into the curriculum with student-centric thought-provoking teaching aids with modern gadgets, modular course content, and intensive fieldwork for the collection of local flora which help them to know about the area and familiarize them with the distribution and other patterns of flora.

The Department of Botany has well-equipped instruments and infrastructure for this course. The laboratories are designed in such a manner that it is well illuminated and aerated with projector facility, latest instruments particularly PCR machine, Binocular microscope, B.O.D. incubator, PC-based UV-Vis-Spectrophotometer, Autoclave, Laminar flow, Refrigerated centrifuge, Growth chamber, pH-meter, Electronic balance, Vortex shaker, Electrophoresis and UV trans-illuminator, Ice Flaking Machine, Refrigerated Centrifuge, Water purification system, etc. The Department has a well-maintained tissue culture room facility.

The faculties and students are exposed to advanced learning techniques and research opportunities through various events organized under **the aegis of the Star College Scheme of the Department of Biotechnology (DBT), Government of India.**

BOTANICAL SOCIETY – PHYTOMICS

The Department has a Botanical society "PHYTOMICS" which aims to organize lectures, seminars, workshops, webinars, conferences, annual fest, competitive exam preparation, special sessions for slow learners, etc. to provide information on up-to-date development in the field of science and technology. Under the botanical society, students are given exposure to

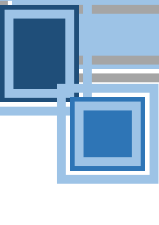


visiting various research institutions across the country (DIPSAR, JNU, IARI, FRI, NBPGR, NIPGR, NISCAIR, etc.) to enlighten them about the current instrumentation techniques used in biological sciences as a part of their curriculum and widened their perspective and thoughts on the present scenarios in biological research. Students are encouraged to participate in National conferences/seminars/symposia/workshops/invited lectures organized in and out of the college to update their knowledge of the subject.

VARIOUS ACTIVITIES ORGANIZED BY THE DEPARTMENT IN 2021-22

Departmental Activities

- Organized a 'Field Trip to Yamuna Biodiversity Park', Wazirabad, Delhi on March 31, 2022, for the second-year students. Dr. Dinakaran and Dr. Julie Thakur were the teacher coordinators. The visit aimed at enlightening students about the biodiversity, the role of ecosystem services, and how can we create and preserve a biodiversity park.
- Organized an educational visit to the Indian Agricultural Research Institute (IARI), New Delhi on March 30, 2022, for the third-year students. Dr. Dinakaran and Dr. Shikha Srivastava were the teacher coordinators. The students learned about the working of fermenters for the isolation and production of agriculturally important microbes.
- Organized an educational visit to a 'Herbal Park, Sector-19, Dwarka', Delhi on March 28, 2022, for the second-year students. Dr. Sujata Bhardwaj and Dr. Dinakaran were the teacher coordinators. This educational and awareness program brought them a greater exposure and inculcated the knowledge into skills for promotion of traditional medicinal plants.
- Organized a 'Tree Census Drive' in collaboration with the Eco-club of the college on the college campus on March 26, 2022. Prof. N.S. Abbas was the convenor, Dr. Gurumayum Suraj Sharma was the coordinator. This drive was planned as a part of documentation of the flora of the college campus as well as the awareness program provided the basic knowledge of common trees and shrubs of the college to the students.
- Organized the 'Annual Botanical Fest, Blossom III' on March 9, 2022 by Phytomics- the Botanical society of the college. A seminar on the topic 'Connecting the Dots: The Way Forward' and various events such as Quinundrum, Test Your Sentidos, BGT 2.0, Beg Borrow Steal, Solve the Mystery, Mad Ads and several fun games were organized. Prof. N.S. Abbas and Dr. Sujata Bhardwaj were the convenors of the event.
- Organized an online two-day international workshop on 'Ayurveda: Wellness Begins with Understanding yourself' by Phytomics- the Botanical society of the college from February 22-23, 2022. Dr. Manisha Mittal, an Ayurveda professional, at Swastik Clinic, Pennsylvania, USA delivered highly informative lectures to create awareness about the importance of Ayurveda in our lives. Prof. N.S. Abbas was the convener, Dr. Sujata Bhardwaj was the co-convenor, Dr. J. Dinakaran and Dr. Julie Thakur were the coordinators. This international workshop enlightened participants about how to prolong life, promote perfect health and eradicate the disease and dysfunction of the body.
- Organized an online Alumni Interactive Session on 'Reminisce, Reconnect and Reflect' by Phytomics- the Botanical society of the college on February 20, 2022. Prof. N.S. Abbas was the convener, Dr. Sujata Bhardwaj was the co-convenor, Dr. Julie Thakur and Dr. J.



Dinakaran were the coordinators. This event provided a platform for the current batch students to interact with their alumni. This interaction helped the students to explore various scope and opportunities available in the field of Botany.

- Organized an online short-term course for 40 hours on ‘Climate Change & Food Security: Issues, Challenges & Strategies’ by Phytomics- the Botanical society of the college from January 3, 2022, to February 12, 2022. Prof. N.S. Abbas was the convener, Dr. Sujata Bhardwaj was the co-convenor, Dr. Gurumayum Suraj Sharma and Dr. J. Dinakaran were the coordinators. Dr. Julie Thakur was the co-coordinator. The program was aimed towards providing foundation about the ecological system and environment, and how to deal with the current environmental scenario, agriculture, crop productivity, and food security.
- Organized a ‘Plantation Drive on the College Campus’ by Phytomics- the Botanical society of the college on October 25, 2021. During the event, the Principal sir, teaching, non-teaching staff and students planted various plant saplings. The purpose of the event was to create awareness amongst all of us about the various benefits of plants in our lives. The drive inculcated environmental awareness and the need for greenery in our surroundings.
- Organized an interaction with the Faculty of members of Indira Gandhi Government College, Tezu, Arunachal Pradesh under the Vidya Vistar Scheme through a virtual meeting on September 19, 2021. Prof. N.S. Abbas convened the event.
- Organized the ‘Swachhta pledge-taking ceremony’ on September 1, 2021, where faculty members, students, and non-teaching staff participated and took the pledge to keep our country neat and clean. The department also organized a ‘Cleanliness Drive’ on September 6, 2021 where many students and faculty participated and they cleaned not only the department, laboratories, instruments, but also collected garbage from college premises, and neighbouring localities and disposed of carefully. The awareness was spread amongst students to be responsible citizens of this Nation, do not indulge in littering, and nor do they allow it to happen.

Organized a virtual visit to NBPGR on the theme ‘A Journey of NBPGR: Glimpses of Gene Bank, Research Opportunities, and Career Prospects & Interaction with the Director, NBPGR’ by Phytomics- the Botanical society of the college on April 20, 2021. Dr. Kuldeep Singh, Director, NBPGR, directly interacted with the students. Dr. N.S. Abbas was the convener, and Dr. Sujata Bhardwaj was the co-convenor. The Director interacted with the students and enlightened them about the various job opportunities present for the students at the NBPGR.



Department of Chemistry

Faculty

Name	Qualification	Specialization
Prof. Balaram Pani (on leave) presently Dean of Colleges, University of Delhi	Ph.D. (J.N.U.)	Inorganic Chemistry Environmental Chemistry
Dr. Lalit Kapur (Teacher in-Charge)	Ph.D. (D.U.)	Inorganic Chemistry
Dr. Swati Gupta	Ph.D. (DU)	Organic Chemistry
Dr. Bholey Singh	Ph.D. (DU)	Physical Chemistry
Dr. Manjeet Singh	Ph.D. (Kurukshetra)	Inorganic Chemistry
Dr. Shailja Singh	Ph.D. (DU)	Organic Chemistry
Dr. Sampat Singh	Ph.D. (IIT, Delhi)	Physical Chemistry
Dr. Vijay Kumar	Ph.D. (DU)	Organic Chemistry

One of the leading subjects in pure sciences, Chemistry offers the students an ideal platform to begin exploring the composition, structure, properties & behavior of all forms of matter. The emphasis at the undergraduate level is to give a broad coverage of most common branches of Chemistry considering the inter-disciplinary nature of the subject today.

The laboratories of the Department are well equipped with sophisticated instruments. Some notable instruments are electronic and analytical balances, pH-meter, hot air oven, double distillation plant, vacuum pump, de-ionizer, spectrophotometer, polarimeter, colorimeter, digital potentiometer, digital melting & boiling point apparatus, conductivity meter and fuming hood chamber that enables students to carry out all the experiments as prescribed in the syllabus as well as simple projects.

Besides this, there is an Instrumentation laboratory for carrying out experiments in Physical Chemistry and Analytical techniques. Titrations, synthesis, purification, and analysis of chemical compounds are some of the aspects that form the basis of the lab. Moreover, there are dedicated laboratories for conducting research work in leading areas of Chemistry that are equipped with sophisticated instruments being funded by the Board of Research in Nuclear Sciences, Science and Engineering Research Board, and the University of Delhi. Presently, one student has completed and three students are pursuing Ph.D. in the Department.

The faculty are well qualified and promote work ethics. They are dedicated to rigorous standards for content knowledge, communication skills, research quality, and professional endeavour. They are committed to demonstrating science as a human endeavour and as a way to understand the natural world. The support staff is quite responsive and sensitive towards their duty.

To provide detailed subjective knowledge to the students, modern power-point based teaching methodologies are employed. One of the lecture halls in the department is equipped with overhead projector. Moreover, students are encouraged to perform minor projects to attain the hands-on experience of the latest instruments. After graduation, students have lucrative and

attractive career options in Research & Development and Managerial positions in Pharmaceutical and Chemical industries.

It is worth mentioning that B.Sc.(H) in the Chemistry course commenced from the year 2017-18. In all 69 students were enrolled. The result was overwhelmingly 100%. The Chemical Society 'ALCHEMY' was inaugurated on September 06, 2017. The society organizes many International and National events through out the year including conferences, seminars, invited lectures/talks, excursion and several activities like Chemistry fest 'Colors of Chemistry', Hindi Pakhwada celebration, Diwali celebration to enrich and update its members with the latest developments across the globe. Students are also encouraged to participate in various sports and cultural activities both at College and Intercollege level. The department goes beyond curriculum by encouraging students to take projects internship etc.

The Department has its Blog (<http://bcaschem.blogspot.in/?m=1>) and at present 10,811 visitors have visited the blog site. A Google-page, Email, and WhatsApp group of the Department of Chemistry is also functional. The Department has a task force "**Bhaskaracharya Environmental and Sustainability Taskforce (BEST)**" whose primary objective is to preserve and enhance the environmental activity to achieve a healthier environment. Apart from this, the department has its own book bank for students and staff.

To bring equity, efficiency, and diversification the university adopted UGCF. Accordingly, Generic elective subjects are offered, the department offers GE papers to expose students in a discipline different from their course of study.



Department of Computer Science

Faculty

Name	Qualification	Specialization
Ms. Manu Kataria <i>(Teacher-In-Charge)</i>	MCA (HPU Shimla)	Computer Graphics, Operating System
Prof. Sangeeta Srivastava	Ph.D. (University of Delhi), D.Sc. (UPES)	Software Engineering, Data Mining and Machine Learning
Mr. Bhavya Deep	M.Sc. (DAVV, Indore)	Internet of Things, Blockchain, Swarm Intelligence, Recommender Systems, Data Science
Ms. Arti Dua	MCA (GGSIPU, Delhi)	Computer Networks
Dr. Jayant Sharma	Ph.D. (CMJ University, Meghalaya)	Data Mining
Mr. Parveen Kumar	ME (DTU)	Artificial Intelligence, Machine Learning
Ms. Seema	MCA (HBTI, Kanpur), Mtech (GGSIPU)	Data Structures, DBMS, C++
Dr. Asha	Ph.D. (MDU, Rohtak)	Data Mining

Bhaskaracharya College of Applied Sciences is regarded as one of the premier institutes for learning Computer Science in the University of Delhi with the objective of imparting quality education in the field of Computer Science. This has been made possible by its hard-working students and dedicated faculty whose utmost concern has always been the students' overall development and the Computer Science fraternity as a whole. The Department constantly encouraged the students to bring out the best in themselves by adopting new technologies, trends and ideas. With a zealous student body, innovative classroom sessions, well-equipped laboratories and dedicated faculty, the Department has been producing exceptional graduates every year. The Department of Computer Science organizes seminars, technical talks, and workshops regularly to enhance the technical abilities of students. The Department of Computer Science nurtures students with technical knowledge through the effective use of contemporary tools. The Department organizes various workshops, seminars and webinars throughout the year. Various activities were organized during the year 2021 like one day National Workshop on 'Research Methodology' held in March, 2022 a Short-Term Course on 'Website Development Techniques' from in, 2021. An international webinar on 'Career Opportunities in Financial Engineering', a webinar on 'Full Stack Development Program'. A webinar on "Ensemble Learning Techniques and Their Implementation" was also organized in March, 2021. CS.Net Society of department celebrated the annual departmental fest

“INTERFACE’ 22” on April, 2022. These included events like LAN Gaming, Quiz, Beg Borrow Steal / 3BL / Tug of War, Coding Event, Online Chess, Speed-O-Test, Mr. & Ms. Interface and Alumni Interaction. Students from various streams have engaged enthusiastically. The students of the Department are placed every year through the Central Placement Committee (CPC) of the University of Delhi. In addition, many students opt to pursue higher education courses like MCA, MSc and MBA etc., in various renowned universities/Institutes of the nation.

Course Objective

This course is designed as the first course that introduces computers and programming to students of other disciplines in the college. The course focuses on the use of computers and programming to address issues of different domains. The notion of object-oriented programming is also introduced.

Course Learning Outcomes

On successful completion of the course, students will be able to:

1. Describe the components of a computer and notion of an algorithm.
2. Apply suitable programming constructs and built-in data structures to solve a problem.
3. Develop, document, and debug modular python programs.
4. Use classes and objects in application programs and visualize data.



Department of Electronics

Faculty:

Name	Qualification	Specialization
Dr. Manoj K. Khanna (on lien/leave)	Ph. D. (Delhi University)	Microelectronics and VLSI designing
Prof. Geeta Mongia	Ph. D. (Delhi University)	Optical Data Storage & Photovoltaic
Dr. Inderbir Kaur <i>(Teacher-In-Charge)</i>	Ph. D. (Delhi University)	Amorphous Semiconductors
Prof. Avneesh Mittal	Ph. D. (Delhi University)	Genetic Algorithm and Adaptive Controls
Dr. Manoj K. Tiwari	Ph. D. (Delhi University)	Microwave Photonics
Ms. Shweta Gupta	M. Sc. (Delhi University)	Electronics
Dr. Jitender Kumar	Ph. D. (Delhi University)	Nano-Materials and devices (LED Solar Cell, Sensors)
Dr. Amit Kumar	Ph. D. (Delhi University)	Electroluminescent Materials & Devices
Ms. Aarti Malyan	M.Sc.(Delhi University)	Electronics

Degree in B.Sc. (Hons.) Electronic Science covers all the key knowledge areas required to become a successful Electronics Professional. It equips students with broad foundation of the fundamentals of Electronics and associated subjects and provides students with skills which are required to design electrical, electronic, computer, automation and communication systems. It includes courses on Analog and Digital Electronics, Signals and Systems, Electrical Machines, Communication, Microprocessor and C programming language. Practicals based on simulators like PSPICE, QUICS, SCILAB, etc. are also included in the curriculum. This degree provides comprehensive opportunities to the graduates to explore and attain the zenith of success in research & development, aerospace and defence electronics, design, testing, quality control, and project management. After graduation, students can also pursue higher studies in Electronics or Information technology from University of Delhi, Indian Institute of Technology, JamiaMillia University, Kurukshetra University, Devi Ahilya University, BanasthaliVidyapeeth University, etc. The students are also eligible to pursue MBA and MCA from various esteemed Universities.

The Electronics Laboratory is well equipped with latest state-of-the art instruments such as Cathode Ray Oscilloscopes (CRO) & Digital Storage Oscilloscopes (DSO) (100MHz), CRO demonstration kits, Pulse Generators, Function Generators, Power Meter, Analog and Digital I.C. tester, LCR Q-tester, 8085 and 8086 Microprocessor kits, Microcontroller trainer,

Interfacing modules and cards, Universal Programmer, various communication modules experimental kits, LASER kits, Antenna trainer kits, PCB design Unit, AVR Microcontroller and Arduino Kits etc. The Department also has well equipped computer laboratory with various simulation software installed to facilitate the students to gain expertise in IT skills.

Department has its society named '**SPARKS**' which organizes various activities like Workshops/ Conferences/ lectures/Seminars/ Technical Fest, etc. every year under the guidance of eminent personalities from the academia and industries. To promote the holistic development of students, many activities have been organized in the last academic year.

1. The Annual Intercollegiate Departmental Fest "TECHMANIA" was organized on April 22, 2022 including many technical events like Project Exhibition, Circuit Making, Quiz Competition etc. and fun games.
2. An online lecture on "Opportunities and Challenges in Renewable Energy and Green Technology" on February 25, 2022. Dr. Shiv Kumar Dixit, Assistant Professor, Manav Rachna University was invited to deliver the insights about the topic.
3. The Departments of Electronics, Department of Physics and Department of Instrumentation in association with Alumni Committee organized an Alumni Interaction session on February 19, 2021 on the topic "Alumni Interaction: Research opportunities in Physical sciences". This interaction was planned with an objective of reconnecting with the alumni as well as showcasing their success stories to inspire the students.
4. The department also organized a series of two sessions on 'How to prepare for M.Sc. Electronics/ IT Entrance' on February 5 and 12, 2022. Mr. Govind Tripathi and Ms. Sakshi Jangid were the resource persons for the session-I. Mr. Neeraj Kumar Yadav and Mr. Himanshu Kumar Gupta were the resource persons for the session-II.
5. An Alumni Interaction Session by Dr. Devinder Madhwal, Assistant Professor, Amity Institute of Advanced Research and Studies, Amity University, Noida. on November 12, 2021 was organized.
6. A webinar on 'Recent Trends in Organic Electronics and Displays' by Prof. (Ret.) P.K. Bhatnagar, Department of Electronic Science, UDSC was organised on September 17, 2021.



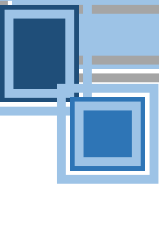
Department of Food Technology

Faculty

S.No.	Name	Degree	Specialization
1.	Dr. Rizwana	Ph.D.	Food Technology
2.	Dr. Vandita Gupta	Ph.D.	Food & Nutrition
3.	Dr. Shalini Sehgal	Ph.D.	Food Microbiology & Food Safety
4.	Prof. Eram Shahid Rao	Ph.D.	Food Science & Nutrition
5.	Dr. Meenakshi Garg (Teacher-in-charge)	Ph.D.	Food Processing & Packaging
6.	Dr. Roshan Lal	Ph.D.	Food Processing & Technology
7.	Dr. Sakshi Khurana	Ph.D.	Food and Dairy Processing
8.	Ms. Manisha Thakur	M.Sc.	Food Science & Technology

Food Technology is a scientific understating and technical approach towards food. Students will learn various principles and technologies used in food to maintain and promote production, preservation, quality, and safety of food. Food sector is the necessity and never ending field of growth and demand globally. The department offers a full time B.Sc. (H) programme in Food Technology. The course is of four years duration split into eight semesters. Food Science is a blend of biology, chemistry, physical sciences, and engineering studied together to understand the nature of foods, the causes of their deterioration, and the principles underlying food processing. Food Technology is the application of food science to the selection, preservation, processing, packaging, distribution, and use of safe, nutritious and wholesome food. Therefore, Food Science and Technology is a multidisciplinary subject, which includes subjects such as Chemistry, Biology, Engineering, Nutrition, Microbiology, etc. and is not a program to enhance the technical skills.

Our food system has advanced over the centuries from food for oneself to food for the world. It is multifaceted and of huge complexity. The contribution of food scientists and technologists towards this evolution has been pivotal. They consistently ensure that the food supply is safe, nutritious and abundant; contributing to better health. This is accomplished through scientific know how, conserving food losses and wastages while providing well-balanced food for all in a sustainable way. With the growing challenges of climate change, global warming, receding natural resources and recent biological threats the Food processing Industry, is still recognized as a dynamic and sunrise industry. Therefore, this niche course offers a unique combination of subjects which empowers the students with professional competence and expertise in Food Processing, Compositional science, Packaging, Preservation and Engineering with hands on training in various Animal and Plant Food Technologies. Emphasis on the importance of Food Safety and Quality Assurance, National and International laws and regulations with thrust on Food Quality Management which is imperative in the retail food value supply chain. The



students are encouraged to appreciate the discipline of food science and technology holistically with its physicochemical, nutritional, microbiological and sensory aspects.

The course contents have been so designed that it can keep pace with the rapidly growing food industry. Since, it is an interdisciplinary science it is recommended that subjects like Biochemistry, Biology, Chemistry, Maths, Statistics, Microbiology, Biostatistics, Physics etc. be preferably chosen as the Generic elective (GE) by the students as they are synergistic to the curriculum. However, students are free to pick up any of the Generic Elective Courses offered by other departments. The new education programme (NEP) of the University of Delhi aims to structure the teaching-learning experiences in a more student-centric manner. The curriculum focuses to enhance the students' knowledge, skills and aptitude in the field of food technology.

