



# SHAHEED RAJGURU COLLEGE OF APPLIED SCIENCES FOR WOMEN (UNIVERSITY OF DELHI)



# PROSPECTUS 2021-22



***Shivram Hari Rajguru***  
*(24 August 1908 — 23 March 1931)*

*Shivram Hari Rajguru was born in an average middle-class Hindu Brahmin family at Khed in Pune district in 1906. He came to Varanasi at a very early age where he learnt sanskrit and read the hindu religious scriptures. At Varanasi, he came in contact with revolutionaries. He joined the movement and became an active member of the Hindustan Socialist Republican Army (H.S.R.A). Rajguru had fearless spirit and indomitable courage. The only object of his adoration and worship was his motherland for whose liberation he considered no sacrifice too great. He was a close associate of Chandra Shekhar Azad, Sardar Bhagat Singh and Jatin Das. His field of activity was U.P. and Punjab, with Kanpur, Agra and Lahore as his headquarters. Rajguru was a good shooter and was regarded as the gunman of the party. He took part in various activities of the revolutionary movement, the most important being the murder of british police officer, J. P. Saunders at Lahore in 1928.*

*Sardar Bhagat Singh, Rajguru and Sukhdev were tried for Saunders' murder. They were convicted and sentenced to death. Rajguru along with his two comrades was hanged in the Lahore jail on the evening of 23rd March, 1931. At the time of his martyrdom, Rajguru was hardly 23 years of age.*

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# Principal's Message



I would like to welcome you to Shaheed Rajguru College of Applied Sciences for Women and to our Admission e-Prospectus 2021 for a look at the diversity of opportunity and range of experiences our students received.

Shaheed Rajguru College of Applied Sciences for Women has been transformed over the past decade. As we approach mark of over 2,000 students and 14 disciplines, we can be truly proud of our recent success. The impact of our teaching and research is now recognised around the whole nation, in particular in our consistent rise in national rankings. Enriched by a talented and diverse team of staff, we are committed to delivering excellence and creating equality of opportunity, through a spirit of partnership. Working together with determination, confidence and ambition, we can look forward to the many exciting opportunities that lie ahead of us in the coming academic session.

Shaheed Rajguru College of Applied Sciences for Women is a grade 'A' Institute accredited by NAAC and NIRF ranking 37 that offers

not only a platform for achieving academic excellence but also a nurturing environment for holistic growth and development. We have a great history in providing high-quality education catering to individual needs and preparing young people for the world of opportunities post secondary education.

The college aims to provide its students, a competitive environment and equip them to be the forerunners in their respective fields. At present, there are 14 undergraduate programs being offered by the college, namely, B.Sc. (Hons.) in Biochemistry, Biomedical Science, Chemistry, Computer Science, Electronics, Food Technology, Instrumentation, Mathematics, Microbiology, Physics and Statistics, Bachelor of Business Administration (Financial Investment Analysis), Bachelor of Management Studies and B.A. (Hons.) Psychology.

The college also stands out for its state-of-the-art infrastructure and facilities. The college is proud of its highly equipped laboratories in each department. It also has a three floored RFID Library, Wi-Fi enabled campus and advanced projection systems with interactive monitors to ensure an advanced and interactive learning experience for our students. The college has a well-equipped gymnasium which is open for all students to imbibe the seed of physical fitness. The college has hostel facility which provides accommodation to nearly 120 students. The campus design is friendly for specially-abled with ramps and elevators. We also have an indoor auditorium, an open-air amphitheater and a conference room. The 9.5 acres lush green campus adds a calming ambience to the college.

Our success rate for students progressing to Higher Education is very high. Over the years, the college has proudly witnessed many of its alumni attain remarkable success in their respective fields and there are surely many more to come. With every passing year, the college gets the opportunity to mould many bright young minds and bring out the best in them in an endeavour to enable them to reach the epitomes of success. The college believes in harbouring an atmosphere of knowledge as well as innovativeness, creativity and talent. College is committed to inculcate a sense of social responsibility amongst student by providing them ample opportunity to work for the betterment of underprivileged class of society.

The session 2021-2022 is again special due to Covid-19 pandemic. We understand that there is rising anxiety amongst admission seekers and their parents. It is pertinent to mention here that college is taking care to minimise all limitations which have arisen due to pandemic. Right from adapting to online mode of admissions, our faculty has quickly adapted to effective online mode of teaching and learning. We are committed to work hard in collaboration with parents and guardians in creating a comprehensive online mode of teaching for the effective remote learning of students.

The e-prospectus contains all the necessary information pertaining to the admission process including the procedure to fill up the admission form, fees, the syllabi of all the programs and generic elective options to help the students. Parents can get information conveniently regarding the admission process and program selection.

With the commencement of a new academic year, I warmly welcome all the first year students in their new phase of life wherein you will make life-long friends and grow both intellectually and socially. I wish you all the very best for the years to come and hope that you have an immensely productive, joyous and memorable time here.

**Prof. (Dr.) Payal Mago**  
Principal

# Admission Schedule

## Schedule for UG (Entrance/Merit -based) for the Academic Session 2021-22 :

### Schedule for UG Merit Based Admission Process\*

Process	Date
Declaration of 1st Cut-Off by Colleges	1st October, 2021 (Friday)
Candidates to apply for Admission against 1st Cut-Off	10:00 am, 04th October (Monday) – 11:59 pm, 06th October (Wednesday)
Colleges to complete approvals for Admission against 1st Cut-Off	Till 05:00 pm, 07th October (Thursday)
Last day of payment by candidates against 1st Cut-Off	05:00 pm, 08th October (Friday)
Declaration of 2nd Cut-Off by Colleges	09th October 2021 (Saturday)
Candidates to apply for Admission against 2nd Cut-Off	10:00 am, 11th October (Monday) – 11:59 pm, 13th October (Wednesday)
Colleges to complete approvals for Admission against 2nd Cut-Off	Till 05:00 pm, 14th October (Thursday)
Last day of payment by candidates against 2nd Cut-Off	05:00 pm, 15th October (Friday)
Declaration of 3rd Cut-Off by Colleges	16th October 2021 (Saturday)
Candidates to apply for Admission against 3rd Cut-Off	10:00 am, 18th October (Monday) – 11:59 pm, 21st October (Thursday)
Colleges to complete approvals for Admission against 3rd Cut-Off	Till 5:00pm 22nd October (Friday)
Last day of payment by candidates against 3rd Cut-Off	05:00 pm, 23rd October (Saturday)
Declaration of <b>Special Cut-off*</b> by Colleges	25th October (Monday)
Candidates to apply for Admission against Special Cut-Off	10:00 am, 26th October (Tuesday) – 11:59 pm, 27th October (Wednesday)
Colleges to complete approvals for Admission against Special Cut-Off	5:00pm 28th October (Thursday)
Last day of payment by candidates against Special Cut-Off	5:00pm 29th October (Friday)
Declaration of 4th Cut-Off* by Colleges	30th October (Saturday)
Candidates to apply for Admission against 4th Cut-Off	10:00 am, 1st November (Monday) – 11:59 pm, 2nd November (Tuesday)
Colleges to complete approvals for Admission against 4th Cut-Off	05:00 pm, 5th November (Friday)
Last day of payment by candidates against 4th Cut-Off	05:00 pm, 6th November (Saturday)
Declaration of 5th Cut-off*	8th November (Monday)
Candidates to apply for Admission against 5th Cut-Off	10:00 am, 9th November (Tuesday) – 11:59 pm, 10th November (Wednesday)
Colleges to complete approvals for Admission against 5th Cut-Off	11:59 pm, 11th November (Thursday)
Last date Payment of fee against 5th Cut-off	5:00pm 12th November (Friday)
Declaration of cut-offs against <b>Special Drive*</b> on Vacant Seats wherever available	13th November (Saturday)
Candidates to Apply Against Special Drive	14th-15th November (Sunday-Monday)
Last date for Payment of fee against Special Drive	16th November, 2021 (Tuesday)

\* *These cut-offs will be declared only if there are vacant seats available.*

*In case vacant seats are left, further Merit Lists may be announced by the University of Delhi.*

#### Note :

- The whole process of admission would in online mode. The minimum qualifications cut off requirements and other relevant documents would be verified online.
- On approval of the admission by the Principal of the college, fee payment will be activated on the applicant's dashboard in the Undergraduate Admission Portal.
- **The applicant has to log on to the portal to make online payment of the fee within 24 hours of the approval. The candidates must save the acknowledgment slip bearing the transaction details.**
- Once the applicant has gained admission, they will have to sign an online declaration stating, “**All the information provided by me are correct. In case any information provided by me is found to be false and/or is not supported by the documents presented by me, I understand that the admission will be immediately cancelled and no fees will be refunded. I shall abide by all the rules and regulations laid down by the University and the College.**”
- The uploaded documents will be verified by the respective colleges within the stipulated time period as and when announced on the college website. **If at this stage it is found that the information given by the applicant is false and/or is not supported by the documents presented, the admission will be immediately cancelled. No fees will be refunded in such cases.**

# College Vision & Mission

**V**ision – To emerge as one of the world’s leading institute through continuing to the highest academic standards by forging strong industry-academia bond and playing a pioneering role in research & development, so as to serve society by way of shaping professionals to conquer the present and future challenges to the socio-economic fabric of our society by dissemination of relevant knowledge through structured learning system. The college aims to change lives, build future, impart technical expertise and improve industrial links through high quality applied learning.

**M**ission – To build & nurture a new generation of professionals by providing them education with a holistic perspective. To imbibe strong ethical values so that they can work as positive change agents in the new millennium. It will be our endeavour to assimilate and disseminate practical strategies to future professionals and to encourage their understanding of strategic perception to fulfil the mission of the organization in the fast changing global environment.

## Academic Calendar 2021-22

Semester III	
Classes Begin	16th August, 2021 (Monday)
Dispersal of Classes, preparation leave and practical examination begin	8th December, 2021 (Wednesday) to 14th December, 2021 (Tuesday)
Theory examination begin	15th December, 2021 (Wednesday)
Semester break	29th December, 2021 (Wednesday) to 2nd January, 2022 (Sunday)
Semester IV	
Classes Begin	3rd January, 2022 (Monday)
Mid Semester Break	17th-20th March, 2022 (Thursday to Sunday) <b>Note</b> : Holi on 18th March, 2022 (Friday)
Classes begin after Mid Semester break	21st March, 2022 (Monday)
Dispersal of classes, preparation leave and practical examination begin	28th April, 2022 (Thursday) to 8th May, 2022 (Sunday)
Theory Examination Begin	9th May, 2022 (Monday)
Summer Vacation	24th May, 2022 (Tuesday) to 19th July, 2022 (Tuesday)
Semester V	
Classes Begin	20th July, 2022 (Wednesday)
Mid-Semester Break	10th-17th October, 2022 (Monday to Monday)
Classes Begin after Mid-Semester Break	18th October, 2022 (Tuesday)
Dispersal of Classes, Preparation Leave and Practical Examination Begin	16th November, 2022 (Wednesday) to 29th November, 2022 (Tuesday)
Theory Examination Begin	30th November, 2022 (Wednesday)
Winter Break	17th December, 2022-1st January, 2023 (Saturday to Sunday)
Semester VI	
Classes Begin	2nd January, 2023 (Monday)
Mid-Semester Break	13th-20th March 2023 (Monday to Monday)
Classes Begin after Mid-Semester Break	21st March, 2023 (Tuesday)
Dispersal of Classes, Preparation Leave and Practical Examination Begin	28th April, 2023 (Friday) to 10th May, 2023 (Wednesday)
Theory Examination Begin	11th May, 2023 (Thursday)
Winter Break	26th May, 2023 (Friday) to 19th July, 2023 (Wednesday)

# Admission Details

## Academic Qualifications

- (a) The candidate should have passed or have appeared in March/April 2021 in Senior Secondary School Examination of CBSE or any other examination considered equivalent by the University of Delhi.
- (b) Compartment cases of current session will not be considered for admission.

## Documents Required (in offline mode)

The **Original Certificates** and two sets of self-attested photocopies of the following documents have to be submitted at the time of admission :

1. Printout of Admission Form of University of Delhi submitted online mentioning the College name and Course opted.
2. Admission Form of the College duly filled.
3. Class 10th Board Examination Certificate as evidence of date of birth.
4. Class 10th Mark-sheet.
5. Class 12th Mark-sheet.
6. Class 12th Provisional/Original Certificate.
7. SC/ST/PwD/CW/KM/EWS Certificate (in the name of the candidate) issued by the competent authority.
8. OBC (Non-Creamy Layer) Certificate (in the name of the candidate) as in Central List.
9. Five passport size self-attested photographs.

The University will accept self-attested copies of documents/papers provided by the students. It is made clear that if any false attestation/ falsified records are detected, the students will be debarred from attending any course in the University or its college(s) for next five years and in addition, a criminal case under relevant section of IPC (viz. 470, 471, 474, etc.) will be instituted against her.

## Children/Widows of armed personnel killed/disabled in action during the hostilities, J & K migrants

The candidates falling in any of the above categories are required to register themselves for admission with University of Delhi as per the modalities laid down by the University.

## Reservation of Seats

- a) 22.5% seats are reserved for SC/ST candidates (SC 15 % and ST 7.5 %, interchangeable, if necessary).
- b) 5% seats are reserved for the Children/Widows of armed personnel killed/disabled in action during the hostilities (CW) (Supernumerary Seats).
- c) 27% seats are reserved for OBC candidates (Non-Creamy layer, Central List).
- d) 10% seats are reserved for Economically Weaker Section (EWS) Category.
- e) 5% seats are reserved for the Persons with Disabilities (PwD) candidates (Supernumerary Seats).

# Admission Details

## Guidelines for Admission on the Basis of Excellence in Sports 2021-22

The college offers admission in sports category for various sports as mentioned below to female candidates. The admission on the basis of sports shall be administered through centralized Sports Merit List based on the Highest Marks obtained in the uploaded Merit/Participation Sports Certificate and order of their preferences of programs and colleges as indicated by the applicant. For further details, kindly refer to the bulletin issued by the University of Delhi. Total 17 (seventeen) sports persons in the following games and positions may be selected.

S.No.	Game/Sport	Position/Event/ Weight category	Seats in Sports Quota		Total 17 (Seventeen)
			In Figures	In Words	
1.	Badminton	–	02	Two	02 (Two)
2.	Basketball	Centre	01	One	03 (Three)
		Forward	01	One	
		Guard	01	One	
3.	Chess	–	01	One	01 (One)
4.	Kho-kho	Runner	01	One	02 (Two)
		Chaser	01	One	
5.	Shooting	10 mts. Air Rifle	01	One	02 (Two)
		10 mts. Air Pistol	01	One	
6.	Softball	Pitcher	01	One	02 (Two)
		Catcher	01	One	
7.	Tennis	Spiker	01	One	01 (One)
8.	Table tennis	–	02	Two	02 (Two)
9.	Volleyball	Setter	01	One	02 (Two)
		Libero	01	One	

- The college reserves the right to reshuffle the sports quota seats.
- Original certificates issued by the Issuing Authority of Zonal, Inter Zonal, State, National and/or International level in the games relevant to the college only will be considered.
- Selected candidates will have to submit an undertaking on Judicial Stamp Paper of Rs. 100/- at the time of admission stating that “She will play for college and university in all the years during her undergraduate course”.
- A medical fitness certificate from Government Hospital/Registered Medical Practitioner should be submitted.

## Guidelines for Admission on the Basis of ECA Quota 2021-22

The college offers admissions in ECA (Extra Curricular Activities) category in the field of dance, music (both vocal and instrumental), dramatics (street play), N.S.S. etc. There are total of (11) eleven seats for ECA quota. Students selected under this quota will have to necessarily become member of the respective college societies and will have to represent college as and when required. Students selected under this quota will have to sign an undertaking accepting these terms and conditions of the college.

S.No.	ECA Category	Subcategory Code	Subcategory	ECA Seats in	
				Figures	Words
1	Dance	2a	Indian Classical	01	One
		2c	Western	01	One
		2d	Choreography	01	One
2	Debate	3a	Hindi	01	One
		3b	English	01	One
3	Music (Vocal)	6a	Indian (Classical & Light)	01	One
4	Theatre	9		01	One
5	N.S.S.	13		02	Two
6	Yoga	14		02	Two

**Note :** Representation of at least 1% each (of total intake capacity of the college) of ECA and Sports is mandatory for all colleges, subject to a ceiling of 5% (of total intake capacity of the college) in total for ECA and Sports together.

# Eligibility Criteria

## Admissions to Undergraduate Programs 2021-22

Admissions to undergraduate (UG) courses at the University of Delhi are merit-based (that is, based on marks scored in Class XII Board/qualifying examinations) or entrance-based (that is, based on written/practical tests depending on the course selected by an aspiring student). All applicants must register through the University of Delhi online admissions portal <http://admissions.du.ac.in>. All undergraduate admissions for 2020-21 will be administered only through this portal.

## Eligibility Criteria for Undergraduate Courses

- The applicant must be a citizen of India. (Applicants seeking admission under Foreign Students' category to apply separately on Foreign Students' Registry website, <http://fsr.du.ac.in>.)
- The applicant should have passed the Class XII examination of any Board/ University examination in India or in any foreign country recognized as equivalent to the 10+2 system by the Association of Indian Universities (AIU).
- The applicant should have "passed" individually in each subject required (including practicals if any) for calculating merit and eligibility to the course they seek admission in. Applicants with "compartment" results are not eligible to apply.
- Applicants with gap year(s) will not be at any disadvantage for the purpose of admission to undergraduate courses.
- Applicants under the UR/SC/ST/OBC/EWS categories are eligible to seek admission based on both merit and entrance tests to courses in all Colleges/ Departments (except Minority Colleges, wherein some categories may not be applicable).
- Applicants from Sikh & Christian minorities may also seek admission under the minority quota in the Minority Colleges of the University.
- The following categories are designated "supernumerary" : i) PwD (Persons with Disabilities); ii) CW (Children/Widows of Personnel of the Armed Forces including Para-Military); iii) KM (Kashmiri Migrants); iv) Prime Minister's special scholarship for Jammu and Kashmir; v) SS (Nominated Sikkimese Students); vi) WQ (Ward Quota); vii) ECA (Extra-Curricular Activities); viii) Sports.

