



**DELHI SKILL AND
ENTREPRENEURSHIP
UNIVERSITY**

Govt. of NCT Delhi

Information Bulletin (Ph.D. Programs)

Admissions to Academic Session: 2022

**Head Office: DSEU Dwarka Campus, Sector - 9,
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DISCLAIMER

The information bulletin contains information for admissions to the PhD programs at DSEU. All possible care has been taken to compile the information correctly in this information bulletin. However, in case of any inadvertent error/ deviation, the decision of the Delhi Skill and Entrepreneurship University shall be considered final.

IMPORTANT DATES

S. No.	Description/ Activity	Dates
1	Online applications	Open – 6 th Aug 2022 Close – 19 th Sept 2022
2	Publication of the list of shortlisted candidates for written test and list of the exempted candidates	24 th Sept 2022
3	Entrance test	30 th September 2022
4	Declaration of Entrance Test Result	5 th October 2022
5	Interview	14 th & 15 th October 2022
6	Declaration of Final Result	21 st October 2022

For any queries please mail: phd_admissions@dseu.ac.in

REGISTRATION FEE

Rs. 500 + Transaction Charges (as applicable)

Note: Please note that the registration fee is non-refundable.

Information Bulletin Issued on: 01.08.2022

Message from the Vice-Chancellor

Welcome to the Delhi Skill and Entrepreneurship University

On behalf of the Delhi Skill and Entrepreneurship University (DSEU), I extend a warm welcome and thank you for your interest in our university. It is a new University founded by the Government of NCT in 2020 with all the state-of-the-art science and technology facilities. DSEU is dedicated to developing leaders and entrepreneurs who will lead their enterprises to greater success in the global market.

Globally, higher education has seen a considerable shift in approach as well as tremendous growth. Higher education in India has also quickly adapted to global needs, with each institution preparing to address global problems by embracing cutting-edge educational tools. DSEU is ready and all prepared to make this shift towards higher education, research-based, interactive learning and technology integration.

All the programs offered by DSEU follow the outcome-based approach. The curriculum has been established with industry-specific aims in mind, and the educator has complete freedom to adapt the syllabus by including the most up-to-date information and encouraging the students' creative ideas. Our curriculum is incredibly relevant and is the outcome of brainstorming efforts of renowned think-tanks: a big number of faculty members, specialists from industries, and research level organization. Continuous assessment with grade point averages is used as the evaluation mechanism. We are confident that it will meet the expectations of all individuals involved.

Any dream of the university will remain unfulfilled until it prepares the next generation of researchers, thinkers, and teachers. In that context DSEU is making a step towards guiding the PhD scholars. If you are interested in spending the next four years preparing yourself and learning how to do applied research, I would request you to consider DSEU as a place to complete your PhD. DSEU would give the budding and innovative researchers a platform to enhance their research/analytical perspective and engage in applied research. Our goal is to have community-centric, environment-centric, and innovation-driven research content creators.

So, if you have the zeal; if you can think out of the box; and if you want to make an impact, DSEU is giving you a one of its kind platform to make an impact in society. The eligibility criteria and the process of admission is shared in this brochure to help you make choices for your career.

I look forward to your choice and I am confident that your participation in our research activities will benefit both you and the entire academic community.

I wish you the very best, and look forward to seeing you on our campus.

Prof. (Dr.) Neharika Vohra

Vice-Chancellor

About Delhi Skill and Entrepreneurship University

The Delhi Skill and Entrepreneurship University (DSEU) has been established through an act of the Legislative Assembly of the National Capital Territory of Delhi, namely the “Delhi Skill and Entrepreneurship University Act, 2019” (Delhi Act 04 of 2020) to provide quality education in applied sciences and skill education. The University aims to equip students with world-class skill education to enable access to aspirational jobs and inculcate an entrepreneurial mindset and entrepreneurship. DSEU creates a win-win for the youth and industry by filling the existing gaps in skill training.

Building on the education philosophy of thinkers such as Mahatma Gandhi and Vinoba Bhave, DSEU aims to integrate the use of the hand, head, and heart for balanced living and engagement in lifelong learning. The focus is on teaching both self-reliance for lifelong independence and the wisdom toward nurturing and valuing interdependence.

The University wishes to change the existing paradigm of skilling, making skill acquisition aspirational and providing opportunities to all for skilling, up-skilling and reskilling. Besides, DSEU will support and nurture entrepreneurs and provide quality mentorship to steer the entrepreneurial journeys of those interested, by providing incubation, and handholding.