In the four year plan the last two semester which are VII & VIII semester, students will be getting an experience of doing research on their respective topics and will be involved in documenting a formal dissertation on the same along with hands on experience of writing research report and performing experiments, analysing results and eventually framing various research articles. Efforts are made to measure cognitive as well as applied learning. During the last two semester of their graduation, they will be fully trained to pursue their higher studies or explore their career in research and development as well. Students are not only trained in the core components but also in areas which are need based, innovative and relevant keeping in pace with the fast-growing food industry. It helps the students in making informed choices which empowers them to pursue their passion for lifelong learning. The course is internationally competitive. The various laboratories of the Food Technology Department are equipped with the state of art infrastructure and boasts of a Pilot Plant (mini food processing facility) which is a unique accomplishment for an undergraduate program. This includes a fruits and vegetable processing Unit- Canning Unit, Automatic Milk Processing Plant, Bakery Unit, various Packaging machines such as Modified Atmosphere Packaging, Inert gas packaging, Vacuum Packaging Machine, Form Fill and Seal Machine etc. Besides, a research laboratory which is equipped with sophisticated instruments such Gas Chromatography, Texture Analyzer, Bomb Calorimeter to name a few. These are used to impart hands on training to the students in order to make them industry ready. The students also participate in various interdisciplinary mini research projects as well as collaborative industry academia projects which propels them to build scientific aptitude for research, harness entrepreneurship skills and nurture innovation. This is done under the supervision of experienced faculty members. The department also undertakes educational tours, conducts seminars and encourages industrial training. Students are encouraged to undertake summer projects in research laboratories of national repute and Food Industries.

Activities organised in the academic year 2021-22

To break the monotony of classes, to groom student talent and enhance their knowledge, different kinds of activities are organised in the department.

The Food Technology society, 'Ambrosia', plays a key role in organizing such events, solely managed by the students and mentored by the faculty. Pandemic in the previous year had consequences on students as well as teachers as they could not meet physically for teaching

and learning. However, it could not deter the zeal to carry out extracurricular events, majorly through online platforms.

We have a very strong alumni committee which organises alumni interaction sessions to guide the students for their career plans. One of such meet was organised under 'Foodophile' departmental festival and Alumni meet on March 10, 2022, another online meet of Panel Discussion on 'Food Technology: The Future Ahead' on January 15, 2022 was executed and we had called these alumnis as resource persons, Mr. Sudhir Zutshi, Mr. Sumit Nair, Ms. Parama Bhadra, Dr. Kavita Bhatnagar and Ms. Chandni Panvanda. Also Mr. Jatin Takkar from Siegwark India Pvt. Ltd. and Ms. Parina Garg from Int. Flavours and Fragrances Inc. were the resource persons which was organised in 6th March 2021 to guide the students for their career.

There had been various conferences where students are been taken, this year ten students and two faculty members, attended a conference on Poultry and Poultry products, organised by CII FACE, on March 21, 2022.

With theoretical knowledge, the students should get an experience of practical world of food technology, therefore various virtual visits are also planned, Yakult-Danone India Pvt. Ltd. on December 9, 2021 and Kulkarni Labs on February 12, 2022 with Ms. Madhuri Yeldare who was the resource person and trainer from Kulkarni labs are some examples.

Since Covid restricts us to arrange anything in physical mode therefore various webinars which were organised on 'Computational Gastronomy' on February 4, 2022, in which the Resource Person was Prof. Ganesh Bagler, associate professor from IIT, Delhi. A webinar on 'Nutrition for health and wellness' on September 2, 2021 under Nutrition Awareness Activity. Resource persons were Ms. Nadia Merchant, Ms. Meenu Yadav, Mr. Devendra Chawla, Ms. Megha Mandke, another webinar on 'Career Opportunities in Food Technology' on August 21, 2021. Resource person was Ms. Anusuya Borah, BCAS Alumnus and Business Development Manager, Givaudan India Pvt. Ltd.

Physical Workshops were also organised by department faculty to enlighten the students for hands-on experience on different subject expertise, one workshop was organised on Confectionary and Bakery Technology on October 13, 2021. Resource person was Chef Hemant Yadav from Downtown Resort. A workshop on "Instrumental Analysis of materials" from March 15-19, 2021 was also organised. Another workshop and hands on training on "Development and testing of Packaging films" held from March 11-12, 2021. A webinar on World Food Safety Day on 'Food Safety and Healthy Living' from June 7 to June 11, 2021 was also organised.

An enthusiastic competition was organised for a recipe making named as 'Disuse to Dish' from September 12-15, 2021, where students showed their talent and creative knowledge about utilizing the waste into attractive dishes.

To promote environmental issues we also organised a plantation Drive in association with the garden committee, on June 15, 2021.

Achievements of Final year students:

1. Saamir Akhtar has been awarded with **“The Student of the year”** award for 2021-22.
2. Saamir Akhtar has received PFNDAI Merit Cum Means Scholarship for the UG students of Food Science and Nutrition for the year and ‘The Student of the year’ award also.
3. Diksha Bansal B.Sc. (Hon) Food Technology Second position at “National Low salt cooking Challenge” Organised by FSSAI and Eat Right India received a cash prize of Rs 5000/- as Appreciation in March 2021.
4. Aman Yadav has received top 5 position in Category B of “National low salt cooking challenge” under Eat Right India movement conducted from 27th Jan -12th Mar 2021.
5. Nikhil Mishra, FT 1st year won the ‘best speaker for the motion’ award in debate competition held on February 16, 2021, organized by department of Zoology, BCAS.
6. Akshat Kaushik, FT 1st year, won 3rd position in Sherlock Holmes quiz competition, held on January 28, 2021 organized by Department of Psychology, Shaheed Rajguru College of Applied Sciences.



Department of Instrumentation

Faculty

Name	Qualification	Specialization
Dr. Manoj Kumar Tiwari* (Teacher-in-charge)	M.Sc., Ph.D. (University of Delhi)	Microwave Photonics
Dr. Geeta Bhatt (On leave and lien)	Ph.D. (University of Mumbai)	Material Science (Semiconductor Thin Films)
Ms. Shweta Dua	M.Sc., Ph.D. (Pursuing), University of Delhi.	Biosensors
Dr. Anil Kumar	M.Sc., Ph.D. (University of Delhi)	Opto Electronics
Mr. Pawan Kumar	M.Sc., Ph.D. (Pursuing), University of Delhi.	Carbon Quantum Dots Photovoltaics
Mr. Rakesh	M.Sc., Ph.D. (Pursuing), University of Delhi.	Optical Waveguide and Fiber Optic Sensors
Mr. Manoj Kumar	M.Sc., Ph.D. (Pursuing), University of Delhi.	Optical Waveguide
Dr. Amandeep Kaur	Ph.D. (University of Delhi)	Material Science, Nano composites-based Vapor Sensors.
Mr. Yagyadatta Goswami	M.Tech., Ph.D. (About to submit), University of Delhi.	Photovoltaic Cell, Control Algorithm, MEMS Capacitive Accelerometer.

*Faculty in the Department of Electronics

Instrumentation is a specialized field which deals with the science and technology of measurement that provides service to not only physical, chemical and biological sciences; but also to all branches of engineering and medicine. Bhaskaracharya College of Applied Sciences is the only co-educational college in the University of Delhi, offering a Bachelor of Sciences (Hons.) course in Instrumentation. This course imparts knowledge and prepares skilled manpower that can design, develop, use and maintain various advanced instruments and creates bright career prospects. The students are also eligible for pursuing M.Sc. Instrumentation, M.Sc. Electronics, M.Sc. IT, M.Sc. Operational Research, M.Sc. Forensic Science, MCA and MBA from various Universities across India.

The College has a specialized Instrumentation Laboratory which provides practical expertise to the students and trains them to design, develop, maintain and troubleshoot instruments that are being used in varied fields like Automation and Control, Process Industries, Medicine, Quality

Control etc. The Laboratory is equipped with state-of-the-art instruments like NI My RIO, NI My DAQ, and NI ELVIS-II Educational Laboratory Virtual Instrumentation Suite supported by LabVIEW full development system from National Instruments and NI USB Data Acquisition Card, to help students interface and integrate real time signals and data. The laboratory also acquaints students with devices used in Process and Control Industries like ratio control trainer, differential pressure transmitter, circular chart recorder, various flow meters such as electromagnetic, orifice meter, ultrasonic etc. It also has advanced transducer and instrumentation trainer, temperature transducers, LVDT, strain gauge trainer etc. Students learn to design and develop small projects on high performance microcontroller and microprocessor kits which are provided with interfacing modules like Temperature Controller, Keyboard, Elevator Simulator Interface, Stepper Motor etc. Students do intensive use of microprocessors and computers to understand the hardware and software aspect of intelligent instrumentation. The Instrumentation Laboratory also boasts of training students in sophisticated biomedical and analytical instruments like 3 to 6 Channel Electrocardiograph, Heart Rate Monitor cum ECG trainer, Respiration Rate Monitor, UV-VIS Spectrophotometer, flame photometer etc. Students also find opportunity to do hands on power electronics equipments like induction motor and other drives.

The faculties and students are exposed to advanced learning techniques and research opportunities through various events organized under the **aegis of Star College Scheme of Department of Biotechnology (DBT)**, Government of India. Besides this, “Sensors Society” of the Instrumentation Department has been organizing various academic activities outside the classroom to support the complete development of students. It provides young minds a platform to organize, manage and coordinate various activities along with learning, interacting with experts from the industry and other fellow students. It is with this endeavor that the society has been regularly organizing various seminars, workshops, talks by experts and industrial visits which apart from facilitating the learning process; help students in exploring and honing their creative, communication and problem solving skills. Four minor research projects for students are presently running in the department.

- Design of digital frequency counter
- Wireless mobile charging
- Automatic street light On/Off
- Modelling and control of photovoltaic system

Following were the activities organized last year by the Department of Instrumentation:

- Organized one-day National Webinar on ‘Seeing in Dark through Image Processing’ by Mr. Mohit Lamba on January 22, 2022. Dr. Manoj Kumar Tiwari was the convener.
- Organized an ‘Online Practical Demonstration on New Technique’ by Mr. Pawan Kumar on January 21, 2022. Dr. Manoj Kumar Tiwari was the convener.
- Organized ‘Entrance Examination Preparation Classes and Counselling Session’ from January 29-February 12, 2022. Dr. Manoj Kumar Tiwari was the convener and Mr. Yagyadatta Goswami and Mr. Pawan Kumar were the coordinator.
- Organized an online demonstration ‘Digital Electronics and Microprocessors Practical’s by Mr. Rakesh and Mr. Pawan Kumar of the Department on October 28, 2021. Prof.

Avneesh Mittal was the convener and Mr. Rakesh and Mr. Pawan were resource persons and Mr. Manoj Kumar was the coordinator.

- Organized an 'Electronic Waste Awareness Program' in association with the Department of Electronics on August 29, 2021.
- Organized an Intercollege Virtual workshop on 'Optimization of Feedback Control System using PID Controller' in association with the Department of Electronics and Romtek by Mr. Anand Bhushan on July 13, 2021. Prof. Avneesh Mittal was the convener, Ms. Shweta Dua was the coordinator and Mr. Yagyadatta Goswami was the organizer.

Special achievements of students graduating in 2021:

1. A placement drive was conducted by Wipro Limited in which four students were selected.
2. A placement drive was conducted by Sarabhai Information Technology for the profile of Graduate Trainee in which two students were selected.



Department of Microbiology

Faculty

Name	Qualification	Specialization
Dr. N. Vijaya Kumar	Ph.D. (JNU)	Molecular Biology
Dr. Purnima Anand	Ph.D. (DU)	Environmental Microbiology
Dr. Ruchi Gulati Marwah	Ph.D. (DU)	Industrial Microbiology
Dr. Pawas Goswami (Teacher-In-Charge)	Ph.D. (NDRI)	Dairy Microbiology
Dr. Gunjan Sirohi	Ph.D. (Jamia Hamdard)	Molecular Biology and Biotechnology
Dr. Neeru Bhagat	Ph.D. (DU)	Molecular Microbiology
Dr. Ratyakshi	Ph.D. (IIT Delhi)	Nano Biotechnology
Dr. Catherine S. Paul	Ph.D. (DU)	Molecular Virology

Louis Pasteur once said, “*The role of infinitely small is infinitely large*”. Microbiology is one of the most dynamic areas of biological sciences, as microbes are evolutionary and ecological pioneers and have a huge influence on our day-to-day life. These miniscule organisms play an indispensable and vital role in research in all areas of basic and applied sciences. It is an exceptionally broad discipline encompassing and integrating areas as diverse as Biochemistry, Cell Biology, Genetics, Molecular Biology, Environment, Agriculture, Taxonomy, Bioinformatics and Biotechnology.

The course curriculum provides a balanced introduction to basic, applied and advanced aspects of Microbiology and allied fields. Microbiologists are employed in a variety of industries ranging from Food, Dairy, Pharmaceuticals, and Chemicals to Hospitality industry. The students are acquainted with the knowledge about all major groups of microorganisms, their influence and applications in our daily lives and how their potential can be harnessed for the betterment of the human life. The pandemic of COVID 19 is once again a stark reminder of the importance of this discipline. Graduates of this discipline can use this knowledge to take up research in combating these deadly diseases, develop new technologies, drugs and vaccines and thus help in making our lives better.

The Department of Microbiology of our college has qualified faculty. Our laboratories are well equipped with state-of-the-art equipment to provide hands-on-training to our undergraduate students such as Biological Safety Cabinets, Monocular and Binocular Microscopes, Trinocular Microscope, Spectrophotometers, Thermal Cycler (PCR), UV-visible double beam Spectrophotometer, Autoclaves, Incubators, Centrifuges, Shaker incubators, Electrophoresis set up, High precision electronic balances, pH analyzers, Cooling centrifuge, Deep freezer,

Cooling cabinet, Reverse Osmosis water purifier (large scale), Gel Documentation System, Ice-making Machine, Hybridization oven, Mini Spinner, Dry heating block, Auto pipettes etc.

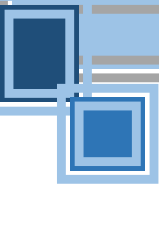
The department is also a proud member of the Star College Scheme of DBT, Government of India, and has been receiving grants since 2010 from the scheme. The college was awarded **Star status in June 2017** of which our department is one of the beneficiary. The grant helps us to go beyond the curriculum in training our students.

Activities organized in the academic year 2021-2022

“SUKSHMJEEV” our departmental society organizes a variety of academic and co-curricular activities in the form of conferences, seminars and lectures for the holistic development of students. Sukshmjeev provides a platform for interaction amongst students, faculty members and various academicians invited from renowned institutes. In 2021-22 several activities were organized by the Department in both online and offline modes. The annual festival of the Department ‘MicroQuest’ was held on April 06, 2022. Various activities like quiz, streak art etc. were organized as a part of MicroQuest. Mr. Aditya Raj, an alumnus of the department interacted with the students and conducted a session for career counselling on April 2, 2022. The department routinely conducts various awareness programs and second year students, under the Environmental Project and Awareness Program (EPAP) 2021-22, are working on ten important issues such as e-waste Management, Water Pollution, Solid Waste Management, Air Pollution, Indoor Air Pollution, Climate change, Infectious Diseases and Public health, Global Warming, Loss of Biodiversity, Biomedical Waste Management and Plastic Waste Management. Students are conducting this program in various stages including literature search, presentations, surveys, awareness and data analysis. Presentations on the above-mentioned issues were organized by the department in November, 2021. At this point of time students are conducting surveys and analysing the collected data. National Webinar on the theme of ‘Loss of Biodiversity’ was organized in collaboration with LAKSHYA, under EPAP on March, 16, 2022. Dr. Hishmi Jamil Husain, Head Biodiversity, Corporate Sustainability, Tata Steels Ltd. gave a lecture and discussed various issues related Microbial Biodiversity Loss and sensitized students about the perils of climate change in this webinar.

A national online workshop on ‘Intellectual Property Rights (IPR)’ was organized in collaboration with School of Management, NIT, Rourkela from February 21 to 25, 2022. Various important topics such as Geographical Indications, Patent Filing, Plant Varieties and Rights of Breeder were covered in the workshop by eminent speakers from the field. These topics are being studied by the students in their IPR course and this workshop enhanced their practical knowledge with the real examples taken for the patenting of products. An online workshop on 'Basic Techniques involved in Industrial Microbiology for Product Development' was organized in collaboration with IIIM-Technology Business Incubator, CSIR-IIIM, Jammu from December 16 to December 21, 2021. In this workshop students were exposed to the theoretical and practical aspects of techniques used in Industrial Microbiology.

The Department of Microbiology participated in the “Science Adda” initiative of DBT on 17th December 2021 in both the offline and online modes. Under this initiative faculty members interacted and demonstrated experiments to school children, who visited Microbiology lab of



the college. They inspired school students to take up science as a career. A virtual workshop on analyzing bacterial growth kinetics through MS Excel was organized by the department on November 17, 2021. Second year students of the department participated in this workshop and learned the usage of MS Excel for data analysis.

A national online workshop on “Astrobiology”, was organized by the department in collaboration with ‘Spaceonova’ from October 29-30, 2021. Students were exposed to new field of Astrobiology and various online databases and bioinformatic resources in this workshop. A virtual visit was organized for third year students to lab and pilot scale fermenter in Amerging Technology Pvt Ltd. on October 29, 2021. Students learned about various parts of fermenter and its functioning, which is a very important aspect of the Industrial microbiology paper catered to the third-year students. A national webinar on ‘Small Molecules make a Big Impact: A Panoramic View of miRNAs in Esophageal Cancer’, was organized under the theme ‘Microbiology: From Principle to Applications’ on October 1, 2021. Dr. Rinu Sharma, Assistant Professor, University School of Biotechnology, Guru Gobind Singh Indraprastha University, interacted with students and discussed the problems and possible solutions for the treatment of esophageal cancer. To increase awareness about entrepreneurship programs, national webinar on ‘Bio-Entrepreneurship and Introduction to BioNEST-UDSC’, was organized in collaboration with Bio-NEST, UDSC on September 30, 2021. Mr. Vijay Kantharia, CEO, Bio-NEST, UDSC interacted with attendees and described various facilities available for the researchers, entrepreneurs and students at Bio-NEST, UDSC. An international webinar on ‘Allies and Adversaries in the Microbial World’, was organized on September 18, 2021 on the occasion International Microorganism Day, celebrated on September 17, 2021. Dr. Deepti Jain, Associate Professor, Regional Centre for Biotechnology, Faridabad discussed the role of microorganisms in day today life and focused on the issue of biofilm formation and its implications. Another international webinar on ‘Journey from Biology to Machine Learning’ – was organized on September 6, 2021. Dr. Ashish Jain (alumnus of the depratment), Data Scientist, Salesforce, Cambridge, MA participated and discussed his career path with the students. Dr. Ashish also counselled the students about career choices after their undergraduate course in Microbiology. A national webinar ‘Drugs for Bad Bugs: Who will Win this War?’ was organized under the theme ‘Microbiology: From Principle to Applications’ on September, 3, 2021. Dr. Sidharth Chopra, Principal Scientist, Division of Microbiology, Lucknow delivered the lecture and highlighted a very important issue of Antimicrobial Resistance in microorganisms, which is responsible for failure of treatment options for infectious diseases. Dr. Chopra also talked about other approaches which can be used for treatment of infections in place of antibiotics. An online workshop on ‘Analysing Spectrophotometric Data through MS Excel for Quantitative Estimation of Biomolecules’ was organized in collaboration with the Department of Biochemistry, BCAS on July, 5, 2021. Students in this workshop were taught to use experimental data to plot graphs and prepare standard curves for calculating concentration of biomolecules. Intra-college workshop on ‘Curriculum Vitae (CV) writing’- was organized on April 17, 2021 in association with Career counselling Cell, BCAS. In this workshop by Mr. Shubham Singh, from CCAMP, Bengaluru (Distinguished Alumnus, Department of Microbiology, Batch 2013-2016) gave tips on effective CV writing to the attendees.