Categories i-viii above are applicable to courses where admission is based on merit. Only categories i and ii above are applicable to courses where admission is based on entrance tests.

## Additional Eligibility Criteria

<b>B. A. (Hons.) Psychology</b>	<ul style="list-style-type: none"> <li>• An aggregate of 45% marks in the qualifying examination. Merit shall be determined on the basis of one language and three best academic/elective subjects as specified in List A and List B.</li> <li>• Inclusion of any subject other than those from List A and List B in the combination of best three will lead to a deduction of 2.5% per such subject included in the aggregate "Best Four" percentage.</li> <li>• Out of three academic/elective subjects chosen above, one must be the concerned subject in which the admission is sought, failing which a deduction of 2.5% will be imposed on the aggregate "Best Four" percentage.</li> </ul>
<b>B. B. A. [F. I. A.] (Bachelor of Business Administration [Financial Investment Analysis]) / B. M. S. (Bachelor of Management Studies)</b>	<ul style="list-style-type: none"> <li>• Aggregate of 60% or more marks in the qualifying examination in four subjects : English, Mathematics &amp; any two other subjects included in List B.</li> <li>• Selection will be based on rank computed from the combined weighted average of percentage scored in the entrance test and the percentage scored in the qualifying examination where the weights are: Entrance Test: 65%, Qualifying Examination : 35%.</li> </ul>
<b>B. Sc. (Hons.) Biochemistry</b>	<ul style="list-style-type: none"> <li>• 55% or more marks in the aggregate of Chemistry, Biology / Biotechnology/Biochemistry and Physics / Mathematics (Practical &amp; Theory together) and passing in one compulsory language (i.e. English). or 55% or more marks in the aggregate of Chemistry, Biology/Biotechnology/Biochemistry and Physics/Mathematics (Practical &amp; Theory together) and 50% in one compulsory language.</li> <li>• Merit will be calculated based on aggregate percentage in Chemistry, Biology/Biotechnology/ Biochemistry and Physics/Mathematics.</li> </ul>
<b>B. Sc. (Hons.) Biomedical Science</b>	<ul style="list-style-type: none"> <li>• 55% or more marks in the aggregate of Physics, Chemistry, Biology/ Biotechnology/ Biochemistry with 50% or more marks in compulsory language, i.e., English.</li> <li>• Merit will be calculated based on aggregate percentage in Physics, Chemistry, Biology/ Biotechnology/ Biochemistry.</li> <li>• Applicants with Physics, Chemistry, Biology/ Biotechnology/ Biochemistry who scored 60% or more marks in Mathematics in the qualifying examination will be given an advantage of 3% over and above their Physics, Chemistry, Biology/Biotechnology/ Biochemistry aggregate.</li> </ul>
<b>B. Sc. (Hons.) Physics / Chemistry / Instrumentation / Electronics</b>	<ul style="list-style-type: none"> <li>• 55% or more marks in the aggregate of Physics, Chemistry and Mathematics and 50% or more marks in one compulsory language.</li> <li>• Merit will be calculated based on aggregate percentage in Physics, Chemistry and Mathematics.</li> </ul>
<b>B. Sc. (Hons.) Computer Science</b>	<p>Merit will be calculated based on "Best Four" of Mathematics, one language and two other subjects listed as academic / elective subjects, as specified in List A and List B above, as per the following:</p> <ul style="list-style-type: none"> <li>• 60% or more marks required in Mathematics;</li> <li>• 60% or more marks in aggregate of four subjects including Mathematics, one language and any two of Physics, Chemistry and Computer Science/ Informatics Practices/Computer Application.</li> <li>• Candidates from other streams (with Mathematics in Class XII), will have a disadvantage of 2% in aggregate of required four subjects.</li> </ul>

# Eligibility Criteria

<b>B. Sc. (Hons.) Food Technology</b>	<ul style="list-style-type: none"> <li>55% or more marks in the aggregate of Physics, Chemistry and Mathematics/Biology/ Biotechnology/ Biochemistry (Practical &amp; Theory together) and 50% in English as a compulsory language</li> <li>Merit will be calculated based on aggregate percentage in Physics, Chemistry, Mathematics/Biology /Biotechnology/ Biochemistry.</li> <li>Applicants who have studied both Mathematics &amp; Biology at qualifying exam will be given 3% relaxation.</li> </ul>
<b>B. Sc. (Hons.) Mathematics/ Statistics</b>	<ul style="list-style-type: none"> <li>50% marks in Mathematics and an aggregate of 45% marks in the qualifying examination.</li> <li>The Merit shall be determined on the basis of one language, Mathematics and two best elective/academic subjects.</li> </ul>
<b>B. Sc. (Hons.) Microbiology</b>	<ul style="list-style-type: none"> <li>55% or more marks in the aggregate of Physics, Chemistry, Biology/Biotechnology/Biochemistry (Practical &amp; Theory together) and 50% or more marks in one compulsory language i.e. English.</li> <li>Merit will be calculated based on aggregate percentage in Physics, Chemistry, Biology/ Biotechnology/ Biochemistry.</li> </ul>

## List A : Language Subjects

List A1					List A2
Assamese Core/ Assamese Elective	Gujarati Core/ Gujarati Elective	Maithili Core/ Maithili Elective	Odia Core/ Odia Elective	Tamil Core/ Tamil Elective	Arabic Core/ Arabic Elective
Bengali Core/ Bengali Elective	Hindi Core/ Hindi Elective	Malayalam Core/ Malayalam Elective	Punjabi Core/ Punjabi Elective	Telegu Core/ Telegu Elective	French Core/ French Elective
Bodo Core/ Bodo Elective	Kannada Core/ Kannada Elective	Manipuri Core/ Manipuri Elective	Sanskrit Core/ Sanskrit Elective	Urdu Core/ Urdu Elective	German Core/ German Elective
Dogri Core/ Dogri Elective	Kashmiri Core/ Kashmiri Elective	Marathi Core/ Marathi Elective	Santhali Core/ Santhali Elective	Persian Core/ Persian Elective	Italian Core/ Italian Elective
English Core/ English Elective	Nepali Core/ Nepali Elective	Konkani Core/ Konkani Elective	Sindhi Core/ Sindhi Elective		Spanish Core/ Spanish Elective

## List B : Elective Subjects

Accountancy	Computer Science/ Computer Applications/ Informatics Practices	Mathematics	Anthropology	Economics
Philosophy/ Logic & Philosophy	Biology/ Biochemistry/ Biotechnology	Geography	Physics	Business Mathematics
Geology	Political Science	Chemistry	History	Psychology
Civics	Home Science	Sociology	Legal Studies	Statistics
Commerce/ Business Studies	—	—	—	—

**Note :** The University may define any other relevant subjects as academic/elective for a particular course.

In case an applicant has studied elective and core languages, the core/elective language subject will be treated as language, while elective language can be considered as academic/elective subject.

# The College

**S**haheed Rajguru College of Applied Sciences for Women a constituent college of University of Delhi and funded by Govt. of NCT of Delhi, was established in the year 1989. The college offers the following programs :

<b>S. No.</b>	<b>Name of Program</b>	<b>S. No.</b>	<b>Name of Program</b>
1	<b>B. Sc. (Hons.) Biochemistry</b>	8	<b>B. Sc. (Hons.) Mathematics</b>
2	<b>B. Sc. (Hons.) Biomedical Sciences</b>	9	<b>B. Sc. (Hons.) Microbiology</b>
3	<b>B. Sc. (Hons.) Chemistry</b>	10	<b>B. Sc. (Hons.) Physics</b>
4	<b>B. Sc. (Hons.) Computer Science</b>	11	<b>B. Sc. (Hons.) Statistics</b>
5	<b>B. Sc. (Hons.) Electronics</b>	12	<b>B. B. A. [F. I. A.] (Bachelor of Business Administration [Financial Investment Analysis])</b>
6	<b>B. Sc. (Hons.) Food Technology</b>	13	<b>Bachelor of Management Studies</b>
7	<b>B. Sc. (Hons.) Instrumentation</b>	14	<b>B. A. (Hons.) Psychology</b>

These programs provide the platform where the students are equipped with essential and practical knowledge to face the challenging positions worldwide. The college has about 1,000 students at present hailing from different parts of the country.

An important aspect of teaching process is the ability to learn, unlearn and relearn. The teaching philosophy of the college is to follow coherent relationship between the teacher and the student. The college has efficient staff to carry out effective and smooth functioning of day to day activities.

Besides regular programs, the college conducts short-term courses, workshops and lectures in various disciplines. The college in collaboration with CISCO runs a CISCO networking academy and prepares the students for CCNA industry certification. The college also has an Indira Gandhi National Open University (IGNOU) centre for PG Diploma in Library Automation and Networking (PGDLAN). The college also offers certification and diploma courses in German language.

The college gives its students an opportunity to excel in extra and co-curricular activities as well. There are various societies in the college that students can join to explore their potential apart from academics.

# IQAC@SRCASW

Since quality enhancement is a continuous process, the Internal Quality Assurance Committee (IQAC) is the part of college system that works towards realization of the goals of quality enhancement and sustenance. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of the college. Feedback response from students, parents and alumni leads to a continuous cycle of improvement. Result analysis is an important parameter to measure our strength. The college actively organizes inter and intra college workshops, seminars, activities etc. for holistic growth of students and staff. Mentorship for each student is another aspect of student-teacher interaction.

## The Staff@SRCASW



*Teaching Staff*



*Para-Teaching and Administrative Staff*

# The Faculty

## Principal, SRCASW



**Prof. (Dr.) Payal Mago<sup>14</sup>**  
*Ph.D. (Botany),  
M.Sc. (Botany),  
University of Delhi*

## Department of Biology



**Dr. Rekha Mehrotra<sup>#2</sup>**  
*(Associate Professor)  
Ph.D. (Genetics), M.Phil (Botany),  
M.Sc. (Botany), University of Delhi*

## Department of Biochemistry



**Dr. Sadhna Jain<sup>#</sup>**  
*(Associate Professor)  
Ph.D. (Biochemistry),  
M.Sc. (Biochemistry),  
University of Delhi*

## Department of Biomedical Science



**Dr. Radhika Bakshi**  
*(Assistant Professor)  
Ph.D. (Biochemistry) AIIMS,  
M.Sc. (Biochemistry),  
University of Delhi*



**Dr. Shruti Banswal<sup>#</sup>**  
*(Assistant Professor)  
Ph.D. (Molecular Biology & Biotechnology),  
IARI Delhi, M.Sc. (Plant Molecular Biology),  
University of Delhi*

## Department of Biomedical Science



**Dr. Varsha Mehra**  
*(Assistant Professor)  
Ph.D. (Biomedical Science) DU,  
M.Sc. (Biotechnology), JNU*



**Dr. Mohd. Saquib Ansari**  
*(Assistant Professor)  
Ph.D. (Biochemistry), M.Sc. (Biochemistry)  
Bundelkhand University*



**Dr. Indu Arora**  
*(Assistant Professor)  
Ph.D. (Chemistry),  
M.Sc. (Chemistry),  
University of Delhi*



**Dr. Jasjeet Kaur<sup>#</sup>**  
*(Associate Professor)  
Ph.D. (Biotechnology), M.Sc. (Chem.),  
Punjab University, Patiala*



**Dr. Suruchi Chawla<sup>#</sup>**  
*(Assistant Professor)  
Ph.D. (Comp. Sc.), University of Delhi  
M.Tech. (CSE), Kurukshetra University*

## Deptt. of Chemistry

## Deptt. of Computer Science

## Department of Computer Science



**Ms. Deepali Bajaj**  
*(Assistant Professor)  
M.Phil. (CS), Madurai Kamraj Univ.,  
MCA (IGNOU)*



**Dr. Aakanksha**  
*(Assistant Professor)  
Ph.D. (CS), DU, M.Phil. (CS), MKU  
M.Sc. (CS), Banasthali Vidyapeeth*



**Ms. Venika Gupta**  
*(Associate Professor)  
M.Phil. (Electronics),  
M.Sc. (Electronics),  
University of Delhi*



**Ms. Preeti Singhal<sup>#</sup>**  
*(Associate Professor)  
M.Phil. (Electronics),  
M.Sc. (Electronics), University of Delhi*



**Dr. Amita Kapoor**  
*(Associate Professor)  
Ph.D. (Opto-Electronics), DU,  
M.Sc. (Electronics), JMI University*

## Department of Electronics

## Department of Food Technology



**Dr. Deepa Joshi**  
*(Associate Professor)  
Ph.D. (Dairying) NDRI, Karnal,  
M.Sc. (Food Tech), G. B. Pant Univ.*



**Dr. Ranjana Singh**  
*(Associate Professor)  
Ph.D. (Food Tech), M.Sc. (Food Tech),  
G. B. Pant University*



**Ms. Para Dholakia<sup>#</sup>**  
*(Assistant Professor)  
M.Sc. (Food & Nutrition),  
University of Baroda*



**Dr. Daya Bhardwaj<sup>#3</sup>**  
*(Assistant Professor)  
Ph.D., TERI University,  
M.Sc. (MICA) Jiwaji University*



**Dr. Sneha Kabra**  
*(Assistant Professor)  
Ph.D. (Electronics),  
M.Sc. (Electronics),  
University of Delhi*

## Department of Instrumentation

## Department of Mathematics



**Dr. Punita Saxena<sup>#</sup>**  
*(Associate Professor)  
Ph.D. (Maths) JMI University,  
M.Phil., M.Sc., University of Delhi*

## Department of Physics



**Dr. Alka Vohra Kuanr<sup>#</sup>**  
*(Associate Professor)  
Ph.D. (Physics),  
M.Sc. (Physics), University of Delhi*

# Teacher-in-Charge, Respective Department | 1 Co-ordinator, Department of Management and Financial Studies |  
2 Co-ordinator, Department of Microbiology | 3 Co-ordinator, Department of Psychology | 4 Co-ordinator, Department of Statistics |

# Department of Biochemistry

*'Innovation is our Tradition'*



The Department offers B.Sc. (Honours) Biochemistry, a three-year degree program consisting of six semesters. The curriculum includes the study of molecules of life, cell biology, proteins, enzymes, gene organization, human physiology, infectious diseases, plant biochemistry genetics, immunology to name a few. This curriculum gives the students an opportunity to choose their master's programs and industrial jobs in various disciplines, giving them an edge over other programs. The department is located on the ground floor in the academic block.

### **Academic Achievements**

Ms. Ritika Bassi (Batch 2017-2020) secured 1st position in University of Delhi and was awarded a gold medal at the university convocation. Students are pursuing masters in various reputed universities like the University of Delhi, Jawaharlal Nehru University, Hyderabad Central University, Banaras Hindu University and Jamia Millia Islamia amongst many others.

### **APromising Future – Research at UG Level**

- The laboratories are well equipped with basic and advanced instruments ranging from pH meter to UV visible spectrophotometer, refrigerated centrifuges, electrophoresis units, PCR etc. to perform all kinds of experiments required for the undergraduate curriculum.
- The department also encourages students to work on small research projects. A total of 8 research projects were accepted at an international conference (Nutricon'9, Thailand). The project "To study the effect of natural ingredients on seborrheic dermatitis (dandruff)" (Principal Investigator: Dr. Lakshmi Sarin) won 1st prize in innovative idea category and the project "To estimate the ascorbic acid content by us in the alternative method : Iodine clock(Principal Investigator: Dr. Sadhna Jain) won 2nd prize in oral presentation at an international conference on "Frontiers of Biochemistry & Biotechnology: Strategies to combat human diseases" at Shivaji College, University of Delhi.
- Students are also taken for regular educational visits to research institutes and industries like Translational Health Science and Technology Institute (THSTI), Dabur Research Foundation and DU, South Campus.

### **Extra-Curricular Activities**

- "**Vinculum**", the elected student society of the department regularly organizes seminars, intellectual talks, training programs, alumni meetings and workshops with national and international eminent personalities to encourage students to develop a holistic approach and to explore research interests beyond classroom teaching.
- Another highlight of the department is its annual tech-fest "**Elixir**" which is organized every year to celebrate the essence of science. The department also releases its annual departmental magazine '**Unlocking Minds**'.
- The department organizes both **educational and fun trips** to give the feeling of rejuvenation to the students. The past trips to Nainital and Mussoorie have been very well received by the students.
- Apart from academics, the department encourages students to participate in various intra and inter-college cultural activities and events.
- The department also organizes regular mentor-mentee meetings, environmental awareness activities and celebrates different festivals. Voluntary student mentors are also appointed for slow learners. All these activities promote the essence of value-based education.