The University has successfully concluded its first cycle of admissions for the Academic year 2021-2022 and has enrolled approximately 5800 students across various programs and campuses. Fifteen campuses have been launched in the first phase and more campuses will become operational in the coming Academic years.

DSEU has also commenced several specialized short-term programs such as NavGurukul; Advance Diploma in Automotive Mechatronics; and a Centre for Healthcare, Allied Medical and Paramedical Sciences that is offering two B.Sc. Programs i.e., B.Sc. Allied B.Sc. in Emerging Medical Technologies and B.Sc. in Dialysis Technology. Many more programs such as Step-up English, Financial Literacy, Digital Literacy, etc are in the pipeline and will be announced soon.

The University’s focus is on designing courses in close collaboration with industry partners, which gives our students an edge in better understanding the skills required by Industry. Students take up live projects, regularly interact with domain-specific experts, and take up on-the-job training in organizations during their coursework – simultaneously integrating the theory learned in the classroom with actual work experience. It is this model of “learning by doing” which becomes a win-win situation for all stakeholders involved. Further, we have a dedicated team for External Relations, Placements & Partnerships which have created a transparent & robust ecosystem helping recruiters and students make informed decisions.

Vision, Mission and Key Principles

Vision

- Set the standards for skill and entrepreneurship education.
- Lead all students at DSEU to experience personal transformation, who in turn become agents of community transformation.
- Become a leading partner in the sustainable growth of industry and the country.

Mission

- To accord dignity to each and every skill by emphasizing its teaching and learning.
- To inculcate an entrepreneurial mindset for the sustainable growth of the planet, the country, the society, the industry, and the individual.
- To work in partnership with the industry to nurture talent which is work ready on the day they graduate.

Key Principles

Delhi Skill and Entrepreneurship University has defined some key principles which are embedded in all its programs to help in the holistic development of all students.

1. Develop market-linked courses by customizing programs to specific job roles
2. Multiple entry/ exit options and offer integrated career pathways
3. Inclusive by design
4. Ensure holistic development by deeply integrating employability/ life skills in the curriculum
5. Leverage technology
6. Equip students with an entrepreneurial mindset

1. DSEU Campuses

1.1. Campuses Offering PG Programs

S. No.	Campus	Director
1.	G. B. Pant DSEU Okhla-I Campus <i>Formerly known as GB Pant Engineering College</i> Okhla Phase III, Okhla Industrial Area, New Delhi, Delhi - 110020 Email ID: director-GBPEC@dseu.ac.in/	Prof. (Dr.) Dipali Bansal
2.	DSEU Okhla: II Campus <i>Formerly known as Delhi Institute of Tool Engineering</i> Maa Anandmayi Marg (Near Djb Water Tank), Okhla Industrial Area Phase-II, New Delhi - 110020 Email ID: director-DITE@dseu.ac.in	Prof. (Dr.) Mumtaz Ahmad Khan
3.	Bhai Parmanand DSEU Shakarpur Campus- II <i>Formerly known as Bhai Parmanand Institute of Business Studies</i> Shakarpur (Opp. Madhuban), Delhi - 110092 Email ID: director-BPIBS@dseu.ac.in	Prof. Girish Kumar Sharma

1.2. Other DSEU Campuses

S. No.	Campus	Director
4.	Aryabhata DSEU Ashok Vihar Campus <i>Formerly known as Aryabhata Institute of Technology</i> Telephone Exchange, G.T. Karnal Road, Near Shakti Nagar, Ashok Vihar, Delhi - 110033 Email ID: director-ABIT@dseu.ac.in	Mr Anil Kumar Choudhary
5.	DSEU Dwarka Campus <i>Formerly known as Integrated Institute of Technology</i> Sector-9, Dwarka, New Delhi - 110077 Email ID: director-IITD@dseu.ac.in	Dr. Kavita Khanna

