



# Delhi Technological University

Established by the Govt. of NCT of Delhi vide Act 6 of 2009  
(Formerly Delhi College of Engineering)

ACCREDITED with 'A' Grade (CGPA 3.22 out of 4.0) by NAAC

ISO 9001:2015 Certified



**ADMISSION  
BROCHURE**

**M. Sc. PROGRAMME**  
2021-2022 /



## Tentative Admission Schedule with Important Dates\*

(For Final Schedule & Important Dates, visit DTU website : [www.dtu.ac.in](http://www.dtu.ac.in))

S. No.	Activity/ Event	Date
1.	Advertisement in newspapers.	14.05.2021 (Friday)
2.	Commencement of Online Registration	15.05.2021 (Saturday) 10:00 AM onwards
3.	Last Date and Time for Online Registration	14.06.2021 (Monday) 12:00 midnight
4.	Display of eligible candidates list for written examination	16.06.2021 (Wednesday) 05:00 PM
5	Written examination for M.Sc. (Mathematics, Physics, Chemistry and Biotechnology)	24.06.2021 (Thursday) & 25.06.2021 (Friday)
6	List of shortlisted candidates on the basis of written examination conducted by DTU for 1st round admission on DTU website.	26.06.2021 (Saturday) 08:00 PM
7	1 <sup>st</sup> Round admissions at DTU for all branches (Selected candidates are required to login in their respective portals for payment of Fee).	02.07.2021 (Friday) 10:00 AM
8	Candidate Portal will close for Fee Payment	03.07.2021(Saturday) 5:00 PM
9	Display of vacant seats for II <sup>nd</sup> round on DTU website: <a href="http://www.dtu.ac.in">www.dtu.ac.in</a> .	09.07.2021 (Friday) 5:00 PM
10	II <sup>nd</sup> Round admissions at DTU for all branches (Selected candidates are required to login in their respective portals for payment of Fee).	16.07.2021 (Friday) 10:00 AM
11	Candidate Portal will close for Fee Payment	17.07.2021(Saturday) 5:00 PM
12	Display of vacant seats for spot round on DTU website: <a href="http://www.dtu.ac.in">www.dtu.ac.in</a> .	26.07.2021 (Monday) 06:00 PM
13	Spot round of admissions at DTU (Selected candidates are required to report along with original documents and online/ fee deposit receipt as detailed in Section - 4 and 6)	30.07.2021(Friday) 10:00 A.M

\*Note: All candidates desirous of seeking admission to M.Sc. Programme are hereby advised to read the brochure carefully and to visit the website [www.dtu.ac.in](http://www.dtu.ac.in) regularly for updates and other details/ additional information about the entire admission process. The contents and information provided in the Admission Brochure is based on the current instruction/guidelines issued from the Government of NCT of Delhi.

Any Modification / Addition / further clarification about eligibility conditions and procedures for admission in the M.Sc. programmes, if required, will be notified on the University website through separate notification.



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## ADMISSION BROCHURE



**M. Sc. PROGRAMME**  
**2021-2022**







दिल्ली प्रौद्योगिकी विश्वविद्यालय  
**DELHI TECHNOLOGICAL UNIVERSITY**

*(Formerly Delhi College of Engineering)*

**DTU**  
Delhi Technological  
UNIVERSITY

Prof. Yogesh Singh  
Vice-Chancellor



E-MAIL : [vc@dtu.ac.in](mailto:vc@dtu.ac.in)

## Message

It is my immense pleasure to announce that Delhi Technological University is commencing admissions to its various graduate and postgraduate courses for the academic year 2021-22 in May 2021.

Delhi Technological University has a long legacy of honing talent and a home to students who moved onto achieve greatness. Students admitted to DTU through their dedication, discipline and steadfastness can go onto become professionals and impactful leaders. DTU provides them an environment to shape their talent as DTU ensures that every step of a student's journey is designed keeping in mind the holistic development. This is coupled with a diverse range of extra-curricular activities throughout the year, which help students develop various skills to facilitate them throughout their lives.

Over the years, DTU has established itself as a University of unshakeable repute. Hence, getting admission into DTU comes with the added responsibility of keeping the standards high. DTU Alumni have scaled great heights on the national and international stages, and continue to make us proud. The conjoined efforts of relentless students, faculty, administration and the staff have preserved an exceptional environment in DTU that allows persistent exchange of information and upholds the unmatched excellence associated with this University for eight decades.

DTU, in realization with the current trends and needs of the scientific community and the nation as a whole, have been aligning its efforts to produce leaders in different discipline fully equipped with the knowledge and confidence. Year on year we have set new records and trends and the current year is no exception.

  
(Yogesh Singh)

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## GENERAL INSTRUCTIONS

1. The application forms can be accessed at the web portal of the University Website at : [www.dtu.ac.in](http://www.dtu.ac.in).
2. The candidates are advised to go through the Admission Brochure carefully and acquaint themselves with all the requirements with respect to filling up of the Online Application Form.
3. The registration fee of Rs. 1000/- for GN/OBC/EWS and Rs. 500/- for SC/ST/PwD, is to be paid online through credit Card/net banking at the time of registration. The fee paid for application for admission shall not be refundable.
4. It is the responsibility of the candidates to ascertain whether he/she possesses the requisite eligibility and qualifications for admission as specified in this brochure.
5. If a candidate is found ineligible at any stage before or after examination / declaration of result or during any stage of the programme, his / her candidature/ admission will be cancelled without any notice and suitable action shall be initiated against him / her including forfeiture of the fee.
6. The applicants are advised to preserve the online Application Form as well as Acknowledgements if any for future reference.
7. While filling up of the application form, the candidate must verify the correctness of all the particulars furnished by him / her. In case any candidate is found to have furnished false information or is found to have concealed any material information in his / her application, he/ she will be debarred from admission. Further, University reserves the rights to take suitable actions against the applicant in this regard.
8. After application form is complete in all respect and all the required documents have been uploaded, candidate must confirm all the details before final submission. The candidate will not be permitted to edit/change details filled in the registration form once the candidate submits the form.
9. Candidates must ensure that **Mobile Number and Email Address** provided by them must be valid and should belong to the candidate or his/her immediate family members. These will be used by the University for future communications with the candidate. University would not be responsible for communication not being made due to non-existent/faulty communication details provided by the candidate.
10. It is in the interest of candidate to remember his/her Password and keep it highly confidential, to avoid misuse by other candidate.
11. The language of the Entrance Examination shall be English.
12. Result will be declared on University website as mentioned in important dates ([www.dtu.ac.in](http://www.dtu.ac.in)). No separate intimation will be sent to the candidates regarding declaration of results and for admission.
13. Tentative dates of commencement of first and second round admissions are mentioned under "Important Dates Schedule" in this Admission Brochure. Any update/ Change will be notified at the DTU website ([www.dtu.ac.in](http://www.dtu.ac.in)).
14. The University will declare and display the ranks of only those candidates who are declared as qualified in the Entrance Examination conducted by the University. The candidates will be called for admission depending upon the number of seats available in each programme. The offer of admission shall be extended only to the qualified



and eligible candidates strictly in order of merit.

15. The list of documents required for admission counselling is mentioned in section 6 of this brochure. **Candidates are advised to bring/upload all the relevant documents as detailed in this brochure at the time of admission.**
16. The candidate seeking admission under reserved categories has to mandatorily produce the caste/category certificate in his/her name at the time of counselling. The certificate in the name of either of the parents (mother/father) or any other family member is not acceptable and the candidate will not be entitled even for provisional admission. The caste certificate must be uploaded in online admission portal as well.
17. It is the sole responsibility of the candidate to prove his / her eligibility for claiming reservation under any of the reserved categories. A candidate who is offered a seat under reserved category / sub-category in any round of seat allotment and fails to produce appropriate document in support, his/her allotted seat will be cancelled and he / she shall be considered for allotment in GENERAL(GN) category in subsequent rounds on submission of a written request by the candidate to University in this regard, subject to eligibility, availability of vacant seats and his/ her merit. University reserves the right to accept or reject such requests.





## About DELHI TECHNOLOGICAL UNIVERSITY

Delhi Technological University (DTU) came into being after the reconstitution of the Delhi College of Engineering by the Government of NCT of Delhi in 2009, by Act 6 of 2009, passed by the assembly of the NCT of Delhi. It is a non-affiliating, teaching and research University, committed to achieve excellence in Engineering, Science, Technology, Management and allied areas and matters connected therewith or incidental thereto. The university, in its various avatars, namely, the 'Delhi Polytechnic' and 'Delhi College of Engineering' (DCE), has been serving the nation and the global community since its inception in 1941, by providing trained manpower of highest quality in the field of engineering and technology, and, is globally well known for its outstanding education, research and innovations. The University currently offers various inter-disciplinary and industry relevant programs in Science, Technology, Management, and allied areas at both the Undergraduate, Postgraduate and Doctoral level. The University has established a strong academia-industry interface and has collaborations with reputed research organizations, industries, and premier institutions. A great many alumni of the institute have excelled at home and abroad and through their contributions to the profession of engineering they have brought high honour and enhanced the dignity of engineering fraternity being rolled out from institutions in India. The University lays great emphasis on assisting students in the development of national character, self-confidence, leadership and fostering an ecosystem for creativity and imagination.

### VISION

To be a world class university through education, innovation and research for the service of humanity

To establish centres of excellence in emerging areas of science, engineering, technology, management and allied areas.

To foster an ecosystem for incubation, product development, transfer of technology and entrepreneurship.

To create environment of collaboration, experimentation, imagination and creativity.

To develop human potential with analytical abilities, ethics and integrity.

To provide environment friendly, reasonable and sustainable solutions for local & global needs.



## PROGRAMS OFFERED

The university offers 14 Undergraduate engineering programs, 21 Post graduate engineering programmes, 5 MBA programmes and 4 M.Sc. programmes. Besides this, the university offers 3 other bachelor programmes namely, B.Des., BBA and BA (Hons.) Economics. The university offers Ph. D programmes in all areas of engineering, science, management and economics. The UG and PG programmes of DTU offer most modern curricula, based on the Choice Based Credit System (CBCS), having rich mix of courses from science, engineering, management, social sciences, humanities, fine arts, liberal arts, classical music, sports, etc. The course curricula have been developed with a view to integrate advancements in science and engineering, while also incorporating industry relevant technologies. To provide further flexibility there is provision for credit transfer and earning credits through massive online courses (MOOCs) from different platforms such as NPTEL, SWAYAM, Coursera and Edx etc. The curriculum is regularly updated keeping in view the new technologies and changes in industries and society.