# Course Contents

## B.Sc. (Hons.) Biochemistry

SEMESTER 1	SEMESTER 2
C-I : Molecules of Life C-II : Cell Biology AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	C-III : Proteins C-IV : Enzymes AECC-II : EVS or English/MIL Communication GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
C-V : Metabolism of Carbohydrates and Lipids C-VI : Membrane Biology and Bioenergetics C-VII : Hormone – Biochemistry and Function SEC-I : Skill Enhancement Course GE-III : Generic Elective	C-VIII : Human Physiology C-IX : Gene Organisation, Replication and Repair C-X : Metabolism of Amino Acids and Nucleotides SEC-II : Skill Enhancement Course GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI : Concepts in Genetics C-XII : Gene Expression and Regulation DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII : Genetic Engineering and Biotechnology C-XIV : Immunology DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

C: Core Courses (14); GE: Generic Elective (04); AECC: Ability Enhancement Compulsory Course (02); SEC: Skill Enhancement Courses (02); DSE: Discipline Specific Elective (04)

### Generic Elective Papers (for other departments)

(Any one per Semester in Semester I-IV)

- BCH GE-1: Biomolecules
- BCH GE-2: Techniques in Biochemistry
- BCH GE-3: Proteins and Enzymes
- BCH GE-4: Biochemical Correlation of Diseases
- BCH GE-5: Intermediary Metabolism
- BCH GE-6: Biochemical Applications in Forensics
- BCH GE-7: Recombinant DNA Technology

### Skill Enhancement Course

(Any one per Semester in Semester III-IV)

- BCH SEC-1: Biochemical Techniques

- BCH SEC-2: Biostatistics
- BCH SEC-3: Research Methodology
- BCH SEC-4: Bioinformatics
- BCH SEC-5: Microbial Techniques

### Discipline Specific Elective

(Any one per Semester in Semester V-VI)

- BCH DSE-1: Nutritional Biochemistry
- BCH DSE-2: Advanced Cell Biology
- BCH DSE-3: Microbiology
- BCH DSE-4: Molecular Basis of Infectious Diseases
- BCH DSE-5: Plant Biochemistry
- BCH DSE-6: Advanced Methodologies

# Department of Biomedical Science



**B**iomedical Science refers to application of biology-based-science for medical use. B.Sc. (Hons.) Biomedical Science is a three-year undergraduate programme, that was started in Shaheed Rajguru College of Applied Sciences for Women in 2005 with the objective to provide a strong platform in a wide range of medically related disciplines like Human Physiology, Genetics, Biochemistry, Immunology, Pathology and Microbiology.

Subjects like Bioinformatics, Biophysics, Toxicology, Statistics, Biotechnology, Computational Biology and Medicinal Chemistry in the curriculum makes this truly interdisciplinary which is the need for research in present scenario. The department has state of the art laboratory facilities with latest equipments including thermocycler, UV spectro-photometer, gel electrophoresis units, centrifuges, incubators, shakers, autoclaves, rotary vacuum and laminar flows which aptly supplement the theoretical knowledge of the subjects with relevant hands on training.

The department has students' society "Chimera" which organises seminars and interactive sessions with eminent academicians and entrepreneurs to keep them abreast with latest research developments. An annual departmental scientific fest, "Plexus" is also organised to celebrate science, in which students are encouraged to participate, discuss and express for their overall personality development. The department regularly organizes conferences & workshops.

The department faculty is actively involved in research. Visits to various reputed research laboratories like RCB, Dabur India Limited, NBRC and ICGEB are also organised.

B. Sc. (Honours) Biomedical Science program equips the students with knowledge and transferable skills necessary for a career in research in both basic and applied sciences. The students graduating from this program join pharmaceutical companies and pursue higher education in reputed institutes like IIT, IISER, TIFR, Indian Institute of Science (IISc), NII, Jawaharlal Nehru University (JNU) to name a few. The program also provides avenues for self-employment such as establishing a diagnostic laboratory, freelance license inspector for pollution control in industries, setting up of a biotechnology unit for production of commercially available products, besides endless vistas for those interested in research in any field of applied biology.

# Course Contents

## B.Sc. (Hons.) Biomedical Science

SEMESTER 1	SEMESTER 2
C-I BMS-101 : Bioorganic Chemistry C-II BMS-102 : Cell and Radiation Biology AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	C-III BMS-201 : Principles of Genetics C-IV BMS-202 : Human Physiology & Anatomy I AECC-II : EVS or English/MIL Communication GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
C-V BMS-301 : Biochemistry C-VI BMS-302 : Human Physiology & Anatomy II C-VII BMS-303 : Medical Microbiology SEC-I : Skill Enhancement Course GE-III : Generic Elective	C-VIII BMS-401 : Immunobiology C-IX BMS-402 : Molecular Biology C-X BMS-403 : Medicinal Chemistry SEC-II : Skill Enhancement Course GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI BMS-501 : Biophysics C-XII BMS-502 : Pharmacology DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII BMS-601 : Human Pathology C-XIV BMS-602 : Toxicology DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

### GE 1-4 : Generic Elective Papers (for other departments)

(Any one per Semester in Semester I-IV)

- BMS-G1 : Basics of Immunology
- BMS-G2 : Biological Chemistry
- BMS-G3 : Biosafety and Bioethics
- BMS-G4 : Biostatistics
- BMS-G5 : Bridging Information Technology and Biotechnology
- BMS-G6 : Concepts in Biotechnology
- BMS-G7 : Concepts in Medicinal Chemistry and Drug Development
- BMS-G8 : Intellectual Property Rights (IPR) for Biologists
- BMS-G9 : Pathological Basis of Disease
- BMS-G10 : Pharmacology and Toxicology
- BMS-G11 : Tools and Model Organisms in Biomedical Research

### SEC 1-2 : Skill Enhancement Course

(Any one per Semester in Semester III-IV)

- BMS-S1 : Methods in Epidemiological Data Analysis (EDA)
- BMS-S2 : Medical Laboratory Diagnostics (MLD)
- BMS-S3 : Techniques for Forensic Science
- BMS-S4 : Tools in Modern Biology

### DSE 1-4 : Discipline Specific Elective

(Any two per Semester in Semester V-VI)

- BMS-A : Computational Biology and Drug Discovery
- BMS-B : Genome Organisation and Function
- BMS-C : Human Genetics
- BMS-D : Medical Biochemistry
- BMS-E : Medical Biotechnology
- BMS-F : Project Work  
(can be chosen only in Semester VI)

# Department of Chemistry

The Department of Chemistry conducts a three year B.Sc. (Hons.) Chemistry program. It has four well-equipped laboratories including a research laboratory. The laboratories cater to three broad branches of chemistry viz. inorganic, organic and physical chemistry. Several research projects including innovation projects have been carried out in the research laboratory.

The labs are well-equipped with various instruments like UV-Vis spectrophotometer, electronic balances, microprocessor-based centrifuge (16,000 rpm), magnetic stirrers with hot plate, vortex shaker, rotary vacuum pumps, digital pH meter, digital and electric melting point apparatus, distillation units, fume hood etc.

The students of the department actively participate in various extracurricular activities and are members of different societies of the College. Besides, they also attend national level conferences and seminars to keep themselves abreast in recent innovations and developments in the field of chemistry and allied subjects. Summer internship projects organised by the department add on to their research capabilities.

The department has a vibrant chemical society “Alchemy” which is platform for students and teachers to interact beyond classroom. The society organises popular lectures by eminent scholars and scientists on regular basis to enrich its members with latest developments in the fields related to Chemistry. Technical festival and workshops are organised to provide exposure to students. Educational excursions educate the students beyond classroom.

Students have been selected for Master’s programs in various prestigious universities and institutes, such as Indian Institute of Technology (Chennai, Dhanbad, Gandhi Nagar, Mumbai), Indian Institutes of Science Education and Research (Mohali), University of Delhi, Indian Institute of Management (Ranchi), University of Glasgow (U.K.), University College (Dublin, Ireland), amongst many others.



# Course Contents

## B.Sc. (Hons.) Chemistry

SEMESTER 1	SEMESTER 2
AECC-I : English/MIL Communication or EVS Core Course-I : Inorganic Chemistry-I Core Course-II : Physical Chemistry-I Core Course-I Practical : Inorganic Chemistry-I Lab Core Course-II Practical : Physical Chemistry-I Lab Generic Elective-1 Generic Elective-1 Practical	AECC-II : EVS or English/MIL Communication Core Course-III : Organic Chemistry-I Core Course-IV : Physical Chemistry-II Core Course-III Practical : Organic Chemistry-I Lab Core Course-IV Practical : Physical Chemistry-II Lab Generic Elective-2 Generic Elective-2 Practical
SEMESTER 3	SEMESTER 4
Core Course-V : Inorganic Chemistry-II Core Course-VI : Organic Chemistry-II Core Course-VII : Physical Chemistry-III Core Course-V Practical : Inorganic Chemistry-II Lab Core Course-VI Practical : Organic Chemistry-II Lab Core Course-VII Practical : Physical Chemistry-III Lab Skill Enhancement Course-1 Generic Elective-3 Generic Elective-3 Practical	Core Course-VIII : Inorganic Chemistry-III Core Course-IX : Organic Chemistry-III Core Course-X : Physical Chemistry-IV Core Course-VIII Practical : Inorganic Chemistry-III Lab Core Course-IX Practical : Organic Chemistry-III Lab Core Course-X Practical : Physical Chemistry-IV Lab Skill Enhancement Course-2 Generic Elective-4 Generic Elective-4 Practical
SEMESTER 5	SEMESTER 6
Core Course-XI : Organic Chemistry-IV Core Course-XII : Physical Chemistry-V Discipline Specific Elective-1 Discipline Specific Elective-2 Core Course-XI Practical : Organic Chemistry-IV Lab Core Course-XII Practical : Physical Chemistry-V Lab Discipline Specific Elective-1 Practical Discipline Specific Elective-2 Practical	Core Course-XIII : Inorganic Chemistry-IV Core Course-XIV : Organic Chemistry-V Discipline Specific Elective-3 Discipline Specific Elective-4 Core Course-XIII Practical : Inorganic Chemistry-IV Lab Core Course-XIV Practical : Organic Chemistry-V Lab Discipline Specific Elective-3 Practical Discipline Specific Elective-4 Practical

### Core Papers

1. Inorganic Chemistry I : Atomic Structure & Chemical Bonding
2. Physical Chemistry I : States of Matter & Ionic Equilibrium
3. Organic Chemistry I : Basics and Hydrocarbons
4. Physical Chemistry II : Chemical Thermodynamics and its Applications
5. Inorganic Chemistry II : s-and p-Block Elements
6. Organic Chemistry II : Oxygen Containing Functional Groups
7. Physical Chemistry III : Phase Equilibria and Electrochemical Cells
8. Inorganic Chemistry III : Coordination Chemistry
9. Organic Chemistry III : Heterocyclic Chemistry
10. Physical Chemistry IV : Conductance & Chemical Kinetics
11. Organic Chemistry IV : Biomolecules
12. Physical Chemistry V : Quantum Chemistry & Spectroscopy
13. Inorganic Chemistry IV : Organometallic Chemistry
14. Organic Chemistry V : Spectroscopy

### Discipline Specific Elective Papers (Credit : 06 each) (4 papers to be selected)

- DSE-1 Novel Inorganic Solids  
 DSE-2 Inorganic Materials of Industrial Importance  
 DSE-3 Applications of Computers in Chemistry  
 DSE-4 Analytical Methods in Chemistry  
 DSE-5 Molecular Modelling & Drug Design  
 DSE-6 Polymer Chemistry  
 DSE-7 Research Methodology for Chemistry  
 DSE-8 Green Chemistry  
 DSE-9 Industrial Chemicals & Environment  
 DSE-10 Instrumental Methods of Chemical Analysis  
 DSE-11 Nanoscale Materials and their Applications  
 DSE-12 Dissertation

### Other Discipline : GE 1 to GE 4

1. Mathematics
2. Physics
3. Computer Science
4. Economics

### Skill Enhancement Courses

1. IT Skills for Chemists
2. Basic Analytical Chemistry
3. Chemical Technology & Society
4. Chemoinformatics
5. Business Skills for Chemists
6. Intellectual Property Rights
7. Analytical Clinical Biochemistry
8. Green Methods in Chemistry
9. Pharmaceutical Chemistry
10. Chemistry of Cosmetics & Perfumes
11. Pesticide Chemistry
12. Fuel Chemistry

### Generic Elective Papers (any four) for other Departments/Disciplines

1. Atomic Structure, Bonding, General Org. Chemistry & Aliphatic Hydrocarbons
2. Chemical Energetics, Equilibria & Functional Group Organic Chemistry-I
3. Solutions, Phase Equilibrium, Conductance, Electrochemistry & Functional Group Organic Chemistry-II
4. Chemistry of s-and p-block elements, States of matter and Chemical Kinetics
5. Chemistry of d-block elements, Quantum Chemistry and Spectroscopy
6. Organometallics, Bioinorganic chem., Polynuclear hydrocarbons & UV, IR, Spectroscopy
7. Molecules of life
8. Green Chemistry - Designing Chemistry for Human Health and Environment

*At least two mathematics papers are compulsory for admission in M.Sc. (Chemistry) in University of Delhi.*

# Department of Computer Science

The Department conducts B.Sc. (Hons.) Computer Science which is a three year program consisting of six semesters. The students are given exposure in the field of Database Management System, Computer Networks, Software Engineering, Unix Scripting, Computer Graphics, Algorithms, Information Security, Data Mining and Internet Technologies. In this program the students are imparted programming skills in C++, application of C++ in Data Structure, Java, Python, Android Programming Language etc. The curriculum provides extensive laboratory sessions where students implement the concepts which they learn in theory. Workshops and technical talks are conducted from time to time in the department for the students and give them exposure to the technology used in industries. Annual technical fest 'TechMelange' is organized by student council of the department every year that involves participation from students of various educational institutes. This program provides tremendous employment opportunities in industries at graduation level and the students expertise in the field of programming, web designing, internet technologies, etc. Over the past few years the department has provided excellent infrastructure for executing software skills using the latest software, development tools and technologies. The department has well equipped ICT enabled labs with :

- About 150 computers with latest computer configuration – Intel core i7, 3.4 GHz processors with 4 GB RAM, 64 bit windows operating system with Wi-Fi connectivity.
- 3 high-end HP servers and 1 laptop.
- A good combination of licensed software and free/open source software to enrich student practical experience.
- 1 server printer, 4 laser printers and 2 scanners.
- Each lab has LCD projectors which are used as a teaching aid for seminars and presentations.

It has latest software like Turbo C++, Oracle 10Gi, SWI-Prolog, Multimedia Tools, Red Hat Linux, Visual Studio, Quincy 2005, latest Java SE Development Kit, CPU Simulator, Weka, Octave, Android Studio, XAMPP, MASM etc. To enhance the spirit of research work among students the labs are equipped with internet facility to provide e-journals to the students. Laboratory network is further equipped with CISCO 2900 series routers, CISCO 1900 switches 24 Port full Duplex, Bay stack 425 24 T switches, 16 port hubs, cable testers etc.

Computer Science Department has one specialized CCNA (Cisco Certified Network Associate) Lab as well where students are given hands-on training about CISCO routers, switches, bridges etc. Department also has various utility rooms like server room, office cum departmental library, UPS room and teaching rooms. Department has skilled lab staff which includes Technical Assistant, Lab Assistants and Lab Attendants to manage the lab work efficiently.



# Course Contents

## B.Sc. (Hons.) Computer Science

SEMESTER 1	SEMESTER 2
BHCS01 : Programming Fundamentals using C++ BHCS02 : Computer System Architecture AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	BHCS03 : Programming in JAVA BHCS04 : Discrete Structures AECC-II : EVS or English/MIL Communication GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
BHCS05 :Data Structures BHCS06 : Operating Systems BHCS07 : Computer Networks SEC-I : Skill Enhancement Course GE-III : Generic Elective	BHCS08 : Design and Analysis of Algorithms BHCS09 : Software Engineering BHCS10 : Database Management Systems SEC-II : Skill Enhancement Course GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
BHCS11 : Internet Technologies BHCS12 : Theory of Computation DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	BHCS13 : Artificial Intelligence BHCS14 : Computer Graphics DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

### Discipline Specific Elective Papers : (Credit : 06 each)

#### DSE-1 (Choose any one)

- BHCS15A Data Analysis and Visualization
- BHCS15B System Programming
- BHCS15C Combinatorial Optimization

#### DSE – 2 (Choose any one)

- BHCS16A Digital Image Processing
- BHCS16B Microprocessors

#### DSE – 3 (Choose any one)

- BHCS17A Information Security
- BHCS17B Data Mining
- BHCS17C Advanced Algorithms

#### DSE – 4 (Choose any one)

- BHCS18A Machine Learning
- BHCS18B Deep Learning
- BHCS18C Unix Network Programming
- BHCS18D Project Work/ Dissertation

### Skill Enhancement Courses (Credit : 04 each)

#### SEC -1 (Choose any one)

- BHCS19A Web Design and Development
- BHCS19B Programming in Python

#### SEC – 2 (Choose any one)

- BHCS20A Android Programming
- BHCS20B Introduction to R Programming

### General Elective Papers (GE) for other Departments / Disciplines : (Credit : 06 each)

- GE-1 CSGE101 Programming using Python
- GE-2 CSGE201 Database Management System
- GE-3 CSGE301 Computer Networks
- GE-4 CSGE401 Information Security and Cyber Laws

# Department of Electronics

The department of Electronics offers B.Sc. (H) Electronics, a three-year degree programme. This programme provides an in-depth knowledge from basic to advance electronics. The students have many avenues for higher education after completing this program such as M.Sc. (Electronics), M.C.A, M.B.A. etc. They also have an opportunity to go for placements.

The department has well equipped laboratories namely Communication Electronics, Microprocessor, Optoelectronics, Digital and Analog Electronics etc. These laboratories are equipped with digital storage

oscilloscopes, function generators, power supplies, multi meters, practical trainer kits, sophisticated microprocessor and microcontroller trainer kits etc. along with their software. The two Electronics simulation laboratories are equipped with more than 50 latest computers, loaded with simulation and other software's. The computers are also provided with internet facility for students and staff to access the web with ease for research, projects, assignments etc. The department has a small book bank for faculty and students.

The department actively organizes seminars, workshops and training programs for students to keep pace with the new developments and recent trends in technologies. The department also promotes value based education by supporting students to involve in community services as a social responsibility. The department has its own student society named "VIDYUT". This society along with the faculty annually organizes various activities like the technical fest "ELECTROMANIA", seminars, workshops etc. This year student society has also started a biannual magazine "ELECTROVEDA" for giving insight of latest technologies, research and development in the field of electronics.