Department of Physics

Faculty

Name	Qualification	Specialization
Prof. Anand Bharadvaja	Ph.D. (D.U.)	Atomic and Molecular Physics
Dr. Vandana Batra	Ph.D. (D.U.)	Astrophysics
Dr. Meetu Luthra	Ph.D. (D.U.)	Cosmology
Dr. Partha S. Pal	Ph.D. (D.U.)	Computational Physics
Dr. Ramesh Kumar	Ph.D. (IIT Delhi) M. Tech. (IIT Delhi)	Quantum Optics, Applied Optics, Non-linear Optics, Optoelectronics
Dr. Sandeep Kumar <i>(Teacher-In-Charge)</i>	Ph.D. (IIT, Delhi) M. Tech. (IIT Roorkee)	Solid State Materials
Dr. Herendra Kumar	Ph.D. (DU)	Atomic and Molecular Physics
Dr. Ajay Kumar	Ph.D. (IIT, Indore)	High Energy Physics

Physics is one of the most fundamental scientific disciplines. Needless to say, the understanding of the physical phenomena has led to the development of new technologies and new ideas. B.Sc. (Hons) Physics is a three-year undergraduate program. It intends to provide a broad-based education at undergraduate level to facilitate an early induction to global research scenario. The course is interdisciplinary with necessary flexibility to provide an overview of the entire gamut of important and recent scientific developments. The curriculum encompasses theoretical, experimental and computational aspects of Physics education. During the course, the sufficient exposure is provided on Mathematics, Chemistry and Electronics. The curriculum provides a thorough understanding of the fundamental subjects in order to enable students to cope with the challenges of the modern research. A number of career options are available to the students after completing the under-graduate in Physics. They can pursue higher education from the Institutions such as IISERS, Delhi University, IITs and other premier institutes of India and abroad. Our graduate students are doing exceedingly well in the higher education as well as in the professional areas. Our department laboratories are well equipped with the latest and sophisticated equipment, which are required to provide an experimental exposure and experiential learning to the students. Some of the key equipment include Digital Storage Oscilloscopes, Spectrometers (10 sec least count), Laser Kits, Universal Interferometer, Ultrasonic Grating Experimental Kit with CCD Camera, Four- Probe set up with USB interface, P-E Hysteresis Kit etc. We have introduced both quantitative (problem oriented) and qualitative (motivational in nature) approach to experiments in our laboratories. In addition, our department has a diverse faculty pool in several contemporary research areas, which includes the theoretical research in computational physics to experimental research in nanotechnology. The research work of our undergraduate students has been published in the

journals of international repute, which clearly indicates the able guidance of our faculty members.

The Department of Physics has been handling a project sponsored by **Department of Biotechnology (DBT)**, Government of India where the students were given hands on training about the practical's and the equipment's beyond the course curriculum. The students were also given some minor projects/research problems to work with. The students pursuing B.Sc. (Hons) physics are also advised to do projects, internship from industries or laboratories/universities. These can be theoretical or experimental depending upon the availability of the resources and interest of the students.

The Physics Society "QUBIT" organizes academic activities which include invited lectures of eminent personalities of the country and abroad from scientific domain to motivate and update students about research activities.

Following were the activities organized by the Physics Society of the Department:

1. The QUBIT Society, Department of Physics, BCAS organized a seminar on "Laser Diode Story: Lab to Fab" on April 19, 2022.
Invited Speaker: Mr. Abhishek Sharma (Scientist E)
Organization: Solid State Physics Laboratory, DRDO, New Delhi
2. The Department of Physics in collaboration with the Astronomy Club has organized two international webinars: (i) "Tornadoes and Typhoons in the Space-Time Geometry" delivered by Prof. Patrick Das Gupta, Department of Physics and Astrophysics, University of Delhi on February 15, 2022 and (ii) "Does the Cosmological Principle hold in the Universe?" delivered by Prof. Pravabati Chingambam, Indian Institute of Astrophysics, Bangalore on March 10, 2022.
3. The Department of Physics organized several lectures and alumni interactions for the students to guide them for the future prospects under the aegis of IQAC, BCAS:
 - (i) An online lecture on "Active Galaxies and Research Methodology" delivered through MS Teams on October 20, 2021.
Invited Speaker: Mr. Ravi Pratap Dubey
Organization: Indian Institute of Technology Indore (IIT Indore)
 - (ii) An online talk on "Standard Candles: The Beacon of the Universe" delivered through MS Teams on October 30, 2021.
Invited Speaker: Dr. Sukanta Deb, Organization: Cotton University, Guwahati, Assam
 - (iii) An online talk on "Future with Physics" delivered through MS Teams on February 04, 2022.
Invited Speaker: Dr. Tanvi Bhatnagar, Organization: Center of Nanoscience and Nanotechnology, University of Paris, Saclay, France.

Student Achievement

Vardaan Sahgal, Scientific work on "*Positron induced scattering of acetone from 0.1eV to 5keV*" is accepted for publication in **Journal of Physics B: Atomic, Molecular and Optical Physics (2021)**.

Department of Polymer Science

Faculty

Name	Qualification	Specialization
Prof. Sidhharth Sirohi	ME (DCE, Delhi University) Ph.D. (IIT Delhi)	Controlled Polymerization, Nanoencapsulation & Composite Nanofibers
Dr. S.K. Shukla	M.Sc. (Chemistry), Ph.D. (Gorakhpur Univ.)	Conducting polymers and Bio-Polymers
Dr. Susmita Dey Sadhu (Teacher-In-Charge)	M.Sc. (Chemistry) (Burdwan University) Ph.D. (IIT Kharagpur)	Polymer Blends and composites, Polymer Nanocomposites, Recycling, Polymer in packaging
Dr. Krishna Dutt	M.Sc. (Polymer Science and Chemical Technology) Ph. D. (CCS Univ., Meerut)	Polymer Recycling, Thermoplastic Elastomer, Rubber Technology, Biodegradable Polymers
Dr. Anil Barak	M.Sc. (Chemistry), Ph.D. (University of Delhi)	Anionic Polymerization, Controlled Radical Polymerization and Nano Composites
Dr. Prem Lata Meena	M.Sc. (Chemistry), Ph.D. (University of Delhi)	Inorganic Polymers
Dr. Umesh Kumar	M.Sc. (Chemistry), Ph.D. University of Delhi	Nano-hybrid Polymers
Dr. Anoop Kumar Saini	M.Sc(Chemistry) Ph.D. (IIT Indore)	Polymer Synthesis

B.Sc. (H) Polymer Science course is unique multidisciplinary course running successfully in Bhaskaracharya College of Applied Sciences since 2004. No other College of Delhi University offers this course. The broad components of course include Polymer Technology, Polymer Processing Fibre Science, Rubber Technology, Chemical Technology and Polymer Blends & Composites. This program is designed to provide fundamental understanding of polymer science, engineering and technology. Students who pass out are well placed in various Polymer Industries and Academic Institutions in India and abroad. It gives an exposure to the students to latest developments in polymeric materials to develop skilled manpower for the fast-expanding polymer industry in India.

Department of Polymer Science has well equipped laboratories to train the students with synthesis, processing and testing of different polymers. The facility of laboratories is enough to meet the requirements of industrial standards. A few notable equipments are:

A few notable equipments of the department are:

- Injection Molding Machine
- Compression Molding Machine
- Two-Roll Mill
- Single Screw Extruder
- Heat Distortion Temperature & Vicat Softening Point Apparatus
- FTIR Spectrometer
- Rota evaporator
- TG-DTA-STA7300
- UV- Visible Double Beam Spectrophotometer
- Digital Rockwell Hardness Tester
- Hand lay Transfer molding machine
- Oscillating Disc Rheometer, ODR
- Universal Testing Machine, UTM
- Melt Flow Index Tester, MFI
- Magnetic stirrer with temperature controller
- Flammability Tester
- Failing Dart Impact Tester
- Izod/Charpy Impact Tester
- Incubator
- Spray Guns (Pressure and Suction)
- Mechanical Stirrer
- Dielectric Strength Analyzer
- Hot Plates with Stirring
- Vacuum Oven-Digital Temperature Controller
- B-one Touch Viscometer
- Optical Microscope
- Abrasion Resistance Tester
- Double Water Distillation Unit
- Hydraulic Pellet
- Muffle Furnace
- Fuming Hood (Modern Lab)
- Opacity Tester
- Carbon Content Measuring Apparatus, ETC.

Apart from the experiments mentioned in the syllabus, students are also trained in handling, maintenance and trouble-shooting of various equipments available in the laboratories. The Department also organized different visits and activities of Polymer Science students to nurture their talents.

The syllabus is designed in such manner so as to give the students an understanding of the theoretical as well as the experimental studies of polymer science enabling them to compete at the global level. Many students get benefited by the internship in industries and research laboratories during their course of study in college.

The objectives of course are:

- To understand the basics of polymer science and polymer synthetic techniques.
- To enable the skilled manpower for polymer industries with sufficient knowledge.
- To provide ample knowledge and understanding to pursue a career as polymer scientists.
- To understand & explore more applications of polymers in the society.
- To characterize the chemical and physical properties of polymers

Employment opportunities for polymer science students exists in the following areas

- Polymer manufacturing (IOCL, GAIL, Reliance, etc.)

- Polymer processing (Supreme, Moser Baer, Havels, etc.)
- Mold and Die designing (Hivee, Rhino, Solid Works, etc.)
- Fibre Technology (Aditya Birla, Arvind Mills, Vardhman Textiles)
- Rubber Technology (Bridgestone, MRF, JK Tyre, etc.)
- Paints & Coatings & Adhesives (Berger, Asian, Dupont, Pidilite etc.)
- Performance evaluation & quality assurance
- Marketing and sales
- Polymer waste management (Banyan Nation, Jet Polymer Recycling etc)

The Department organized several industrial and academic talks under the banner of PEARLS Society of Department.

A few of activities organized by the Department are:

1. Department of Polymer Science organized Freshers' Interaction program for newly admitted students (2021-22) on January 14, 2022 via Microsoft Teams. Prof. Avneesh Mittal (Principal, BCAS) and Faculty of Dept. of Polymer Science, Dr. Susmita Dey Sadhu (Teacher-in-Charge), Prof. Sidhharth Sirohi & Dr. S.K. Shukla addressed the students on the occasion.
2. Department of Polymer Science organized a student awareness e-workshop for B.Sc. (H) Ist, 2nd and IIIrd year students in association with IQAC via. Microsoft Teams on December 3, 2021.
3. Department of Polymer Science organized an orientation program for the newly admitted B.Sc. (H) first year students in the online mode via. Microsoft Teams on November 20, 2021.
4. Department of Polymer Science organized IIIrd webinar of webinar series 2021-22 on September 03, 2021 through Microsoft Teams Platform. Dr. Sampa Saha (Associate Professor, Dept. of Materials Science & Engineering, and IIT Delhi) delivered a talk on "Innovative Multi-layered Biodegradable Polymer Particles for Food Packaging" in the webinar. 39 participants attended the webinar. Dr. Susmita Dey Sadhu & Dr. Premlata Meena coordinated the event.
5. Department of Polymer Science organized IIInd webinar of webinar series 2021-22 on August 03, 2021 through Microsoft Teams Platform. Prof. Tharanikkarasu Kannan (Department of Chemistry, Pondicherry University) delivered a talk on "Polyelectrolyte Membranes for Fuel Cells" in the webinar.
6. Department of Polymer Science (PEARLS) in association with Indian Institute of Packaging, Delhi organized First webinar of webinar series 2021-22 on July 12, 2021 through Microsoft Teams Platform. Dr. Tanweer Alam, Director, IIP, MOCI, GOI delivered talk on "Career in Packaging". Mr. Madhab Chakraborty, Joint Director & Regional Head, IIP Delhi delivered a talk on "Scope of Plastics in Food Packaging".

Industrial and Academic Visits

The department maintains active linkages with the Polymer industries in India. These visits are carried out in every semester for the students which helps them to learn the latest technologies and gain the practical knowledge of their theoretical understanding. Some of the prominent industries where visits have been conducted are: Relaxo Footwears Limited, Asian Paints, UFlex, Recycling Industries, Indian Oil, GAIL, Tyre Industries etc. In addition to these, academic visits are also carried out for better understanding of the curriculum. The

visits are carried out in the prominent research institutes like IIT Delhi, University Science Instrumentation Centre (USIC), Delhi Institute of Tool Engineering (DITE), Indian Institute of Packaging (IIP) etc.

Alumni Interaction

The department has a regular and active interaction with its alumni spread all over the world. Department organises Alumni meet in each academic year and the outgoing batches gets benefitted with these fruitful interactions. Alumni share their industrial and academic experiences with their juniors which helps and motivate them.



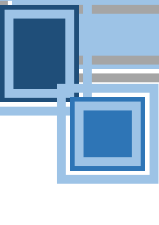
Department of Zoology

Faculty

Name	Qualification	Specialization
Prof. Anil K. Bali (Teacher-In-Charge)	D.Phil. (University of Sussex, U.K.)	Molecular Biology & Biotechnology
Dr. Alivia Roy	Ph.D. (DU)	Molecular Endocrinology
Dr. Reetuparna	Ph.D. (DU)	Molecular Endocrinology
Dr. Anjali Saxena	Ph.D. (DU)	Molecular Biology
Dr. Pallee Shree	Ph.D. (DU)	Food Traceability
Dr. Amit Kumar Singh	Ph.D. (DU)	Environmental Genomics
Dr. Satyam Dwivedi	Ph.D. (DU)	Ecotoxicology
Dr. Laljee Ram Meena	Ph.D. (JNVU, Jodhpur)	Ecotoxicology

Zoology, the branch of biological science that deals with study of the animal kingdom, has captured the interest of human race since time immemorial. The field saw its genesis through the works of great scientists like Aristotle and Galen, and since then it has gained tremendous momentum in exploring various aspects of the animal kingdom. Under the domain of Zoology, we are now capable of understanding evolution, taxonomy & systematics, morphology, physiology, biochemical & molecular aspects, genetic basis, process of embryo development and many more aspects of animal world. Zoology has a huge potential in the field for research. At present, many significant discoveries are coming from research being carried out in this field that is directly related to the benefit of human kind and animal husbandry. The future scope is not only limited to research but extends to various other professional roles such as jobs in academic institutions, pharmaceutical industry, pathological testing laboratories, forest and animal conservation organizations, government and non-government departments related to agriculture & animal husbandry, etc.

The young and growing mind of an undergraduate student should be nurtured graciously and cautiously. It is the best stage of one's life to develop a viewpoint about oneself and the surroundings. Taking this into consideration, Bhaskaracharya College of Applied Sciences introduced B.Sc. (Hons.) Zoology in the academic session of 2017-18 to provide an opportunity to the undergraduate students to understand the biological life within and around them. Although the department is one of the youngest in the college it has, within a short span of time, achieved commendable goals in its organization, operations, and academic growth.



The students of the department have been benefited the most which is substantially represented in their excellent results, placements in reputed national and foreign higher education institutes, and other noteworthy achievements.

The Department has two well-equipped laboratories with projector facility and high-end scientific instruments for conducting practicals such as Binocular and Trinocular microscopes, B.O.D. incubator, PC-based UV-Vis Spectrophotometer, Refrigerated centrifuge, Deep Freezer, Digital blood cell counter, Digital haemoglobin reader, Digital blood analyzer, pH-meter, Electronic balance, Vortex shaker, Electrophoresis chamber, UV trans-illuminator, Ice Flaking machine, Glucometer etc. Also, a tissue-culture laboratory is present that is furnished with all the essential equipments like Laminar Flow, Orbital Shaker, Growth chamber, etc.

The curriculum of this course provides comprehensive theoretical as well as practical knowledge of Zoology. Several core papers are taught during the span of this course such as Non-Chordates, Chordates, Cell Biology, Ecology, Physiology, Biochemistry, Molecular Biology, Developmental Biology, Genetics, etc. Discipline-specific papers such as Biotechnology, Endocrinology, Animal Behavior & Chronobiology, Immunology, Reproductive Biology etc. are also offered to have in-depth knowledge of these topics. The curriculum also focuses on enhancing the skill of undergraduate students by offering skill-enhancement papers (Sericulture, Apiculture, Fisheries, etc.) so that they may have a future as entrepreneurs or may join skill-based industries.

Since its genesis, the Department of Zoology has diligently worked to deliver knowledge to its students in the best possible way. The department also encourages its students to join research projects, field work and summer internship programs. The curriculum of B.Sc. (H) Zoology aims to provide out-of-classroom knowledge of the subject. The department executes this by conducting trips to Zoological parks, research organizations, and Institutes related to sericulture, apiculture, etc. The department is also actively involved in organizing workshops and seminars to provide hands-on-learning exposure to students. Our department organized the following curricular/co-curricular events in the academic year 2021-22:

- A seminar on the topic ‘Thalassemia Awareness and Screening’ was held on April 13, 2022 in the college which was coordinated by Lok Nayak Hospital and Dr. Sunita Jaitley, State Blood Cell Coordinator, University of Delhi colleges. It was followed by a blood screening drive wherein students and faculty members got themselves tested for the disease.
- A departmental visit to National Zoological Park, Mathura Road was organized on March 30, 2022 for second and third year students of B.Sc (H) Zoology students. Students witnessed animal diversity and various conservation strategies.
- An online Short-Term Certificate course was organized by the department on ‘Immunological Techniques and their applications’ in collaboration with Department of Zoology, University of Delhi. The course was also an initiative under the Vidya Vistar scheme through which our department shared knowledge with faculty and students of Indira Gandhi Government College (IGGC) in Tezu, Arunachal Pradesh. We aimed to impart in-depth theoretical and practical understanding of various

Immunology-based techniques like Immunodiffusion, ELISA, Confocal Microscopy, ChIP, FACS, etc. The course with total duration of 40 hours was conducted from October 22- November 09, 2021.

Our department, in association with Department of Zoology of few other educational institutions, conducted an online Skill Enrichment Program (Basic) on 'Bacterial Genomics and Metagenomics' from January 15- February 7, 2022. The event conducted weekend hands-on sessions on various important bioinformatics tools for genome and metagenome analyses. It included a vast coverage of topics related to Linux software, databases, DNA sequencing and *denovo* bacterial genomic assembly, RAST annotations etc. The event witnessed an enthusiastic participation from students across the country.

- Eranko, the Zoological society of BCAS, organized an online workshop 'Sparrow Conservation and Nest Building' on October 08, 2021 on occasion of Wildlife Conservation Week. The resource person for the workshop was Mr. Rakesh Khatri, popularly known as the Nest-Man of India. Active participation of youngsters in nest-making serves as an initiative for sparrow conservation in modern cities like Delhi. The event was followed by various competitions on the theme 'Save Wildlife, Save Humanity'.
- On occasion of World Ozone Day, we had organized a National online quiz competition 'Quizone' from September 15-16, 2021. Ninety-eight participants registered for the quiz from all over India. In the final round, six participants competed among whom three students from Gargi College bagged the first three positions.

Involvement of the department in a student's life does not end at the level of academics. It takes the initiative to guide, counsel and prepare students in helping them face the current and future hurdles of life, especially related to career. Also, various fun-filled and creative activities are organized by the department to nurture talent of students. In this regard, the Department of Zoology has carried out the following events in academic year 2021-22:

- Eranko in collaboration with Alumni Committee of BCAS organized online Alumni event 'युग्म: Alumni Meet 2022 @ Zoology' on January 30, 2022. The event aimed to bring together alumni of our department (Batch 2017-20 and 2018-21) with the current Zoology students for a better interaction. Alumni answered queries raised by their fellow juniors and shared their experiences of graduation. They also showed eagerness in becoming the part of Alumni association in future. 'Career guidance by Alumni' was scheduled from January 31- February 02, 2022. Alumni of both academic batches had come together to provide guidance about Competitive examinations in Zoology/allied sciences/MBA or others, Masters programmes & Job opportunities in India and abroad, etc.
- With a similar objective in mind, faculty members of our department conducted online weekend classes from January 22-February 26, 2022 for M.Sc. entrance exam preparation for final year students belonging to various disciplines of our college. The various papers taught by the faculty included Molecular biology, Evolutionary biology, Developmental biology, Animal Biotechnology, Human Physiology,

Immunology, Biochemistry and Ecology. Students participated in fair numbers and learnt a lot about important topics to be covered, problem solving and tips to score better in entrance exams.

The annual Zoological fest 'Zoosangam 2K22' was organized on April 12, 2022 under the umbrella of Eranko. The festival conducted various co-curricular and extra-curricular activities and witnessed active participation of students at Inter-University level.



Department of Biochemistry

Faculty

Name	Qualification	Specialization
Dr. Anita Sondhi (Teacher-In-Charge)	Ph.D. (D.U.)	Medical Biochemistry

Biochemistry is a very interesting body of knowledge. It is an endeavour into a field which enriches the study of the human system. In the present times, the study of Biochemistry is greatly influencing other fields like Life Sciences, Food Sciences, Biotechnology, Applied Sciences, Biomedical Sciences, Bioinformatics (Computational Biology), Patent law and Intellectual Property Rights, Clinical Research and Diagnostics, Agriculture, Molecular Biology and Molecular Diagnostics. Recognizing its importance and potential, the Department has been nominated as one of the Departments to receive funds under the Star College Scheme of DBT since **2010** and has been awarded “**Star Department Status**” in the year **2017** by **Department of Biotechnology, Government of India**. The Star-funds have been used for enriching the curriculum by introducing new practical, new techniques, conducting workshops, seminars, Visits to Institutes, organizing minor projects for students with an aim of motivating the students to take up higher studies or career in Biological Sciences.