## FACULTY AND RESEARCH

The university has a very talented pool of experienced, as well as young faculty members who are well qualified in their area of specialization and have very good national and international exposure. To engage the students and faculty in research and innovation the university offers provisions like funding for students' innovative projects, financial assistance to students for attending internship overseas, research project grants to all faculty members etc. To celebrate the individual's excellence in research, the university offers **Research Excellence Awards** to researchers in three categories of awards annually, namely, *Outstanding Research Awards*, *Premier Research Awards*, and *Commendable Research Awards*. The

awards are open to all the researchers of DTU. The university has been granted with the Technical Education Quality Improvement Program (TEQIP) project. The project provides funds to faculty and students to organize and attend various faculty development programs, seminars, and conferences.

## RANKING AND REWARDS

The University is accredited with 'A' grade by NAAC (National Assessment and Accreditation Council) and has been accorded 12-B status by the University Grants Commission (UGC). Several of its UG engineering programs are also accredited by the National Board of Accreditation (NBA). The university has also been consistently ranked among best 10 engineering institutions as per the various independent Surveys on Best Engineering Institutions of the country. The university has got 2<sup>nd</sup> position as per Times Engineering Ranking 2019. The University has been ranked 7<sup>th</sup> by India Today's best government engineering colleges ranking 2019. The 2020 NIRF rankings placed DTU at the 36<sup>th</sup> position among the engineering institutions and at 45<sup>th</sup> in the categories of universities.

## CAMPUS AND INFRASTRUCTURE

DTU has 164 acres of a lush green, tech-savvy main campus, consisting of 16 academic departments, research centers, and residences for students, faculty, and staff. At present the university has around 10,000 students in its undergraduate, postgraduate, and Ph. D programs. DTU has an EDUSAT Studio utilized for recording of lectures, events, and talks. Besides the main campus, the university has another campus in East Delhi, where some of the M. B. A programmes, B. A (Hons.) Economics and B.B.A. programmes are offered. The newly established East Delhi Campus of DTU has been functional since the 2017-18 academic session. It is located at Vivek Vihar, Phase II, Delhi. This campus endeavours to provide



quality education, research, and innovation in the emerging areas of management, relevant to industry and society.

### COMPUTER CENTRE

DTU has a well-equipped centralized computer centre to cater to the needs of students and faculty in the university. It is housed, in a magnificent state-of-the-art building having specialized laboratories to provide variety of platforms and computing environment for UG, PG and research students. The centre possesses a number of servers and over 275 Dell intel core i5 computer systems. In addition, the centre has more than 15 servers hosting different applications such as websites & portals, SPSS, Mathematica, MatLab, DNS, LDAP, proxy, Email services, Network Monitoring System (NMS) etc. and 4 SUN CAD workstations meant for use by UG/PG/PhD students for their projects and research work. The centre is fully networked through high-end intelligent Avaya & CISCO switches, and possesses round the clock 10 Gbps NKN leased line, ISDN and a 200 Mbps leased line in a different pipe for the LAN wired & Wi-Fi connectivity for the academic, administrative and hostel blocks of the campus, with internet facilities on all the nodes. It also has the latest versions of compilers, scientific, technical and engineering software, training kits etc. for the students of different branches of engineering.

### LIBRARY AND KNOWLEDGE CENTRE

Delhi Technological University library, with a collection of more than 2,00,000 text and reference books and a large number of e-journals, e-books, manuscripts in digital format, is one of the highly rich engineering libraries in the country. Library provides remote access facility to all its readers by using cloud based remote access software. The library also helps researcher to maintain proper integrity and ethics and provides the facility of similarity check to avoid

instances of plagiarism. It has a very active presence on Facebook. Various current awareness services and user information literacy programs are continually organized throughout the year. The library building is a four storied, aesthetically designed, centrally air-conditioned structure with a seating capacity of 400.

### OUTREACH, EXTENSION AND BUSINESS INCUBATION ACTIVITIES

The university has also established centers like **Center of Outreach & Extension Activities** and **Center of Human Resource Development** (HRDC). The center of outreach & extension activities organizes a variety of activities for promoting public awareness for various sections of society including awareness program on engineering for class X/XI/XII students of private and government schools. The HRDC center aims to upgrade and enhance the skills and knowledge of faculty at DTU. The university has also established the DTU Innovation and Incubation Foundation, pursuant to sub-section (2) of section 7 of the Companies Act, 2013 and rule 8 of the Companies (Incorporation) Rules, 2014. Currently, 14 teams are working in the Centre. The center offers incubation infrastructure, including space, computing resources, connectivity, common tools, and environment for co-working, collaboration, and innovation.

### SPORTS AND OTHER OUTDOOR ACTIVITIES

The students of DTU are provided with excellent facilities for indoor and outdoor games. DTU has 4 x 400m racing track, fields for football, hockey, cricket, courts for volleyball, basketball, tennis, badminton, along with facilities for indoor games. A well-equipped gymnasium is also available in the campus in addition to gym facilities in each hostel. The university has appointed coaches in almost all the games to coach



the students and prepare university teams. Students are encouraged to participate in various sporting events and tournaments held in, and around, NCR of Delhi. From academic year 2018-19, as per the revised curriculum, the university offers foundation electives to the students of first year and second year and in these sports have big share of electives.

## EVENTS AND FESTIVALS

The university organizes annual cultural, literary, sports and technical festivals. These festivals not just provide an opportunity to the students to connect with the professional

world, but also display their creative and technical skills in several interesting events and activities organized during the fests. The **ENGIFEST**, one of the most well attended student's cultural event in northern India, is annual cultural extravaganza of the university and offers a good mix of literary, cultural, and entertainment events. The "**INVICTUS**" is annual technical festival of the university where all technical societies of the university host various technical activities and competition.

More information about DTU can be accessed at [www.dtu.ac.in](http://www.dtu.ac.in).



## 1. M. Sc. PROGRAMMES

The M.Sc. two-year degree programme offers quality education in the disciplines of Mathematics, Physics, Chemistry and Biotechnology. The course is designed to provide a basket of 'Elective' courses as an integral component of curriculum, for catering to the varied interests of the students, so that students can develop 'specialization' in the areas of their academic and professional interest. The interdisciplinary content of the curricula

which is based on Choice Based Credit System (CBCS) guidelines issued by University Grants Commission (UGC) equips the students with the ability to utilize scientific knowledge foundation for practical and Industrial applications. The medium of instruction is English for the programme. The educational qualifications and eligibility conditions for admission is given in the Table-1.

Table-1

S. No.	Name of Department	Programme Name	Number of Seats*	Essential qualifications
1.	Applied Mathematics	M.Sc. Mathematics (MSCMAT)	40	BA/B.Sc. (Gen. OR Hons.) with 55% or equivalent CGPA provided by the concerned Institute/ University with <b>Mathematics as one of the main subjects.</b>
2.	Applied Physics	M.Sc. Physics (MSCPHY)	40	B.Sc.(Gen./Hons.) with 55% or equivalent CGPA provided by the concerned Institute/ University with <b>Physics as one of the main subjects.</b>
3.	Applied Chemistry	M. Sc. Chemistry (MSCCHEM)	40	B.Sc. (Gen/Hons.) with 55% or equivalent CGPA provided by the concerned Institute/ University with <b>Chemistry as one of the main subjects.</b>
4.	Biotechnology	M.Sc. Biotechnology (MSCBT)	40	B.Sc.(Gen/Hons.) with 55% or equivalent CGPA provided by the concerned Institute/ University with <b>Biology as one of the main subjects.</b>

\*Number of seats may enhance. Candidates are advised to visit University website: [www.dtu.ac.in](http://www.dtu.ac.in) regularly.

In case CGPA or conversion formula has not been provided by the concerned Institute/ University then equivalent CGPA will be computed as per the following

Percentage of Marks= 10 X CGPA

Relaxation in minimum percentage requirement will be granted to candidates belonging to SC/ST/PwD/OBC categories as given in **Table 2**. The aggregate marks awarded for the qualifying degree will be

considered for eligibility. Admission to the M.Sc. programmes as given in Table-1, will be made on the basis of merit in the written test to be conducted by the DTU.



- a. Final year students who will be completing all the requirements of their qualifying examination including back paper(s)/ supplementary(ies) before the date of admission may also apply. Such candidates will be required to submit a certificate as per the proforma given in **Annexure-1** along with the application form. Such candidates may be admitted provisionally but they will be required to produce the proof of having passed the qualifying degree with the required percentage of marks or CGPA latest by **November 30, 2021**, failing which their admission shall be cancelled.
- b. Detailed seat matrix indicating seats in various departments under different categories is given below:

**Seat Matrix for M.Sc. Programme for the Session 2021 – 2022**

Category	Department/ Branch	AM	AP	AC	BT	Total**
		Mathematics	Physics	Chemistry	Biotechnology	
General	Open	15	14	15	14	
	PwD	--	01	01	01	
	CW	01	01	--	01	
Total GN Seats		16	16	16	16	64
SC	SC	05	05	05	05	
	SC-PwD	01	--	--	01	
	CW	--	01	01	--	
Total SC Seats		06	06	06	06	24
ST	ST	03	03	03	03	
	ST-PwD	--	--	--	--	
	CW	--	--	--	--	
Total ST Seats		03	03	03	03	12
OBC	OBC	10	10	10	10	
	OBC-PwD	--	01	01	--	
	CW	01	--	--	01	
Total OBC Seats		11	11	11	11	44
EWS	EWS	03	04	03	04	
	EWS-PwD	01	--	--	--	
	CW	--	--	01	--	
Total EWS Seats		04	04	04	04	16
Total Seats**		40	40	40	40	160

\*\* The number of seats in all M.Sc. Programmes are likely to be enhanced from 40 to 60. The seat matrix will be revised accordingly. The Candidates are advised to visit University website: [www.dtu.ac.in](http://www.dtu.ac.in) for update

## 2. Reservation of Seats for Different Categories and Relaxation in Essential Qualifications

Admissions to the M.Sc. programmes will be made on All India basis. The university follows the reservations rules of Govt. of NCT of Delhi. In addition to this, 01(One) seat

in each M. Sc. programme of DTU, over and above their normal intake, is earmarked for Single Girl Child (SG) candidate and 01 (one) seat in all M.Sc. programme is reserved for



Kashmiri migrant. However, there will be no relaxation in the minimum eligibility criteria for SG and Kashmiri migrants (KM).

categories and relaxation in minimum eligibility conditions as applicable for the academic session 2021- 22.