# Course Contents

## B.Sc. (Hons.) Electronics (LOCF)

SEMESTER 1	SEMESTER 2
C-I : Basic Circuit Theory and Network Analysis C-II : Mathematics Foundation for Electronics CL-I : Basic Circuit Theory and Network Analysis Lab CL-II : Mathematics Foundation for Electronics Lab AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	C-III : Semiconductor Devices C-IV : Applied Physics CL-III : Semiconductor Devices Lab CL-IV : Applied Physics Lab AECC-II : EVS or English/MIL Communication GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
C-V : Electronic Circuits C-VI : Digital Electronics and Verilog/VHDL C-VII : C Programming and Data Structures CL-V : Electronic Circuits Lab CL-VI : Digital Electronics and Verilog/VHDL Lab CL-VII : C Programming and Data Structures Lab SEC-I : Skill Enhancement Course GE-III : Generic Elective	C-VIII : Operational Amplifiers and Applications C-IX : Signals and Systems C-X : Electronic Instrumentation CL-VIII : Operational Amplifiers and Applications Lab CL-IX : Signals and Systems Lab CL-X : Electronic Instrumentation Lab SEC-II : Skill Enhancement Course GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI : Microprocessors and Microcontrollers C-XII : Electromagnetics CL-XI : Microprocessors and Microcontrollers Lab CL-XII : Electromagnetics Lab DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII : Communication Electronics C-XIV : Photonics CL-XIII : Communication Electronics Lab CL-XIV : Photonics Lab DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

### Discipline Specific Electives (DSE) (Credit : 06 each)

#### (4 papers to be selected) DSE I-IV

#### Group 1 (V Semester) (DSE I, II)

1. Power Electronics
2. Numerical Analysis
3. Digital Signal Processing
4. Basic VLSI Design
5. Computer Networks
6. Semiconductor Fabrication and Characterization
7. Biomedical Instrumentation

#### Group 2 (VI Semester) (DSE-III, IV)

1. Electrical Machines
2. Modern Communication Systems
3. Control Systems
4. Transmission Lines, Antenna and Wave Propagation
5. Nanoelectronics
6. Embedded Systems
7. Dissertation/ Project work

### Skill Enhancement Course (SEC) (02 papers)

#### (Credit : 02 each) SEC-I to SEC-II

1. Design and Fabrication of Printed Circuit Boards
2. Robotics
3. Mobile Applications Development

4. Internet and Java Programming
5. Programming with LabVIEW
6. Artificial Intelligence
7. Internet of Things
8. Data Sciences
9. Cyber Security
10. 3D Printing and Design
11. Virtual Reality

### Generic Elective Papers (GE) for other Departments/Disciplines (Credit : 06 each)

1. Electronic Circuits and PCB Designing
2. Digital System Design
3. Instrumentation
4. Practical Electronics
5. Communication Systems
6. Microprocessor and Microcontroller Systems
7. Consumer Electronics
8. Computational Mathematics
9. Applied Mathematics-I
10. Applied Mathematics-II
11. Artificial Intelligence
12. Internet of Things
13. Data Science

*Any core courses can be offered as Generic Elective.*

# Department of Food Technology

The department offers B.Sc. (Hons.) program in Food Technology. The department is located on the ground floor and the pilot plant is in the basement area. The department has five labs viz. Analytical Lab 1 and 2, Food Microbiology Lab, Food and Nutrition Lab and Analytical Instrumentation Lab.

There are additional rooms for culture inoculation, sample weighing and sample digestion equipped with laminar flow chamber, electronic balances and digestion facilities respectively. The pilot plant houses canning unit, dehydration unit, fluidized bed freezer, deep freezer, bakery and ice cream unit. The departmental library has reference books, project reports and product development literature with computers and internet facilities for the students.

The analytical labs have moisture meter, bursting strength tester, vacuum oven, brookfield viscometer (digital and analog), abbes refractometer, penetrometer, hydrometer, soxhlet unit, UV visible spectrophotometer, dehydrator, muffle furnace, polarimeter, lovibond tintometer, kjeldahl unit, vacuum evaporator, cobb tester, vacuum packaging machine, fermenter and RM-PV estimation assembly. Bakery unit has planetary mixer, baking ovens, dough kneader, bread slicer, dough sheeter, bun cutter, sugar grinding mill, Kitchen aid mixer etc. Microbiology lab has an autoclave, incubators, digital microscope, binocular microscopes, BOD incubator, air sampler, millipore filtration assembly, laminar air flow chamber, electronic colony counters etc. The advanced facilities include HPLC system, texture analyser, atomic absorption spectrophotometer, rancimat, fat analyser, protein analyser, reverse osmosis plant and SO<sub>2</sub> estimation assembly. The department has received a grant of fifty lakhs from Ministry of Food Processing towards purchase of various sophisticated equipment in the past.

The department in collaboration with other departments of college or with various organizations organizes workshops, training sessions, invited lectures, seminars and webinars on regular basis to keep students updated and informed about the recent developments in the field. In the session 2020-21, the department organized various virtual academic and technical events for the students and faculty members such as National Nutrition Week on 4<sup>th</sup> September 2020 with a talk by Dr. Sesikaran, World Food Day was marked by a talk by Dr. Prabodh Halde on 16<sup>th</sup> October 2020, students celebrated the department technical fest, Felicity'21 with various inter college events and competitions on 28<sup>th</sup> and 29<sup>th</sup> January 2021. A training program was organized for students and faculty members on Experimental Data Analysis, on 18<sup>th</sup> and 19<sup>th</sup> February 2021.

Educational visits of the students are also organized by the department to various industries and research institutes like NDRI-Karnal, Mother Dairy-Delhi, Safal-Delhi and Yakult-Sonipat. Students pursue higher education programmes in various reputed universities and colleges within the country and abroad such as CFTRI – Mysore, Indian Institute of Packaging, NDRI-Karnal, NIFTEM Sonipat, BHU, Cornell University, University of Netherlands etc. Alumni of the department are well placed in various food industries and organizations like GSK, Mother Dairy, Nestle India, Pepsico, Yakult, FSSAI, BIS etc. Department is focusing to train the students in new product development and has an entrepreneurship development cell for skill enhancement. Students of the department are involved in writing research and review papers for their projects and also undertake internships in various industries and organizations. Various scholarships are awarded to the students by government and non-government organisations such as PFNDAI (Protein Foods and Nutrition Development Association of India) and CII-SKA (Confederation of Indian Industries-Surakshit Khadya Abhiyan) etc. The department also promotes various outreach activities or extension activities for the overall growth and development of students and society.



# Course Contents

## B.Sc. (Hons.) Food Technology

SEMESTER 1	SEMESTER 2
C-I : Fundamentals of Food Technology C-II : Principles of Food Science AECC-I : English/MIL Communication or EVS GE-I* : Generic Elective	C-III : Technology of Food Preservation C-IV : Food Processing Technology AECC-II : EVS or English/MIL Communication GE-II* : Generic Elective
SEMESTER 3	SEMESTER 4
C-V : Food and Nutrition C-VI : Technology of Fruits, Veg. & Plantation Crops C-VII : Technology of Dairy & Sea Foods SEC-I* : Skill Enhancement Course GE-III* : Generic Elective	C-VIII : Technology of Cereals, Pulses and Oil Seeds C-IX : Food Microbiology C-X : Technology of Meat, Poultry and Egg SEC-II* : Skill Enhancement Course GE-IV* : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI : Food Engineering C-XII : Food Chemistry-I DSE-I* : Discipline Specific Elective DSE-II* : Discipline Specific Elective	C-XIII : Food Chemistry-II C-XIV : Food Quality and Sensory Evaluation DSE-III* : Discipline Specific Elective DSE-IV* : Discipline Specific Elective

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

\* Any 4 DSE, 2 SEC and 4 GE to be picked up by the student.

### Discipline Specific Elective (Any four in V, VI Semester)

1. Food Safety
2. Food Quality Management
3. Bakery Technology
4. Food Packaging
5. Nutraceutical and Functional Foods
6. Food Plant Sanitation

### Generic Elective (Any Four in I, II, III, IV Semester)

#### (For other Departments)

Credits : 4+2 (4 Period Theory and 4 Period Practical per Week)

1. Food Processing and Preservation

2. Chemistry of Food
3. Sensory Evaluation of Food
4. Food Microbiology and Food Safety
5. Food Engineering and Packaging
6. Technology of Plant and Animal Foods

### Skill Enhancement Courses (Any two in III, IV Semester)

Credits : 2 (2 Period Theory + 4 Period Practical per Week)

1. Entrepreneurship Development
2. Food Product Development
3. Food Fermentation Technology
4. Confectionary Technology
5. Project and Technical Report

# Department of Instrumentation

The department of Instrumentation offers a B. Sc. (Hons.) program in Instrumentation. The department has developed modern research facility and infrastructure to support the teaching and research activities. The department has five major laboratories based on curriculum: Analytical Instrumentation Laboratory supported by a Wet Laboratory, Biomedical Instrumentation Laboratory, Electronics Instrumentation & Electrical Machine Laboratory, Microprocessor Laboratory and Industrial Instrumentation Laboratory. The Analytical Laboratory is well equipped with HPLC, GLC, Karl Fischer Titrator, pH meter, UV-Vis Spectrophotometer, Photometer, Flame Photometer, FTIR Spectrophotometer and Rotary Vacuum Evaporator. The Biomedical laboratory has biomedical kits which are used to measure EEG, ECG, EMG, pulse rate, respiration rate etc. The lab also has ELISA reader, Biochemistry Analyzer, PCR machine, Blood cell counter and ultrasound machine. Electronics Instrumentation and Electrical Machine Laboratory have various equipment like series and shunt DC Motors, induction motors etc. Microprocessor lab is equipped with 8085 kits to train students for programming and designing new projects. Industrial Instrumentation lab has instruments like orifice meter, DC calibration meter, level transmitter, ultrasonic flow meter, ratio controller, pressure gauge calibrator, magnetic flow meter, circular chart recorder etc. All laboratories of the department are equipped with computer systems for running simulation based practical.



The faculty of the department have been taking online classes during pandemic Covid-19. The department organizes workshop, training, invited lectures and seminars on regular basis to update students about the latest development in the field. This year (2020-2021) department has organized various activities in the online mode namely (1) E-workshop on “Multisim Electronics Workbench”, (2) Coalescence-Industry Academia National E-seminar Lecture Series (3) Technical Fest 'Technexus' (4) Online Session : Guidance and Counselling. Students performed practical in laboratory on college campus by following covid-19 protocols i.e. by maintaining social distance and wearing mask all time.



# Course Contents

## B.Sc. (Hons.) Instrumentation

SEMESTER 1	SEMESTER 2
C-I : Basic Circuit Theory and Network Analysis C-II : Applied Physics CL-I : Basic Circuit Theory and Network Analysis Lab CL-II : Applied Physics Lab AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	C-III : Analog Devices and Circuits C-IV : Transducers and Sensors CL-III : Analog Devices and Circuits Lab CL-IV : Transducers and Sensors Lab AECC-II : EVS or English/MIL Communication GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
C-V : Biomedical Instrumentation C-VI : Digital Electronics and VHDL C-VII : Engineering Mathematics CL-V : Biomedical Instrumentation Lab CL-VI : Digital Electronics and VHDL Lab CL-VII : Engineering Mathematics Lab SEC-I : Skill Enhancement Course GE-III : Generic Elective	C-VIII : Operational Amplifiers and Applications C-IX : Analytical Instrumentation C-X : Electronic Instrumentation CL-VIII : Operational Amplifiers and Applications Lab CL-IX : Analytical Instrumentation Lab CL-X : Electronic Instrumentation Lab SEC-II : Skill Enhancement Course GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI : Measurement Technology C-XII : Microprocessor CL-XI : Measurement Technology Lab CL-XII : Microprocessor Lab DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII : Power Electronics C-XIV : Control Systems CL-XIII : Power Electronics Lab CL-XIV : Control Systems Lab DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

**Discipline Specific Electives (DSE) (Credit : 06 each)**  
**(4 papers to be selected) DSE I-IV**

1. Signal and Systems
2. Advanced Analytical Instrumentation
3. Communication System
4. Advanced Biomedical Instrumentation
5. Embedded System and Robotics
6. Process Control Dynamics
7. Reliability and Quality Control Techniques
8. Artificial Intelligence
9. Dissertation

**Skill Enhancement Course (SEC) (Credit : 02 each)**  
**(2 papers to be selected) SEC-I & SEC-II**

1. Programming in C
2. VLSI Design and Verification
3. Testing and Calibration
4. PLC and SCADA
5. Virtual Instrumentation
6. Programming using MATLAB

**Other Discipline GE-I to GE-IV**

1. Mathematics
  2. Computer Science
  3. Physics
  4. Biomedical Science
  5. Chemistry
  6. Electronics
  7. Commerce
- Any other discipline of Choice

**Generic Elective Papers (GE) (any four) for other Departments/Disciplines (Credit : 06 each)**

1. Sensors and Actuators
2. Instrumentation & Control
3. Analytical Instrumentation
4. Nuclear & Biomedical Instrumentation
5. Machine Intelligence
6. Standardization and Quality Control
7. MATLAB and its Applications
8. General Instrumentation
9. Applied Mathematics

# Department of Management Studies and Department of Financial Studies

Since its commencement in 2017, the Department of Management Studies and Department of Financial Studies has been dedicated to its vision of being a pioneer in nurturing next generation leaders and change agents, strongly rooted in eternal values, fostering excellence in all the fields of society. The departments are committed to fulfilling the mission of:

- Contributing towards excellence in leadership, financial and management education to ensure its relevance to the needs of society and people around.
- Nurturing young and dynamic leaders, entrepreneurs and policy makers of tomorrow who can solve complex organizational, financial and managerial problems through providing an environment of collaborative and multi-disciplinary activities.
- Establishing as a center of excellence in upcoming areas of management and finance by innovative and research activities among faculty and students.

Under the revised CBCS scheme, the departments offer two undergraduate programs – Bachelor in Management Studies [BMS] and Bachelor of Business Administration (Financial Investment Analysis) [BBA (FIA)]. Our college is among the only two colleges in University of Delhi which offers the BBA (FIA) program. We, at our college, furnish the students with a well-equipped library which is a repository of works by several distinguished authors. Also, it's an unparalleled source of learning and research in the vast array of Marketing, Taxation, Finance, Economics, Human Resource Management, Global Business Management, Accountancy, Business Law, Statistical Methods and many more.

We believe that education doesn't stop at classroom doors and student activities play a vital role in creating opportunities to pursue some new endeavors or lifelong interests. There are a multitude of college societies to indulge in that were instigated by the students of the Department of Management Studies and the Department of Financial Studies such as Enactus, Mark-Haven (The Marketing Society), RAQAM (The Finance Society), Equilibrium (The Economics Society) and Globetrotters (The Travel & Tourism Society).



# Department of Management Studies and Department of Financial Studies

The departments organise their annual fest 'Iidiara' with star performers like Mr. Stavya Kaila and conducts numerous educational field visits and trips which provides a great platform to develop and hone their managerial and analytical skills. Many seminars, webinars and symposiums by eminent speakers such as Mr. Harsh Gupta (Assistant Directory Moody's Analytics Knowledge Services), Prof. Ram Singh (Delhi School of Economics), Dr. Ramgopal Agarwala (Ex-Chief Economist, World Bank), Dr. Krishnamurthy Subramanian (Chief Economic Advisor, GoI) and many more are organized to serve the core academic functions of the departments and also to keep the students abreast with the latest doings in the boardroom of big corporate houses and policy making of GoI. Various workshops are conducted focusing on leadership, financial tools, personality development social outreach to prepare the students for the corporate world.

The training and placement cell facilitates the placements of the graduate students and conducts group discussions as well as campus interviews. The students have done internships at some of the leading organizations like Ernst and Young, Bajaj Capital, Sharekhan and many more. Students have been given many internship opportunities so as to obtain a firsthand exposure in the corporate world to further hone their leadership and managerial skills. With placements at FIS Global and Chegg India and an average package of around 4.35 lacs p.a. with highest package of 6 lacs p.a., the department has done fairly well for its second graduating batch. Some prospective fields where the students can go for internships are:

- Marketing: Assistant Brand Manager; Technical Marketing Assistant; Media Planner & Buyer Supply Chain Management; E-commerce Analyst Banking.
- Finance and Accountancy: Global Investment Manager; Mergers & Acquisitions Analyst; Audit or Tax Trainee; Treasury Assistant.
- Human Resources: International Recruitment Consultant; Training Coordinator.
- IT: Systems Analyst; Project Analyst.
- Others: Investment Advisory Services, Portfolio Management Services, Corporate Finance, International Finance, Capital and Money Markets, Merchant Banking, Credit Rating, Venture Capital, Forex Advisory Services etc.



# Course Contents

## Bachelor of Management Studies (BMS)

SEMESTER 1	SEMESTER 2
C-I : Fundamentals of Mgmt. & Organisational Behaviour C-II : Statistics for Business Decisions AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	C-III : Managerial Economics C-IV : Business Accounting AECC-II : English/MIL Communication or EVS GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
C-V: Macroeconomics C-VI: Principles of Marketing C-VII: Management Accounting SEC-I : Skill Enhancement Course GE-III : Generic Elective	C-VIII: Business Research C-IX: Human Resource Management C-X : Financial Management SEC-II : Skill Enhancement Course GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI : Quantitative Techniques for Management C-XII : Legal Aspects of Business DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII: Business Policy & Strategy C-XIV: Financial Institutions & Markets DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

### Generic Elective Papers

(Any one per Semester in Semesters I-IV)

1. Fundamental of Marketing Management
2. India's Diversity in and Business
3. Business Legislation
4. Ethics and Corporate Social Responsibility
5. Fundamentals of Human Resource Management
6. Entrepreneurship and New Venture Creation
7. Production and Operations Management
8. Money and Banking

### Skill Enhancement Course

(Any one per Semester in Semesters III-IV)

1. Advanced Spreadsheet Tools for Business Analysis
2. Software for Data Extraction and Analysis
3. IT tools for Business
4. Personality Development and Communication
5. Statistical Software Package
6. E Commerce
7. Basic Econometrics Using Software
8. Business Analytics

### Discipline Specific Elective

(Any two per Semester in Semesters V-VI)

A student would be free to choose any four papers from one group. The course offers mainly four groups viz. Finance (DSE-I), Marketing (DSE-II), Human Resource (DSE-III) and Management of Global Business (DSE-IV). An additional paper in Research project mode (Semester-long Research Project) may be offered at Semester VI as extra credit paper under discipline specific electives. Students can choose one Research project as extra paper under the guidance of a teacher.