Ever since its inception more than two decades ago, the College has added tremendously to the infrastructure catering to the students studying Biochemistry. The state-of-the-art Laboratory at the college is well equipped to take care of the needs of the students. It familiarizes the students with the latest and the most sophisticated of equipment like Trans-Illuminators, Spectrophotometers (UV-Visible and Visible), Electrophoresis apparatus (Vertical, Horizontal, Slab, Paper, Rod) Thin layer chromatography, Gel filtration chromatography, orbital Shaking Incubator, Quartz double- distillation Water purification system, Deep freezer, cooling Cabinets, Microscopes and the use of equipment like Vortex Shaker, Magnetic Stirrer, Autoclave, Centrifuge, Laminar air flow chamber and pH meter.

The Department of Biochemistry is a vibrant department and it conducts a number of Workshops and training sessions for the benefit of students. A few are listed as follows:

- The Department organized the participation of our college in “Azadi ka Amrit Mahotsav” a student connect initiative in the form of an interaction of students from participating Star Status Colleges with Hon'ble Minister of State (Independent Charge) of the Ministry of Science and Technology & Earth Sciences, conducted by DBT for the online program on 8th November 2021.
- Organized “Science Adda”, a one-day interaction program with the school students on 17th December, 2021, an outreach program showcasing Science, Technology and Innovation under the aegis of “Azadi ka Amrit Mahotsav conducted under the aegis of DBT Star college scheme



Department of Human Communication

Faculty

Name	Qualification	Specialization
Dr. Madhulika Bajpai (Teacher-In-Charge)	M.Phil., Ph.D. (D.U.)	Psychology

“Like all science, psychology is knowledge; and like science again, it is knowledge of a definite thing, the mind” - James Mark Baldwin

As the above quote suggests, Psychology is a study of human behaviour and in the due course of learning, one tends to find more about oneself. The department deals with these aspects of human interaction in societal, organizational and most significantly individual contexts. Department offers different General Elective (GE) papers under the discipline of Psychology in the first four semesters. The Department has catered to various courses in the past with varied subjects to make our students confident, self-reliant and positioned to successfully take on further challenges in life. An emphasis is made to ascertain students’ holistic growth, especially on their capability to find their place in the vocational world without losing themselves in due process.

Department faculty in association with various other committees has involved students in several activities of relevance to youth. Besides curriculum, an effort is made to take up individual or collective concerns and provide an effective solution to not just enrich their learning but improve their quality of life as well. There is due emphasis on providing students with an impetus and platform to be on the path of self-discovery and self-recovery.

During the restrictive period of the pandemic, the TIC of the department addressed topics related to mental health on several platforms. Through her talks and workshops, she attempted to spread awareness about mental health and promoted the idea of leading a holistic life of wellness. She offered to counsel staff and students of the college along with their families. She also counselled students enrolled in the School of Open Learning on special requests.

The objective of the Department can be summed up in the words of a very famous psychologist, **William James**, ***“Man can alter his life by altering his thinking”...***



Department of Mathematics

Faculty

Name	Qualification	Specialization
Dr. Ragini Jindal <i>(Teacher-In-Charge)</i>	Ph.D. (CCS University)	Applied Mechanics
Dr. Neeru Sharma	Ph.D. (D.U.)	Functional Analysis

“Mathematics is the most beautiful and most powerful creation of the human spirit.”

-Stefan Banach

Understanding and competence in applying the fundamental mathematical tools is often required to do serious study in any field of sciences. Role of mathematics in various disciplines of Physical Sciences is well established. Mathematics and science have a long and close relationship that is of crucial and growing importance for both. Mathematics is an intrinsic component of science and indispensable source of intellectual tools. Reciprocally, science inspires and stimulates mathematics, posing new questions and engendering new ways of thinking. Fields such as physics and Computer Science that have always been mathematical are becoming even more so. Sciences that have not been heavily mathematical in the past--- for example, biology and Food Technology etc. are moving from description to analysis and explanation; demanding exploration with new mathematical tools. Progress in science requires close involvement and strengthening of the mathematical enterprise; new science and new mathematics go hand in hand.

Department of Mathematics, being an integral part of the college has been catering to courses in the college. Department has well qualified and experienced faculty. The Department room is well equipped with computer, printer and scanner. Department organises lectures, seminars and various competitions for the students.

The Library

Name	Qualification
Ms. Geeta Papnei (<i>Librarian (offg)</i>)	M.A., M.Lib

The College Library was set up in 1995 with the mission to cater to the information needs of the students and faculty. The library functions as an information resource centre for the college in achieving its aim.

Infrastructure

The library is housed in a spacious and well-lit three storied building called the library block. Lower ground floor is being used mainly as stack room with a facility of reading space for 10 users. Upper ground floor is being used for circulation cum reference service, stack room, staffs working area, entry-exit and reading space for 6 faculty members. The top floor is mainly used as a reading room with a capacity of 120 users and a free air-conditioned Internet facility with 20 computers.

Collection

The library has a staking length of 3396 ft. having a strong collection of nearly 27068 volumes of books including reference books, 336 bound volumes of journals. The student books ratio of the library is 1:20. Library also has 1231 CD-ROMs/ DVD-ROMs. The library has developed a computerized record of more than 11000 journals articles with bibliographic details. These are used by students for their projects. Apart from the in-house collection, the library has full access to the thousands of journals online which are being subscribed to by the Central Reference Library (University of Delhi). The library is also subscribing to N-LIST (National Library and Information Services Infrastructure of Scholarly Contents) Programme - (a collection of E-Resources under UGC-INFONET Digital Library Consortium)

Library Automation

The college library is automated using an open-source Library Management Software KOHA with web-OPAC facilities. The library uses RFID technology for many of its operations.

Services

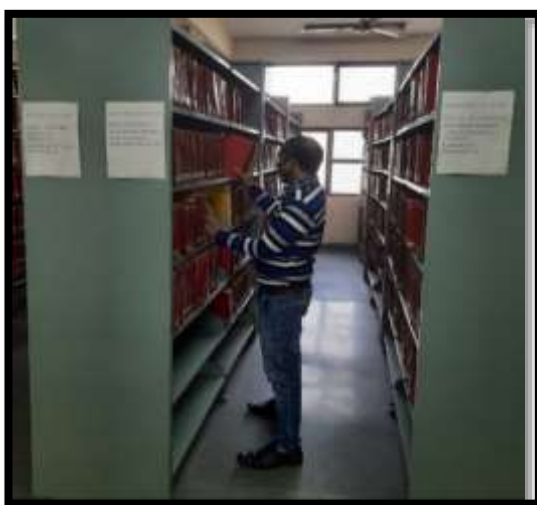
- Web- OPAC – Web based Online Public Access Catalogue
- Air-Conditioned Internet Room freely available to the students and the faculty
- Article Indexing Service – Bibliographical details of the journal articles are computerized and disseminated to the users on demand
- Reprography in proximity with the library
- Open Access
- Lending Service and Reference Service

- Newspaper Clippings

The library also organizes Book Exhibitions and Displays on a regular basis to cultivate reading habits amongst students. Our library grows in size and services every year to accumulate the ever-expanding horizons of knowledge.

Facilities

- Air-Conditioned Internet Room freely available to the students and the faculty with 20 desktop computers.
- Reprography in proximity with the Library
- Reading Hall with adequate furniture for 120 students
- Water cooler with RO and adequate number of restrooms



Star College Scheme

Prof. Balaram Pani (Principal), Chairman, Star College Scheme (till December 16, 2021)
Prof. Avneesh Mittal, Chairman, Star College Scheme (from December 17, 2021 onwards)
Prof. N.S. Abbas – Coordinator for DBT Star College Scheme - II

Department Coordinators:

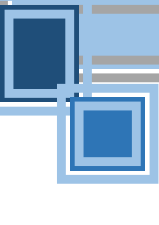
Prof. Anand Bharadvaja, Coordinator, Department of Physics
Mr. Bhavya Deep, Coordinator, Department of Computer Science
Dr. Inderbir Kaur, Coordinator, Department of Electronics (till May 2021)
Dr. Jitender Kumar, Coordinator, Department of Electronics (from December 18, 2021 onwards)
Dr. Manoj K. Tiwari, Coordinator, Department of Instrumentation (from December 18, 2021 onwards)

Bhaskaracharya College of Applied Science has been a recipient of financial support under the Star college scheme of the Department of Biotechnology (DBT) since 2010 and takes immense pride in being a recipient of the Star college status from DBT. The college expresses its heartfelt gratitude to the DBT, Government of India for guiding us all along in this very long learning association with them.

In order to strengthen life sciences education training at the undergraduate level, DBT, Ministry of Science and Technology, Government of India, New Delhi has sanctioned financial support to various departments viz, Physics, Computer Science, Electronics & Instrumentation under the DBT Star College Scheme for three years w.e.f. 2019. To meet the defined objectives under the sanctioned scheme, the college organizes a diverse array of academic and scientific activities including workshops, outreach programs, extension lectures, industrial visits and training, a facility for providing free books to meritorious students, specialized training programmes for faculty improvement for optimizing their technical capabilities, standard curricula, standard operating procedures (SOP) for practicals and summer schools etc. from time to time. The participating departments have taken action in strengthening the laboratory infrastructure involving modern equipment and consumables for undergraduate students to upgrade their careers in Science Stream.

During the current academic session, the participating departments have organized numerous activities like interactive sessions, outreach programs, alumni meetings, webinars, and workshops at intra- and inter-college levels with the support of this scheme. These activities have been highlighted under the respective departmental activities. Such mentioned activities carried out by the above Departments are a testimony to fulfilling the aim and goal of the DBT Star College Scheme. As per the DBT norms, the scheme is being smoothly conducted by various team leaders (2021-22).

One of the mandates of the scheme is also to encourage collaboration between various departments and foster frequent and meaningful interactions between the faculty and the students. The students, under this scheme, are also given experiential learning through visits to various industries, institutes and research laboratories. These visits help them understand the applications of science in other institutes and also familiarize them with various career options available in their chosen scientific fields.



Bhaskaracharya College of Applied Sciences was selected by the Department of Biotechnology, Government of India for organizing 'One Day Interaction Programme/ Science Adda' on December 17, 2021, for school students to showcase Science, Technology, and Innovation under the aegis of Azadi ka Amrit Mahotsav. The interaction was in hybrid mode (online and offline) and included lectures and demonstrations of experiments by science faculties of the participating departments of the college. The interaction with over a hundred school students was designed to impart new insights into various fields.

College Activities

Holistic education and overall development of the students have been the main mottos of the college. Keeping these in mind, various committees and cells have been constituted in the college. These committees and cells organize a wide variety of enriching, engaging, informative events and activities each year. Active participation in these events provides ample opportunities to students to develop, enhance and showcase their potential in wide-ranging domains and extra-curricular activities. These committees organized several activities throughout the last year, which provided a wonderful platform for students to learn and evolve.

Alumni Committee

The Alumni committee encourages the cooperation, participation and involvement of alumni by organizing alumni meets every year which promotes a meaningful dialogue and exchange of ideas between the college and its alumni for development of the institute and placement.

The Alumni committee conducted panel discussions, expert lectures and interactions of students with the alumni. Alumni meet was held by various Departments of the college and feedback was also taken.

The Alumni database is maintained, managed and updated using a portal on the college website through which alumni can register themselves and alumni committee gets to know where our alumni are placed and how they are progressing in different areas.



Career Counselling Cell

The career counselling cell of the college aims to provide guidance to the students about different career opportunities by organising various seminars and workshops. In the year 2021-22, the cell organised the following activities:

A National webinar on **"Essentials of Bioentrepreneurship and Supporting Ecosystem"** was organised on 9th March 2022 to foster innovation, research and entrepreneurial skills in biological science and allied areas. This session by Ms. Suman Gupta, Chief Operations Officer, BSC BioNEST Bio-Incubator, Regional Centre for Biotechnology (RCB), Faridabad was attended by students, research scholars and faculty members from different colleges and universities.

A panel discussion on **'Careers in Neuroscience'** was held on the Brain Awareness Day organised at BCAS, the University of Delhi on 11th November 2021 in association with Amity Institute of Neuropsychology and Neurosciences, Amity University, NOIDA. The distinguished panellists interacted with the participants and provided insights to their queries related to the qualifications, scope and future of neuroscience.

The cell in association with the Department of Biomedical Science also organised a two-hour online **"International Workshop on Science Communication and the Art of Writing about Science"**. This interactive workshop by Dr. Anusha Krishnan, Science Writer and Editor aimed to make the students appreciate not only the importance of effective communication in science but also the career opportunities in science communication. The participants from different universities, colleges and institutes in India and abroad enthusiastically participated in the workshop.

The career counselling cell and the Department of Computer Science of the college in association with the University of Berkeley, USA organised an **"International webinar on Career**



Extra-Curricular Activity Committee

ECA committee of the college facilitates and conducts various cultural events such as dance, music, dramatic events, film screenings, fine arts, photography and debate events to inculcate and instigate the cultural interest of students. All students are given equal opportunity of participation in the events. Due to corona pandemic, this year ECA has held various online and some offline cultural events.

As part of awareness programme, ECA has organized a National webinar on **"My Life with Rocket Science"** by Padma Shree Sh.

Opportunities in Financial Engineering”

on 30th September 2021 to inform the students about the career opportunities in the field of financial engineering.

The cell in association with ‘Abhikalpana-Ek Yuva Soch’ organised an outreach programme on guidance and counselling for class XII students of various schools on 27th March 2022 in the college. The school students were informed about the various options available for their higher studies. Their queries related to the National Education Policy 2020 and entrance based admissions were also discussed.



Gandhian Study Centre

Gandhian Study Center provides students to express their opinions on Gandhian values. Its objective to disseminate the message of Mahatma Gandhi. Gandhian Study Center provides wide path to show their talents, creativity and various innovative skills through various competitions organized. Gandhian Study Center organizes various programs, events to spread awareness and evoke sensitivity to the virtues of Satya, Ahimsa, and sanitation among all.

The Gandhian Study Centre of our college organized a webinar on “Gandhian View: Atm Nirbharta and Sarvodaya” on the occasion of 152nd Birth Anniversary of Mahatma Gandhi. The webinar took place on 4 October, 2021 at 11:00 am on the

Vasudevan Gnana Gandhi on 8th July 2021, through Google Meet, to celebrate 75 years of India’s Independence. Mr. VG Gandhi highlighted the importance of space research and how students can pursue research in aeronautical engineering and allied subjects. The lecture lasted for 1 hour 30mins and it created lot of enthusiasm among students and faculty which is evident from feedback forms. This year, ECA organized 74th independence day celebrations through MS Teams online platform. Flag hoisting of the National flag was done in the college campus on 15th August 2021 at 7:30 am by Prof. Balaram Pani, Principal and acting Dean of Colleges, University of Delhi. Due to pandemic, the flag hoisting took place in blended mode, allowing participants in online mode also. The cultural events took place online on MS Teams software. The independence day celebration also included inauguration of vidya vistar scheme, by guest Prof. Ratnabali, Coordinator of Vidya Vistar Scheme, University of Delhi and inauguration of BRAHMA software of college by Prof. P.C. Joshi, Hon’ble Vice Chancellor of University of Delhi. ECA has also organized a National Webinar on “Role of Youth in Making Modern India” delivered by the Chief Guest of the Event, Mr. V. V. Lakshmi Narayana, IPS, who retired as a Joint Director of Central Bureau of Investigation (CBI) and winner of coveted President’s Police Medal. He inspired students with his words of wisdom. The event is further celebrated by dance, music, art and film performances by students of respective clubs. The ECA events are concluded by reciting musical of National Anthem.

ECA celebrated the Vigilance Awareness Week 2021 as part of Independent India @75. The Vigilance Awareness Week is celebrated every year in the birthday week of Sh. Sardar Vallabhbhai Patel Ji, often referred to as the 'Bismark of India'. He was born on October 31st and is hailed as a man of high integrity and

Google Meet platform. The speaker for the event was “Prof. Ramesh C. Bhardwaj”, Hon. Director of Gandhi Bhawan, University of Delhi. Through his words he made everyone realize that he is a dedicated follower of Gandhian Ideologies. He was quite enthusiastic while delivering his lecture and very sensibly presented his thoughts. He talked on all the aspects of youth becoming self-dependent and contributing in the development of the nation. The event was attended by the students of various departments of the college and each of them actively participated in the event. The webinar took place under the guidance of Prof. Balaram Pani, Principal, BCAS; Dean of Colleges, DU. It was well supervised by Dr. Ramesh Kumar (Convener) and Dr. Shvetambri Arora (Faculty Coordinator). The circulation of the event and maintenance of code of conduct during the webinar was done by the students - Shubham Ghosal (Dept. of Physics), Pradumn (Dept. of Zoology) and Bhavya (Dept. of Biomedical Sciences).

It was an inspiring and path leading session for all and the Gandhian society of the college is looking forward to organize much more inspiring sessions and spread the principles of Gandhi ji as much as possible.



honesty. In the year 2021, Vigilance Week is being observed from **October 26 to November 1**. In this regard, with reference to the Circular no. 98 regarding Observance of Vigilance Awareness Week w.e.f. 26th October to 01st November 2021 with the theme “Independent India @ 75: Self Reliance with Integrity; ECA conducted an online integrity pledge has been held using google meet platform on 1st Nov.2021 at 11:30AM. The event started with the welcome note by Dr Vijaya Kumar Nalla, Convener, ECA for all those attended for the event. It was followed by Speech by Prof. Avaneesh Mittal, Vice Principal of Bhaskaracharya College, who highlighted the role of Sh. Sardar Vallabhai Patel in bringing India’s integrity and the importance of vigilance awareness event. All the attendees present were requested to take the integrity pledge and the same has been delivered through online platform. The integrity pledge was taken by 46 members who comprise Teaching staff, Non-Teaching staff and Students of the College. The event was concluded with the National Anthem. The 73rd Republic Day celebrations were done in college by ECA through various online cultural events. The republic day, on 26th January 2022 was marked by flag hoisting ceremony held in the college campus at 7:30AM. Flag hoisting was done by Prof. Balaram Pani, Dean of Colleges. The event was attended by Chairperson of the college & Prof. Avneesh Mittal, Acting Principal, Staff and their families. The event was coordinated by Dr N. Vijaya Kumar, Convener of ECA. Flag hoisting is followed by various online cultural events. The guest of honour of cultural events is Prof. Balaram Pani, who has delivered his words of wisdom. Events by Music, Dance, Dramatics, Fine Arts and Film clubs made students motivated and realized about the importance of celebrating republic day. On 8th April 2022 Bhaskaracharya college of applied sciences (university of



delhi) located in Dwarka sector-2 celebrated it's inter college cultural festival, Srijan in a grand manner. More than 1000 Students from several colleges of Delhi university participated in this festival. Chief guest of inauguration was Dr Priyanka Mishra, IPS, and Director of Administration at Indira Gandhi National Center for Arts, New Delhi. Other guests of the event were Prof. Balaram Pani, Dean of colleges, DU, Ms. Madhuri Varsheny, Chairperson of Governing Body, Mr Sunil Kumar Choudhary, and Treasurer. Guests were welcomed by Principal, Prof. Avneesh Mittal. Cultural events of Music, Drama, Dance, Fine Arts, Film, Photo and Literary clubs and plantation event attracted attention of audience. Cultural events are coordinated by Dr Vijay Nalla and Dr Shivani G Varmani. Guests appreciated the efforts and coordination of college staff in making event successful.



Gender Sensitization Committee

The aim of the Gender Sensitization Committee is to offer an integrated and multidisciplinary approach to understanding the cultural and social constructs of gender which affect the experiences of individuals in society. It also generates awareness regarding equality in law, social system, and democratic activities. It also makes young boys and girls gender sensitive and create positive values that support their rights. To achieve these goals Gender Sensitization organizes several different activities from time to time.

An open-mic competition on the theme "Gender Sensitization" was organized by the Gender Sensitization Committee of the Bhaskaracharya college of applied sciences. The topics were assigned on the spot and were based on the concept of "Gender Equality". The event was conducted to encourage students to fight against gender inequality and stereotypes and move towards a better society. Event also spread awareness about gender



equality and creation of positive values supporting equal rights. An online debate competition was held on the theme "Relevance of gender pay gap". The main goal of the event was to spread awareness about gender-related issues like gender inequality still exists in our society and regarding equality in law. This event also encouraged students to fight gender based inequality and violence. A Session was also organized in association with LAKSHYA-A Society for Social And Environmental Development on the topic "Gender lens-a perspective of gender equity". The event was conducted to encourage students to see and understand gender sensitization from a completely new perspective of equity. It provided a brilliant insight into gender equality and encouraged students to fight for gender-based inequality, and sensitized students with current gender issues and inequality.

Another session with keynote speaker, Dr. Ankita Gupta, an expert in the field of gender, community and women's studies was organized on the theme "Gender Sensitization". Event highlighted the differences between sex and gender, spoke about various sexual orientations and gender identities, and gave a 4 pillared approach to building an inclusive environment for all.

Biological & Chemical Waste

Management Committee

The College is committed to, and continuously striving towards, the ideal of a green and clean campus. In this endeavour, biological and chemical waste management committee is organizing activities throughout the year to create awareness about good lab practices. A webinar on 'Indian Rivers: Ancient Culture and Modern Science' and an online National workshop on 'Good Laboratory Practices in Biological and Chemical Sciences' was organized. A follow up student activity on Good Laboratory Practices is also being conducted to understand the impact of the workshop. A Memorandum of Understanding (MoU) was signed with Ms. SMS Water Grace BMW Pvt. Ltd.-a Government of Delhi empanelled company for waste management in January, 2022 for a period of two years and a well-defined procedure was established in the college to handle the waste generated.