Table 2 given below indicates the percentage of reservations for various

**Table-2**

S. No.	Category	Seats reserved	Relaxation in Essential qualification
1	Scheduled Castes (SC)	15%	5%
2	Scheduled Tribes (ST)	7.5 %	5%
3	Other Backward Classes (OBC)	27%	NIL
4	Economically Weaker Section (EWS)	10%	NIL
5.	Sub Category Persons with Disability (PwD)	5%	5%
	Sub Category Defence Personal (CW)	5%	NIL

## 2.1 Reservation Policy

- a. **Scheduled Caste (SC):** 15 % of the total seats are reserved for Scheduled Caste candidates.
- b. **Scheduled Tribe (ST):** 7.5 % of the total seats are reserved for Scheduled Tribe candidates.
- c. **Other Backward Class (OBC- NCL):** 27% of the total seats are reserved for Other Backward Class (Non-Creamy Layer) candidates.
- d. **Economically Weaker Section (EWS):** 10% of the total seats are reserved for Economically Weaker Section candidates.

Sub-categories namely 'Defence' and 'Person with Disability' are available under each category (General, SC, ST, OBC-NCL, EWS).

- e. **Defence Personnel (CW):** 5% of the total seats (Horizontal) in each category are reserved for candidates belonging to Defence sub-category in the following priority:

**Priority I** - Widows / wards of Defence Personnel killed in action.

**Priority II** – Wards of disabled in action and boarded out from service.

**Priority III** - Widows/wards of Defence Personnel who died in peace time with death attributable to Military Service.

**Priority IV** - Wards of disabled in service and boarded out from service with disability attributable to military service.

**Priority V** - Wards of serving Defence Personnel and ex-servicemen who are in receipt of the following Gallantry Awards:  
1. Param Vir Chakra 2. Ashok Chakra 3. Mahavir Chakra 4. Kirti Chakra 5. Vir Chakra 6. Shaurya Chakra 7. Sena / NauSena / Vayu Sena Meda 8. Mention-in-Despatches 9. President's Police Medal for Gallantry 10. Police Medal for Gallantry

**Priority VI**– Wards of Ex-servicemen.

**Priority VII** – Wives of:

- i. Defence personnel disabled in action and boarded out from service



- ii. Defence personnel disabled in service and boarded with disability attributable to military service
- iii. Ex-servicemen and serving personnel who are in receipt of Gallantry awards.

**Priority VIII** – Wards of Serving personnel.

**Priority IX** - Wives of Serving personnel.

Note: \* These medals are awarded for Gallantry as well as for distinguished service. Accordingly, it is notified in correspondence as under: (a) Sena Medal (G)/ Nau Sena Medal (G)/ Vayu Sena Medal (G) for the medal awarded for Gallantry. (b) Sena Medal (D)/ Nau Sena Medal (D)/ Vayu Sena Medal (D) for the medal awarded for Distinguished Service. However, for the purpose of reservation, only notification which states that the Medal has been awarded for Gallantry will be accepted and the Medal for Distinguished Services will not be accepted.

- f. **Person with Disability (PwD):** 5% of the total seats (Horizontally) in each category are reserved for candidates belonging to 'Person with Disability' sub-category. Candidate's seeking admission must fulfil the eligibility conditions as detailed earlier. The 5% reservation horizontally for persons with disability may be allocated as detailed in Seat Matrix. The format of disability certificate is available at **Annexure-3**.

Against the seats identified for each disability, of which, one percent each shall be reserved for persons with benchmark disabilities under clauses (a), (b), and (c) and one percent, under clauses (d) and (e).

- a) Blindness and low vision;
- b) Deaf and hard of hearing;
- c) Locomotors disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy;
- d) Austin, intellectual disability, specific learning disability and mental illness;
- e) Multiple disabilities from amongst persons under clauses (a) to (d) including deaf-blindness.
- f) Physically handicapped applicants are permitted 5% marks of equivalent CGPA relaxation in eligibility requirement in line with the policies of Govt. of NCT of Delhi. They will not be allowed any other relaxation beyond this limit even if they belong to SC/ST category.

**g. Kashmiri Migrants (KM) (Supernumerary):**

(One) seat over and above the total intake of all programme is available.

**h. Single Girl Child (SG) (Supernumerary):**

- i. 01 (One) seat in each programme, over and above their normal intake, is earmarked for Single Girl Child candidate (**Girl having no brother and sister alive**).

**2.1 Seat Conversion rules:**

- a. After exhausting the complete list of PwD and CW subcategories if there are vacant seats, the vacant seats in these subcategories will be transferred to respective main category (GEN/SC/ST/OBC/EWS).
- b. After exhausting the complete list of SC, ST, OBC and EWS candidates, the vacant seats will be treated as unreserved in the Spot Round. The conversion of vacant seats will be done only in the **Spot Round** as per the following procedure:



- i. If the complete list of ST candidate exhausts, then the remaining vacant seats under this category will be filled from the list of SC, category candidates or vice versa as per merit.
- ii. If the complete list of SC/ST candidate exhausts, then the remaining vacant seats under this category will be filled by creating equal number of seats in GN, category as per merit.
- iii. If the complete list of EWS candidate exhausts, then the remaining vacant seats under this category will be filled from the list of GN, category candidates as per merit.
- iv. If the complete list of OBC candidate exhausts, then the remaining vacant seats under this category will be filled from the list of GN, category candidates as per merit.

### 3. Online Registration Process

For admission to M.Sc. programmes 2021, candidates need to register and fill the application form ONLINE only by accessing [www.dtu.ac.in](http://www.dtu.ac.in) from May 15<sup>th</sup> 2021 to on or before June 14<sup>th</sup> 2021.

The guidelines indicated in the Online application form must be carefully read by all applicants before filling the Online application form. The application process is completed only when a print out of the filled ONLINE application form is taken after successful registration and candidates paying ONLINE registration fee, which has to be submitted/uploaded at the time of admission/counselling in the University along with two good quality photographs (**same as uploaded on online application form**) affixed in the appropriate place on the form.

Candidates, whose final year result is awaited, may also fill the online application form. Once the candidate has registered and paid the registration fee, he/ she would be required to upload an Undertaking as per the format given in the Brochure (Annexure – I) while filling up the application form. The candidates would require to submit their final mark lists/ degree by November 30, 2021. Detailed notification in this regard will be published on University website.

Candidates are requested to ensure that they must fulfil all such requirements before filling and applying for such programmes as their choices. Incomplete application due to any reason is liable for rejection by the University. In this regard, no communication will be entertained.

#### 3.1 Application Fee

The registration fee of Rs. 1000/- for GN/OBC/EWS and Rs. 500/- for SC/ST/PwD, is to be paid online through credit/net banking at the time of registration and choice filling. The registration shall not be complete without the payment of registration fee which is non-refundable and would not be adjusted towards any other fee. Convenience charge (online transaction) will be charged over and above the Online Registration as per the charges for the payment gateway on every online registration fee payment.

**If a candidate wishes to apply in more than one M.Sc. programme, then he/she must apply separately in each department by paying separate online registration fee. They need to appear in separate entrance test for each M.Sc. Programme.**



### 3.2 Details of Entrance Test

The entrance test will be Computer Based Test (CBT mode) of 60 minutes duration comprising of 40 multiple choice questions. For all Programmes, each question carries four marks. For each incorrect response, one mark will be deducted from the total number of marks obtained by the candidate. No deduction from the total marks will, however, be made if no response to a question is indicated. Candidates are advised not to attempt a question if they are not sure of the correct answer. The cut off for the same will be decided by the University. The syllabus for the entrance test for each programme is detailed in section 8 in this brochure.

**Note: In view of the ongoing COVID 19 pandemic in the country, the mode of conducting the Admission/ Entrance Test shall be one of the following depending upon situation at the time of test:**

- i. **OMR based pen-paper type at DTU campus.**
- ii. **Computer based test at DTU campus.**
- iii. **AI & manually proctored online examination.**
- iv. **Any other mode as per the situation.**

The exact mode of examination shall be posted on the University website prior to the admission test. Students are advised to check DTU website regularly for updates and additional information.

### 3.3 Rules for Seat Allotment

- e. The University shall declare the result of each Entrance Test in respect of qualifying candidates as per the tentative schedule and the merit list will be displayed on the University's website, [www.dtu.ac.in](http://www.dtu.ac.in). No separate intimation to this effect will be sent to the candidates individually.

- f. Separate merit list for each M.Sc. Programme will be prepared on the basis of DTU entrance test score.
- g. To resolve and determine inter-se-merit of candidates having same score in DTU entrance test, following criterion will be used in the stated order of preference.

# Date of Birth will be compared and elder candidate will be given preference;

# In highly unlikely event of date of birth is same, then rank will be decided on the basis of marks/ CGPA obtained in the qualifying degree.

### 3.4 First round of admission

- a. The list of selected candidates will be displayed for first round of admissions along with first round admission schedule on the university website [www.dtu.ac.in](http://www.dtu.ac.in) and department notice boards. In case some seats remain unfilled then second round of counselling may be conducted.
- b. The selected candidates in first round of admission shall deposit the requisite fee through the link activated on the web portal which can be accessed through the login id of the candidate, after the document verification (as uploaded in application form) of the candidates as per the given schedule on the university website.