#### DSE-I (Finance)

1. Strategic Corporate Finance
2. Investment Analysis and Portfolio Management
3. Project Appraisal and Implementation
4. Business Analysis and Valuation

5. International Finance
6. Investment Banking and Financial Services
7. Financial Time Series Econometrics
8. Derivatives and Risk Management

#### DSE-II (Marketing)

1. Consumer Behavior
2. Personal Selling
3. Marketing of Services
4. International Marketing
5. Retail Management
6. Advertising and Brand Management
7. Distribution and Supply Chain Management
8. Digital Marketing
9. Research Projects

#### DSE-III (Human Resource Management)

1. Training and Management Development
2. Management of Industrial Relations
3. HRD: Systems and Strategies
4. Counseling and Negotiation Skills for management
5. Talent and Knowledge Management
6. Performance and Compensation Management
7. Organizational Development
8. International Human Resource Management
9. Research Projects

#### DSE-IV (Management of Global Business)

1. International Trade: Policies and Strategies
2. Transnational and Cross Cultural Marketing
3. International Accounting and Reporting System
4. Multinational Business Finance Global Business Environment
5. International Supply Chain Management
6. International Joint Ventures, Mergers and Acquisitions
7. Cross Cultural Human Resource Management
8. Research Projects

# Course Contents

## Bachelor of Business Administration (Financial Investment Analysis) [BBA (FIA)]

SEMESTER 1	SEMESTER 2
C-I : Financial Accounting & Analysis C-II : Managerial Economics AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	C-III : Statistics for Business Decisions C-IV : Cost & Management Accounting AECC-II : English/MIL Communication or EVS GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
C-V: Income Tax C-VI: Corporate Finance C-VII: Financial Markets & Institutions SEC-I : Skill Enhancement Course GE-III : Generic Elective	C-VIII: Macro Economics C-IX: Quantitative Techniques C-X : Financial Econometrics SEC-II : Skill Enhancement Course GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI : Investment Analysis & Portfolio Management C-XII : Financial Derivatives DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII : Corporate Restructuring C-XIV : International Finance DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

### Generic Elective Papers

(Any one per Semester in Semesters I-IV)

1. Business Ethics & Corporate Governance
2. Fundamentals of Financial Management
3. Operations Management
4. Fundamentals of Econometrics
5. Entrepreneurship Theory and Practices

### Skill Enhancement Course

(Any one per Semester in Semesters III-IV)

1. IT Tools for Business.
2. Financial Database and Analysis Software
3. Financial Analytics

4. Advanced Spreadsheets Tools for Financial Analysis

5. Summer Internship (6-8weeks)

### Discipline Specific Elective

(Any two per Semester V-VI)

1. Investment Banking & Financial Services
2. Corporate Analysis & Valuation
3. Business Tax Planning
4. Advanced Financial Econometrics
5. Strategic Corporate Finance
6. Behavioral Finance
7. Management of Financial Institutions
8. International Financial Architecture
9. Research Projects (additional course for extra credit)

# Department of Mathematics



The Department of Mathematics conducts a three year undergraduate program, B.Sc.(H) Mathematics. In addition, the department also offers a variety of optional papers for the students of other disciplines that can be taken as Generic Elective courses by them. The department has been instrumental in the functioning of the college ever since its inception. The department is a thriving community of dedicated and

research oriented teachers and diligent and devoted students. The students are provided ample opportunities to develop organisational skills and improve their ability to work in a team.

The department is located on the second floor of the academic block of the college. The department has well-equipped labs with high speed broadband internet facility. The systems are installed with mathematical and statistical softwares such as Mathematica, R, LaTeX, HTML, SciLab and Octave. The curriculum of the program is designed in such a manner that the students get an opportunity to get trained in these softwares.

The department has a dynamic mathematical society 'Ramanarya'. Lectures by eminent mathematicians and scholars are conducted from time to time under the banner of this society. The department makes a constant effort to encourage students to explore and pursue research interest by organising various seminars and workshops. The students are inspired to collaborate with other departments for research projects. For a holistic development of students, the department emboldens the students to participate in the cultural and sport events of the college.



# Course Contents

## B.Sc. (Hons.) Mathematics

SEMESTER 1	SEMESTER 2
BMATH-101 : Calculus BMATH-102 : Algebra AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	BMATH-201 : Real Analysis BMATH-202 : Differential Equations AECC-II : EVS or English/MIL Communication GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
BMATH-301 : Theory of Real Functions BMATH-302 : Group Theory-I BMATH-303 : Multivariate Calculus SEC-I : LaTeX and HTML GE-III : Generic Elective	BMATH-401 : Partial Differential Equations BMATH-402 : Riemann Integration & Series of Function BMATH-403 : Ring Theory and Linear Algebra-I SEC-II : Comp. Algebra Systems & Related Softwares GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
BMATH-501 : Metric Spaces BMATH-502 : Group Theory-II DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	BMATH-601 : Complex Analysis BMATH-602 : Ring Theory and Linear Algebra-II DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

### Discipline Specific Electives (DSE) (Credit : 06 each)

#### DSE-I

- (i) Numerical Analysis, or
- (ii) Mathematical Modeling & Graph Theory, or
- (iii) C++ Programming for Mathematics

#### DSE-II

- (i) Probability Theory and Statistics, or
- (ii) Discrete Mathematics, or
- (iii) Cryptography and Network Security

#### DSE-III

- (i) Mathematical Finance, or
- (ii) Introduction to Information Theory and Coding, or
- (iii) Biomathematics

#### DSE-IV

- (i) Number Theory, or
- (ii) Linear Programming and Applications, or
- (iii) Mechanics

### Generic Electives (GE) Papers (for other department)

#### Odd Semester

GE-I : Calculus/ Analytic Geometry

GE-III : Differential Equations / Linear Programming and Game Theory

#### Even Semester

GE-II : Linear Algebra / Discrete Mathematics

GE-IV : Numerical Methods/Elements of Analysis

# Department of Microbiology

The Department of Microbiology is currently offering a three-year B.Sc.(Hons.) Microbiology program under CBCS mode. Microorganisms have an immense impact on our day to day lives, be it maintenance of the environment and serving as important industrial tools or as causative agents of several human, animal and plant diseases as well as food spoilage. The vision of the department is to educate and train students in the discipline of microbiology and to expand the body of knowledge of this scientific field through active research. The department aims at creating awareness and sensitizing a common man through social outreach programs about the importance of microorganisms affecting each one of us.

Among the many reasons to study microbiology is to gain basic knowledge of the field needed to pursue careers in medical science, ecology, agriculture, pharmaceutical sciences and diagnostics, aquatic microbiology and biotechnology.

The department has spacious laboratories with basic and advanced instruments and has facilities such as media preparation room, bio-instrumentation room, inoculation room and a culture room. The labs are well-equipped with various instruments like microscopes, shaker incubator, laminar flow cabinet, incubator, UV spectrophotometer, centrifuge, digital pH meter, electronic weighing balances, colony counter, gel electrophoresis units, tissue culture racks, autoclaves etc.

The department has a duly elected student council “ETHEREAL” which organises events, seminars and interactive sessions with eminent scientists, academicians and entrepreneurs to abreast them with latest research in the field. The department also regularly organizes field trips to various reputed research laboratories and industries.



# Course Contents

## B.Sc. (Hons.) Microbiology

SEMESTER 1	SEMESTER 2
MICROB-CC101: Intro. to Microbiology & Microbial Diversity MICROB-CC102: Bacteriology AECC-I : Environmental Science GE-I : Generic Elective	MICROB-CC201: Biochemistry MICROB-CC202: Cell Biology AECC-II : English communication/ MEL GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
MICROB-CC301: Microbial Physiology & Metabolism MICROB-CC302: Environmental Microbiology MICROB-CC303: Molecular Biology SEC -1: Skill Enhancement Course GE-3: Generic Elective	MICROB-CC401: Microbial Genetics and Genomics MICROB-CC402: Virology MICROB-CC403: Food and Dairy Microbiology SEC -2: Skill Enhancement Course GE-4: Generic Elective
SEMESTER 5	SEMESTER 6
MICROB-CC501: Industrial Microbiology MICROB-CC502: Immunology DSE-1: Discipline Specific Elective DSE-2: Discipline Specific Elective	MICROB-CC601: Medical Microbiology MICROB-CC602: Recombinant DNA Technology DSE-3: Discipline Specific Elective DSE-4: Discipline Specific Elective

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

### Generic Elective Papers

(Any one per Semester in Semesters I-IV)

#### Semester-I

1. Introduction and Scope of Microbiology

#### Semester-II

2. Bacteriology and Virology

#### Semester-III

3. Microbial Metabolism
4. Microbial Genetics and Molecular Biology
5. Applications of Microbes in Biotechnology

#### Semester-IV

6. Industrial and Food Microbiology
7. Microbes in Environment
8. Medical Microbiology and Immunology
9. Genetic Engineering and Biotechnology

### Skill Enhancement Course

(Any one per Semester in Semesters III-IV)

1. Microbial Quality Control in Food & Pharma. Industries
2. Microbial Diagnosis in Health Clinics

3. Biofertilizers and Biopesticides
4. Food Fermentation Techniques
5. Management of Human Microbial Diseases
6. Microbiological Analysis of Air and Water
7. Fundamentals of Bioinformatics
8. Biostatistics

### Discipline Specific Elective (for other department)

(Any two per Semester in Semesters V-VI)

#### Semester-V

1. Bioinformatics
2. Instrumentation and Biotechniques
3. Principles of Genetics
4. Biomathematics and Biostatistics

#### Semester-VI

5. Microbial Biotechnology
6. Advances in Microbiology
7. Plant Pathology
8. Biosafety and Intellectual Property Rights
9. Project Work

# Department of Physics

The department offers a three year programme B. Sc. (Hons.) in Physics and has highly active and vibrant faculty committed to impart high quality research standards in pure and applied areas of physics. It trains the students to become competent and motivated physicists.

The department conducts invited talks and educational talks through its society "TACHYONS". The department has state-of-the-art research labs and a well-equipped computational lab, wherein the students build their foundation on the principles of physics thereby enhancing their scientific temperament. It has equipment like He-Ne laser, polarimeter, spectrometers, electrical bridges, oscilloscopes, resistance meters, function generators, power supplies, optical benches etc. to aid the learning process and meet the practical needs of the students.



# Course Contents

## B.Sc. (Hons.) Physics

SEMESTER 1	SEMESTER 2
C-I : Mathematical Physics-I C-I : Lab (Mathematical Physics-I) C-II : Mechanics C-II : Lab (Mechanics) GE-I : Generic Elective AECC-I : English/MIL Communication or EVS	C-III : Electricity & Magnetism C-III : Lab (Electricity & Magnetism) C-IV : Waves and Optics C-IV : Lab (Wave and Optics) GE-II : Generic Elective AECC-II : EVS or English/MIL Communication
SEMESTER 3	SEMESTER 4
C-V : Mathematical Physics-II C-V : Lab (Mathematical Physics-II) C-VI : Thermal Physics C-VI : Lab (Thermal Physics) C-VII : Digital Systems and Applications C-VII : Lab (Digital Systems and Applications) GE-III : Generic Elective SEC-I : Skill Enhancement Course	C-VIII : Mathematical Physics-III C-VIII : Lab (Mathematical Physics-III) C-IX : Elements of Modern Physics C-IX : Lab (Elements of Modern Physics) C-X : Analog Systems and Applications C-X : Lab (Analog Systems and Applications) GE-IV : Generic Elective SEC-II : Skill Enhancement Course
SEMESTER 5	SEMESTER 6
C-XI : Quantum Mechanics C-XI : Lab (Quantum Mechanics) C-XII : Solid State Physics C-XII : Lab (Solid State Physics) DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII : Electromagnetic Theory C-XIII : Lab (Electromagnetic Theory) C-XIV : Statistical Mechanics C-XIV : Lab (Statistical Mechanics) DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

**Discipline Specific Elective Papers (Credit : 06 each) DSE I-IV (4 papers to be selected : 02 each for Odd Semester and Even Semester as listed below)**

**Odd Semester**

1. Experimental Techniques (4) + Lab (4)
2. Advanced Mathematical Physics (4) + Lab (4)\*
3. Nuclear and Particle Physics (5) + Tutorial (1)
4. Physics of Devices and Communication (4) + Lab (4)
5. Astronomy and Astrophysics (5) + Tutorial (1)
6. Atmospheric Physics (4) + Lab (4)
7. Biological Physics (5) + Tutorial (1)
8. Embedded Systems- Introduction of Microcontroller (4) + Lab(4)
9. Linear Algebra and Tensor Analysis (5) + Tutorial (1)\*

**Even Semester**

10. Nano Materials and Applications (4) + Lab (4)
11. Communication System (4) + Lab (4)
12. Medical Physics (4) + Lab (4)
13. Applied Dynamics (4) + Lab (4)
14. Digital Signal processing (4) + Lab (4)
15. Physics of the Earth (5) + Tutorial (1)
16. Advanced Mathematical Physics II (5) + Tutorial (1)
17. Classical Dynamics (5) + Tutorial (1)
18. Dissertation (8)
19. Verilog and FPGA based system design (4) + Lab (4)
20. Advanced Quantum Mechanics (5) + Tutorial (1)

\* Papers listed at S. No. 02 (Advanced Mathematical Physics) and 09 (Linear Algebra and Tensor Analysis) are not allowed to be taken together as DSE-1 and DSE-2 in Semester-V.

**Skill Enhancement Courses (02 to 04 papers)**

**(Credit : 02 each) SEC-I to SEC-IV**

1. Physics Workshop Skills
2. Computational Physics Skills
3. Electrical Circuit and Network Skills
4. Basic Instrumentation Skills

5. Renewable Energy and Energy Harvesting
6. Engineering design and prototyping/Technical Drawing
7. Radiation Safety
8. Applied Optics
9. Weather Forecasting
10. Introduction to Physical Computing
11. Numerical Analysis

**Generic Elective Papers (GE) (Minor - Physics) for other Departments/Disciplines (Credit : 06 each)**

**Odd Semester**

1. Electricity and Magnetism + Lab
2. Mathematical Physics + Lab
3. Digital, Analog and Instrumentation + Lab
4. Applied Dynamics + Lab
5. Medical Physics + Lab
6. Waves and Optics + Lab
7. Quantum Mechanics + Lab
8. Communication System + Lab
9. Verilog and FPGA based system design + Lab
10. Nano Materials and Applications + Lab

**Even Semester**

11. Mechanics + Lab
12. Elements of Modern Physics + Lab
13. Solid State Physics + Lab
14. Embedded Systems – Introduction of Microcontroller + Lab
15. Biological Physics + Tutorial
16. Thermal Physics and Statistical Mechanics + Lab
17. Digital Signal processing + Lab
18. Nuclear and Particle Physics + Tutorial
19. Astronomy and Astrophysics + Tutorial
20. Atmospheric Physics + Lab
21. Physics of the Earth + Tutorial

# Department of Psychology

The Department of Psychology was established in the year 2017 and currently runs a three-year undergraduate program for B.A. (Honours) Psychology. The curriculum has been designed to provide theoretical and applied knowledge in the various sub-domains of Psychology viz; Foundations of Psychology, Social and Cultural Psychology, Clinical Psychology, Life Span Development, Organizational Behaviour, Statistics and Research Methodology and Bio-Psychology.

The aim of the department is to produce psychologists who can apply conceptual knowledge to the real world settings. The teaching-learning process includes interaction based lectures, use of e-learning resources, audio-visual aids, movie screening, journals and research articles to enrich the learning process amongst students. The department encourages students to develop a holistic approach and to explore research interests beyond classroom teaching.

The department has an academic society named 'Psymentia' – a window to psyche mind and conscientia. Since 2017, the aim of the society is to organize various activities like workshops, seminars and interactive sessions by eminent speakers for the students. It helps in providing applied knowledge of various upcoming fields of psychology. The highlight of the society is its annual psychology fest 'Trezire' which organizes various events like panel discussion, seminar, workshop and inter college competitions. The department also releases its annual magazine 'Sophrosyne' that has the annual details of its achievements.

The department thus provides an enriching environment to students for engagement in academic activities and beyond.