Research & Project Committee

The Research and Project Assessment Committee aims at creating a conducive environment for the promotion of Research and Innovation in college, inculcating research aptitude in the students' minds, encouraging faculty to apply for major-, minor- research projects, and promoting collaborative research and internship programs. The committee organized various programs to promote the Research amongst students and faculty:

- Organized a one-day National Workshop on 'Research Methodology' on March 24, 2022 in collaboration with the Internal Quality Assurance Cell of our college. The event aimed at spreading the awareness about the latest research software used in the Research methodology. The first speaker of the Day, Prof. Vir Bahadur Singh, from the School of Computer and Systems Sciences, Jawaharlal Nehru University delivered an interesting talk on publishing promising research articles, citations, H-index, etc. The second speaker of the day was Dr. Gajendra Pratap Singh, Assistant Professor, from the School of Computational and Integrative Sciences, Jawaharlal Nehru University delivered an interesting talk on the software LaTeX. The participants learned about the research design, the significance of the research, and the new software being used in the present time.
- Organized a one-day workshop on 'Different Aspects of Research' on February 16, 2022 in collaboration with the Department of Botany of our college. The workshop aimed to create awareness amongst participants and inculcate the research aptitude in the participants. Prof. N. B. Singh, from the Department of Chemistry and Biochemistry, Sharda University, Greater Noida, U.P. delivered a comprehensive talk on various research methodologies and ethics. Prof. Singh talked about key features of scientific research originality, scientific rigour,



generalizability of findings, research design, the significance of the research, good science and ethics. He also discussed in detail about the research that it helps us to explore hidden facts about something, makes way for discovery and perhaps invention which culminates in industrial and socio-economic development. It helped students, researchers and all other participants to understand the various aspects of research and it improved their soft and language skills.

- Organized a webinar on 'Science and Ethics' on February 01, 2022 in association with Shiksha Sanskriti Utthan Nyas, Delhi. The event aimed at spreading the awareness about the ethical aspects of science for responsible research and innovation. Shri Nitin Sharma, the Secretary- Shiksha Swasthya Nayas, and the Chairperson- WOSY, World Organisation for Students and Youth, delivered a highly interesting talk. He used anecdotes, personal life incidents and many examples to explain the importance of ethics. The participants understood the importance of Science and Ethics for the welfare of the environment.



Anti- Tobacco Cell

“Make every day World No Tobacco Day” Anti Tobacco Cell of Bhaskaracharya College of Applied Sciences aims to make college premises free from tobacco and smoking. On the occasion of National Youth Day (Swami Vivekananda Jayanti), the organized a webinar on “Swami Vivekananda Ideology: No Space for Addiction” on January 12, 2022 with an aim to spread awareness about the negative impact of tobacco. To understand negative impact of tobacco on people's lung health causing from chronic respiratory disease, cancer, the fundamental role lungs play for the health and well-being of all people. According to the World Health Organization (WHO), When the news came out that smokers were more likely to develop severe disease with COVID-19 compared to non-smokers, it triggered millions of smokers to want to quit tobacco.



National Service Scheme (NSS) Cell

Motto: The motto of National Service Scheme is NOT ME BUT YOU

Through the National Service Scheme system at BCAS, students and faculty are able to participate in community work and develop a sense of involvement in nation-building activities. Every year, a wide range of activities is organized to channel the energy and idealism of the younger generation.

Activities of the NSS wing include Blood Donation Camps, Leadership Workshops, Summer Camps, National Awareness Programmes, participation in various government-sponsored activities, etc.

The NSS unit at BCAS functions under the guidance of a Faculty programme officer. Every NSS volunteer & Faculty programme officer have a maximum term of 2-years.

List of Programmes last year's:

In-house Essay/Slogan writing event : National Service Scheme (Under the aegis of IQAC) On the occasion of "Shaheed Diwas" 23 March 2021 organised Essay Writing Competition on the topic: "Bhagat Singh's contribution in development of Young India" and Slogan Writing Competition on the topic: "Bhagat Singh- The torchbearer of our independence".

Participation in Ganga Quest 2021: The NSS Cell of Bhaskaracharya College of Applied Sciences facilitated participation of the college students in an event "Namami Gange" - Ganga Quest. It was a Government organised event from April 7, 2021 to May 8, 2021 on National Mission for Clean Ganga by Ministry of Jal Shakti.

National Webinar on Covid-19: Precautions & Cure: A Webinar on COVID Vaccine



Immunization and Life Style Diseases was organised in collaboration with NSS group of Bhaskaracharya College of Applied Sciences, Delhi University on April 10, 2021, from 11AM to 12 Noon on zoom.

National Webinar on Covid-19: Immunization Awareness: NSS organised a national webinar on “COVID Immunisation through Vaccination” on the occasion of National Vaccine Festival on April 14, 2021 from 1100 AM to 1200 noon. It was a NSS-outreach programme, organised for mass awareness during national vaccination fest.

Online Session on ‘YOGA for Everyone’ on the occasion of International Yoga Day

NSS unit along with Yoga club organized the Online Session on YOGA for Everyone on the occasion of International Yoga Day on June 21, 2021, 9 AM onwards. The national participants reached more than 100 including students, faculties, and others.

Sports

Bhaskaracharya College of applied sciences believes that sports and games curriculum is an integral and compulsory part of the education process. We also believe that sports facilities provides the student a platform to build their concentration level and to keep them physically and mentally fit. It helps all the stakeholders of the education system to increase cohesion in both the community and the workplace.

College has a large number of facilities for Indoor as well as outdoor sports to keep the students and faculty members engaged and physically fit. These include a football ground, practice pitch for Cricket, Volleyball, and Badminton and Basketball courts. Also available Table Tennis Tables



and a Gymnasium with state of art equipment.

During pandemic college provided workshops on mental health and also provided online physical activity sessions in order to maintain physical and mental health of the students.

Bhaskaracharya College of applied sciences believes in wholesome development of each and every student of college with wide range of activities.



Training and Placement Cell

Placement activity organized in online mode on 8th February 2022 for Coriolis Technologies 55 students participated.

Internship cum Placement activity for Sarabhai IT was organized in online mode. 92 students participated in the placement drive on 2nd February 2022 and 22 students successfully cleared the written test. The selected 22 students were interviewed on 3rd and 4th February 2022 and 9 students were further shortlisted for 2nd level of Interview scheduled on 8 February 2022. Finally, 6 students were selected for placement cum internship.

Several activities have been organised by the Training, placement and Entrepreneurship Cell of the College in which many companies and NGOs have approached the college for placement and internship. College students enthusiastically participated in it consequently 3 students were selected by Wipro for placement and several students for internship by different companies.



Equal Opportunity Cell

Equal opportunity Cell of the college is actively involved in various activities to provide equal opportunities to students from all walks of life. BCAS signed an MOU with Vision Divyang Foundation, a non-governmental organization working for

the benefit of divyangjan, on November 23, 2021. Dr. N Vijaya Kumar and Dr. Pawas Goswami attended 'Awareness Generation and Sensitization Training Program on Rights of Persons with Disabilities Act, 2016', organized by National Institute of Labour Economics Research and Development (NILERD) on January 11-12, 2021. A counselling session on the theme of 'Mental Health and Wellness' was organized in collaboration with Vision Divyang Foundation on February 5, 2022 in online mode. Mr. Mukesh G Gupta, Chairperson, Vision Divyang Foundation, interacted with the students in a very congenial and informal manner and gave them lifestyle tips for a stress-free living in this program. Vision Divyang Foundation organized a hearing kit distribution program at Vision Institute of Advanced Studies, Rohini, on April, 2, 2022. On behalf of BCAS, Dr. Pawas Goswami, Convener, Equal Opportunity Cell attended this program and distributed hearing kits to the student. A webinar on 'Autism Spectrum Disorder' was organized in collaboration of Vision Divyang Foundation on the occasion of 'World Autism Day', on April, 2, 2022. Mrs. Kusum Gupta, Principal, Vision Institute of Advanced Study, interacted with students in this webinar and talked about various disorders related to autism, their symptoms and diagnosis. In this webinar students were sensitized about PWDs and their inclusiveness in the society.



Women Development Cell

"There is no tool for development more effective than the empowerment of women."

-- Kofi Annan

Women Development Cell @ BCAS is a vibrant and incessantly active collaboration of students, faculty, and staff; endeavouring to create a more inclusive, tolerant and gender sensitized community within campus as well as in society. It believes in strengthening



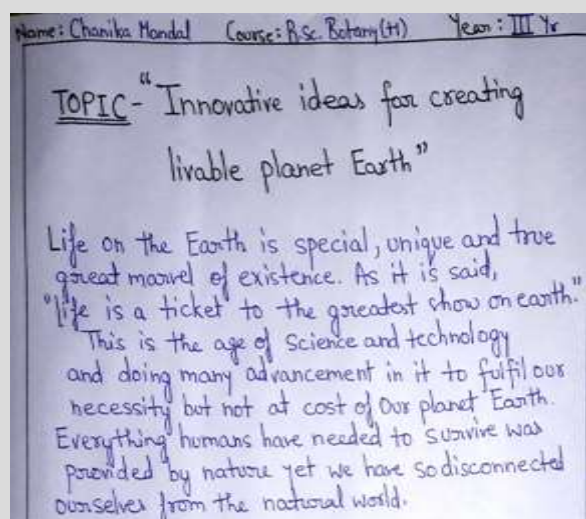
North East Cell

The North East Cell of the college aims to spread awareness about the rich cultural and traditional diversity of North East India. The cell provides a platform for all the students to share and express their thoughts. The cell aims to organize many inter and intra college activities to The North East Cell of the college aims to spread awareness about the rich cultural and traditional diversity of North East India. The cell provides a platform for all the students to share and express their thoughts. The cell aims to organize many inter and intra college activities to promote awareness and celebrate the region's unique and

students by creating awareness about socio-political, cultural, and legal perspectives through talks, workshops and symposia. Through its myriad activities - slogan writing, poster-making, rangoli making, debates, self-defense training courses - the Cell sensitizes and educates female students in a holistic manner. Our programmes and events primarily aim at creating awareness about above-mentioned issues still prevailing in our society. We launched 'Menstrual Café' which is a community of teenagers and young adults who come together to create a safe space for conversations, discussions and activities to take place on the much-stigmatised topics of menstruation and sexual and reproductive health of all women which will help in sensitising the society towards menstrual health and hygiene and eradicating the taboos attached with menstruation. Every year the cell celebrates International Women's Day to rejoice womanhood. The celebration includes a keynote lecture and a number of intercollegiate competitions for students such as quiz, Just-a-minute, poster making, rangoli making, mehndi art, singing, slogan writing competition etc. where students showcased their knowledge, talents, values, and skills. We conducted a number of webinars on Women Entrepreneurship, career opportunities for women in Hospital and Healthcare Management, Cybercrime against Women and Cancer Awareness for Women. The cell used to conduct self-defence training programs prior to the pandemic sparked by a coronavirus.

magnificent cultures. North East cell in Collaboration of Equal opportunity cell, BCAS organized an Essay writing competition **in memory of Dr. A.P.J. Abdul Kalam on the Topic** on the topic “Innovative Ideas for creating livable planet Earth” on **July 27, 2021**. Chanika Mandal, B.Sc (Hons.) Botany, BCAS has given an appreciation certificate for her essay write up. Through this event the students got an opportunity to show their hidden talents and also help in improving their writing skills.

North East cell in Collaboration of Equal opportunity cell, BCAS organized an Essay writing competition **in memory of Dr. A.P.J. Abdul Kalam on the Topic** on the topic “Innovative Ideas for creating livable planet Earth” on **July 27, 2021**. Chanika Mandal, B.Sc (Hons.) Botany, BCAS has given an appreciation certificate for her essay write up. Through this event the students got an opportunity to show their hidden talents and also help in improving their writing skills.



Bhaskaracharya College of Applied Sciences
(University of Delhi)
Sector-2, Dwarka, New Delhi 110075
Under IQAC
(Accredited with Grade 'A' by NAAC)

NORTH EAST CELL AND EQUAL OPPORTUNITY CELL
Organizes
Essay writing Competition in memory of Dr. A.P.J. Abdul Kalam on the Topic
"Innovative ideas for creating livable planet Earth"

Date: 27 July 2021
Deadline for Submission: 30 July 2021
All entries must be submitted to
northeastcell@bcas@gmail.com

E-certificate to all participants

Rules for the Competition

- Only English language
- Word Limit 1000
- Plagiarism not allowed
- It should be hand written
- Kindly mention your name, course and year
- Registration Link:
<https://forms.gle/6rHYMFy8mangp0>

Co-ordinators
Dr. S.K. Shukla
Dr. N. Vijaya Kumar

Conveners
Dr. Salam Sonia Devi
Dr. Pawas Goswami

Patron
Prof. Balaram Pani

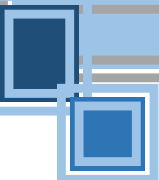
Vivekananda Vichar Manch

VVM is a forum created for organising events and activities aimed at motivating students to imbibe exemplary attributes of Swami Vivekanand Ji and be guided by his philosophy. The objective of events is character building, inculcating values, sense of pride for the nation and commitment of selfless service towards the society.

Activities organised :

Celebrated National Youth Day on the occasion of Swami Vivekanand Jayanti by organising Webinar on 'Role of National Education Policy in Empowering Qualities in Youth of 21st Century', '२१ वी सदी के युवा के व्यक्तित्व निर्माण में राष्ट्रीय शिक्षा नीति का योगदान' on 12th January, 2022. Prof. Anand Paliwal, Department of Law, Mohanlal Sukhadia University.

Celebrated अंतरराष्ट्रीय मातृभाषा दिवस to inculcate feeling of pride and respect towards the languages and celebrate the linguistic diversity of our nation by organising following events: Webinar in association with Atelier: Capability enhancement and Literary Club, BCAS on the topic 'भाषा संबंधी परिचर्चा अंतराष्ट्रीय स्वरूप और संभावनाएं' was organised on 21st February, 2022. Dr Harinder Kumar, Department of Hindi, Hindu College, and



University of Delhi was the invited speaker. Dr. Kumar explained the indispensable role of various Indian languages during our freedom struggle, Kargil War and even in present times how they are appreciated across the world. He informed show the New Education Policy has opened doors for people wanting to learn new subjects in their own language and explained the contribution of Hindi in various fields such as television, journalism, radio and education.

‘लोकगीत प्रतियोगिता’ in association with Music Club, BCAS was organized in college on 25th February 2022. The event was a great success with 12 participations and ‘An Awareness session on Internationalism, Nationalism and Education in light of Sri Aurobindo’s vision’ was organized jointly with The Debate Club, BCAS in collaboration with Eager to Forge Ahead organization on the occasion of 150th Birth Anniversary year of Sri Aurobindo. The session was held in offline mode in college on 20th June, 2022.

College Clubs

With an objective to provide comprehensive opportunities to the students to explore, the following clubs have been constituted in the college. These clubs organize several workshops, seminars, lectures, competitions, etc. to promote the academic and extra-curricular interests of the students.

Music club

“Music is the shorthand of emotion. Where words fail, music speaks”. Leo Tolstoy

The Music Club ‘Moksha’ of our college serves a platform where students with interest in music can meet, collaborate and perform. The club conducts various activities throughout the year to showcase their musical talent and spread musical joy. On 70th Republic Day, the students mesmerized the audience with their marvelous rendition of patriotic songs. On the occasion of 73rd Independence Day, the students from music club participated in the celebrations and aroused the feeling of motherhood among the audience through their heart-throb singing of patriotic songs as a tribute to the slain soldiers they also dedicated a song to the girl child. Saurabh Kishor (Department of Instrumentation) was shortlisted for M.A.D’2.0(music, art and dance season 2) one of the India’s best Singing and Dancing competition held on 25 August 2019. An Intra college competition titled “Bollywood Antakshri” was organized on 19th September 2019 where students participated enthusiastically and show cased their talent. The winners Manish Kumar (Microbiology Department) and Yogesh Kumar (Computer science Department) respectively were duly felicitated with certificates and cash prizes. Students of the music club participated in



the international summit on women in STEM Visualising the Future: New Skylines organised by ICGEB New Delhi at India Habitat Centre on 23-24 January 2020. Their performance was well appreciated and they were duly felicitated with certificate of Appreciation and memento by DBT.

Yoga Club

The Department of Physical Education and Yoga club jointly organized a '75 Crore Surya Namaskar & Yoga' program on February 03, 2022, in a blended mode. The event aimed at spreading the awareness about the importance of yoga and Suryanamaskar. Ms. Meenakshi, a certified yoga practitioner demonstrated the Surya Namaskar, along with many other exercises. The participants learned the importance of Suryanamaskar and also performed it in a physical mode. Participants learned various exercises related to breathing and eyes. The versatility and application of Yoga made it one of the most useful methods of inducing a healthy, vigorous, and active life. It helped participants with spiritual awakening and resulted in expansion of awareness.

The yoga club in collaboration with the Sports Committee organized an online 'Surya Namaskar Program' on January 26, 2022, through the Microsoft Teams platform. The objective of the event was to spread awareness about the role of Suryanamaskar in our day-to-day life and making participants do the same during the session. Dr. Madan Mohan Singh Kushwaha, Asso-ciate Professor, Mansarovar Group of Institution, Madhya Pradesh. The participants learned a series of 12 powerful poses that rejuvenated the mind, body and soul. Participants also learned various breathing exercises that aid in boosting immunity. Suryanamaskar had a direct vitalising effect on the solar energy of the body which flows through Pingala Nadi. The speaker explained that the regular practice of Suryanamaskar regulates Pingala Nadi and its



Capability enhancement and Literary Club

Capability Enhancement and literary club is a skill centric and ability enhancement club. The club actively encourages students to take part in writing, oratory, and other personality development soft skills for their intellectual and artistic growth through various competitions,

regulation leads to a balanced energy system at both mental and physical levels.



webinars, field trips and talk sessions. The Club Office-bearers strive to efficiently plan, organize and execute various Inter and Intra college events and club activities.

The club started the session of 2021-2022 with an inter-college writing competition 'Litrovolve' on March 3, 2021, this was followed by an intra-college picture-based writing competition called 'Picturesque' from March 26 to April 2, 2021. On teacher's day, 5 September 2021 the club got an opportunity to organize an inter-college essay writing competition on 'Role of teacher in making India'. Followed by an intra-college capability enhancement training club for non-teaching and MTS Staff for one month on 'English Skill Enhancement' from September 8 to October 8, 2021. On September 20, 2021, the club organized an inter-college essay writing competition on 'Literature that inspired freedom fighters'. On November 26, 2021, the club organized an online essay writing competition, entitled 'Electoral Process in India' in collaboration with the district Election Office, southwest Delhi. Our next year started with an intra-college webinar on "National Pension Scheme" on 21 January, 2022 which was graced by principal sir Anveesh Mittal, teaching and non-teaching staff and students. The talk was delivered by Mr Akshay Suri, a fellow manager in ICICI company, bangalore. Further, on 12 February 2022, the club organized an E-Group discussion on the topic "identity crisis in the LGBTQ+ community" catering to the needs for the awareness and education of 'other' in heteronormative society. On 21 February, 2022, Vivekanand Vichar Manch in association with Capability enhancement and Literary club organized a webinar on "भाषा संबंधी परिचर्चा अंतर्राष्ट्रीय स्वरूप और संभावनाएँ". On 28 February, 2022, the club

be the peacemaker in the emerging world?" to



organized an inter-college competition entitled 'Dasta-e-laikh', which was a poem writing competition. On 7 and 9 March, 2022, the club and the NAAC committee under the aegis of IQAC, BCAS organized a two day workshop on "Building Emotional Agility", the speaker provided students with study material and useful tactics to combat emotional imbalance. On the occasion of annual inter college fest 'srijan', 2022 on 8 April, the club organized an event 'Bid to buy' which proved to be a great learning experience for students aspiring for acquiring skills sets for management and business studies. The club took students on an educational field trip on 24 May 2022, to Dainik Jagran News and editorial office, ITO, New Delhi. Further the on field trip was followed by another inter-college two day educational field trip to Electronic Media Production Center, IGNOU, on 31 May and 1 June, 2022. The aim of this field trip was to acquaint students about the self-learning programmes, the audio-video transmission study materials and their functioning methods, television, interactive Radio counsellings, Gyanvani and web based interaction and communication, Gyandhara, teleconferencing, gyandhara. The club continues to strive for best and cultivate more skills in students.



Eco Club

The Bhaskaracharya College of Applied Sciences, University of Delhi has environmental awareness programmes as part of its operations in order to contribute to the creation of a more environmentally sustainable world. To attain this college has constituted Eco club to conduct environmental awareness activities to establish an eco-friendly and sustainable campus and also imparting important environmental information to all members of the college community. Eco club has so far engaged in a variety of activities/projects to promote, monitor, and nurture an environment friendly campus and society as well. Student involved initiatives and activities presented number of innovative working models explaining its uses to reduce the usage of natural resources. These activities help to raise awareness among students and staff members about the environmental issues as well as take positive environmental actions.