**It may be noted that the admission of the candidate is complete only after the payment of online admission fee within the prescribed time limit. If a candidate fails to pay fee within prescribed time, then his/ her provisional allotment of seat may be cancelled.**

- c. Admission committee will verify all uploaded documents and fee payments for all candidates, who are



- allotted seat in a particular round. If all documents are verified successfully and fee payment is successful, admission will be confirmed by the admission committee. Such candidates can see the status of document verification in their login and print the provisional admission letter. Once provisional admission letter is available for the candidate at the portal, admission process is considered complete for such candidates.
- d. If the candidate is allotted a seat in a particular round and he/she does not pay/ fails to pay the required admission fee as per counselling schedule, his/her allotted seat shall be cancelled and his/she will not be considered for any seat allotment in subsequent rounds.
  - e. If admission committee finds some deficiency/deficiencies in uploaded documents and the seat allotted is not confirmed by the admission committee, a deficiency will be created by admission committee and status will be available in candidate login. They can contact [mscoordinator@dtu.ac.in](mailto:mscoordinator@dtu.ac.in) for further clarification on deficiencies mentioned by the admission committee. If candidate produces new/additional documents related to mentioned deficiencies, and update the information through mail at [mscoordinator@dtu.ac.in](mailto:mscoordinator@dtu.ac.in) within the prescribed limit, the admission committee can confirm his/her admission if documents are found to be in order.
  - f. A candidate can send his authorized representative with all the required documents and fee to report for admission in case he/she is unable to report for admission in person. **The authorized representative must come with the authorization letter duly signed by the candidate.**
  - g. Admission of a candidate is purely provisional and is subject to verification of original documents after the physical reporting of the candidate at the respective University Departments.

### 3.5 Second / subsequent rounds of admission (Subject to availability of seats)

- a. A list of seats available for admission during second/spot round of admission will be displayed on the DTU admission website as per the schedule given. Candidates are advised to check the DTU website regularly for instructions and Merit list.
- b. The second/ subsequent rounds for all the programmes will be held at the scheduled date and time in online mode. No separate individual communication will be sent in this regard.
- c. The selected candidates in second round of admission shall deposit the requisite fee through the link activated on the web portal which can be accessed through the login ID of candidate. after the document verification (as uploaded in application form) of the candidates are verified as per the given schedule on the university website.
 

**It may be noted that the admission of the candidate is complete only after the payment of online admission fee within the prescribed time limit. If a candidate fails to pay fee within prescribed time, then his/ her provisional allotment of seat may be cancelled.**
- d. No admission will be made directly to second or higher semester of any programme.



### 3.6 Spot round of admission (Subject to availability of seats)

- a. The SPOT ROUND shall be conducted depending upon the availability of vacant seats in programmes offered.
- b. All the registered and eligible candidates who have not secured a seat till the second round of counselling i.e. candidates who have been allotted but not accepted a seat and those who have not been offered a seat till the second round of counselling, are eligible for spot round. The registered candidates who were allotted seat in some round of counselling, but the seat was cancelled due to some deficiency (or legitimate reason) are also eligible for this round provided the deficiencies are removed.
- c. For detailed information on spot round, candidates are advised to visit the University website [www.dtu.ac.in](http://www.dtu.ac.in).
- d. Participating candidates need to report in person at the Spot Round venue (Respective Department Office) as per spot round schedule and mark their attendance within reporting time. No candidates shall be allowed after the reporting time.
- e. Candidates who cannot come physically can authorize their parent/relative/guardian/friends as their representative to participate in SPOT round on their behalf and complete admission formalities. No other relaxation will be given in the procedure of admission. Such candidates are also advised to send a copy of authorization letter on admission support email ([mscoordinator@dtu.ac.in](mailto:mscoordinator@dtu.ac.in)).
- f. Candidates will be called in order of their merit rank and allowed to opt for their choice of seat as per vacant seat availability.
- g. The selected candidates in spot round of admission shall deposit the requisite fee as per the given schedule through **DD in favour of "Registrar, Delhi Technological University" payable at Delhi** and submit a copy of fee receipt back to the respective department. Admission shall not be valid without payment of fee and submitting the fee receipt to the department.
- h. Withdrawal of seat is not allowed for SPOT round seat and admission fee will not be refunded.



## 4. Fee Structure

The detailed fee structure for M.Sc. Programme is given below:

S. No.	Particulars	AY 2021-22 1 <sup>st</sup> Year (₹)	AY 2022-23 2 <sup>nd</sup> Year (₹)
1.	Tuition Fee	15000/-	16000/-
2.	Non Govt. Component		
2.1	Student welfare fee (Co-curricular activities, Training & placement, extra curricular activities, Annual gathering, Students welfare, Institutional development, outsourcing, conference, seminar, workshop, innovative projects, skill development activities and miscellaneous expenditure on unspecified items)	8000/-	8000/-
2.2	Facilities and services charges (Research initiatives, training programmes, Awards, automation, facilities, entrepreneurship activities and any miscellaneous expenditure on unspecified items)	1500/-	1500/-
2.3	Economically weaker section fund	4000/-	4000/-
2.4	Examination fee (Examination infrastructure strengthening, expenditure on examination activities, confidential printing etc.)	4000/-	4000/-
2.5	Premium amount for Mediclaim of student (per-annum)	500/-	500/-
	<b>GRAND TOTAL</b>	<b>Rs.33,000/-</b>	<b>Rs.34,000/-</b>

The annual fee of the M.Sc. programme will have to be deposited online by the candidate at the time of admission on the university website. Candidates must note that the admission fee must be paid in single instalment failing which the admission offer will be withdrawn immediately. Waitlisted candidates (if offered admission during

counselling) will be given one-day time to deposit the admission fee.

If the admission fee is not paid within the stipulated date and time, then the offer of admission given to them will be withdrawn automatically and the seat will be offered to the next eligible candidate.

## 5. Withdrawal / Refund Policy

The University follows the following policy for the remittance and refund of fee, if a student chooses to withdraw from programme of study in which he / she is enrolled:

S. No.	Percentage of Refund of aggregate fee	Point of time when application for withdrawal of admission received
1.	100%	15 days before the formally notified last date of admission.
2.	80%	Not more than 15 days after the formally notified last date of admission.
3.	50%	More than 15 days but less than 30 days after the formally notified last date of admission.
4.	NIL	More than 30 days after the formally notified last date of admission.

Note: Last date of admission will be notified separately on DTU website before the start of counselling. Candidates are advised to visit DTU website [www.dtu.ac.in](http://www.dtu.ac.in) regularly for notification.



## 6. Documents Required

Candidates are required to submit the following documents in original along with ONE set of self-attested photo-copies of the original documents, two recent passport size photographs, printout of the registration form duly signed by the candidates and annual admission fee receipt paid online on the university website, for the purpose of verification, as and when the restrictions for COVID-19 are lifted and students start reporting physically in University. The original documents will be returned to the students after verification. Candidates are advised to visit University website regularly for notification in this regard.

1. Date of Birth proof /10<sup>th</sup> certificate.
2. All mark sheets and certificate of qualifying examination (Graduation).
3. If Result for final semester is not declared, then candidate will be required to submit an Undertaking as per format placed at **Annexure-1**.
4. Candidates applying for any reserved seat (i.e. EWS, SC, ST, OBC-NCL, SG, CW, KM) must produce the original certificates (as applicable) issued from an approved district authority, at the time of document verification.
5. OBC (NCL) candidates are required to produce a caste certificate issued after March 31, 2021 from the authorities as mentioned in **Annexure 2**. However, if the certificate is issued prior to March 31, 2021, it must be accompanied with an additional certificate regarding the present non-creamy layer status of the candidate, issued by the same competent authority. This additional certificate must have reference of his/her already issued original caste certificate.
6. Candidates applying for admission to seat reserved for Differently Abled Person (PwD) sub-category, the candidate must produce the certificates in original at the time of document verification as per **Annexure-3**.
7. The benefit of reservation under EWS can be availed by persons who are not covered under the scheme of reservation for SCs, STs and OBCs upon production of an Income and Asset Certificate issued by a competent authority based upon the Income and Assets criteria. The details and prescribed format issued by the Competent Authority is detailed at **Annexure-4**.
8. For admission to a seat reserved for Defence sub-category (CW), candidate must produce the following certificates (as applicable), in original, at the time of document verification as per format available at **Annexure-5**.
9. The candidates seeking admission under SGC category can submit an affidavit duly attested by competent authority as per **Annexure-6**.
10. The candidates seeking admission under Kashmiri Migrants (KM) seats must produce the following documents, in original, at the time of document verification:
  - a. Certificate of registration as Kashmiri Migrants issued by the Relief Commissioner, Jammu or Divisional Commissioner, Delhi to establish the status of the applicant as registered migrants as per **Annexure-7**.
  - b. Proof of property in Kashmir of the parent of the candidate.



### 7.1 DEPARTMENT OF APPLIED MATHEMATICS

The Department runs a four-year B. Tech. programme in Mathematics & Computing. This programme is an amalgamation of Mathematics with Computer Science and Financial Engineering. More than 25 research students are registered in the Department for Ph.D programme. The department has a team of committed faculty members from the disciplines of Pure Mathematics, Applied Mathematics,

Computer Engineering, Statistics and Operation Research.

Research Areas: Information Theory, Graph Theory, Discrete Mathematics, Numerical Analysis, General Relativity and Cosmology, Optimization Technique, Complex Analysis, Mathematical Modelling, Approximation Theory, Stochastic Processes, Fuzzy logic and optimization, Algebra and Mathematical Finance.

#### Course Scheme for M.Sc. (MATHEMATICS)

FIRST SEMESTER	SECOND SEMESTER
Abstract Algebra	Complex Analysis
Real Analysis	Partial Differential Equations
Ordinary Differential Equations	Topology
Discrete Mathematics	Linear Algebra
Mathematical Statistics	Numerical Analysis
Programming Lab- I	Programming Lab- II
Communicative English	Fundamentals of Computers

THIRD SEMESTER	FOURTH SEMESTER
Functional Analysis	Measure and Integration
Operation Research	Dissertation-II
Dissertation-1	Discipline Specific Elective-3/Track-I
Discipline Specific Elective-1/ Track-I	Discipline Specific Elective-4
Discipline Specific Elective-2	Generic Elective Courses-2
Generic Elective Course-1	



## LIST OF ELECTIVES

Stochastic Process	Financial Mathematics
Analysis and Design of Algorithms	Data Mining
Number Theory	Optimization Techniques
Mathematical Modelling and Simulation	Approximation Theory
Calculus of Variation	General Relativity and Cosmology
Graph Theory	Finite Element Method
Database Management System	Machine Learning
Integral Transforms & Equations	Advanced Partial Differential Equations
Cryptography and Coding Theory	Univalent Function Theory
Classical Mechanics	Fuzzy Sets and Applications

*In addition to these departmental electives, student can opt for other elective courses depending on his/ her interest offered by any other department offering courses in M.Sc. and B.Tech. programmes.*

*Track 1 option is by research work. Candidate will be finally evaluated at the end of the semester IV on the basis of his/her publication (accepted or published in SCI/SCIE journals).*

*Further, besides conventional modes of teaching such as lectures, videos, power points and reading materials, Students are encouraged to earn some credits through self-paced custom elearning in the areas of interest through MOOCs, SWAYAM and NPTEL digital Platforms.*



## 7.2 DEPARTMENT OF APPLIED PHYSICS

Applied Physics Department is providing cutting edge research, innovation and education in the emerging areas of science and technology. Department offers the undergraduate Academic Programme in Engineering Physics and Post Graduate program in Nanoscience and Technology and one Interdisciplinary M.Tech. programme in Microwave and Optical Communication Engineering (MOCE) is offered from the Department in association with *Electronics and Communication Engineering Department*. The department has well-equipped state of art laboratories for undergraduate, postgraduate and Ph.D. students. Faculties of the department are actively involved in National and International collaborations for R & D activities.