# Course Contents

## B.A. (Hons.) Psychology

SEMESTER 1	SEMESTER 2
C-I : Introduction to Psychology (Theory+Practical) C-II: Statistical Methods for Psychological Research-I (Theory+Tutorial) AECC-I : Environmental Science GE-I : Generic Elective	C-III : Biopsychology (Theory+Tutorial) C-IV : Psychology of Individual Differences (Theory+Practical) AECC-II : English Communication GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
C-V : Development of Psychological Thought (Theory+Tutorial) C-VI : Psychological Research (Theory+Practical) C-VII : Social Psychology (Theory+Tutorial) SEC-I : Skill Enhancement Course GE-III : Generic Elective	C-VIII : Understanding Psychological Disorders (Theory+Tutorial) C-IX :Statistical Methods for Psychological Research-II (Theory+Tutorial) C-X : Applied Social Psychology (Theory+Practical) SEC-II : Skill Enhancement Course GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI : Understanding & Dealing with Psychological Disorders (Theory+Practical) C-XII : Developmental Psychology (Theory+Practical) DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII : Organisational Behaviour (Theory+Practical) C-XIV : Counseling Psychology (Theory+Practical) DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

### Elective : Generic (GE) (Any 4, each in Sem. I, II, III and IV)

GE PSY 01 General Psychology  
 GE PSY 02 Psychology over the Life Span  
 GE PSY 03 Psychology for Health and Well-being  
 GE PSY 04 Psychology at Work  
 GE PSY 05 Psychology and Media  
 GE PSY 06 Inter Group Relations  
 GE PSY 07 Youth Psychology  
 GE PSY 08 Psychology and Mental Health  
 GE PSY 09 Understanding Intimate Relationships  
 GE PSY 10 Positive Psychology: Understanding Human Strengths  
 GE PSY 11 Social Psychology: Understanding Human World

### Skill Enhancement Courses (SEC)

(Any 2 – 1 in Semester III and 1 in Semester IV)

SEC PSY 01 Emotional Intelligence  
 SEC PSY 02 Stress Management  
 SEC PSY 03 Effective Decision Making  
 SEC PSY 04 Educational Psychology  
 SEC PSY 05 Human Resource Practices

SEC PSY 06 Personal Growth and Development  
 SEC PSY 07 Psychological Skills in Organizations  
 SEC PSY 08 Psychology of Relationships  
 SEC PSY 09 Learning how to Learn  
 SEC PSY 10 Research Publication and Presentation  
 SEC PSY 11 Skills of Communication

### Elective : Discipline Specific (DSE) (Any 4) (2 in Semester-V and 2 in Semester-VI)

DSE-PSY-01 Positive Psychology  
 DSE-PSY-02 Human Resource Management  
 DSE-PSY-03 Health Psychology  
 DSE-PSY-04 Community Psychology  
 DSE-PSY-05 Cultural and Indigenous Psychology  
 DSE-PSY-06 Project/Dissertation (VI Semester)  
 DSE-PSY-07 Psychological Perspectives in Education  
 DSE-PSY-08 Psychology of Disability  
 DSE-PSY-09 Psychology of Peace  
 DSE-PSY-10 Forensic Psychology  
 DSE-PSY-11 Introduction to Indian Psychological Thought  
 DSE-PSY-12 Environmental Psychology  
 DSE-PSY-13 Cognitive Psychology

# Department of Statistics

It is well known that, Statistics, construed broadly, is the study of uncertainty : how to measure it (using ideas and methods in probability theory), what to do about it (using concepts from statistical inference and decision theory) and also to learn : how to play with data. Statistics is a key foundational discipline for data science and has applications in a wide variety of fields in recent era.

The department of statistics was established in the year 2017 with the objective to start a three-year undergraduate B. Sc. degree program in Statistics for the students. Through this statistical program, students learn the basic knowledge of statistical tools and imply its applications in real life situations. The fundamental philosophy of the department is to inculcate not only intellect and creativity among its students through their active engagement in academic and research activities but to realize them their extra-academic and extra-curricular disposition as well, critical for making a productive member of the society.

The program covers all the related topics of the field and the students are given full exposure and assistance in their all round development during the study program. Apart from this, the department has a society by name of “Parastika” organizing various lecture series, seminars, webinars and trainings on the basis of more updated informative statistical studies that given by eminent professors under the banner of the society.

The department has a well furnished laboratory with the variety of softwares available on its computer systems. The students get expertise by learning software(s) skills like R-software language, SPSS, TORA, Mathematica and Excel and get a leg up when competing for the graduate level government and private sector jobs. After completion of this program, the students can apply for Survey Investigator, Statistician, Data Analyst, Data Scientist, to name a few.



# Course Contents

## B.Sc. (Hons.) Statistics

SEMESTER 1	SEMESTER 2
C-I : Descriptive Statistics C-II : Calculus AECC-I : English/MIL Communication or EVS GE-I : Generic Elective	C-III : Probability and Probability Distributions C-IV : Algebra AECC-II : English/MIL Communication or EVS GE-II : Generic Elective
SEMESTER 3	SEMESTER 4
C-V: Sampling Distributions C-VI: Survey Sampling and Indian Official Statistics C-VII : Mathematical Analysis SEC-I : Statistical Data Analysis using Software Packages / Using R Software Environment GE-III : Generic Elective	C-VIII : Statistical Inference C-IX : Linear Models C-X : Statistical Quality Control SEC-II : Statistical Techniques for Research Methods/ Database Management Systems GE-IV : Generic Elective
SEMESTER 5	SEMESTER 6
C-XI: Stochastic Processes C-XII: Stat. Computing using C/C++ Programming DSE-I : Discipline Specific Elective DSE-II : Discipline Specific Elective	C-XIII: Design of Experiments C-XIV: Multivariate Analysis & Non-parametric Methods DSE-III : Discipline Specific Elective DSE-IV : Discipline Specific Elective

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

### Generic Elective Papers (I-IV Semester)

1. Statistical Methods
2. Introductory Probability
3. Basics of Statistical Inference
4. Applied Statistics

### Discipline Specific Elective (V, VI Semester)

(Credit : 06each)

#### DSE-I

1. Time Series Analysis
2. Demography and Vital Statistics

#### DSE-II

1. Operations Research
2. Econometrics

#### DSE-III

1. Actuarial Statistics
2. Survival Analysis

#### DSE-IV

1. Financial Statistics
2. Project Work

# Supporting Department – Department of English

The Department of English had its genesis with the introduction of CBCS curriculum w.e.f. 2015. The department is a supporting department to all the other departments wherein it offers certain courses to the students from other backgrounds.

The department offers AECC (Ability Enhancement Compulsory Course) in English to all UG programs of the college in the first year of their graduation. With this paper, department strives to attain sharp improvement in english language speaking skills of the students. It also aids to improve the soft/ life skills of the students to help them effectively build interpersonal and intrapersonal relationships

The department also offers GE (Generic Elective) courses to the first- and second-year students of the college. The GE courses are aimed to introduce the students to a choice of subject apart from their core courses. Through these GE courses, the department aims to develop the critical thinking capabilities of students through literature so as to allow them to form an independent and unbiased opinion about the contemporary issues faced by the society.

The department supports in the different academic, cultural and co-curricular activities of the college. Some events organized (in collaboration) by the department in previous year: Five-Day Workshop on MOODLE Learning Management System and Thought-a-thon.



# Supporting Department – Department of Environmental Studies

**E**nvironmental education for undergraduate studies is imparted as Ability Enhancement Compulsory Course (AECC), Environmental Studies (EVS) under 'choice-based credit system' (CBCS) by the University Grant Commission (UGC). The EVS department at Shaheed Rajguru College of Applied Sciences for Women, involves creating strategies that are simple, innovative, natural, penetrable, relatable, inter-disciplinary and inter-cultural. The curriculum is designed to be commensurate with student-age learnings in environment. The information on the environment covers various dimensions which include topics like ecology, natural resources, sustainable environment, environmental policy, pollution and waste management, impact assessment, biodiversity, environmental ethics and traditional practices. Moreover, it also refurbishes the students' knowledge through current topics like carbon footprint, environment audit, energy efficiency and energy management, circular economy, life-cycle assessment (of a product) and statistical analysis (of the data) which goes beyond the curriculum-based topics. The learnings foster thinking in the students to unite them with the growing desire for action towards a sustainable environment.

Also, EVS aims at transcending the information of a student into practice beyond classroom learning through projects, surveys and fieldwork. Various projects and surveys have been undertaken by the students, for instance, the carbon footprint calculation of their houses, survey(s) on assessing the awareness, practice and the attitude of the household on solid waste management, awareness on the environment, building their composting systems at home etc. Thus, the EVS department transcends the concept of responsibility and care ethics in its students from more personal to social values and further to environmental values through critical inquiry.



**F**or the nation to progress, the health of the students has to be nurtured so as to make them a powerhouse. With this philosophy in mind, SRCASW along with academics puts considerable focus on sports activities and encourages students to participate and excel in a variety of games and sports that are organized regularly in our college and outside. The college caters to Physical education and sports in the following ways:

1. **Sporting Facilities** : The college provides facilities for Athletics, Aerobics, Badminton, Cross Country, Gymnastics, Kho-Kho, Volleyball, Table Tennis and Yoga. It has a well equipped Gymnasium in its campus. These facilities are open for staff and students. The department also organizes various fitness programs and camps from time to time.
2. **Participation in Tournaments** : Our students regularly participate in the DU inter college tournaments and also in tournaments at District level, State level, National level and Inter University level and make the college proud through their achievements. College provides all the required back-up support.
3. **SPARDHAA**, the Sports Fest, invites teams from different colleges/institutions to participate and exhibit their sports talent, leadership and comradery. In SPARDHAA-2021, athletes from various colleges of University of Delhi and NCR took part and showcased their talents online through healthy competitions in aerobics, yoga, chess and sports quiz .
4. **Intra-Murals** : The college organizes intra-murals, where college students and staff participate in various sporting events.
5. **Physical Education as Subject of Teaching** : Department of Physical Education & Sports Science offers Generic Elective Paper in Physical Education.

Semester I : Yoga and Stress Management

Semester II : Obesity Management

Semester III : Aerobics Training

Semester IV : Fitness and Exercise Management



# Facilities@SRCASW

The college boasts of a hi-tech auditorium with a seating capacity of about 600, an aesthetically designed amphitheater, several seminar halls, classrooms, well-equipped gym, beautiful gardens and well-maintained lawns. It also has an on-campus hostel which accommodates about 120 students. The college hostel gives students a neat, clean and comfortable place to live in.

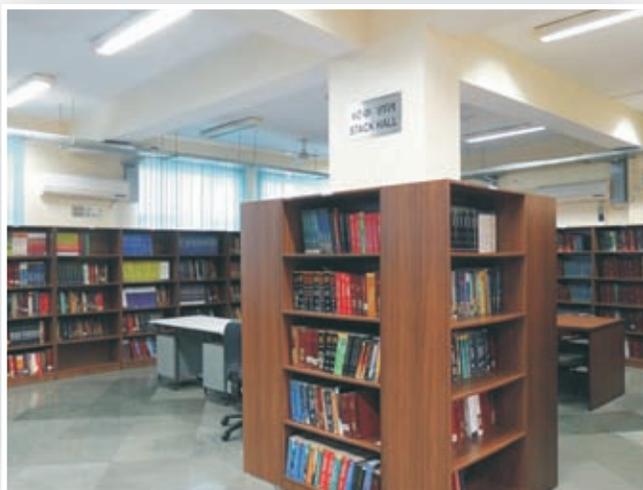
## The Library

The college library has approximately 19100 books, 20 printed journals and magazines; and many scientific encyclopedia and periodicals covering all aspect of fundamental science. The library subscribes to a large number of e-Resources through UGC-Infonet, DULIS Electronic Journal and NLIST of Inflibnet. It includes 11 online databases on reference & citation sources, 7 online databases on bibliographic sources, 2 online databases on citation analysis resources, 5 online databases on financial and statistical sources, single databases on doctoral theses and 77 online databases on full text sources. Around 49270+ e-journals and 97000+ e-books are available in the library with three wi-fi computer laboratories consisting of 80 computers.

The library has digital materials on its institutional repositories like New Product Development done by the 3rd year students of Food Technology. Other Important project reports, question papers, syllabus are also digitized by the library.

The college library is RFID (Radio Frequency Identification System) enabled, which is being used for housekeeping operation. The system moves beyond security to become tracking system that combine security with more efficient tracking of materials throughout the library, including easier and faster charge and discharge, inventory, material handling and automated book drop kiosk being used for easier return of books.

The system includes self-circulation desk, staff work station, security gate, book drop box, RFID reader, RFID sticker for Book, SMS/e-mail services for each book transaction.



# Facilities@SRCASW

## Other Infrastructural Facilities

Besides the above, the college has an amphitheater, lecture theaters, conference rooms, well-furnished staff-rooms for the faculty, cafeteria, hostel and a lush green playground, too. Staff-rooms have tea/coffee dispensing machines installed by Café Coffee Day.



*Hostel*



*Conference Room*



*Amphitheater*



*Playground*



*e-Library*



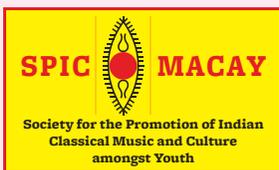
*The Cafeteria*

# Milestones@SRCASW

## Technology Business Incubator (TBI)

Technology Business Incubator of the college has recently been awarded the approval and is supported by the Micro, Small and Medium Enterprises (MSME) – DI, New Delhi. The mission of incubator is to stimulate the establishment and growth of technology based startups. By fulfilling this mission, the TBI would contribute to job creation and generate revenue to run the incubator without support. One of the startup on 'Mushroom Cultivation' is being incubated in this.

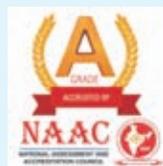
## SPIC Macay



SPIC MACAY is a non-political nationwide voluntary movement that organizes programs of classical music and dance, folk arts, crafts, yoga, classic cinema screenings, heritage walks etc. Every year SPICMACAY organises programs and carrying forward the same legacy, Shaheed Rajguru Chapter organized its orientation program on 30th March 2021. The orientation was attended by 80+ students. Legends like Rajan and Sajan Mishra, Shovana Naryayana gave their performance in 2019-20.

## NIRF Ranking

NIRF, the National Institutional Ranking Framework, e-Released the India Rankings 2021 on 9th September 2021 by Hon'ble Education Minister Shri Dharmendra Pradhan. In the college category Shaheed Rajguru College of Applied Sciences for Women, obtained 37th position, amongst the 1,802 participating institutions, with an overall score of 57.17. The College was previously at the 67th position. The framework outlines a methodology to rank institutions across the country. The methodology draws from the overall recommendations broad understanding arrived at by a Core Committee set up by MHRD, to identify the broad parameters for ranking various universities and institutions. The parameters broadly cover "Teaching, Learning and Resources" (TLR), "Research and Professional Practices" (RPC), "Graduation Outcomes" (GO), "Outreach and Inclusivity" (OI) and "Perception". The college is a Grade 'A' institute accredited by NAAC in 2015.



## Institution's Innovation Council

Institution's Innovation Council, a promising initiative by the Ministry of Education, Government of India is a syndicate of innovators, entrepreneurs and leaders. IIC-SRCASW aims at espousing a culture of entrepreneurship and innovation by means of sustained mentorship and inspiration. Our primary mandate is to expand the realm of knowledge as well as the opportunities within and beyond the four walls of a classroom. Since its inception, IIC-SRCASW has organized a myriad of successful and engaging events ranging from enthralling webinars with entrepreneurs to confounding business hackathons. IIC strives to provide a more innovation-oriented eco-system in and around the campus through multitudinous modes.

## Training & Placement Cell

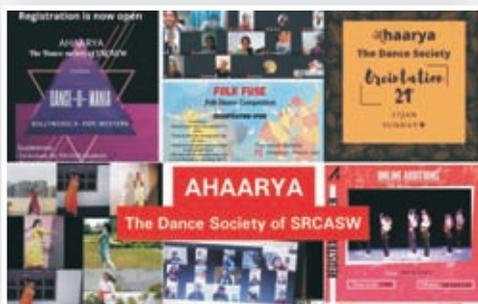
The academic year 2020-21 saw its own share of challenges and opportunities. Having the entire session over a virtual platform was indeed demanding but the Training and Placement Cell, witnessed an exhilarating year lined up with activities. June and July of 2020 witnessed training sessions over CV writing and getting onboard opportunities for internships across a plethora of domains. During August and September, CV vetting was conducted for the students who wished to be a part of the placement drives which were later conducted in two parts (Oct-Dec & Jan-Apr). Some of the prominent recruiters were Jaro, Wipro, TCS, ICICI Bank, DE Shaw, Yunity and Planet Sparks and 18 LPA was the highest package offered.





## ***Students' Cultural Societies***

**AHAARYA**, *the dance society*, means “a way to express ourselves”, making it a golden platform to express every emotion through dance. The society aims to create synergies of dancing talent and motivate the will of our members by polishing them to strive harder and helping them reach higher limits so that they can achieve their fullest potential confidently. Moreover, it offers a plethora of avenues for the development of each member in our family by giving them ample opportunities to show their colours through dance. Ahaarya is indeed a temple of learning, a field of contentment and a lantern of optimism.



**ELVIRA**, *the fine arts society*, aims to represent not the outward appearance, but the inward significance. The whole essence of this society is in the enchanting panorama of diverse array of colors, distinct yet similar, driven by relentless passion for arts. Elvira is known for treading forth with every propositions, setting new milestones, wising novel territories every year with arcane obstinacy. Ecstatic Diwali Mela to tranquil Independence Day, on your way to riveting Fresher's and Karvaan along with an indelible Vistoso, the team has supplied splendid experiences, with its ingenuity. The secret is not only the mechanic or technical know-how but also the spirit, commitment, trust and energy that binds this society together and build it as a team.



**GLAMFIRE**, *the fashion society*, aims to bring together students from different fields who share a common interest in fashion. Epitomizing grace, elegance and glamour, the fashion society consists of highly driven students who often prefer to let their on-stage presence speak for them and even the most inscrutable creatives don't lay low when it comes to working diligently for the society. It is more than just strutting in stilettos for us! The team includes a passionate and creative team of students who work as models, makeup artists and designers in the aforementioned fields. Rigorous and regular practice sessions are held right from the beginning of the year, leading up to the fest season. We attempt to exhibit through our performances, the prevalent issues pertaining to the society.