Fine Arts Club (Akriti)

Akriti- Fine Arts Club redefines the beauty of the art. Here, it is encouraged to let your imaginations take flight and bring down the expression of happiness, sorrows, freedom, uniqueness, culture and most importantly thoughts on the piece of paper or any art form. Akriti, the fine arts society of BCAS, had organized various events in the academic year 2021- 22. An intercollege Anime Drawing Competition was organized on 8 April 2022 during Srijan 2022. On March 3, 2022, two-hour workshop on 'ICT Skills for Lab Staff - Poster and Certificate Designing using Canva' in collaboration with the Department of Computer Science was organized. On February 17, 2022, logo designing competition on the theme 75 years of India's independence and 25 years of college establishment was organized. An Intercollege Online Painting



Competition on the theme of 'Major developments of India in 75 years of Independence' was held on August 13, 2021.



Research at BCAS

The college has well experienced and dedicated faculty who are not only involved in classroom teaching and various co-curricular activities but are also engaged actively in research. The faculty members are also guiding students for their doctoral work.

S.No.	Title of the Project	Principal Investigator	Funding Agency	Sanctioned Amount (Rs)	Duration
1.	Exploring moonlight enzyme, glutamate racemase, of <i>Neisseria gonorrhoeae</i> as a target for anti-gonococcal drug discovery.	Dr. Uma Chaudhry and Dr. Bishwajit Kundu (IIT, Delhi)	ICMR	22.60 lakhs (For Dr. Uma Chaudhry)	2019-2022
2.	Significance of 5-Hydroxymethylcytosine in neurodegeneration associated with rapid eye movement sleep deprivation.	Dr. Uma Dhawan	SERB-DST	40.11 lakhs	2018-2021
3.	ARMEd: Antimicrobial resistance mitigation and eradication using blended learning approach - social media, outreach and awareness activities.	Dr. Uma Chaudhry and Dr. Avneesh Mittal	DST	17.91 lakhs	2020-2022
3.	Development of Herbal Garden	Dr. Meenakshi Garg	Ministry of Ayush	45000	2019-2021

Faculty Supervisors of Doctoral Program


Name of the Faculty	Department	Number of Ph.D/PDF. Students enrolled/submitted till date
Prof. Balaram Pani	Chemistry	5
Dr. Geeta Bhatt (On leave and lien)	Instrumentation	3
Dr. Manoj Khanna (On leave and lien)	Electronics	4
Dr. Meenakshi Garg	Food Technology	5
Prof. N. S. Abbas	Botany	1
Dr. Rizwana	Food Technology	1
Prof. Sangeeta Srivastava	Computer Science	4
Dr. Saroj Kumar Shukla	Polymer Science	9
Prof. Sidhharth Sirohi	Polymer Science	2
Dr. Uma Chaudhry	Biomedical Science	7
Dr. Uma Dhawan	Biomedical Science	4

College Rules

- **Identity Card:** Identity cards are issued to all the bonafide students of the College. It must be renewed in the beginning of every academic session. Every student has to carry Identity Card during the college timings, so that it could be shown to the college authority as and when demanded. Duplicate I-card will be issued only after furnishing a copy of the F.I.R. and on payment of Rs.100/-
- **Vehicle Pass:** Students are not allowed to bring automotive vehicles inside the College campus without a valid license and vehicle sticker. Vehicle sticker can be issued from the college office once he/she has been issued the college identity card.
- **Hostel:** The College does not provide hostel facility. Outstation students are required to make their own arrangements for boarding and lodging.
- **D.T.C. Bus Pass and Railway Concession:** The students can avail the D.T.C. Student Concession Bus Pass facility and Railway monthly/quarterly season tickets from residence to college and back. Outstation candidates are entitled for 2nd Class Sleeper Railway concession for visiting their hometown during vacations as per the University of Delhi norms.
- **Minimum Attendance:** Subject to the provision of ordinance VII, the candidate is required to attend not less than two third of theory and practical classes separately in all the subjects taken together in the college in an academic session so as to appear in the University Annual/Semester Examination.
- **Examination:** Examination and marking scheme (including Internal Assessment) procedure shall remain same as notified by the University of Delhi from time to time.
- **Website:** Students are advised to regularly visit the college and Delhi University websites: <http://bcas.du.ac.in> and <http://du.ac.in> respectively for important notices, ordinances, time table and inputs and for reference to various undertakings and guidelines.
- **Notice Board:** Students are advised to check the notice boards of the college for regular updates and relevant information.

Library Rules and Regulations

1. The Library is open to the college students and staff members from 09:00 A.M. to 05:00 P.M. on all working days.
2. Students are required to carry their College Identity Card with them and mark their attendance on biometric machine / register before entering the library.
3. They can be refused admission to the library if they fail to produce their identity card on demand.
4. Entire library premises are a SILENCE ZONE. Discussions/Gossips are not permitted.
5. Personal books, umbrella, stick, bags etc. are not allowed in the library. These personal belongings are to be left outside the library at student's own risk.
6. Any misuse of the library facilities and damage of the library property (RFID gate, books, furniture, computers, biometric machine etc.) will be considered as a serious breach of discipline and the college can take appropriate action whenever required.
7. Students are required to read notices issued by the Librarian and college from time to time. Ignorance will be no excuse.
8. Students are entitled to borrow maximum of four books (including one magazine) at a time. The books will be issued for fifteen days only.
9. Borrowers must ensure that book(s) which are not properly issued in their name are not to be taken out of the library in any circumstances.
10. Students are required to show the books and other materials which are being taken out of the library to the staff at the entrance counter.
11. Membership is NOT TRANSFERABLE. The borrower is responsible for the books borrowed on his/her card. Students may borrow books against the membership ID issued to them. Loss of library documents should be immediately reported to the Librarian in writing.
12. Book(s) once taken from the shelves should be left on the reading- table only. Books should not be keep on the racks.
13. The rate of overdue charges will be Rs. 5/- per day per book. Off-days will be excluded for calculation of overdue charges.
14. Borrowers must ensure that the books borrowed by them are not spoiled, dog-eared, marked or otherwise mutilated.
15. Books lost or damaged shall have to be replaced for a same/latest edition or its double price (if same/latest edition is not available) shall be charged from the borrower. In case of failure, the amount shall be recovered from the security deposit of the student.

- 
16. Reference books, costly books and “Not to be issued” books will only be issued after 04.00 P.M. for keeping overnight. Overdue charge for such books is Rs. 50/- per day. Also disciplinary action may be taken against the defaulter.
 17. Students on leave must arrange for the return of books in time.
 18. The librarian may recall any issued book/s from member at any time and the member shall return the same immediately.
 19. Library uses KOHA software. Students can access their library account using their Roll No. as user ID and password with following URL:

<https://bcas.bestbookbuddies.com>
 20. All the students can access N-List using their N-List login and password using the following URL:

<https://nlist.inflibnet.ac.in>
 21. Students are advised to update their personal information using “Personal Details” tab.
 22. Library has its own BLOG and is being updated time to time. Students are advised to using the following URL:

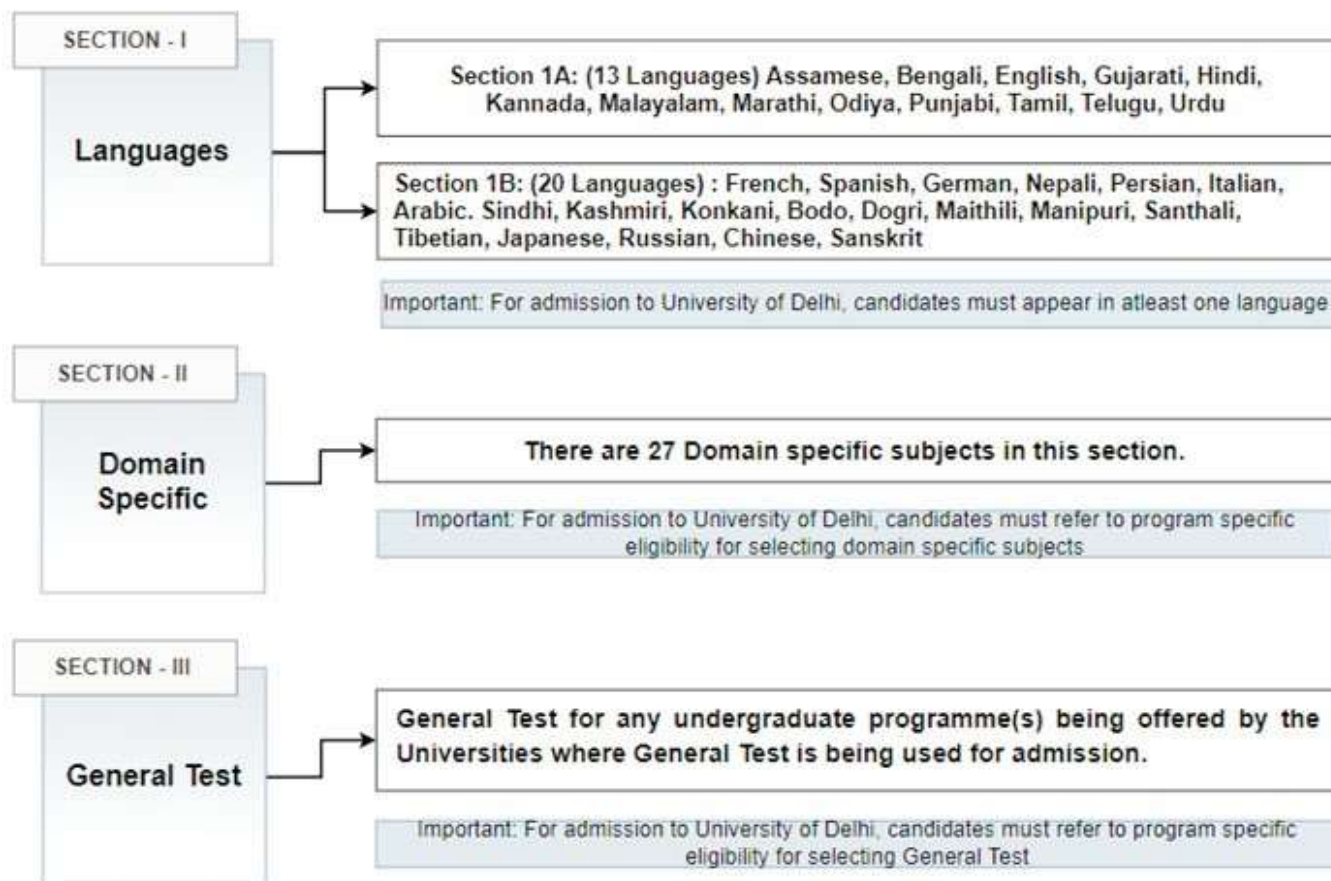
<https://librarybcas.blogspot.com>
 23. Eatables are not allowed in the library premises.
 24. The College may change any or the entire library rules without any prior notice.
 25. NO BOOK(S) SHALL BE ISSUED AFTER THE LIBRARY CLEARANCE.



Admission Procedure

Admissions to all programs will be done through a centralized e-counselling procedure. To minimize the number of rounds of counselling, and to start the academic session timely, the University may explore the possibilities of admitting candidates over and above the sanctioned strength in the initial rounds of counselling. Further details related to admission processes such as e-counselling, Tie Breaking, etc. will be notified separately.

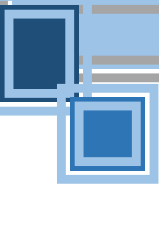
Structure of Common University Entrance Test (CUET)-2022



- Candidates must carefully study the Program-Specific Eligibilities of Undergraduate programs of the University of Delhi before registering for CUET 2022 at <https://cuetsamarth.ac.in/>
- For admission to the University of Delhi, the candidates must appear in CUET in the subjects/Test papers mentioned in the Program-Specific Eligibilities for which s(he) is desirous to take admission. Grievance related to non-appearance in CUET 2022 or the required subjects/test papers will not be entertained.
- For all updates related to CUET, the candidates must visit the National Testing Agency (NTA) website: <https://nta.ac.in>

Important Points

1. Admissions to all Undergraduate Programs at the University of Delhi will be based on the scores obtained in CUET 2022.
2. An eligible candidate desirous of seeking admission to the Undergraduate Program(s) of the University of Delhi for the academic session 2022-23 must read the contents of this Bulletin of Information, as well as the notifications, updates and information published on the admission website of the University very carefully.
3. Candidate must appear in CUET in only those subjects in which s(he) has passed Class XII.
4. In case the subject studied at Class XII is not mentioned in the CUET, the candidate must appear in the subject that is similar/closely related to the subject s(he) has studied at Class XII (for example, if a candidate has studied Biochemistry in Class XII, s(he) must appear in Biology in CUET 2022)
5. Merit will be based only on the 'combination of subjects in which a candidate has appeared in CUET as mentioned in the respective Program-Specific Eligibility.
6. The candidate must have studied and passed Class XII Examination or its equivalent from a single recognized board.
7. Only the scores obtained in CUET 2022 will be considered for admissions to the academic year 2022-23.
8. Candidates must study the Program-Specific requirements carefully and then appear in Subjects/papers of the CUET 2022.
9. The Candidates are advised to check that they satisfy all eligibility criteria for the program(s) for which they are applying in the entrance test. Admission is subject to the Candidate's fulfilling the eligibility requirements prescribed for applying to the concerned program of study. In case a Candidate does not meet any eligibility criteria prescribed for applying to the concerned program and appears in the entrance test, it is at the Candidate's own risk and cost. If at any stage, it is found that eligibility requirements are not fulfilled, the admission, if granted, shall be cancelled ipso facto.
10. Before registering for CUET 2022, the candidates are advised to carefully read the Bulletin of Information and consult the Delhi University Act, 1922 and the Statutes. The Ordinances, Rules and Regulations of the University of Delhi, available on the University website, would be binding on them.
11. As per ordinance-I of University, there is no minimum age bar for admission to the undergraduate programs in the University and its colleges except in the programs where the respective regulatory bodies, such as Medical Council of India (MCI), All India Council of Technical Education (AICTE), Bar Council of India (BCI), National Council for Teacher Education (NCTE), Dental Council of India (DCI), etc. have prescribed the minimum age requirement in



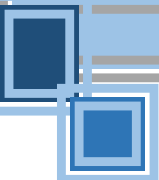
their regulations.

12. Gap year will not be a bar for purpose of admission to undergraduate programs. However, such candidates must also appear in CUET-2022 for admissions in academic year-2022



Disclaimer

- The University reserves the right to revise, amend, update, or delete any part of this bulletin without prior notice. Any change so made shall be updated on the UG Admission Portal
- Any change made in any programs after the release of this bulletin shall become effective from the date it is posted on the undergraduate Admissions Portal, www.admission.uod.ac.in.
- Admission are responsible for regularly checking the websites and admission portals of NTA and the University of Delhi for updates related to CUET 2022 and admission-related policies. Grievances resulting from not having consulted this bulletin and the website/s will not be entertained.
- This Bulletin of Information is a compendium of inputs assembled and collated from NTA and various Faculties, Departments, Centers, Colleges, other DU institutions and related sources. Due care has been taken to reproduce the authentic, official version of rules and regulations and additional relevant information in this bulletin as far as possible. However, it should, in no case, be construed as a warranty, express or implied, regarding the completeness and accuracy of the information so far provided as a ready reference.
- The University of Delhi disclaims any liability towards any individual for any loss or damage caused to them arising out of any action taken based on the information in the Bulletin. Any error, if found, in the Bulletin may be due to inadvertent omissions. Clerical mistakes, or any other reason.
- Non-compliance with any of the requirements for admission includes non-submission of relevant documents and/or non-payment of Fee within the prescribed date and time. In that case, the applicants will lose their right to admission.
- Suppose at any stage original documents relating to a candidate's admission are found to be fake/non-genuine or fabricated or in any other manner defective; In that case, the said candidate will not be admitted and if already admitted, admission will be cancelled without any prior notice in this regard. If the same is found after completing the course, the candidate's degree will be cancelled and appropriate legal action will be taken against them.
- The University of Delhi will not be responsible for any change/modification in the



papers/structure/mode of examinations of CUET 2022.

- The University is liable to change/modify its admission policies and processes anytime without giving any prior notification. The latest and updated information will be available on the website of the University of Delhi www.admission.uod.ac.in.

Undergraduate Degree

Programs at BCAS

Undergraduate Programs in Sciences

- B.Sc. (Hons.) Botany
- B.Sc (Hons.) Zoology
- B.Sc.(Hons.) Biomedical Science:
- B.Sc. (Hons.) Chemistry
- B.Sc (Hons.) Physics
- B.Sc. (Hons.) Polymer Science
- B.Sc. (Hons.) Computer Science
- B.Sc (Hons.) Electronics
- B.Sc. (Hons.) Instrumentation
- B.Sc (Hons.) Food Technology
- B.Sc (Hons.) MicroBiology

Registration to Undergraduate Programs

For admission to Undergraduate programs of the University of Delhi, all candidates (Including those applying for supernumerary seats) must register for CUET-2022 at <https://cuetsamarth.ac.in>

Eligibility Requirements for Undergraduate Admissions

Common Minimum Eligibility*

The candidate must have passed the Class XII or its equivalent examination from a single recognized board.

*In case a candidate has passed subjects/s from more than one board, she) can appear for CUET 2022 in the subjects in which she) has passed Class XI: however, for the purpose of ascertaining the Minimum Eligibility, the marksheet/ degree of only one board will be considered (For example. If a candidate has appeared in CBSE Board Examination with five subjects except for Mathematics and later appears and passes Mathematics from another board such as the National Institute of Open Schooling (NIOS), the minimum eligibility shall be ascertained from his/her marksheet issued by CBSE only)

Program-Specific Eligibilities

List of Subjects/Papers to be chosen Programs of the University of Delhi

List A:

All Languages of Section IA and Section IB of CUET 2022.

Candidates must appear in at least one language from the following			
Arabic	Gujarati	Manipuri	Sindhi
Assamese	Hindi	Marathi	Spanish
Bengali	Italian	Nepali	Tamil
Bodo	Japanese	Odiya	Telugu
Chinese	Kannada	Persian	Tibetan
Dogri	Kashmiri	Punjabi	Urdu
English	Konkani	Russian	
French	Maithili	Sanskrit	
German	Malayalam	Santhali	

List B:

Subjects/ Test papers mentioned in Section II of CUET 2022 have been categorised under List B1 and List B2. Candidate must refer to Program-Specific Eligibility to choose the subjects in which s(he) should appear in CUET 2022 to be considered for admission to the selected program.

Subjects in List B1		Subjects List B2	
1	Accountancy/ Bookkeeping	1	Agriculture
2	Anthropology	2	Engineering Graphics
3	Biology/Biological Studies/ Biotechnology/Biochemistry	3	Entrepreneurship
4	Business Studies	4	Knowledge Tradition and Practices India
5	Chemistry	5	Fine Arts/ Visual Arts (Sculpture/ Painting)/ Commercial Arts

6	Computer Science/ Informatics Practices	6	Mass Media/ Mass Communication
7	Economics/ Business Economics	7	Physical Education/NCC/Yoga
8	Environmental Studies	8	Performing Arts – i) Dance (Kathak/Bharatnatyam/Kathakali/ Odissi/ Kuchipuri/ Manipuri (ii) Drama- Theatre (iii) Music General (Carnatic /Rabindra Sangeet/ Hindustani /Percussion/ Non-percussion
9	Geography/Geology	9	Teaching Aptitude
10	History		
11	Home Science		
12	Legal Studies		
13	Mathematics		
14	Physics		
15	Political Science		
16	Psychology		
17	Sanskrit		
18	Sociology		

Only the papers mentioned in List B1 and List B2 will be considered as “subjects” for Program-Specific Eligibility

The marks obtained by the candidate in CUET 2022 will be considered for computing the total marks according to the Program-Specific combinations of subjects for deciding merit and granting admissions in the undergraduate programs. Merit will be based only on the ‘combination of subjects in which a candidate has appeared in CUET 2022’ as mentioned in the respective Program-Specific Eligibility.

For admission to the University of Delhi, the candidates must appear in CUET in the subjects/Test papers mentioned in the Program-Specific Eligibilities for which s(he) is desirous to take admission. Grievance related to non-appearance in CUET 2022 or the required subjects/test papers will not be entertained.