**Research Areas:** Nanotechnology: Carbon Nanotube / Carbon Nano fibre and Graphene. Plasma Physics/Dusty plasma/ THz Radiation Emission/High power microwave devices, Photonics and Photonic Crystals. Glass Science and Technology Phosphors, Photoluminescence, Organic & Nano-Material, Time-resolved spectroscopy, Micro electronic Devices and Solar Cells-Application Oriented Modelling and Simulation, Waveguide based devices. *Fibre and Integrated optics, Luminescent Material, Material science, Experimental Lithium Ion battery, Multiferroic materials, Atomic & molecular physics, Gas sensors, Atmosphere Sciences, Memory Devices.*

### Course Scheme for M.Sc. (PHYSICS)

FIRST SEMESTER	SECOND SEMESTER
Mathematical Physics	Advanced Quantum Mechanics
Classical Mechanics	Statistical Mechanics
Quantum Mechanics	Computational Methods
Applied Optics	Electrodynamics
Electronics	Solid State Physics
Physics Lab-I	Physics Lab-II
Communicative English	Fundamentals of Computers

THIRD SEMESTER	FOURTH SEMESTER
Atomic and Molecular Physics	Advanced Semiconductor Devices
Nuclear and Particle Physics	Discipline Specific Elective-2/ Track-I
Dissertation-I	Generic Elective Course-2
Discipline Specific Elective-1/ Track-I	Advanced Physics Lab -II
Generic Elective Course-1	Dissertation-II
Advanced Physics Lab -I	



## LIST OF ELECTIVES

Fibre and Integrated Optics	Space and Atmospheric Science
Advanced Condensed Matter Physics	Lasers and Spectroscopy
Advanced Numerical Physics	Spintronics
Plasma Physics	Advanced Electronics
Characterization Techniques	Advanced Functional Materials

*In addition to these departmental electives, student can opt for other elective courses depending on his/ her interest offered by any other department offering courses in M.Sc. and B.Tech. programmes.*

*Track 1 option is by research work. Candidate will be finally evaluated at the end of the semester IV on the basis of his/her publication (accepted or published in SCI/SCIE journals).*

*Further, besides conventional modes of teaching such as lectures, videos, power points and reading materials, Students are encouraged to earn some credits through self-paced custom elearning in the areas of interest through MOOCs, SWAYAM and NPTEL digital Platforms.*



### 7.3 Department of Applied Chemistry

Department of Applied Chemistry holds the foundation of the reputation of Delhi Technological University as it is one of the core disciplines of DTU founded at the time of its inception. The department offers B.Tech. in Chemical Engineering (4 yrs); M.Tech. in Polymer Technology (2 yrs); and M.Sc. in Chemistry (2 yrs); and Ph.D. in Chemistry and Chemical Engineering. The department is providing cutting edge research, innovation and education in the emerging areas of chemistry and chemical engineering. The department has well-equipped state of art laboratories for undergraduate, postgraduate and Ph.D. students. The faculty members of the department are actively involved in research and collaborations. The department have

published quality research papers in peer-reviewed journals and contributed towards conference proceeding and book chapters of national and international repute.

**Research Areas:** Inorganic chemistry, bioinorganic chemistry, cell imaging, organic chemistry, organic synthesis, bioorganic chemistry, medicinal chemistry, biomimetic reactions, bio-polymer, nutraceuticals & functional foods, conducting polymer, sensors, electrochemistry, natural products, medical textiles, effluent treatment, nano& environmental biotechnology, surface chemistry, reaction engineering, chemical engineering, polymer blends & composites, hydrogels.

#### Course Scheme for M.Sc. (Chemistry)

FIRST SEMESTER	SECOND SEMESTER
<i>Inorganic Chemistry-1:</i> Chemical Bonding, Stability Constant and Supramolecular Chemistry	<i>Inorganic Chemistry-2:</i> Molecular symmetry and Group Theory
<i>Organic Chemistry-1:</i> Stereochemistry and Reaction Intermediates & Mechanism	<i>Organic Chemistry-2:</i> Photochemistry & Pericyclic reactions and Spectroscopy
<i>Physical Chemistry-1:</i> Quantum chemistry, electrochemistry and chemical kinetics	<i>Physical Chemistry-2:</i> Thermodynamics, Chemical bonding, and Surface chemistry
Elementary Topics for Chemists	Generic Elective Courses-1
Chemistry practical (inorganic/organic/ physical)	Chemistry practical (inorganic/organic/ physical)
Communicative English	Fundamentals of Computers
THIRD SEMESTER	FOURTH SEMESTER
<i>Organic Chemistry-3:</i> Methods and Reagents in Organic Synthesis	<i>Inorganic Chemistry-4:</i> Spectroscopy for Inorganic Chemists <i>Organic Chemistry-4:</i> Medicinal and Natural product chemistry <i>Physical Chemistry-4:</i> Advance electrochemistry



<i>Physical Chemistry-3: Physical aspects of spectroscopic methods</i>	Dissertation-I
Specialization Laboratory	Generic Elective Courses-2
Discipline Specific Elective-1/Track-I	Discipline Specific Elective-2/Track-I
<i>Inorganic Chemistry-3: Organometallic Chemistry and its Applications</i>	Dissertation-II

#### LIST OF ELECTIVES

Chemistry of Nanomaterials	Advanced Methods in Organic Synthesis
Inorganic Reaction Mechanisms and Bioinorganic Chemistry	Agrochemicals and food chemistry
Organic Synthesis and Heterocyclic Chemistry	Chemistry of Life Processes and Bioactive Compounds
Solid State Chemistry	Macromolecules
Analytical Techniques for Inorganic Chemists	Advanced Molecular Spectra
Material, Nuclear and Radiochemistry	

*In addition to these departmental electives, student can opt for other elective courses depending on his/ her interest offered by any other department offering courses in M.Sc. and B.Tech. programmes.*

*Track 1 option is by research work. Candidate will be finally evaluated at the end of the semester IV on the basis of his/her publication (accepted or published in SCI/SCIE journals).*

*Further, besides conventional modes of teaching such as lectures, videos, power points and reading materials, Students are encouraged to earn some credits through self-paced custom elearning in the areas of interest through MOOCs, SWAYAM and NPTEL digital Platforms.*



## 7.4 Department of Biotechnology

The main objective of the Department is to provide academic training and conduct research in the interdisciplinary areas of biotechnology with particular emphasis on extending the knowledge generated from these studies towards the development of technologies of commercial significance.

The Department is running postgraduate programmes in Biotechnology, Bioinformatics, and Industrial Biotechnology. Department of Biotechnology is also running research-oriented Ph.D. programme. The

department has undertaken sponsored projects funded by ICMR, CSIR, DST, DBT, UGC, etc. The department has 11 state-of-the-art laboratories.

**Research Areas:** Aquaculture, Algal Biotechnology, Bioremediation, Biosensor, Functional Genomics, Genome informatics, Immunology, Immunostimulation, Molecular Neuroscience, Nano-biotechnology, Neuro-oncology, Radiation Biology, Water Quality Management.

### Course Scheme for M.Sc. (BIOTECHNOLOGY)

FIRST SEMESTER	SECOND SEMESTER
Biochemistry	Immunology
Cell and Developmental Biology	Microbiology and Industrial Applications
Molecular Biology	Genetic Engineering
Analytical Techniques	Genetics
Biostatistics and Computer Applications	Generic Elective Courses-1
Seminar	Project Proposal Presentation
Communicative English	Fundamentals of Computers

THIRD SEMESTER	FOURTH SEMESTER
Bioprocess Engineering and Technology	Project Work
Immunotechnology and Molecular Virology	Genomics and Proteomics
IPR & Biosafety	Generic Elective Courses-2
Discipline Specific Elective-1	
Discipline Specific Elective-2	
Lab based on elective	



## LIST OF ELECTIVES

Microbial Technology	Diagnostics
Computational Biology	Cancer Genetics
Animal Biotechnology	Evolutionary Genetics
Plant Biotechnology	Model Genetic Systems
Environmental Biotechnology	Pharmacogenomics
Nano biotechnology	Stem Cell Biology
Protein Engineering	Vaccines
Molecular Virology	Metabolic Engineering
Industrial & Food Biotechnology	Molecular Therapeutics

*In addition to these departmental electives, student can opt for other elective courses depending on his/ her interest offered by any other department offering courses in M.Sc. and B.Tech. programmes.*

*Track 1 option is by research work. Candidate will be finally evaluated at the end of the semester IV on the basis of his/her publication (accepted or published in SCI/SCIE journals).*

*Further, besides conventional modes of teaching such as lectures, videos, power points and reading materials, Students are encouraged to earn some credits through self-paced custom elearning in the areas of interest through MOOCs, SWAYAM and NPTEL digital Platforms.*