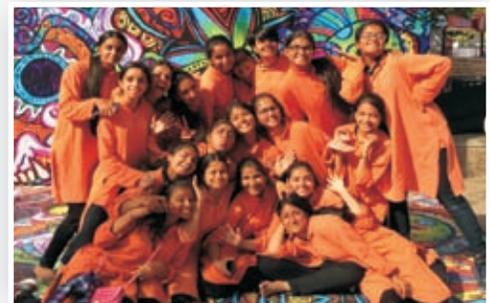
**GLOBETROTTERS** is a travel and tourism society of our college, aims to encourage the idea of travelling and exploring new and hidden adventures. With a group of young and enthusiastic travelers, it aims at building a platform of shared knowledge by looking at the world and its people differently.

**INKLINGS**, *the literary society*, since 2013, has been working to encourage the artistic side of lovers of language and literature. It aims to bring together the plethora of literary enthusiasts and other such talented individuals of the rajguru family and hone their skills while providing to them a sense of belonging. From orators and debaters to writers and poets, designers and creative thinkers, readers and editors; the society is a perfect amalgamation of all creative things and expressions.

**MENSTRUAL CAFÉ**, *the women health society*, is a Campus Ambassador Program, an initiative of NGO Sachhi Saheli and is one of the newly registered society of the college. It aims to dismantle stigma and generate awareness around Menstrual Health and Hygiene, Sexual and Reproductive Health Rights, Mental Health etc. The concept of a café in the current culture is replicated in the Menstrual Café where free flowing yet pertinent conversations can take place around topics such as menstruation, gender, mental health and more. The on-campus presence of a gynae doctor and a psychologist is helpful in this venture.

**MUKHAUTA**, *the dramatics society*, aims to bring light to the neglected problems our society is facing. Working together as a team, the members use their opinions and voice to make a social change. Known for its dedication, commitment and hardwork, the society has been widely appreciated for its work over the years. From teaching acting skills to teaching important life skills, one receives everything in this beautiful journey of theatre. The Nukkad Natak on social issues are its USP.

**PHILYRA**, *the music society* – They say “If music is a place, then jazz is the city, Folk is the wilderness, Rock is the road and Classical is the temple” and that has been the Philyran ideology since forever. Philyra has always been the heart of the college and its members, it's heartbeat. The society consists of an Indian and a



Western branch. However, despite our ranging interests and preferences, we have always been one big family. Like every year, this year too Aarohana and the Western Music Society have managed to organise several intra and inter college events, which have been a huge success. A few of our events include Nirvana, Cadenza, Meraki and Tirangmanch. While Nirvana and Cadenza were inter-college competitions, Meraki and Tirang Manch were intra college competitions. These competitions were enjoyed by everyone, the audience as well as participants.

**SHUFFLESHOTS**, *the photography club* – Capturing Life, Creating Art Society to learn, understand and express through the means of photography is the constant endeavour of this society. We aim at serving as an ideal platform to share and gain photography knowledge and enhance photography skills of budding photographer. By organizing competitions, workshops, photo walks for the practical implementation and exhibition we give exposure to its enthusiastic cohort of photographers.

**EHSAAS**, *the mental health society*, is the Mental Health Awareness Society of the college. Mental Health is essential to wellbeing and is fundamental to achieving a healthy, balanced and a productive life. The society strives to promote mental well being of the students with the aim of spreading awareness about mental health issues and trying to remove the stigma and taboos attached to it. Moreover, it encourages students to feel positive about them and experience life well. The society has and will continue to promote mental health and spread its awareness through workshops, seminars and interactive events.

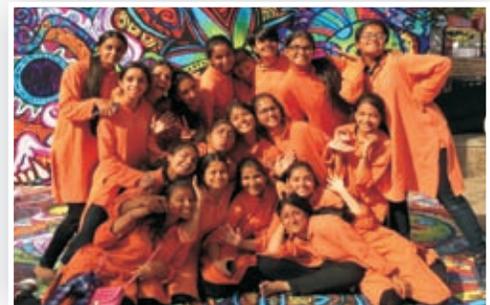
**ENACTUS** project has a vision to create a better world by solving social issues via sustainable business models. It aims at taking up business projects from the inception stage and working on them till they become sustainable and positive change agent in the society. The student's society is developing progressively with project, "Pehchaan" which is an initiative to facilitate holistic growth of the LGBTQIA+ community and to ensure their greater participation in the mainstream society. In 2020, project Sugavya, the second project



under the umbrella of Enactus Rajguru which aligns with the centuries-old Indian belief that anything that comes from a cow can be used to benefit the human body and its environment. More recently, Green-Haven has been launched by our Principal Prof. (Dr.) Payal Mago. Our project is committed to providing the freshest, safest, highest quality mushrooms to our consumers. It aims to serve as a vehicle of consciousness in the market by creating a holistic, sustainable business model that promotes good health and wellness for all beings and mother nature. Many participants are trained in bakery and fruit related products. They are successfully running the business and living a respectful life.

**HUMAN CAFE** is a new initiative by Shaheed Rajguru College of Applied Sciences for Women. This initiative aims to create an open and judgement and biasfree space for the students, where they will be heard by the listeners. This will allow the students to share their experiences, emotions, feelings etc. without the fear of being judged by anyone. It aims to uplift the mental health of the students by the students with proper mentoring and coaching from the faculty of the college.

**MARK-HAVEN**, *the marketing society* aims to facilitate an all-round development of the students in the field of marketing and keep them abreast with the latest happenings in the said domain. The same is achieved through a plethora of initiatives taken by the society ranging from knowledge sharing sessions to guest lectures by industry experts. The topics of discussion cover the length and breadth of marketing from the basics to the emerging trends. The society aims to conduct an on-line as well as on-campus events to challenge and ignite the marketing minds. With the advent of technology, the number of products and services available to the customers has increased exponentially. In this cluttered space of options, marketing becomes the most critical tool to catch the attention of the customer. From branding to advertising to sales promotions, a marketer plays with various tools to capture the market space. In the society we aim to target all these aspects of marketing and train students before entering in to the real world of marketing.



**PRAVRIDHI**, the *Eco Club* of the college began in 2005 by a group of teachers and students of the college. It aims to create and incorporate the concepts of environmental awareness and sustainable development through various activities in and around the college by recognizing the significance and the pivotal role of the students and youths in safeguarding future sustainability. The society conducts various activities, capacity building programs, workshops and interactive sessions that help students in understanding local issues in the global context. It teaches skills to the students towards action to participate in appropriate action through drives, campaigns and field work. It also maintains dissemination and the dissipation of the information through videos, write-ups, presentations that are regularly uploaded on the web.

**RAQAM**, the *Finance and Investment Society* was founded in August 2019 by the students of the Department of Management and Financial Studies and has come a long way since its inception. The society aims at providing the right platform to the students in order to gear their interest towards the correct and possible avenues that exist in the field of finance. The motto of the society is to “impart in-fin-ite knowledge” not only in the field of finance but also by showcasing and developing skills like teamwork, leadership, management, communication, creativity etc.

**YOUTH PARLIAMENT SOCIETY**, laid its pious foundation in the premises of the college in July 2016 and has been blossomed ever since. This society is not only to castigate the political agendas that our country is facing today but also to develop a critical analysis of everyday legislation. The dedicated members are striving to create authority aptitudes and direct young minds to profit mankind at world level. It helps to nurture the dreams and aspirations of young and resurgent faces of the country, for strengthening the foundation of youth as a whole. It imparts pragmatic training to prepare the youth for making the political and social scenario better. It encourages the youth to serve the society by entering into public life and assuming vivid roles accordingly. Activities of society introduce us to the basic structure of our constitution.





*A number of activities were organised by student council 2020-21 under the guidance of Cultural Secretary, Dr. Sadhna Jain and Student Advisor, Ms. Venika Gupta. The activities are as follows :*

**Republic Day** – Shaheed Rajguru College of Applied Sciences for Women celebrated Republic Day with utmost patriotic fervor on 26th January 2021. The tricolour flag was hoisted, and the national anthem echoed in the campus. Principal ma'am, Prof, Dr. Payal Mago spoke about India's freedom struggle and the sacrifices which led to India becoming an independent nation. Her inspiring speech was followed by a patriotic poem and a solo music performance by student council members.



**Psychometric Assessment** – The student council conducted a free psychometric assessment for the students of all years in collaboration with UPES and Pearl Academy to help them make an informed decision regarding their prospects.



**Independence Day** – Shaheed Rajguru College of Applied Sciences for Women celebrated Independence Day with utmost patriotic fervour on 15 August, 2021. The Indian Tricolour was hoisted by Mr. Kuldeep, MLA of the area. The celebrations were attended by Governing Body members and family in faculty in full strength. The soil brought from Shaheed Rajguru's village near Pune was handed over to college, to be used in installing Shaheed Raguru statue. Principal, Dr. Payal Mago and other speakers remembered the sacrifices of all freedom fighters in getting us freedom.



**Student Council Elections** – Student council elections were conducted in Shaheed Rajguru College of Applied Sciences for Women on January 8, 2021 under the Lyngdoh Committee guidelines in online mode. In total

seven council members were elected for the session 2020-21. The elections were held in fair and proper manner.

**Karvaan'21** – Shaheed Rajguru College of Applied Sciences for Women, University of Delhi organised its Annual Cultural Fest Karvaan 2021 held on 18th February 2021 to 20th February 2021 in the online mode. The event was kicked off by a dynamic panel discussion on the topic 'Role of Women in the Development of India' with an all-star panel comprising of Dr. Sudha Bhattacharya (Sr. Scientist, INA), Dr. Samiksha Ojha (Dean, Pearl School of Creative Business) and Ms. Advaita Kala (Author, Screenwriter). A vast multitude of cultural competitions and games were organised by different societies of the college such as — the street play society 'Mukhauta' organised 'Darpan' (Short-film Festival), the music society 'Philyra' organised 'Nirvana' (Indian solo), the fine arts society 'Elvira' organised many creative arts competitions, the fashion society 'Glamfire' organised 'Mr. & Ms. Karvaan', the robotics club organised 'Expo'21', the travel society 'Globetrotters' organised 'Trip-o-Mania' and many more engaging events were organised by different societies of the college enriching the cultural experience and fostering a healthy competitive spirit amongst participants from pan-Delhi University and other colleges. The student council also organised a 'Comedy Night' as the star event featuring comedian Mr. Rohan Gujral of Comicstaan 2 fame. Mr. Gujral left the student in splits with his funny quips and relatable banter and the event was wrapped up on an extremely positive note.

**Online Scribble Day** – The student council orchestrated a virtual 'Scribble Day' for outgoing final-year students on the Relic App platform which enabled friends and acquaintances alike to exchange well wishes and farewell messages.



# Social Initiatives@SRCASW



## National Service Scheme

NSS activities are actively carried out round the year by the volunteers of our college. Teaching underprivileged kids from nearby slum areas, visits to old-age homes and orphanages, collection drives, road safety activities, women empowerment related activities etc. are some of NSS initiatives. The NSS also organizes various camps like Eye check-up camp, Blood Donation Camp, Health Issues related Camps, Self Defence Training Camp etc. Even during the pandemic and lockdown NSS volunteers of SRCASW organized several webinars in collaboration with several societies, colleges and organizations which included Webinars on 'Journey of a Women : From Puberty to Menopause', 'Road Safety Awareness', 'Safety & Security of Women', 'Sustainability and Social Issues', 'Provisions relating to Maintenance, Compensation and Services being provided by DSLA', to name a few. Besides these, a number of pledge ceremonies including Covid Guidelines Pledge, World AIDS Day, Integrity pledge, Vocal for Local pledge etc. were taken. The volunteers also spread the awareness towards the highly contagious Corona Virus (COVID-19) by making a documentary "Tribute to unsung corona warriors".



## EBSB Club

Established in January 2020, EBSB Club of SRCASW was created under the 'Ek Bharat Shreshtha Bharat' initiative of MHRD, Government of India, where Delhi state is paired with Sikkim state. EBSB Club strive to conduct various engaging activities that promote the culture, traditions, language, folk dance, folk music and cuisine of Sikkim. The aim of the club is to “celebrate the unity in diversity of our country”; to inspire the youth to be a force for equality and to become more culturally inclusive in their everyday interactions.





*Village survey by faculty & students*

## **Girl Up Nayaab**

A UN Foundation initiative, Girl Up is a global movement of empowered young women leaders who defend gender equality. The Shaheed Rajguru College chapter, Girl Up Nayaab, believes that empowered women are powerful and precious beyond measure. The club has worked on several issues such as physical and mental health, gender disparity at the workplace, constitutional rights for women, the marginalization of the LGBTQIA+ community, domestic abuse, lack of sex education in youth and various others. A Go to Document was created and circulated, covering the rights of women, mobile applications, devices/instruments, specialized safety products that help in self-defense and emergency contacts for people in New Delhi to call/text for immediate help. The club regularly uploads opinion pieces to the Girl Up portal as well as their own WordPress account. Girl Up Nayaab has also raised funds worth Rs. 18,000 for survivors of gender-based violence and has been felicitated by Karuna- The Compassion NGO in collaboration with the Delhi Police on International Women's Day, 2021 for their hard work towards women empowerment.

## **Unnat Bharat Abhiyan (UBA)**

It is a flagship program of the Ministry of Education (MoE), Govt. of India. The program was initiated by a group of dedicated faculty members of IIT Delhi working consistently in the field of rural development as well as technology and was officially launched by the Ministry of Human Resource Development (MHRD). UBA aims at engaging the faculty members and students of higher educational institutions (HEI) in the goal of improving

# Social Initiatives@SRCASW



the social and economic well-being of the rural communities. Various activities were conducted to spread awareness regarding important topics, initiatives such as battle against hunger, plastic free campaign, stationary distribution, help in generating e-ration cards for the villagers, helping the para-transport drivers receive government aid, training the people in making sanitizers and masks by themselves at home by using video tutorials etc were taken by UBA, SRCASW to help people during pandemic. Various webinars and interactive sessions were also being conducted on topics like, 'Clean Yamuna : A Gateway Towards Cancer Prevention' and 'National Education Policy-2020'. UBA in association with Gandhi Smriti and Darshan Samiti organized two workshops i.e. 'MUDITA' – Workshop on 'Promotion of volunteerism for constructive work' and 'MUDITA' – Workshop on 'Peer Mediation: An Approach to Constructive Dispute Resolution'. To celebrate the occasion of Women's Day, a panel discussion was also organised in March 2021, 'Women in Leadership': Achieving an Equal Future and Vocal for Local. Various competitions were also held during the session such as, 'ANDAAZ APNA APNA - A Virtual Stage Competition' ; 'THE TAMBOLA BATTLEFIELD' – An E-tambola competition, 'PARWAAZ – A Candid Conclave' – an extempore competition.

In these turbulent times with tensions running high, it is extremely essential being mindful of the way we interact with our environment and people. We aim to enhance and bring out hidden volunteerism in people and spread more kindness in this world.

## Women Development Cell

Women Development Cell of the college aims to sensitize and apprise the students on various socio-legal issues related to women at home and workplace. It organizes self-defence workshop to promote self-empowerment, talks related to

# Social Initiatives@SRCASW



women empowerment, voice against sexual harassment & promote healthcare of women.

## Equal Opportunity Cell

The Equal Opportunity Cell (EOC) of the college has been established with a view to empower the ST, SC and OBC students from north east and students with disabilities to give them equal opportunities in higher education. The cell disseminates information regarding various welfare schemes related to such students and also provides facilities and assistance through counseling and remedial classes. All efforts are made to make the campus disabled friendly. The college has ramps, lifts, wheel chairs and disabled friendly toilets. In addition, College library has computers with assistive software for visually impaired students.



## North East Cell

The cell was established with a view to address issues and concerns of students from North-East states studying in the college, so as to ensure them a homely environment far away from home. It provides a platform for North East students of the college to showcase and spread awareness about the diverse and magnificent, yet less known, cultures and traditions of North East states. The cell aims to promote the Spirit of Fraternity and Unity in Diversity as a step towards National Integration by amalgamating the lesser known cultures and traditions of North-East states into the mainstream. The cell presented a movie screening of two movies Axone & Mary Kom through You tube live streaming, to raise awareness and give a brief idea about North Eastern States. It also organized a powerpoint presentation competition under the theme “Explore the States” through Google Meet.



# College Regulations

## **Lectures, Tutorials and Practical**

It is compulsory for every student to attend lectures and tutorials/practical in each of the subject taken up for study. The students are divided into sections or groups for lectures / practicals. It is expected from every student to find out her section/ group/ days/ periods well in time so as not to miss any of the classes. In case a student does not find her name / roll number in any of the sections / groups for any lecture or practical class, she should bring this fact to the notice of the concerned teacher immediately.

## **Discipline and Attendance**

Every student of the college must abide by the rules and regulations of the college and university. According to University regulation, students of undergraduate programs are required to attend at least 67% of the total lectures and tutorials / practicals separately in each subject. Students falling short of attendance will not be allowed to appear for the semester examination. The students are required to maintain discipline and silence in and around classrooms and laboratories. The students are required not to use their mobile phones during teaching or lectures or seminars.

The college will not be responsible for any event organized by the students outside or in the college premises without the prior approval of the Principal.

## **Medical Leave**

All applications for leave of absence due to sickness must be supported by a medical certificate issued by an authorized medical practitioner or hospital and should reach the Principal office not later than a week of the student joining the college after her illness. This rule will be enforced strictly in giving benefit of attendance on medical grounds.

## **Identity Card**

RF Identification cards are issued to all the students soon after the admissions. It is compulsory for the students to carry their I-cards to the college everyday and they should be able to present it on demand by the college authorities. In case of loss/damage of Identity card, a duplicate card can be obtained from the college office by paying an amount as per the college rules.

## **Library**

A student can issue four books each for a week and a text book for a day. If the books are not returned within stipulated time, fine as per library rules has to be deposited. The periodicals of the library are only for reference. Student can get photocopy of the same from paid facility. Students will get login/password to access 135000 e-books and 5000 e-journals, besides printed books.

## **Notice Board / Website**

Students are advised to read the notice board regularly and comply with the orders and instructions relevant from time to time. Students are also advised to visit the college and university website from time to time to keep themselves updated for important inputs.