Program	Program-specific Eligibility Criteria and Combination of Subjects for Admission
B.Sc (Hons.) Computer Science	<ul style="list-style-type: none"> ❖ Candidates must appear in CUET in the following subject combination: ❖ Any one language from List A + Mathematics + Any two subjects out of which one should be from List B1 ❖ Merit will be based on the CUET scores obtained from the above-mentioned combination of subjects.
B.Sc.(Hons.) Botany	<ul style="list-style-type: none"> ❖ Candidates must appear in CUET in the following subject combination: Physics + Chemistry + Biology/Biological Studies/ Biotechnology/ Biochemistry ❖ Merit will be based on the CUET scores obtained from the above-mentioned combination of subjects. ❖ Candidates must have obtained a minimum of 30% score in any one language of List A in CUET.
B.Sc. (Hons.) Microbiology/Zoology	<ul style="list-style-type: none"> ❖ Candidates must appear in CUET in the following subject combination: ❖ Physics + Chemistry + Biology/Biological Studies/ Biotechnology/ Biochemistry ❖ Merit will be based on the CUET scores obtained from the above-mentioned combination of subjects. ❖ Candidates must have obtained a minimum of 30% score in any one language of List A in CUET.
B.Sc. (Hons.) Chemistry/ Physics/ Polymer Science	<ul style="list-style-type: none"> ❖ Candidates must appear in CUET in the following subject combination: ❖ Physics + Chemistry + Mathematics ❖ Merit will be based on the CUET scores obtained from the above-mentioned combination of subjects. ❖ Candidates must have obtained a minimum of 30% score in any one language of List A in CUET.
B.Sc.(Hons.) Electronic Science/ Instrumentation	<ul style="list-style-type: none"> ❖ Candidates must appear in CUET in any of the following subject combinations: ❖ Combination I: Physics + Mathematics + Chemistry

	<p>OR</p> <p>Combination II: Physics + Mathematics + Computer Science/ Informatics Practice</p> <ul style="list-style-type: none"> ❖ Merit will be based on the best CUET score obtained from any of the above-mentioned combinations of subjects. ❖ Candidates must have obtained a minimum of 30% score in any one language of List A in CUET.
B.Sc.(Hons.) Food Technology	<ul style="list-style-type: none"> ❖ Candidates must appear in CUET in any of the following subject combinations: ❖ Combination I: Physics + Chemistry + Biology/Biological Studies/ Biotechnology/ Biochemistry <p>OR</p> <ul style="list-style-type: none"> ❖ Combination II: Physics + Chemistry + Mathematics ❖ Merit will be based on the best CUET score obtained from any of the above-mentioned combinations of subjects ❖ Candidates must have obtained a minimum of 30% score in any one language of List A in CUET.
B.Sc.(Hons.) Biomedical Science	<ul style="list-style-type: none"> ❖ Candidates must appear in CUET in the following subject combination: ❖ Chemistry + Physics + Biology/Biological Studies/ Biotechnology/ Biochemistry ❖ Merit will be based on the CUET scores obtained from the above-mentioned combination of subjects. ❖ Candidates must have obtained a minimum of 30% score in any one language of List A in CUET.

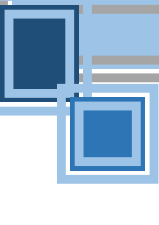
Seat Matrix:

The Complete Category wise seat distribution and Supernumerary seats for DU Ward – Quota, ECA, Sports etc. in different courses being run by the college will be as follows:-

S.N o.	Course	Distribution of seats in various categories					Distribution of Supernumerary Seats						FSR	Grand Total seats
		UR	OBC	SC	ST	EWS	PwD	C W	K M	Sports	ECA	Ward Quota		
1	Biomedical Sciences	24	16	9	4	6	3	3	3	2	1	1	6	78
2	Computer Science	24	16	9	4	6	3	3	3	2	1	1	6	78
3	Electronics	24	16	9	4	6	3	3	3	2	1	1	6	78
4	Food Technology	24	16	9	4	6	3	3	3	2	1	1	6	78
5	Instrumentation	24	16	9	4	6	3	3	3	2	1	1	6	78
6	Polymer Science	24	16	9	4	6	3	3	3	2	1	1	6	78
7	Botany	16	11	6	3	4	2	2	2	1	1	1	4	53
8	Microbiology	16	11	6	3	4	2	2	2	1	1	1	4	53
9	Physics	16	11	6	3	4	2	2	2	1	1	1	4	53
10	Zoology	16	11	6	3	4	2	2	2	1	1	1	4	53
11	Chemistry	16	11	6	3	4	2	2	2	1	1	1	4	53

Discipline

1. Students are responsible for their conduct within the college premises and are prohibited from doing anything, either inside or outside the College, which will amount to a breach of discipline or interference in the smooth functioning of the college. A student shall be liable to disciplinary action for any act of indiscipline. Disciplinary action may involve warning and/or suspension from classes, from the examinations, from the college library or even from the college. All the rules and norms as provided in Ordinance XV (B), XV (C) and XV (D) of the “Rules of Discipline of the University of Delhi” would be strictly adhered to in case of any act of indiscipline.
2. Students shall conduct themselves in a civil and dignified manner, and desist from offensive behaviour towards any section of the college community. Uncivilized behaviour and/or language shall be sternly dealt with.
3. A student who faces any disciplinary action shall not be eligible for any special recognition from the college. This includes all kind of participation in intra-college and inter-college activities, scholarships, financial assistance provided to students and participation in the college festival ‘Srijan’ and all other sports activities.
4. Students shall maintain silence and decorum in class rooms and desist from disorderly behaviour. They must not loiter in the corridors or in front of class rooms or office rooms and create noise. During their free periods, students are advised to work in the library or “reading room”, or spend time in the “common room”, without causing any disturbance whatsoever. Verbal abuses will also be considered as violation of the discipline.
5. Playing any sports in the college corridors is strictly not allowed. Students are advised to avoid playing cards in the college campus.
6. Smoking in the college premises is an offence and is strictly prohibited under the law.
7. Possession or the consumption of alcohol/ drug or any other addictive/illegal material is strictly prohibited in the college premises and will lead to termination from the college.
8. Ragging in any form is strictly prohibited and is a punishable offense. Anyone involved in such cases will be dealt strictly with according to the rules of University of Delhi.
9. Students shall take proper care of the college furniture and fixtures. They must not cause any damage to the college property. It could attract disciplinary action against them.

- 
10. Students are notified to not litter, lay or throw any kind of garbage in and around the campus.
 11. A designated parking space is provided for all students to park their vehicles with the valid sticker issued to them for the same. No vehicle would be allowed to be parked in any other part of the college premises.
 12. Students cannot form any society/club in the college without the prior permission of the Principal, nor shall any person can be invited to address a meeting in the college without the formal consent of the Principal.
 13. Students suffering from any contagious or infectious disease are suggested to not attend college during the phase of illness.
 14. Students who regularly are absent from the college for no valid reasons can be removed from the college rolls.
 15. All notices/circulars issued time to time will be binding on all students without exception.
 16. The college has a zero- tolerance to ragging and very strict anti-ragging policy. Kindly go through the document provided in the following link:
http://www.du.ac.in/du/uploads/anti_ragging/11072017_antiragging_guidelines.pdf

Admission under ECA Category*

The following categories and sub-categories will be considered for admission under ECA:

Name of the College	Category	Sub-Category	Sub- Category	Number of Seats
		Code		
Bhaskaracharya College of Applied Sciences	CREATIVE WRITING	1a.	Creative Writing (Hindi)	1
	DANCE	2a.	Indian Classical	1
		2b.	Indian Folk	1
		2c.	Western	1
	DEBATE			
		3b.	Debate (English)	1
	DIGITAL MEDIA	4a.	Photography	1
	FINE ARTS	5a.	Sketching & Painting	1
	MUSIC (VOCAL)	6a.	Indian	1
		6b.	Western	1
	MUSIC (INSTRUMENTAL: Western)	8g.	Keyboard	1
	THEATRE	9	Theatre	1
	Total:			11

*Refer to University Admission Bulletin (2022-23) for guidelines to admission through ECA.

Admission under Sports Category*

**Position/Event/Weight category for Team Games/Sport for Admission on the basis of
Sports in Undergraduate Programmes 2022**

S.No.	Category	No. of Seats for Men	No. of Seats for Women
1	Athletics	3	
2	Badminton	1	1
3	Basketball (Guard)	1	
4	Chess	1	
5	Cricket (Batsman)	2	
6	Football (GK) Football (Forward+Right Mid)	1 2	
7	Volleyball (Spiker)	2	
8	Gymnastics (Artistic)	1	1
9	Judo	1	
	Total	15	2

*Refer to University Admission Bulletin (2022-23) for guidelines to admission on the basis of Sports

Relaxation and Reservation

Reservation of Seats for Scheduled Caste (SC) and Scheduled Tribe (ST) Candidates

22.5% of the total numbers of seats is reserved for Candidates belonging to Scheduled Caste and Scheduled Tribes (15% for Scheduled Caste and 7.5% for Scheduled Tribes, interchangeable if necessary).

The Candidate must be in possession of the Caste/Tribe certificate in his/her own name at the time of Registration and Admission. The Caste certificate should clearly state:

- (a) Name of his/her caste/tribe
- (b) Whether candidate belongs to SC or ST
- (c) District and the State or Union Territory of Candidate's usual place of residence, and
- (d) The appropriate Govt. of India Schedule under which his / her caste / tribe is approved as SC or ST.

Candidate will have to produce the valid original SC or ST caste/tribe certificate at the time of admission. The following are empowered to issue the requisite SC / ST Certificate:

- A. District Magistrate / Additional District Magistrate / Collector / Deputy Commissioner / Addl. Deputy Commissioner / Deputy Collector / 1st class Stipendiary Magistrate / City Magistrate / Sub-Divisional Magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner.
- B. Chief Presidency Magistrate / Addl. Chief Presidency Magistrate / Presidency Magistrate.
- C. Revenue Officer not below the rank of Tehsildar.
- D. Sub- Divisional Officer of the area where the Candidate and/ or his family normally resides.
- E. Administrator / Secretary to the Administrator/ Development Officer (Lakshadweep Islands).

Candidates to note that the SC/ST Certificate from any other person/authority shall not be accepted in any case. If the Candidate happens to belong to SC or ST, Candidate's caste / tribe must be listed in the appropriate Govt. of India Schedule.

It is a statutory obligation on the part of Colleges to fill all seats reserved for Scheduled Caste / Scheduled Tribe Candidates.

Colleges shall not refuse admission to any SC / ST Candidate on the basis of medium of instruction. Any deficiency in the knowledge of any particular language should be addressed; for this purpose remedial classes may be arranged by the College by utilizing grants available from University Grants Commission.

Reservation of Seats for Other Backward Classes (OBC, Non-Creamy Layer, Central List)

27% seats are reserved for the Candidates belonging to Other Backward Classes (OBC - Non-Creamy Layer, Central List).

At the time of giving admission to an OBC Candidate, the College will ensure that the caste is included in the Central List of OBC (the OBC status is to be determined on the basis of the Central (Govt. of India) List of OBCs notified by the Ministry of Social Justice and Empowerment on the recommendations of the National Commission for Backward Classes (available at the website http://ncbc.nic.in/backward_classes/index.html.)

The certificate must mention non-creamy layer status of the Candidate (Non-creamy layer status issued by an authority mentioned in DOPT Office Memorandum no. 36012/22/93-Estt. (SCT) dated 15.11.1993).

The OBC Candidates who belong to the 'Non-Creamy Layer' and **whose caste appears in the Central List of the OBCs only**, shall be eligible to be considered for admission under the OBC category (Validity period of OBC certificate in respect of 'non-creamy layer' status of the Candidates as per DOPT Office Memorandum No. 36036/2/2013-Estt. (Res- I) dated 31 March 2016). The validity of the non-creamy layer certificate shall be for the **financial year 2021- 2022, issued on or after 31st March, 2022.**

It is a statutory obligation on the part of Colleges to fill all the seats reserved for OBC Candidates.

Reservation policy for Economically Weaker Sections (EWS)

As per the University of Delhi notifications (Reference No. Aca. I / Reservation of EWSs / 2019/ 63 Dated 28th March 2019 and Reference No. Aca. I / Reservation of EWSs / 2019 / 101 Dated 15th May 2019), for the reservation for Economically Weaker Sections (EWSs) Category, the University Departments / Centres / Colleges have reserved 10% seats for admission of candidates belonging to EWS category .

Admission to Supernumerary Seats

Admission to all supernumerary seats will be through CUET 2022. Candidates desirous of taking admission on Supernumerary seats must appear in CUET 2022.

Category	
PwBD	Persons with Benchmark Disabilities
CW	Children/Widows of Personnel of the Armed Forces including Para-Military
ECA	Extra-Curricular Activities
Sports	Sports
KM	Kashmiri Migrants
PMSS	Prime Minister's Special Scholarship for Jammu and Kashmir
SS	Nominated Sikkimese Students
WQ	Ward Quota of Employees of University of Delhi

Reservation of Seats for Persons with Benchmark Disabilities (PwBD)

A. Locomotor Disability

Locomotor disability (a person's inability to execute distinctive activities associated with movement of self and objects resulting from affliction of musculoskeletal or nervous system or both), including—

1. **"leprosy cured person"** means a person who has been cured of leprosy but is suffering from—
 - i) loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifestation of deformity;
 - ii) manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity;
 - iii) extreme physical deformity as well as advanced age which prevents him/her from undertaking any gainful occupation, and the expression "leprosy cured" shall construed accordingly;
2. **"cerebral palsy"** means a Group of non-progressive neurological condition affecting body movements and muscle coordination, caused by damage to one or morespecific areas of the brain, usually occurring before, during or shortly after birth;
3. **"dwarfism"** means a medical or genetic condition resulting in an adult height of 4feet 10 inches (147 centimeters) or less;
4. **"muscular dystrophy"** means a group of hereditary genetic muscle disease thatweakens the muscles that move the human body and persons with multiple dystrophy have incorrect and missing information in their genes, which prevents them from making the proteins they need for healthy muscles. It is characterisedby progressive skeletal muscle weakness, defects in muscle proteins, and the death of muscle cells and tissue;
5. **"acid attack victims"** means a person disfigured due to violent assaults by

throwing of acid or similar corrosive substance.

B. Visual impairment

1. **"blindness"** means a condition where a person has any of the following conditions, after best correction
 - b) total absence of sight; or
 - c) visual acuity less than 3/60 or less than 10/200 (Snellen) in the better eye with best possible correction; or
 - d) limitation of the field of vision subtending an angle of less than 10 degree.
2. **"low-vision"** means a condition where a person has any of the following conditions, namely:
 - a) visual acuity not exceeding 6/18 or less than 20/60 upto 3/60 or upto 10/200 (Snellen) in the better eye with best possible corrections; or
 - b) limitation of the field of vision subtending an angle of less than 40 degree upto 10 degree.

C. Hearing Impairment

1. **"deaf"** means persons having 70 DB hearing loss in speech frequencies in both ears;
2. **"hard of hearing"** means person having 60 DB to 70 DB hearing loss in speech frequencies in both ears;
3. **"speech and language disability"** means a permanent disability arising out of conditions such as laryngectomy or aphasia affecting one or more components of speech and language due to organic or neurological causes.

D. Intellectual Disability

A condition characterised by significant limitation both in intellectual functioning (reasoning, learning, problem solving) and in adaptive behaviour which covers a range of every day, social and practical skills, including—

1. **"specific learning disabilities"** means a heterogeneous group of conditions wherein there is a deficit in processing language, spoken or written, that may manifest itself as a difficulty to comprehend, speak, read, write, spell, or to do mathematical calculations and includes such conditions as perceptual disabilities, dyslexia, dysgraphia, dyscalculia, dyspraxia and developmental aphasia;
2. **"autism spectrum disorder"** means a neuro-developmental condition typically appearing in the first three years of life that significantly affects a person's ability to communicate, understand relationships and relate to others, and is frequently associated with unusual or stereotypical rituals or behaviours.

E. Mental Behaviour

"Mental illness" means a substantial disorder of thinking, mood, perception, orientation or memory that grossly impairs judgment, behaviour, capacity to recognise reality or ability to meet the ordinary demands of life, but does not include retardation which is a condition of arrested or incomplete

development of mind of a person, specially characterised by subnormality of intelligence.

F. Disability caused due to Chronic neurological conditions, such as—

1. **"multiple sclerosis"** means an inflammatory, nervous system disease in which the myelin sheaths around the axons of nerve cells of the brain and spinal cord are damaged, leading to demyelination and affecting the ability of nerve cells in the brain and spinal cord to communicate with each other;
2. **"Parkinson's disease"** means a progressive disease of the nervous system marked by tremor, muscular rigidity, and slow, imprecise movement, chiefly affecting middle-aged and elderly people associated with degeneration of the basal ganglia of the brain and a deficiency of the neurotransmitter dopamine.

G. Blood Disorder

1. **"haemophilia"** means an inheritable disease, usually affecting only male but transmitted by women to their male children, characterised by loss or impairment of the normal clotting ability of blood so that a minor wound may result in fatal bleeding;
2. **"Thalassemia"** means a group of inherited disorders characterised by reduced or absent amounts of haemoglobin.
3. **"Sickle cell disease"** means a haemolytic disorder characterised by chronic anaemia, painful events, and various complications due to associated tissue and organ damage; "haemolytic" refers to the destruction of the cell membrane of red blood cells resulting in the release of haemoglobin.

H. Multiple Disabilities (more than one of the above specified disabilities)

Multiple disabilities including deaf blindness which means a condition in which a person may have combination of hearing and visual impairments causing severe communication, developmental, and educational problems.

Any other category as may be notified by the Central Government.

Concessional/Waiver of fees in respect of Persons with Benchmark Disabilities (PwBD)

- A. Candidates with physical disabilities pursuing various programs of study in the Faculties, Departments, Centres, and Institutions / Colleges of the University shall be **exempted from payment of fees, including examination fee and other University fees**, except Admission fee, subscription towards Delhi University students' Union and Identity Card fee (As per amendment to Ordinance X(4) of the University).

- B. PwBD Candidates who meet the merit for the unreserved category and will take admission in the unreserved category (UR) will pay the fee relevant for PwBD Candidate.
- C. As per the Executive Council Resolution No. 50 dated 03.11.2012, students with physical disabilities residing in different Hostels / Halls of the University are **exempted from payment of all hostel fees and charges** except refundable caution fee and the mess fees. Persons with Physical Disabilities who are students shall pay 50% of the Mess fee and the remaining **50% of their Mess Fee** will be met by the University of Delhi. **Similar norms are to be adopted by the Colleges in respect of PwBD Students residing in various hostels of the Colleges.**
- D. PwBD students who are getting fellowships / financial assistance shall be exempted from payment of fees / charges / mess fees subject to the following conditions.

Value of Fellowship	Exemption of Fees waiver etc
Upto 3000/- per month	Fees waiver +50% Mess Subsidy
3001/- to 8000/- per month	Fees waiver but no Mess Subsidy
8001/- and above per month	No fees waiver and no Hostel Subsidy

Reservation for Children/Widows of Personnel of the Armed Forces (CW)

Five percent (5%) of seats are reserved for Candidates under this category, program-wise in all colleges.

Candidates desirous of taking admission under the CW quota of the University must appear in CUET 2022.

All such Candidates have to upload the Educational Concession certificate issued by **any of the following authorities**

On the proper letterhead:

- (a) Secretary, Kendriya Sainik Board, Delhi.
- (b) Secretary, Rajya Zila Sainik Board.

- (c) Officer-in-Charge, Record Office.
- (d) 1st Class Stipendiary Magistrate.
- (e) Ministry of Home Affairs (For Police Personnel in receipt of Gallantry Awards)

No other format shall be permissible. Proofs of the CW category in the form of ID card of parent or dependent, Medical card, Ration card, CSD card, etc. are not admissible in lieu of certificate in correct format. The priority must be clearly mentioned in the certificate. Certificates that do not mention the relevant priority will not be considered.

Admission may be offered to the Children/Widows of Personnel of the Armed Forces (**Priority to IX**) including Para- Military Personnel (**only Priority I to V**), in the following order of preference:

Priority I	Widows/Wards of Defence personnel killed in action;
Priority II	Wards of Defence Personnel disabled in action and boarded out from service with disability attributable to military service;
Priority III	Widows/Wards of Defence Personnel who died while in service with death attributable to military service;
Priority IV	Wards of Defence Personnel disabled in service and boarded out with disability attributable to military service;
Priority V	Wards of Ex-servicemen and Serving personnel, including personnel of police forces who are in receipt of Gallantry Awards; <ul style="list-style-type: none"> i) ParamVir Chakra ii) Ashok Chakra iii) MahaVir Chakra iv) Kirti Chakra v) Vir Chakra vi) Shaurya Chakra vii) President's Police Medal for Gallantry/President Gallantry Medal for the fire services personnel viii) Sena Medal (Gallantry), Nau Sena Medal (Gallantry), Vayu Sena Medal (Gallantry) ix) Mention-in-Despatches x) Police Medal for Gallantry/Gallantry Medal for fire services
Priority VI	Wards of Ex-Servicemen.
Priority VII	Wives of: <ul style="list-style-type: none"> i. Defence personnel disabled in action and boarded out from service. ii. Defence personnel disabled in service and boarded out with disability attributable to military service iii. Ex-servicemen and serving personnel who are in receipt of Gallantry Awards.
Priority VIII	Wards of Serving Personnel
Priority IX	Wives of Serving Personnel

Reservation of Kashmiri Migrants (KM)

Up to 5% seats are reserved program-wise in all colleges for the wards of Kashmiri Migrants. All the wards of Kashmiri Migrants will have to upload a certificate of registration as Kashmiri Migrants issued by Divisional Commissioner/ Relief Commissioner.