## 8.1 Syllabus for M.Sc. Mathematics (MA) Entrance Examination

1. **Real Sequences and Series:** Sequence & sub-sequences of real numbers, convergent & divergent sequences, bounded and monotone sequences, convergence criteria for sequences of real numbers, Cauchy sequences, Bolzano-Weierstrass theorem. Series of real numbers, tests of convergence for series of positive terms: – comparison test, ratio test, root test; Leibniz test for convergence of alternating series, absolute convergence.
2. **Functions of Single Variable:** Limit, continuity, intermediate value property, differentiation, Rolle's Theorem, mean value theorem, L' Hospital rule, Taylor's theorem, maxima and minima.
3. **Functions of Multivariable:** Limit, continuity, partial derivatives, differentiability, maxima and minima.
4. **Integral Calculus:** Definite integrals and their properties, fundamental theorem of calculus. Double and triple integrals, change of order of integration, evaluation of surface areas and volumes using double integrals, calculating volumes using triple integrals.
5. **Ordinary Differential Equations:** Ordinary differential equations of the first order of the form  $y' = f(x, y)$ , Bernoulli's equation, exact differential equations, integrating factor, orthogonal trajectories, homogeneous differential equations, variable separable equations, linear differential equations of second order with constant coefficients, method of variation of parameters, Cauchy-Euler equation. Power series solution of differential equations, Frobenius method.
6. **Vector Calculus:** Scalar and vector fields, gradient, divergence, curl, line, surface and volume integrals, Green, Stokes and Gauss theorems.
7. **Group Theory:** Groups, subgroups, Abelian groups, cyclic groups, normal subgroups, Lagrange's Theorem for finite groups, group homomorphisms and basic concepts of quotient groups, non-Abelian groups, permutation groups.
8. **Linear Algebra:** Finite dimensional vector spaces, linear independence of vectors, basis, dimension, linear transformations, matrix representation, Rank and inverse of a matrix, determinant, solutions of systems of linear equations, consistency conditions, eigenvalues and eigenvectors for matrices, Cayley-Hamilton theorem.
9. **Real Analysis:** Finite, countable and uncountable sets, Real number system as a complete ordered field, Archimedean property, supremum, infimum, interior points, limit points, open sets, closed sets, bounded sets, connected sets, compact sets.



## 8.2 Syllabus for M.Sc. (Physics) Entrance examination

- 1. Mathematical Methods:** Calculus of single and multiple variables, partial derivatives, Jacobian, imperfect and perfect differentials, Taylor expansion, Fourier series. Vector algebra, Vector Calculus, Multiple integrals, Divergence theorem, Green's theorem, Stokes' theorem. First order equations and linear second order differential equations with constant coefficients. Matrices and determinants, Algebra of complex numbers.
- 2. Mechanics and General Properties of Matter:** Newton's laws of motion and applications, Velocity and acceleration in Cartesian, polar and cylindrical coordinate systems, uniformly rotating frame, centrifugal and Coriolis forces, Motion under a central force, Kepler's laws, Gravitational Law and field, Conservative and non-conservative forces. System of particles, Center of mass, equation of motion of the CM, conservation of linear and angular momentum, conservation of energy, variable mass systems. Elastic and inelastic collisions. Rigid body motion, fixed axis rotations, rotation and translation, moments of Inertia and products of Inertia, parallel and perpendicular axes theorem. Principal moments and axes. Kinematics of moving fluids, equation of continuity, Euler's equation, Bernoulli's theorem.
- 3. Oscillations, Waves and Optics:** Differential equation for simple harmonic oscillator and its general solution. Superposition of two or more simple harmonic oscillators. Lissajous figures. Damped and forced oscillators, resonance. Wave equation, traveling and standing waves in one-dimension. Energy density and energy transmission in waves. Group velocity and phase velocity. Sound waves in media. Doppler Effect. Fermat's Principle. General theory of image formation. Thick lens, thin lens and lens combinations. Interference of light, optical path retardation. Fraunhofer diffraction. Rayleigh criterion and resolving power. Diffraction gratings. Polarization: linear, circular and elliptic polarization. Double refraction and optical rotation.
- 4. Electricity and Magnetism:** Coulomb's law, Gauss's law. Electric field and potential. Electrostatic boundary conditions, Solution of Laplace's equation for simple cases. Conductors, capacitors, dielectrics, dielectric polarization, volume and surface charges, electrostatic energy. Biot-Savart law, Ampere's law, Faraday's law of electromagnetic induction, Self and mutual inductance. Alternating currents. Simple DC and AC circuits with R, L and C components. Displacement current, Maxwell's equations and plane electromagnetic waves, Poynting's theorem, reflection and refraction at a dielectric interface, transmission and reflection coefficients (normal incidence only). Lorentz Force and motion of charged particles in electric and magnetic fields.
- 5. Kinetic theory, Thermodynamics:** Elements of Kinetic theory of gases. Velocity distribution and Equipartition of energy. Specific heat of Mono-, di- and tri-atomic gases. Ideal gas, van-der-Waals gas and equation of state. Mean free path. Laws of thermodynamics. Zeroth law



and concept of thermal equilibrium. First law and its consequences. Isothermal and adiabatic processes. Reversible, irreversible and quasi-static processes. Second law and entropy. Carnot cycle. Maxwell's thermodynamic relations and simple applications. Thermodynamic potentials and their applications. Phase transitions and Clausius-Clapeyron equation. Ideas of ensembles, Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein distributions.

- 6. Modern Physics:** Inertial frames and Galilean invariance. Postulates of special relativity. Lorentz transformations. Length contraction, time dilation. Relativistic velocity addition theorem, mass energy equivalence. Blackbody radiation, photoelectric effect, Compton effect, Bohr's atomic model, X-rays. Wave-particle duality, Uncertainty principle, the superposition principle, calculation of expectation values, Schrödinger equation and its solution for one-, two- and three- dimensional boxes. Solution of Schrödinger equation for the one-dimensional

harmonic oscillator. Reflection and transmission at a step potential, Pauli exclusion principle. Structure of atomic nucleus, mass and binding energy. Radioactivity and its applications. Laws of radioactive decay.

- 7. Solid State Physics, Devices and Electronics:** Crystal structure, Bravais lattices and basis. Miller indices. X-ray diffraction and Bragg's law; Intrinsic and extrinsic semiconductors, variation of resistivity with temperature. Fermi level, p-n junction diode, I-V characteristics, Zener diode and its applications, BJT: characteristics in CB, CE, CC modes. Single stage amplifier, two stage R-C coupled amplifiers. Simple Oscillators: Barkhausen condition, sinusoidal oscillators. OPAMP and applications: Inverting and non-inverting amplifier. Boolean algebra: Binary number systems; conversion from one system to another system; binary addition and subtraction. Logic Gates AND, OR, NOT, NAND, NOR exclusive OR; Truth tables; combination of gates; de Morgan's theorem.



## 8.3 Syllabus for M.Sc. (Chemistry) Entrance examination

### (a) Inorganic Chemistry

- 1. Periodic table:** Periodic classification of elements, periodicity in properties.
- 2. Chemical bonding:** Types of bonding, VSEPR theory and shapes of molecules, Hybridization, dipole moment. Ionic solids - lattice energy.
- 3. Main group elements (s and p blocks):** Chemistry with emphasis on group relationship and gradation in properties; structure of compounds based on main group elements and application of main group elements.
- 4. Transition metals (d block):** Characteristics of d-block elements, Coordination compounds of first row transition elements, bonding in coordination compounds – VBT and CFT of tetrahedral and octahedral complexes. Application of CFT to spectral and magnetic properties.
- 5. Organometallic compounds:** Concept of hapticity, 18-electron rule, metal alkynes and ferrocene.
- 6. Non aqueous solvents:** General characteristics, reactions with reference to ammonia and liquid sulphur dioxide.
- 7. Acids and Bases:** Definitions, different concepts of acids and bases, HSAB concepts, Acid-base titrations and acid-base indicators.
- 8. Nuclear Chemistry:** Radioactivity, nuclear reactions, applications of isotopes.

### (b) Organic Chemistry

- 1. Basic organic chemistry:** Nomenclature of Organic compounds, Electronic effects in Organic molecules – Inductive effect,

polarizability effect, resonance, hyper conjugation. Formal charge. General reactions of reactive intermediates – Carbocation, carbanion, carbon radical.

- 2. Stereochemistry:** Types of isomerism, Projection formulae, chirality, assigning stereo chemical descriptors to chiral centres and geometric isomers, Optical isomerism in compounds containing one and two asymmetric centers, Conformations of ethane, butane, and cyclohexanes.
- 3. Aromaticity and Huckel's rule:** Mono and bicyclic carbocyclic aromatic hydrocarbons and their electrophilic substitution reactions.
- 4. Synthetic chemistry:** Methods of preparation and characteristic reactions of alkanes, alkenes, alkynes (including their cyclic analogues), arenes and their simple functional derivatives, such as alkyl, halo, nitro, hydroxyl, alkoxy, formyl, carboxyl (and carboxylic acid derivatives, Functional group interconversions, Grignard reagents, acetoacetic and malonic ester chemistry.
- 5. Organic reaction mechanism (with stereochemistry):** Aliphatic nucleophilic substitution, elimination, enolate reactions, Claisen condensation, esterification and ester hydrolysis, Cannizzaro reaction, benzoin condensation, Perkin reaction, Claisen rearrangement, Beckmann rearrangement, Wagner-Meerwein rearrangement.
- 6. Carbohydrates:** Classification, nomenclature, Open and cyclic formulae, Chemistry of glucose and fructose.



7. **Amino acids and peptides:** Structure, stereochemistry, and characteristics reactions of amino acids. Structure of peptides.
8. **Heterocyclic chemistry:** Monocyclic 5- and 6-membered aromatic compounds with one hetero atom (S,O,N). Their nomenclature, electronic structure, aromaticity, characteristic properties and general reactions.
9. **Spectroscopy:** UV-visible spectroscopy, IR spectroscopy and NMR of simple compounds.