## **Medals and Prizes**

Medals for the best academic performance in each program are awarded at the end of every academic year. Apart from academic prizes, medals and prizes for various activities as conducted in the college throughout the year are also awarded. Many memorial awards are also instituted by the various departments of the college.

## **Seminars, Workshops and Various Functions, Annual Technical Festival**

The college organizes seminars/ workshops in order to have a direct interaction with various industries/ research institutes. Eminent speakers are invited to deliver talks in their respective fields of specialization. Lectures by skilled professionals are also conducted in the college from time to time for the benefit of the students. It is compulsory for every student to attend these seminars/workshops/ lectures failing which strict disciplinary action would be taken against the students.

# College Regulations

## Lockers

Every student is issued a locker in the beginning of the academic session. Students are not allowed to carry their bags inside laboratories, auditorium and library and they must not leave their bags and other belongings unattended. Hence for safety purpose, the locker should be kept locked.

## Damage to College Property

Students shall take proper care of the college property and they must not spoil or cause any damage to or tamper the college property, furniture, fittings etc. Strict disciplinary action would be taken against the students found to be involved in damaging college property.

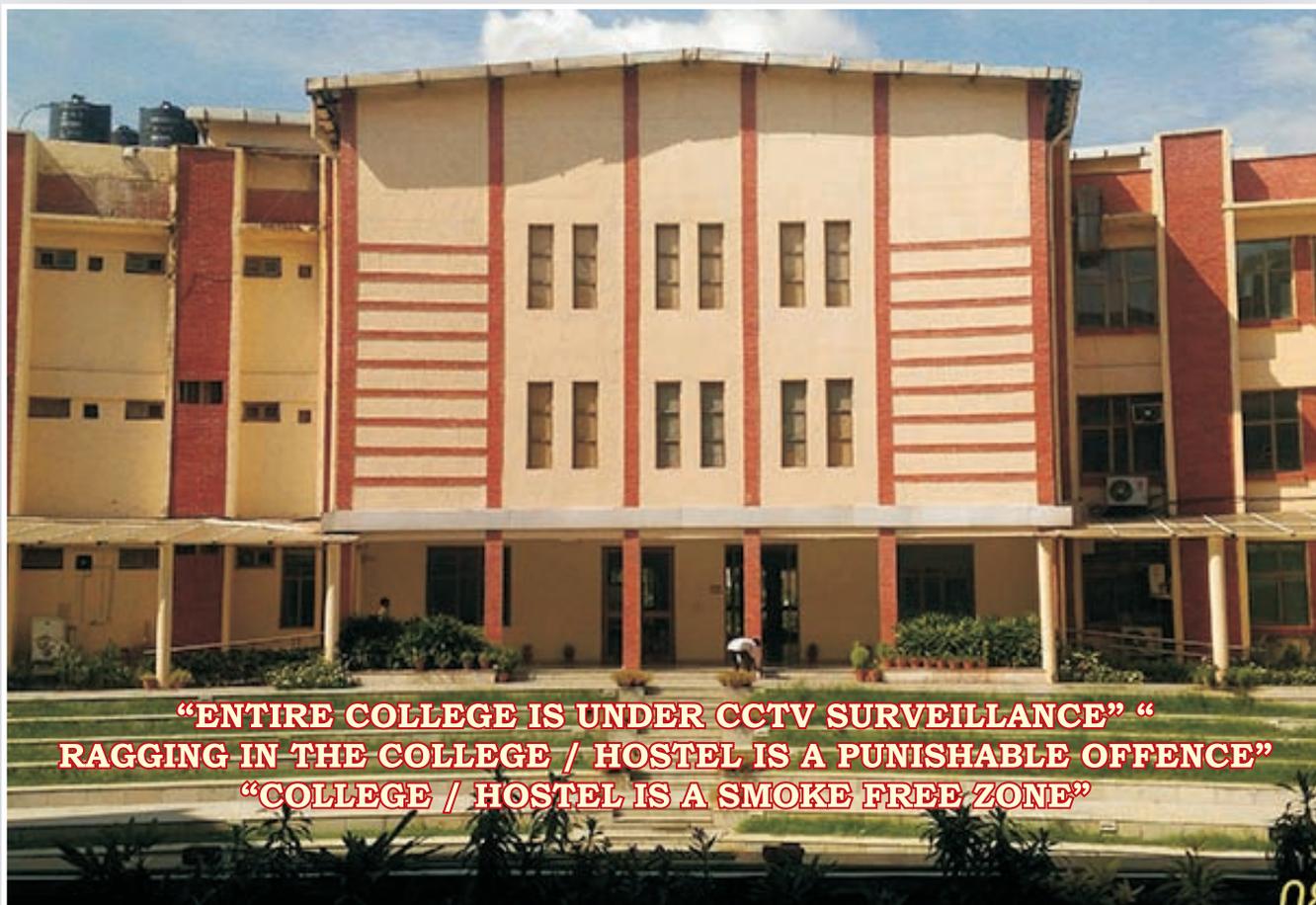
## Scholarships

All eligible SC/ST, OBC, PwD students etc. should submit their scholarships form online for every academic year as and when announced on National Scholarships Portal of Government of India.

## Fee Concession

The college offers the fee concession for the needful, economically weak and bright students. Students willing to avail this facility can apply in the prescribed form (available at the college website) after admission. A notice is circulated to call for applications. Students desirous of applying for the fee concession are advised to check the notice boards for announcements.

**A student will be liable to disciplinary action for violation of any of the above rules. Disciplinary action may involve warning, fines and suspension from using the college library, suspension from the class or even expulsion from the college.**



# 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.

## 19.2 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.

# Ordinances

- 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 (4) 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.

**Note : 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.

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

# Committees

## Admission Committee

Dr. Deepa Joshi (Convenor) .....	9810950353
Dr. Ranjana Singh (Convenor) .....	9818258145
Dr. Indu Arora (Foreign Student Advisor) .....	9891027157
Dr. Sadhna Jain, Associate Professor, Department of Biochemistry .....	9810103664
Dr. Shruti Banswal, Assistant Professor, Department of Biomedical Science .....	9811138293
Dr. Jasjeet Kaur, Associate Professor, Department of Chemistry .....	8130959522
Dr. Suruchi Chawla, Assistant Professor, Department of Computer Science .....	9810342692
Ms. Para Dholakia, Assistant Professor, Department of Food Technology .....	9811706879
Ms. Preeti Singhal, Associate Professor, Department of Electronics .....	9868516331
Dr. Daya Bhardwaj, Assistant Professor, Department of Instrumentation .....	9811239028
Dr. Punita Saxena, Associate Professor, Department of Mathematics .....	9810221483
Dr. Rekha Mehrotra, Associate Professor, Department of Biology/Microbiology .....	9811243283
Dr. Alka Vohra Kuanr, Associate Professor, Department of Physics .....	9717453770
Dr. Daya Bhardwaj, Assistant Professor, Department of Psychology .....	9811239028
Dr. Payal Mago / Dr. Ashish Garg, Department of Statistics .....	9873340197
Dr. Payal Mago / Dr. Dimpay Handa, Department of Management & Financial Studies .....	9212111802

## Admission Grievance Committee

Dr. Mohd Saquib Ansari (Convenor) .....	9868877867
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## Sport Admission Committee

Dr. Punita Saxena (Convenor) .....	9810221483
Dr. Bimla Pawar (Co-Convenor) .....	9810224259

## ECA Admission Committee

Dr. Radhika Bakshi/Ms. Saumya Chaturvedi .....	9560384491
Dr. Ritika Chopra .....	9958559143

## Special Categories Admission Enabling Committee

Dr. Mohd. Saquib Ansari (Convenor) .....	9868877867
Ms. Preeti Singhal .....	9868516331

## Proctorial and Anti-ragging Committee

Dr. Suruchi Chawla .....	9810342692
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## Internal Complaint Committee

Ms. Venika Gupta (Nodal Officer) .....	9953469945
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## Fee Concession Committee

Dr. Jasjeet Kaur .....	8130959522
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# Seat Matrix

S.No.	Program	General	OBC	SC	ST	EWS	Total	PwD	CW (Army)	Kashmiri Migrant	Sports	ECA	Ward Quota 14 T. 14 PT	Foreign National	Total Supernumery
1	B.Sc. (Hons.) Biomedical Sc.	16	11	6	3	4	40	2	2	2	1	1	2	2	12
2	B.Sc. (Hons.) Biochemistry	16	11	6	3	4	40	2	2	2	1	1	2	2	12
3	B.Sc. (Hons.) Chemistry	16	11	6	3	4	40	2	2	2	2	1	2	2	12
4	B.Sc. (Hons.) Computer Sc.	23	16	9	4	6	58	3	3	2	2	1	2	2	15
5	B.Sc. (Hons.) Electronics	16	11	6	3	4	40	2	2	2	1	1	2	2	12
6	B.Sc. (Hons.) Food Technology	16	11	6	3	4	40	2	2	2	1	1	2	2	12
7	B.Sc. (Hons.) Instrumentation	16	11	6	3	4	40	2	2	2	1	1	2	2	12
8	B.Sc. (Hons.) Mathematics	23	16	9	4	6	58	3	3	2	2	1	2	2	15
9	B.Sc. (Hons.) Microbiology	16	11	6	3	4	40	2	2	2	1	1	2	2	12
10	B.Sc. (Hons.) Physics	23	16	9	4	6	58	3	3	2	2	1	2	2	15
11	B.Sc. (Hons.) Statistics	23	16	9	4	6	58	3	3	2	1	1	2	2	14
12	B.B.A (F.I.A.) (Bachelor in Business Administration [Financial Investment Analysis])	23	16	9	4	6	58	3	3	2	0	0	2	2	12
13	B.M.S. (Bachelor in Management Studies)	23	16	9	4	6	58	3	3	2	0	0	2	2	12
14	B.A. (Hons.) Psychology	23	16	9	4	6	58	3	3	2	2	1	2	2	15

# Fee Structure

## FEE STRUCTURE I YEAR FOR THE ACADEMIC YEAR 2021-22

(A)	Maintenance Account	Amount	Amount	(B)	Student's Society Account	Amount
1	Tuition Fee (July-June)		180.00	1	Games & Sports Fee	1000.00
2	Magazine Fee		500.00	2	Function & Cultural Activities Fee	1500.00
3	Library & Reading Room Fee		2000.00	3	Student's Aid Fund	200.00
4	Identity Card Fee		100.00	4	Security Deposit (Refundable)	500.00
5	Garden Fee		500.00	5	Medical Fee	150.00
6	Water & Electricity Fee		1500.00	6	Development Fee	2000.00
7	Laboratory Fee		2500.00	7	Picnic & Excursion Fee	400.00
8	University Enrolment Fee		200.00	8	Seminar/Exhibition Fee	500.00
9	University Athletic Association Fee		50.00	9	In-house Examination Fee	0.00
10	University Cultural Activities Fee		5.00	10	Prevention of Sexual Harassment Fee	10.00
11	University Development Fee		600.00	11	World University Services Fee	5.00
12	Computer Laboratory Fees		1200.00	12	Others	0.00
13	N.S.S. Fund		20.00			
14	Computer Science Course Fee	15000.00				
15	Biomedical Science Course Fee	10000.00				
16	Business Administration (BBA(FIA))	11000.00				
17	University Examination Fee		0.00			
18	Internet Facility		0.00			
19	Placement Brochure Fee (For final year Student)	200.00	0.00			
20	Fine		0.00			
	<b>Total (A)</b>		<b>9355.00</b>		<b>Total (B)</b>	<b>6265.00</b>
	<b>Total (A+B)</b>					<b>15620.00</b>

## PROGRAM AND CATEGORY-WISE FEES\* FOR THE ACADEMIC YEAR 2021-22

No.	Program(s)	UR / OBC / EWS / CW / Kashmiri Migrants / Sports / ECA / Ward	SC / ST	PwD	Foreign Students
1	Biochemistry	17840	17660	1490	32840
2	Biomedical Science	27840	27660	1490	42840
3	Chemistry	17840	17660	1490	32840
4	Computer Science	32840	32660	1490	47840
5	Electronics	17840	17660	1490	32840
6	Food Technology	17840	17660	1490	32840
7	Instrumentation	17840	17660	1490	32840
8	Mathematics	17440	17260	1490	32440
9	Microbiology	17840	17660	1490	32840
10	Physics	17840	17660	1490	32840
11	Statistics	17640	17460	1490	32640
12	Business Administration (B.B.A. (F.I.A.))	28040	27860	1490	43040
13	Management Studies (B.M.S.)	17040	16860	1490	32040
14	Psychology	17440	17260	1490	32440

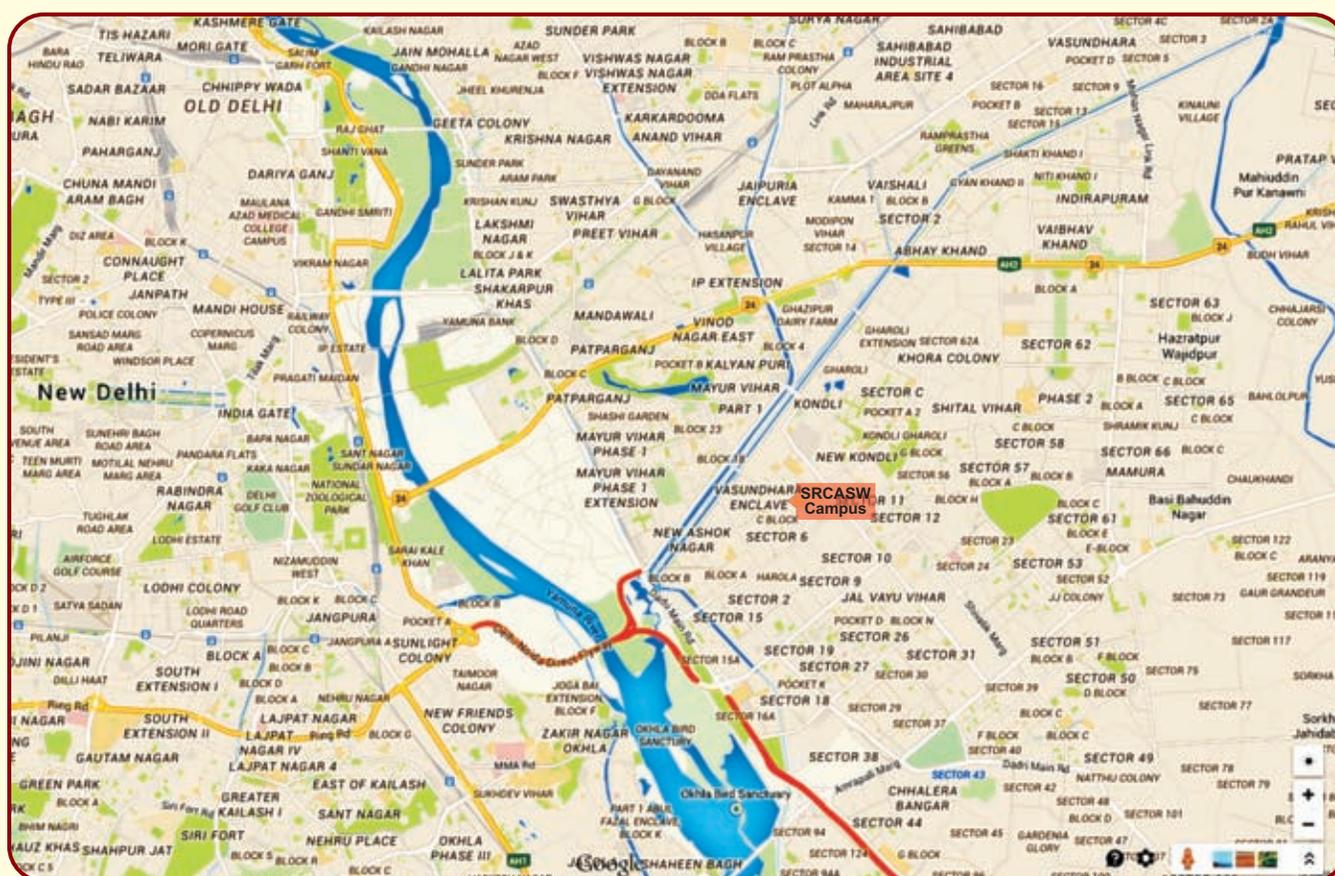
\* Above-stated fee structure includes examination fee.

# FEE REFUND POLICY

## Rules for refund of fee on account of withdrawal/cancellation of Admission

S. No.	Reasons for seeking refund	Quantum of fee to be refunded
1	When a student applies for withdrawal of admission up to last date of admission.	Full fee after deduction of Rs. 1000/- and full examination fee.
2	When admission is made inadvertently due to error/ omission/ commission on the part of the University/College.	Full fee and full examination fee.
3	When cancellation of admission is due to concealment/ falsification of facts, submission of false/fake certificates(s), providing misleading information by the student or for any error/mistake on the part of the student.	No fee will be refunded.
4	When a student of self-financing course applies for withdrawal of admission on or before the last date of admission.	Full fee after deduction of Rs. 1000/- and full examination fee.
5	In case a student after his/her admission expires within one month of the last date of admission.	Full fee including examination fee will be refunded to his/her parents.

## Route Map – SRCASW, Vasundhara Enclave, Delhi-96



**Sector 15, NOIDA, UP (2.5 Km)**

**Nearby Metro Stations : New Ashok Nagar, Delhi (3.7 Km)**

**Mayur Vihar Extension, Delhi (4.5 Km)**



## **Shaheed Rajguru College of Applied Sciences for Women (University of Delhi)**

Vasundhara Enclave (Adjoining Chilla Sports Complex), Delhi - 110 096

Phone(s) : 011-22623503, 22623505 • Telefax : 011-22623504

Website : [www.rajgurucollege.com](http://www.rajgurucollege.com)