Candidates desirous of taking admission under the Kashmiri Migrants quota must appear in CUET 2022.

Prime Minister's Special Scholarship Scheme for J&K students

Candidates desirous of taking admission under the Prime Minister's Special Scholarship Scheme for J&K students must appear in CUET 2022.

Nomination of Seats for Sikkimese Students

Candidates desirous of taking admission under the Sikkim nomination scheme must appear in CUET 2022.

Sikkimese students nominated by the Govt. of Sikkim shall be considered for admission by the University in Colleges where hostel facilities are available (AC Resolutions 51 dated 05/06/1980 and 122 dated 17/12/1990). The allocation of Sikkimese students for admission as well as for hostel accommodation in respective colleges be made by the Vice-Chancellor at his discretion.

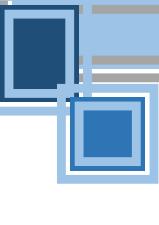
The number of these nominated seats is detailed below:

Program	Seats
B.A. Program	3
B.A. (Hons.)	1
B. Com (Hons.)	2
B.Com.	4
B.Sc. Physical Science/ Applied Physical Sciences	2
B.Sc. Life Sciences/ Applied Life Sciences	2

Ward Quota of Employees of University of Delhi

Candidates desirous of taking admission under the Ward Quota of Employees of University of Delhi must appear in CUET 2022.

Admission to the wards of University and its College employees, both teaching and non-teaching will be done as per Academic Council resolution 9 a & b dated 27.11.2020 and subsequent amendments thereof.



Candidates must be in possession of a valid Employment Certificate issued by due officials at the time of registration. Only the Employment certificate uploaded at the time of registration will be considered. I-cards, Aadhar Card and/or any other document will not be accepted.

Extra-Curricular Activities (ECA) and Sports Quota

Candidates desirous of taking admission under the supernumerary quota for ECA and/or Sports must appear in CUET 2022.

For admissions to ECA and Sports supernumerary seats a weightage of 25% will be given to CUET score and 75% to certificates/trials/performances.

Further details shall be notified separately.

***The admissions under these categories will be done as per University of Delhi norms. Admissions under reserved categories will be carried in accordance with the guidelines notified by the University of Delhi from time to time. For further information, please refer to the website of University of Delhi i.e. "admission.uod.ac.in". And "<http://du.ac.in/uploads/new-web/2022DUUGBULLETIN-English.pdf>"**

Admission of foreign students: The admission of international students are done by “Foreign Students' Registry office”, Conference Centre, University of Delhi, Delhi -110007 using a single window for all course. The interested foreign students may contact the offices of “Foreign Students' Registry office”, Conference Centre, University of Delhi, Delhi -110007 for details procedures and formalities during working days and times.



Financial Aid and Awards

Fee Concession: Limited Number of fellowships are available for needy and deserving students as per the Delhi University rules. A student in need of financial assistance can contact the Convener, Students Advisory and Public Relations Committee of the College.

Scholarship: Meritorious students are awarded scholarships by the Delhi Government. Exact details can be obtained from the College Office.

Deepika Wanganoo Memorial Prize: A prize is given every year to the topper of B.Sc. (Hons.) Electronics (III) year in the memory of Deepika Wanganoo, student of B.Sc. (Hons.) Electronics.

Saurabh Grover Memorial Prize: A prize is given every year to the topper of B.Sc. (Hons.) Physics (III) year in the memory of Saurabh Grover, student of B.Sc. (Hons.) Physics.

The Best Student Award: The College gives this award for the all-round performance of the final year student, based on good academic record and active participation in co-curricular and extracurricular activities of the College.

Distinguished Alumnus Award: The College announces an award for distinguished alumni each year amongst various Departments.

Fee Structure

Details of the annual fees to be paid by the candidate seeking admission to various courses are as per the details given below. The fee is required to be submitted online. The fee structure given does not include the examination fee which is to be submitted separately as per the University norms. Some changes may occur in the fee structure so students should see the college Notice Board before payment of fee, if offered admission.

Fees Schedule 1st Year Students

S.no.	Particulars	Fee for Under-graduate courses (Rs.)
1	Tuition Fee	2500.00
2	College Facilities and Service Charges	4000.00
3	University Student Welfare Fund	100.00
4	University Development Fund	900.00
5	University Facilities and Service Charges	500.00
6	Economically Weaker Section Support University Fund	100.00
7	Delhi University Students Union (DUSU) Fund	20.00
8	College Student Welfare Fund	4350.00
9	College Development Fund	1000.00
10	Refundable Security Fees a. College security fees – 6,000.00 b. Library security fees – 4,000.00	10,000.00
	Total Fees to be paid by student (in Rs.)	23,470.00

*All the figures are in Indian Rupees.

*Fee is tentative and any deviation should be settled by the student seeking admission.

Note: If any change in fees, it will be intimated later.

Ordinances

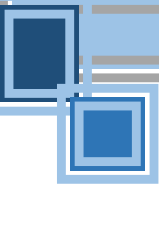
ORDINANCE XV-B: Maintenance of discipline among Students of the University

1. All powers relating to discipline and disciplinary action are vested in the Vice-Chancellor.
2. The Vice-Chancellor may delegate all or such powers as he/she deems proper to the Proctor and to such other persons as he/she may specify in this behalf.
3. Without prejudice to the generality of power to enforce discipline under the Ordinance the following shall amount to acts of gross indiscipline:
 - a. Physical assault, or threat to use physical force, against any member of the teaching and non-teaching staff of any Institution / Department and against any student within the University of Delhi
 - b. Carrying of, use of or threat to use of any weapons
 - c. Any violation of the provisions of the Civil Rights Protection Act, 1976
 - d. Violation of the status, dignity and honour of students belonging to the scheduled castes and tribes
 - e. Any practice-whether verbal or otherwise-derogatory of women
 - f. Any attempt at bribing or corruption in any manner
 - g. Willful destruction of institutional property
 - h. Creating ill-will or intolerance on religious or communal grounds
 - i. Causing disruption in any manner of the academic functioning of the University system;
 - j. Prohibition of Ragging as per Ordinance XV-C.
4. Without prejudice to the generality of his / her powers relating to the maintenance of discipline and taking such action in the interest of maintaining discipline as may seem to him/her appropriate, the Vice-Chancellor, may in the exercise of his / her powers aforesaid order or direct that any student or students -
 - (a) be expelled; or
 - (b) be, for a stated period rusticated; or
 - (c) be not for a stated period, admitted to a programme or programmes of study in a College, Department or Institution of the University; or
 - (d) be fined with a sum of rupees that may be specified; or
 - (e) be debarred from taking a University or College or Departmental Examination or Examinations for one or more years; or that the result of the student or students concerned in the Examination or Examinations in which he /she or they have appeared be cancelled.
5. Institutions, Halls and teaching in the concerned Departments. They may exercise their authority through, or delegate authority to such of the teachers in their Colleges, Institutions or Departments as they may specify for these purposes.
6. Without prejudice to the powers of the Vice-Chancellor and the Proctor as aforesaid, detailed rules of discipline and proper conduct shall be framed. These rules may be supplemented, where necessary, by the Principals of Colleges, Heads of Halls, Deans of Faculties and Heads of Teaching Departments in this University. Each student shall be expected to provide himself/herself with a copy of these rules. At the time of admission, every student shall be required to sign a declaration that on admission he/she submits himself /herself to the disciplinary jurisdiction of the Vice-Chancellor and several authorities of the University who

may be vested with the authority to exercise discipline under the Acts, the Statutes, the Ordinances and the rules that have been framed therein by the University.

ORDINANCE XV-C: Prohibition and Punishment for Ragging

1. Ragging in any form is strictly prohibited, within the premises of College/ Department or Institution and any part of Delhi University system as well as on public transport.
2. Any individual or collective act or practice of ragging constitutes gross indiscipline and shall be dealt with under this Ordinance.
3. Ragging for the purposes of this Ordinance, ordinarily means any act, conduct or practice by which dominant power or status of senior students is brought to bear on students freshly enrolled or students who are in any way considered junior or inferior by other students; and includes individual or collective acts or practices which:
 - a. Involve physical assault or threat to use of physical force.
 - b. Violate the status, dignity and honour of women students.
 - c. Violate the status, dignity and honour of students belonging to the scheduled caste and tribe.
 - d. Expose students to ridicule and contempt and affect their self-esteem.
 - e. Entail verbal abuse and aggression, indecent gestures and obscene behavior.
4. The Principal of a College, the Head of the Department or an Institution, the authorities of College, or University Hostel or Halls of Residence shall take immediate action on any information of the occurrence of ragging.
5. Notwithstanding anything in Clause above, the Proctor may also suo moto enquire into any incident of ragging and make a report to the Vice-Chancellor of the identity of those who have engaged in ragging and the nature of the incident.
6. The Proctor may also submit an initial report establishing the identity of the perpetrators of ragging and the nature of the ragging incident.
7. If the Principal of a College or Head of the Department or Institution or the Proctor is satisfied that for some reason, to be recorded in writing, it is not reasonably practical to hold such an enquiry, he/she may so advise the Vice-Chancellor accordingly.
8. When the Vice-Chancellor is satisfied that it is not expedient to hold such an enquiry, his/her decision shall be final.
9. On the receipt of a report under Clause (5) or (6) or a determination by the relevant authority under clause (7) disclosing the occurrence of ragging incidents described in Clause 3(a), (b) and (c), the Vice-Chancellor shall direct or order rustication of a student or students for a specific number of years.
10. The Vice-chancellor may in other cases of ragging order or direct that any student or students be expelled or be not for a stated period, admitted to a programme of study in a college, departmental examination for one or more years or that the results of the student or students concerned in the examination or examinations in which they appeared be cancelled.
11. In case any students who have obtained degrees or diplomas of the University of Delhi are found guilty; under this Ordinance, appropriate action will be taken under Statute 15 for withdrawal of degrees or diploma conferred by the University.
12. For the purpose of this Ordinance, abetment to ragging whether by way of any act, practice or incitement of ragging will also amount to ragging.
13. All Institutions within the Delhi University system shall be obligated to carry out instructions/directions issued under this Ordinance, and to give aid assistance to the Vice-Chancellor to achieve the effective implementation of the Ordinance.



Order of the Vice-Chancellor in pursuance of Ordinance XV-C: Where incident(s) of ragging are reported to the Vice-Chancellor by any authority under this Ordinance, the students(s) involved in ragging, shall be expelled for a specified term, designated in the order. Non-students involved in reports of ragging will be proceeded with under the criminal law of India; they will also be rendered ineligible for a period of five years from seeking enrolment in any of the institutions of the University of Delhi. Students against whom necessary action is taken under this note, will be given post decisional hearing, with strict adherence to the rules of natural justice.

ORDINANCE XV-D/The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (MINISTRY OF LAW AND JUSTICE)

An Act to provide protection against sexual harassment of women at work place and for the prevention and redressal of complaints of sexual harassment and for matters connected there with incidental thereto.

WHEREAS sexual harassment results in violation of the fundamental rights of a woman to equality under articles 14 and 15 of the Constitution of India and her right to life and to live with dignity under article 21 of the Constitution and right to practice any profession or to carry on any occupation, trade or business which includes a right to a safe environment free from sexual harassment;

AND WHEREAS the protection against sexual harassment and the right to work with dignity are universally recognized human rights by international conventions and instruments such as Convention on the Elimination of all forms of discrimination against Women, which has been ratified on the 25th June, 1993 by the Government of India.

AND WHEREAS it is expedient to make provisions for giving effect to the said Convention for protection of women against sexual harassment at workplace. For details, please see the website

<http://www.shebox.nic.in/assets/site/main/images/Sexual-Harassment-at-Workplace-Act.pdf>.

Admission Committee

Convener	Prof. Sangeeta Srivastava	9873027777
Co-Convener	Dr. Neeru Sharma	9811463962
Department	Members	Contact Number
Biomedical Sciences	Dr. Uma Dhawan	8743033300
Botany	Prof. N. S. Abbas	9810861086
Chemistry	Dr. Lalit Kapur	9811211222
Computer Science	Ms. Manu Kataria	9311044179
Electronics	Dr. Inderbir Kaur	9810681129
Food Technology	Dr. Meenakshi Garg	9958415333
Instrumentation	Dr. Manoj Kumar Tiwari	9891433885
Microbiology	Dr. Pawas Goswami	9899293335
Physics	Dr. Sandeep Kumar	8851114816
Polymer Science	Dr. Susmita D Sadhu	9910028035
Zoology	Dr. Anil Kumar Bali	9810696967

Grievance Sub-committee for SC/ST/OBC/EWS applicants for admission (2021-23)

Name	Contact No.	e-mail id
Dr. Jitender Kumar (Liason Officer, Ex-Officio)	9910941616	jitender.kumar@bcas.du.ac.in
Dr. Shivani G Varmani	9811328195	shivani.varmani@bcas.du.ac.in
Dr. Laljee Ram Meena	9414717222	dr.laljeeram57zoology@gmail.com
Dr. Prem Lata Meena	9560018951	premlatameena23@gmail.com
Dr. Catherine S Paul		

Grievance Sub-committee for PwD applicants for admission (2021-22)

Name	Contact No.	e-mail id
Dr. Jitender Kumar (Liason Officer, Ex-Officio)	9910941616	jitender.kumar@bcas.du.ac.in
Dr. Pawas Goswami	9899293335	pawas.goswami@bcas.du.ac.in
Dr. Sonia Salam	9990626535	salam.sonia@gmail.com

Extra-Curricular Activity Committee for the academic session 2021-2022

Name	Contact No.	e-mail id
Dr. Vijaya Kumar Nalla (Convener)	9968126699	nallavijay.kumar@bcas.du.ac.in
Dr. Shivani Varmani	9811328195	shivani.varmani@bcas.du.ac.in

Sports Committee for the academic session 2021-2022

Name	Contact No.	e-mail id
Prof. Anand Bharadvaja (Convener)	9810690359	anand.bharadvaja@bcas.du.ac.in
Prof. Sidhharth Sirohi	9868898270	siddharth.sirohi@bcas.du.ac.in
Dr. Amit Kumar Singh	8920646491	amit.k.singhbhu@gmail.com
Dr. Bholey Singh	9540475702	singh.du.chem@gmail.com
Dr. Kapil Roy	9871149027	kapilbio@gmail.com
Dr. Palleeshree	9958010776	palleeshree20@gmail.com
Ms. Seema	8527325577	seemahbti6@gmail.com

Committee for Student Counselling System and Mentorship

Convener: Prof. Avneesh Mittal	9540758800
Members	Contact Number
Dr. Rizwana	9810998663
Prof. Sidhharth Sirohi	9868898270
Dr. Meenakshi Garg	9958415333
Dr. Uma Dhawan	8743033300
Dr. Manoj Tiwari	9891433885

Proctorial & Anti-Ragging Committee

Convener- Dr. Sujata Bhardwaj	9810979868
Members	Contact number
Prof. Anand Bharadvaja	9810690359
Dr. Herendra Kumar	8745944401
Dr. Kapil Roy	9871149027
Dr. Reetuparna Basak	9911660104
Dr. Vijay Kumar	7503995584
Mr. Manoj Kumar	7503237919
Mr. Praveen Kumar	8510974477

College Helpdesk & Grievance Committee

Convener: Mr. Bhavya Deep	9899075383
Members	Contact Number
Dr. Susmita Dey Sadhu	9910028035
Ms. Ritu Sareen	9868814835

*This committee will look after the grievances during admission.

Student Advisory & PR Committee

Convener: Dr. Susmita Dey Sadhu Co-convener: Dr. Vandita Gupta	9910028035 9868041546
Members	Contact Number
Dr. Amit Kumar Singh	8920646491
Dr. J. Dinakaran	8800968802
Dr. Jitender Kumar	9910941616
Dr. Neeru Bhagat	9899006321
Dr. Ramesh Kumar	8851114816
Dr. Uma Dhawan	8743033300
Dr. Vijay Kumar	7503995584
Mr. Rakesh	8295607395
Dr. Jayant Sharma	

*This committee will look after the grievances during admission.

General Format of Various Undertakings

Various undertakings formats are given below which are required to be submitted by the student seeking admission at Bhaskaracharya College of Applied Sciences, at the time of admission on non-judicial stamp paper of **Rs. 10/-** duly attested by Notary Public/First Class Magistrate.

MANDATORY AFFIDAVIT TO BE PRODUCED AT THE TIME OF ADMISSIONS

It is mandatory as per Hon. Supreme Court & UGC/AICTE Regulations that all students fill in an Anti-Ragging Affidavit each year. To make the process easy MHRD has developed an ONLINE facility.

Affidavits can be obtained from any of the two web-sites:

WWW.ANTIRAGGING.IN

Or

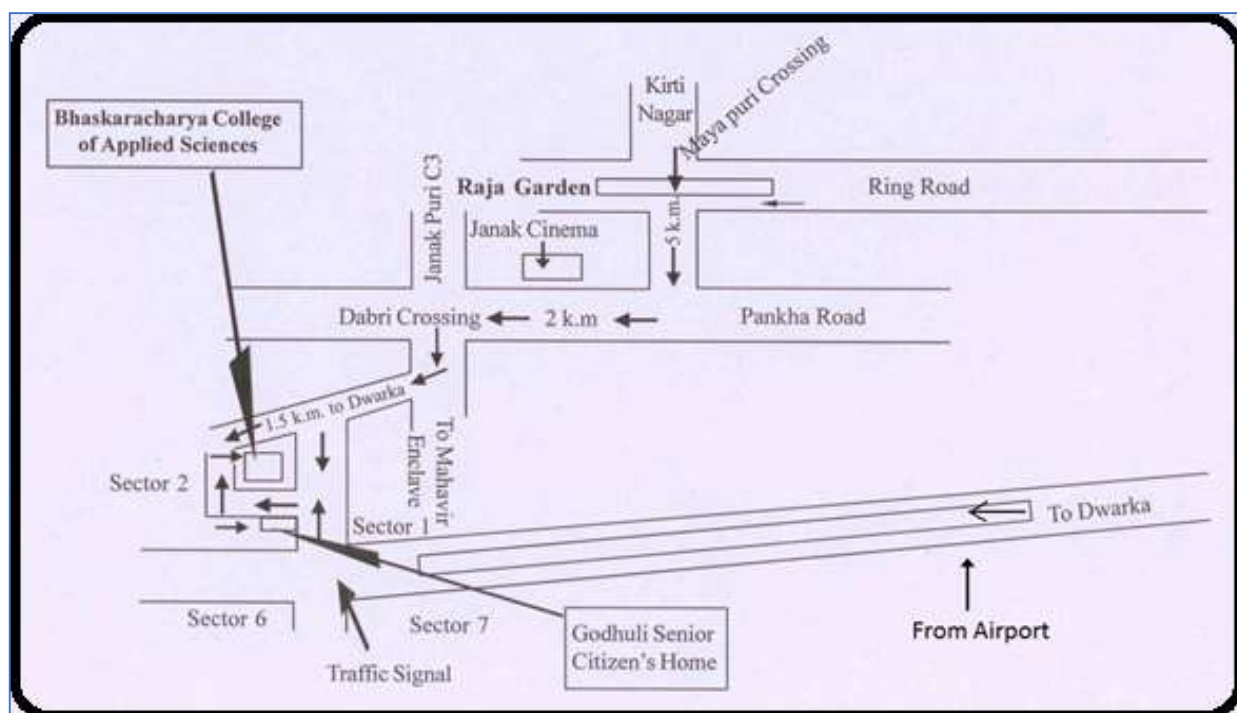
WWW.AMANMOVEMENT.ORG

Notifications of The University of Delhi about the application process, certificates/documents for admissions to Under-Graduate programs can be seen on below mentioned link.

“<https://admission.uod.ac.in/userfiles/downloads/18-08-2022-NOTICE%20-%20Certificates.pdf>”

College Map

The College is well connected by public transport viz; Delhi Metro and road transport (761,778,721,801,764, 727, RL77, 813, etc.) from all parts of Delhi. The closest metro stations are Dwarka Mor or Dwarka Sec.11 (about 3 Km from the college) and connected through feeder and other transport means.



**Bhaskaracharya College of Applied Sciences
(University of Delhi)
Sector-2, Phase-I, Dwarka, New Delhi-110075**



Phone No: 011-25087597, Fax: 25081015

Website: www.bcas.du.ac.in

Email: bhaskaracharya.college@bcas.du.ac.in

Prospectus Committee:

Dr. Saroj K. Shukla (Convener), Prof. Anand Bharadvaja, Dr. Rizwana, Dr. Sujata Bhardwaj, Dr. Vijaya Kumar Nalla, Dr. Amit Kumar Singh, Dr. Bholey Singh, Dr. Kapil Roy, Dr. Satyawati, Dr. Manoj Tiwari, Mr. Yagyadatta Goswami, Ms. Ritu Sareen.