### (c) Physical chemistry

1. **Atomic structure:** Fundamental particles, Bohr's theory of hydrogen atom, Wave-particle duality, Uncertainty principles, Schrodinger's wave equation, Quantum numbers, shapes of orbitals, Hund's rule and Pauli's exclusion principle.
2. **Theory of gases:** Kinetic theory of gases, Real and ideal gases, critical phenomenon.
3. **Chemical thermodynamics:** Reversible and irreversible processes. First law and its application to ideal and nonideal gases. Thermochemistry, Second law, Entropy and free energy, Criteria for spontaneity, Third law.
4. **Chemical and Phase equilibria:** Law of mass action;  $K_p$ ,  $K_c$ ,  $K_x$  and  $K_n$ ; Effect of temperature on  $K$ ; Ionic equilibria in solutions; pH and buffer solutions; Hydrolysis; Solubility product; Phase equilibria-Phase rule and its application to one-component and two-component systems; Colligative properties.
5. **Electrochemistry:** Conductance and its applications; Transport number; Galvanic cells; EMF and Free energy. Liquid junction potential and concentration cells. Application of emf measurement for determination of  $K$ ,  $\Delta G$ ,  $\Delta H$ ,  $\Delta S$ . Stability of complexes, conductometric and potentiometric titrations.
6. **Chemical kinetics:** Reactions of various order, Arrhenius equation, Collision theory; Theory of absolute reaction rate; Chain reactions - Normal and branched chain reactions; Enzyme kinetics; Photophysical and photochemical processes; Catalysis.
7. **Quantum chemistry:** Elementary quantum chemistry, state function, operators, eigen values and eigen functions.



## 8.4 Syllabus for M.Sc. (Biotechnology) Entrance Examination

- 1. Molecules and their Interaction Relevant to Biology:** Structure and functions of biomolecules; Carbohydrates; Fatty acids; Lipids; Amino acids; Proteins; Nucleic acids – DNA, mRNA, tRNA, rRNA; Hormones; Vitamins; Enzymes; Bioenergetics; Cell metabolism; Protein-protein and protein-DNA interactions
- 2. Cellular Organization:** Cell theory; Cell as basic unit of life; Hierarchy of cell organization; Structure and organization of prokaryotic and eukaryotic cells; Structure and function of cell organelles; Biomembranes; Cytoskeletal elements; Chromosome structure; Karyotype; Chromatin organization, Cell Cycle
- 3. Fundamental Processes:** Photosynthesis; Cellular respiration; Movement through cell membrane; Nutrition; Blood clotting; Human physiological systems; Replication; Transcription; Translation; DNA repair mechanisms; Plant physiology; Bacterial growth; Microbial genetics, Secondary metabolites
- 4. Developmental Biology and Evolution:** Stages of development; Mechanism of differentiation; Germ layers; Potency; Morphogenetic movements; Early and late development in model organisms; Cell division; Gametogenesis and fertilization in animals and flowering plants; Embryology; Seed germination; Dormancy; Evolution and natural selection; Mendel's law of heredity; Evidences of DNA as genetic information carrier; Hardy-Weinberg law; Extra-chromosomal inheritance; Sex-linked inheritance in humans; Mutations
- 5. Plant and Animal Biotechnology:** Plant tissue culture techniques; Totipotency; Organogenesis and Somatic embryogenesis; Suspension culture; Protoplast isolation and somatic hybridization; Production of secondary metabolites; Basic techniques in animal cell and organ culture; Bioreactors for large scale culture of animal cells; Stem cells; Transgenic plants and animals
- 6. Immunology and Vaccines:** Immunity; Antigen; Structure of antibody; Hapten; Antigen-antibody interaction, Introduction to antigen presentation; Role of MHC; Complement system; Bacterial diseases of humans; Types of vaccines; Immunization; Recombinant vaccines
- 7. Computational Biology:** Databases and tools; Nucleotide sequences; Protein Sequences; Protein Structure.
- 8. Diversity of Life Forms:** General characteristics of life forms; General characteristics of bacteria, fungi, algae, Microbial growth curve; plant and animal viruses; Classification of plant and animal kingdom
- 9. Ecological Principles and Environmental Biology:** Ecosystem; Ecological relationships; Habitat and niche; Ecology of ecosystems; Air, water and soil pollution; Greenhouse effect and global warming; Noise pollution; Pollution abatement; Wastewater treatment; Disposal of solid wastes; Biogeochemical cycles of elements; Bioremediation; Bioleaching; Biopesticides; Biofertilizers
- 10. Applied Biology:** Basics of fermentation technology; Microbes



in industry; Biosensors; Biofuels; Principles of gene cloning; Methods of gene transfer; Application of biology in agriculture, health, industry and environment sectors

**11. Methods in Biology:** Basics of Centrifugation; Electrophoresis; Chromatography; Microscopy; UV-Visible spectrophotometry; Radiotracer technique; PCR; DNA sequencing; Southern blotting;

Tests of significance; Analysis of variation; Correlation and regression; Hybridoma technology; Basic techniques in bioinformatics

**12. Inheritance Biology:** Mendelian's principles, Extensions of Mendelian principles, Gene mapping methods, Extra chromosomal inheritance, Human genetics, Mutations, Structural and numerical alterations of chromosomes



### CERTIFICATE FOR APPEARING IN THE FINAL SEMESTER/YEAR EXAMINATION

(Required from candidates who are yet to appear in the qualifying examination)

In connection with the application of Mr./Ms. \_\_\_\_\_  
for admission to PG programme(s) at Delhi Technological University Delhi, I hereby  
certify that he/she is a bonafide student of our institution. He/she is yet to complete  
the requirements of qualifying examination including theory, practical project  
examination and back paper(s)/supplementary(is) for B.A./B.Sc. \_\_\_\_\_  
which is to be scheduled later on (Strike out the non-applicable ones and write in the  
blank space if the degree is not mentioned) and the result is likely to be announced  
by \_\_\_\_\_ 2021. The percentage of aggregate marks/CGPA obtained by him/  
her upto pre final year examination is \_\_\_\_\_. His/her conduct and character  
during his/her stay at the University/University has been "GOOD".

Signature of the Principal/Dean/Registrar/  
Dy. Registrar /Proctor/Administrative Officer

Name: \_\_\_\_\_ Seal : \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

#### UNDERTAKING BY THE CANDIDATE REGISTERED WITHOUT PRODUCTION OF PROOF OF PASSING THE QUALIFYING EXAMINATION/APPEARED IN THE BACKPAPER(S)/ SUPPLEMENTARY(IES) TILL DATE OF REGISTRATION

I, \_\_\_\_\_ son /daughter/ward of  
Mr./Ms. \_\_\_\_\_ hereby undertake that I have appeared in all  
the examinations including practicals/projects/theory/back paper(s)/supplementary(ies)  
before the date of registration and only the result is awaited, which is likely to be declared  
by \_\_\_\_\_.

Signature \_\_\_\_\_

Place: \_\_\_\_\_

Name \_\_\_\_\_

Date: \_\_\_\_\_

Address \_\_\_\_\_



## 9.2 ANNEXURE-2

### AUTHORITIES WHO CAN ISSUE CASTE/TRIBE CERTIFICATE

**Scheduled Caste (SC)/Scheduled Tribe (ST) /Other Backward Class (OBC-NCL):** For admission to a seat reserved for Scheduled Caste/Scheduled Tribe/Other Backward Class (NCL), candidate must produce a certificate, in original, issued from an approved district authority stating the Scheduled Caste/ Scheduled Tribe/ Other Backward Class (NCL), to which the candidate belongs. A list of approved authorities is given below:

- District Magistrate / Additional Magistrate / Deputy Commissioner / Collector / Additional Deputy Commissioner / Deputy Collector / 1st Class Stipendiary Magistrate / City Magistrate (not below the rank of 1st Class Stipendiary Magistrate), Sub-Divisional Magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner.
- Revenue Officer not below the rank of Tehsildar.
- Sub-Divisional Officer of the area where the candidates and/or his/her family normally resides
- Administrator/Secretary to Administration/Development Officer (Laccadive & Minicoy Islands).

#### Prescribed Format for OBC Certificate

#### FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES

This is to certify that Shri / Smt. / Kum. \_\_\_\_\_  
\_\_\_\_\_ Son /Daughter of Shri / Smt. \_\_\_\_\_  
\_\_\_\_\_ of Village/Town \_\_\_\_\_  
\_\_\_\_\_ District/Division \_\_\_\_\_ in the State belongs to the \_\_\_\_\_  
\_\_\_\_\_ Community which is recognized as a backward  
class under:

- Resolution No. 12011/68/93-BCC(C) dated 10/09/93 published in the Gazette of India Extraordinary Part I Section I No. 186 dated 13/09/93.
- Resolution No. 12011/9/94-BCC dated 19/10/94 published in the Gazette of India Extraordinary Part I Section I No. 163 dated 20/10/94.
- (Resolution No. 12011/7/95-BCC dated 24/05/95 published in the Gazette of India Extraordinary Part I Section I No. 88 dated 25/05/95.
- Resolution No. 12011/96/94-BCC dated 9/03/96. (v) Resolution No. 12011/44/96-BCC dated 6/12/96 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 11/12/96.
- Resolution No. 12011/13/97-BCC dated 03/12/97.
- Resolution No. 12011/99/94-BCC dated 11/12/97.
- Resolution No. 12011/68/98-BCC dated 27/10/99.
- Resolution No. 12011/88/98-BCC dated 6/12/99 published in the Gazette of India Extraordinary Part I Section I No. 270 dated 06/12/99.



- ix. Resolution No. 12011/36/99-BCC dated 04/04/2000 published in the Gazette of India Extraordinary Part I Section I No. 71 dated 04/04/2000.
- x. Resolution No. 12011/44/99-BCC dated 21/09/2000 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 21/09/2000.
- xi. Resolution No. 12015/9/2000-BCC dated 06/09/2001.
- xii. Resolution No. 12011/1/2001-BCC dated 19/06/2003.
- xiii. Resolution No. 12011/4/2002-BCC dated 13/01/2004.
- xiv. Resolution No. 12011/9/2004-BCC dated 16/01/2006 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 16/01/2006.

Shri / Smt. / Kum. \_\_\_\_\_

and / or his family ordinarily reside(s) in the \_\_\_\_\_ District / Division of \_\_\_\_\_ State. This is also to certify that he/she does not

belong to the persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the Government of India, Department of Personnel & Training O.M. No. 36012/22/93-Estt. (SCT) dated 08/09/93 which is modified vide OM No. 36033/3/2004 Estt. (Res.) dated 09/03/2004.

Dated: \_\_\_\_\_

District Magistrate / Deputy Commissioner /  
Competent Authority  
Seal

**NOTE:**

- a. The term 'Ordinarily' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.
- b. The authorities competent to issue Caste Certificates are indicated below:
- i. District Magistrate / Additional Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / Ist Class Stipendiary Magistrate / Sub-Divisional magistrate / Taluka

- Magistrate / Executive Magistrate / Extra Assistant Commissioner (not below the rank of Ist Class Stipendiary Magistrate).
- ii. Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.
- iii. Revenue Officer not below the rank of Tehsildar' and
- iv. Sub-Divisional Officer of the area where the candidate and / or his family resides.



### Declaration/undertaking - for OBC Candidates only

I, \_\_\_\_\_ son/daughter of Shri \_\_\_\_\_

resident of village/town/city \_\_\_\_\_ district \_\_\_\_\_

State \_\_\_\_\_ hereby declare that I belong to the \_\_\_\_\_

community which is recognized as a backward class by the Government of India for the purpose of reservation in services as per orders contained in Department of Personnel and Training Office Memorandum No.36012/22/93- Estt. (SCT), dated 8/9/1993. It is also declared that I do not belong to persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the above referred Office Memorandum, dated 8/9/1993, which is modified vide Department of Personnel and Training Office Memorandum No.36033/3/2004 Estt. (Res.) dated 9/3/2004.

Signature of the Candidate

Place: \_\_\_\_\_

Date: \_\_\_\_\_



### 9.3 ANNEXURE-3

#### PERSON WITH DISABILITY SUB-CATEGORY

For admission to seat reserved for Differently Aabled Person (PD) sub-category, the candidate must produce the following certificates in original at the time of document verification for PD candidates:

- A certificate of physical disability issued by a duly notified Medical Board of a District/ Government Hospital set up for examining the physically challenged candidates under the provision of the Person with Disability (equal opportunities, protection of rights and full participation) Act 1995. The certificate should indicate the extent (i.e. percentage) of the physical handicap and should bear the Photograph of the candidate concerned. The certificate should be countersigned by one of the Doctors constituting the Board issuing the certificates.
- A certificate duly recommended by Vocational Rehabilitation Centre for the Handicapped, 9 - 11 Vikas Marg, Karkardooma, Delhi 110092.

#### Certificate for Person with Disability To be issued by Medical Board from Government Hospital

Name of the candidate: Mr./Ms.\* \_\_\_\_\_

Father's Name: \_\_\_\_\_

Permanent Address: \_\_\_\_\_

Percentage loss of earning capacity (in words): \_\_\_\_\_



Whether the candidate is otherwise able to carry on the studies and perform the duties of an engineer/architect satisfactorily: \_\_\_\_\_.

Name of the disease-causing handicap: \_\_\_\_\_

Whether handicap is temporary or permanent: \_\_\_\_\_

Whether handicap is progressive or non-progressive: \_\_\_\_\_

The candidate is FIT / UNFIT to pursue further studies.  
(\*Strike out whichever is not applicable)

Member

Member

Principal Medical Officer  
(Orthopaedic Specialist)  
Seal of Office:

Date: \_\_\_\_\_

#### NOTE:

- The medical board must have one orthopaedic specialist as its member.
- Candidate having temporary or progressive handicap will not be considered against the seats.

## 9.4 ANNEXURE-4

### CERTIFICATE FOR ECONOMICALLY WEAKER SECTION (EWS)

Government of.....

(Name & Address of the authority issuing the certificate)

### INCOME & ASSET CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS

Certificate No. \_\_\_\_\_

Date: \_\_\_\_\_

VALID FOR THE YEAR \_\_\_\_\_

This is to certify that Shri/Smt./Kumari \_\_\_\_\_

son/daughter/wife of \_\_\_\_\_ permanent resident of \_\_\_\_\_

\_\_\_\_\_ Village/Street \_\_\_\_\_ Post Office \_\_\_\_\_

District \_\_\_\_\_ in the State/Union Territory \_\_\_\_\_

Pin Code \_\_\_\_\_ whose photograph is attested below belongs to Economically Weaker Sections, since the gross annual income\* of his/her family\*\* is below Rs. 8 lakh (Rupees Eight Lakh only) for the financial year \_\_\_\_\_. His/her family does not own or possess any of the following assets\*\*\*:

- 5 acres of agricultural land and above;
- Residential flat of 1000 sq. ft. and above;
- Residential plot of 100 sq. yards and above in notified municipalities;
- Residential plot of 200 sq. yards and above in areas other than the notified municipalities.

Shri/Smt./Kumari \_\_\_\_\_ belongs to the \_\_\_\_\_ caste which is not recognized as a Scheduled Caste, Scheduled Tribe and Other Backward Classes (Central List)

Name \_\_\_\_\_

Signature with seal of Office

Designation \_\_\_\_\_

\*Note 1: Income covered all sources i.e. salary, agriculture, business, profession, etc.

\*\*Note 2: The term 'Family' for this purpose include the person, who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also

his/her spouse and children below the age of 18 years.

\*\*\*Note 3: The property held by a 'Family' in different locations or different places/cities have been clubbed while applying the land or property holding test to determine EWS status.

### INCOME AND ASSET CERTIFICATE ISSUING AUTHORITY

The Income and Asset Certificate issued 'by any one of the following authorities in the prescribed format

as given above shall only be accepted as proof of candidate's claim as 'belonging to EWS:-

- District Magistrate/Additional District Magistrate/ Collector/ Deputy Commissioner/Additional Deputy Commissioner/ 1st Class Stipendiary Magistrate/ Sub-Divisional Magistrate/

Taluka Magistrate/ Executive Magistrate/ Extra Assistant Commissioner,

- Chief Presidency Magistrate/Additional Chief Presidency Magistrate/ Presidency Magistrate,
- Revenue Officer not below the rank of Tehsildar and
- Sub-Divisional Officer or the area where the candidate and/or his family normally resides.



## 9.5 ANNEXURE-5

### CERTIFICATE IN RESPECT OF DEFENCE CATEGORY (CW) (CERTIFICATE FOR AVAILING ADMISSION AGAINST DEFENCE QUOTA OFFICE OF THE ZILA/RAJYA SAINIK BOARD)

This is to certify that Master/ Miss \_\_\_\_\_  
son/ daughter of \_\_\_\_\_ resident of \_\_\_\_\_  
\_\_\_\_\_ the above named officer/ JCO/ OR  
pertains to the category marked below:- (Select one from below)

- a. Killed in action on \_\_\_\_\_ during \_\_\_\_\_
- b. Disabled in action on \_\_\_\_\_ and boarded out from service on  
during \_\_\_\_\_
- c. Died in peace time on \_\_\_\_\_ with death attribute to military service.
- d. Disabled in peace time and boarded out from service with disability attributable to  
military service.
- e. Gallantry Award winner ( \_\_\_\_\_ )
- f. Ex- serviceman,
- g. Serving soldier

(Category \_\_\_\_\_ above)

Mr./ Miss \_\_\_\_\_ son/ daughter of \_\_\_\_\_  
\_\_\_\_\_ the above named officer/ JCO/ OR Is eligible for admission in  
DTU against the Defence quota under priority His/ Her Ex-serviceman widow identify card  
No. Is DLH-01 \_\_\_\_\_.

NO \_\_\_\_\_ / \_\_\_\_\_ RSB Secretary

(Round stamp of office)

(Zila/Rajyasainik board)

## 9.6 ANNEXURE-6

### AFFIDAVIT FOR SINGLE GIRL CHILD

For claiming admission in this category, the Father/Mother/Guardian (in case parents are deceased) shall have to submit affidavit/ self attested to this effect duly attested by area District Magistrate/Additional Magistrate/Deputy Commissioner/Collector/Additional Deputy Commissioner/Deputy Collector / 1st Class Stipendiary Magistrate /City Magistrate (not below the rank of 1st Class Stipendiary Magistrate)/Sub-Divisional magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner.

### SPECIMEN OF AFFIDAVIT/SELF ATTESTED FOR ONLY (SINGLE) GIRL CHILD CATEGORY

(on non-judicial PAPER OF Rs. 20/- duly attested by 1st Class Magistrate)

I \_\_\_\_\_ (name) father/mother  
of Miss \_\_\_\_\_ resident of \_\_\_\_\_

\_\_\_\_\_ (full address to be given) do hereby, solemnly declare and affirm as under:

1. That I am a citizen of India.
2. That Miss \_\_\_\_\_ born on \_\_\_\_\_  
is the only (Single) Girl Child of the deponent.
3. That the deponent has no living male/female child other than the above one.

Place: \_\_\_\_\_

Dated: \_\_\_\_\_

DEPONENT

### VERIFICATION

Verified that the contents of the above affidavit/self attested are true and correct to the best of my knowledge and belief and nothing has been concealed therein.

DEPONENT

Place: \_\_\_\_\_

Dated: \_\_\_\_\_



## 9.7 ANNEXURE-7

### CERTIFICATE FOR AVAILING ADMISSION AGAINST KASHMIRI MIGRANT QUOTA

#### KASHMIRI MIGRANT QUOTA

(To be submitted at the time of admission)

Certified that Shri/ Km/Smt. \_\_\_\_\_  
son/ daughter/wife of \_\_\_\_\_  
resident of \_\_\_\_\_  
is registered as migrant from Jammu and Kashmir. The registration number is  
\_\_\_\_\_ dated \_\_\_\_\_.

It is also certified that Shri/ Km/Smt. \_\_\_\_\_  
is registered in Delhi/ \_\_\_\_\_ as J & K Migrant on \_\_\_\_\_.

Name & Signature of  
Deputy Commissioner/ Competent authority  
(Office stamp)

Place: \_\_\_\_\_

Date: \_\_\_\_\_

**Note:** No Document other than this will be accepted by the University for claiming reservation against the Kashmiri Migrant Seat.

**For all the queries related to**

M.Sc. admission 2021-2022

**Mail to:** [mCoordinator@dtu.ac.in](mailto:mCoordinator@dtu.ac.in)

**M. Sc. Chairperson**

**Delhi Technological University**

Shahbad Daulatpur, Bawana Road, Delhi-110042

**Website:** [www.dtu.ac.in](http://www.dtu.ac.in)

**Email:** [mCoordinator@dtu.ac.in](mailto:mCoordinator@dtu.ac.in)





# Delhi Technological University

Established by the Govt. of NCT of Delhi  
vide Act 6 of 2009

(Formerly Delhi College of Engineering)

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