6.	<p>Meerabai DSEU Maharani Bagh Campus** (for Girls only) <i>Formerly known as Meerabai Institute of Technology</i> Eastern Avenue Road, Maharani Bagh, New Delhi 110065 Email ID: director-MBIT@dseu.ac.in</p>	Dr. Rashmi Panwar
7.	<p>G. B. Pant DSEU Okhla-III Campus <i>Formerly known as GB Pant Institute of Technology</i> Okhla Phase III, Okhla Industrial Area, New Delhi, - 110020 Email ID: director-GBPIT@dseu.ac.in</p>	Dr. S.V. Vageesha
8.	<p>Centre for Healthcare, Allied Medical and Paramedical Sciences <i>Formerly known as Delhi Institute of Tool Engineering</i> Maa Anandmayi Marg (Near Djb Water Tank), Okhla Industrial Area Phase-II, New Delhi - 110020 Email ID: director-pm@dseu.ac.in</p>	Dr. Monica Chopra
9.	<p>Kasturba DSEU Pitampura Campus** (for Girls only) <i>Formerly known as Kasturba Institute of Technology</i> Muni Maya Ram Marg, Pitampura Delhi - 110088 Email ID: director-KIT@dseu.ac.in</p>	Ms Uditia Malaviya
10.	<p>DSEU Pusa Campus <i>Formerly known as Pusa Institute of Technology</i> Pusa, New Delhi - 110012 Email ID: director-PIT@dseu.ac.in</p>	Dr. Om Prakash Singh
11.	<p>DSEU WCSC Pusa Campus <i>Formerly known as Pusa Institute of Technology</i> Pusa, New Delhi - 110012 Email ID: director-wcsc-pusa@dseu.ac.in</p>	Ar. Suneet
12.	<p>DSEU Rajokri Campus <i>Formerly known as Rajokri Institute of Technology</i> Golden Gate, Rajokri, New Delhi - 110038 Email ID: director-RIT@dseu.ac.in</p>	Mr P. Ramanaiah
13.	<p>Guru Nanak Dev DSEU Rohini Campus <i>Formerly known as Guru Nanak Dev Institute of Technology</i> Sector – 15, Rohini, Delhi - 110089 Email ID: director-GNDIT@dseu.ac.in</p>	Mr Ravinder Singh

14.	Ambedkar DSEU Shakarpur Campus- I <i>Formerly known as Ambedkar Institute of Technology</i> Shakarpur (Opp. Madhuban), Delhi - 110092 Email ID: director-AIT@dseu.ac.in	Ms Neeru Mehta
15.	DSEU Siri Fort Campus <i>Formerly known as World Class Skill Centre</i> August Kranti Marg, Sirifort, New Delhi -110049 Email ID: director-SIRIFORT@dseu.ac.in	Ms Manju Jain
16.	DSEU Wazirpur Campus <i>Formerly known as Delhi Institute of Tool Engineering</i> Wazirpur Industrial Area, Delhi - 110052 Email ID: director-DITE@dseu.ac.in	Prof. (Dr.) Mumtaz Ahmad Khan
17.	DSEU Vivek Vihar Campus <i>Formerly known as World Class Skill Centre</i> Vivek Vihar, Delhi-110095 Email ID: osd-2@dseu.ac.in	Dr. Punita Duhan
18.	Sir C.V. Raman DSEU Dheerpur Campus Near By Burari Crossing On, Outer Ring Rd, Dheerpur, Nirankari Park, Gopalpur Village, Delhi, 110009 Email ID: director-dheerpur@dseu.ac.in	Dr. Monica Chopra
19.	Dr. H.J. Bhabha DSEU Mayur Vihar Campus Sanjay Lake View Apartments, Pocket 5, Mayur Vihar, New Delhi, Delhi 110091 Email ID: director-mayurvihar@dseu.ac.in	TBA Soon

****Note:** DSEU Maharani Bagh Campus and DSEU Pitampura Campus are Girls only campuses and all the courses being offered at these locations are only for girls.

2. Programs and Seats Availability

2.1. Ph.D. Programs: DSEU offers PhD programs in following departments:

- Computer Science and Engineering/Applications
- Mechanical Engineering
- Electronics and Communication Engineering

2.1.1. Computer Science and Engineering/ Applications: The department prepares and equips students with the most relevant, industry aligned skills to design, manage, develop, implement, and support computer-based information systems. The

department has highly qualified faculty members from top institutions, working together to touch new heights in the research domain. These collective efforts have kept the department on a growth path. An updated curriculum and alignment with the need for innovation, has also resulted in the department alumni holding important positions in industry in India and abroad. The department is currently offering the following courses – BTech in Computer Science and Engineering, MTech in Computer Science and Engineering, B.Sc. in Data Analytics, Bachelors in Computer Applications (B.C.A.) and Masters in Computer Applications (M.C.A.).

The department currently offers a wide array of latest research opportunities in Machine Learning, Deep Learning, Ad hoc Networks, Recommender Systems, Algorithms, Big Data, Network Security, Internet of Things etc.

2.1.2. Mechanical Engineering: The presence of experienced and highly talented faculty has helped to establish a high reputation for the department of Mechanical Engineering in academia and industry. The department is equipped with state of art Computer Integrated Manufacturing Lab, Robotics Lab, Advance Manufacturing Methods Lab, Mechanical Workshop, Mechatronics Lab, Internal Combustion Engine Lab, Refrigeration and Air Conditioning Lab, Metrology and other related labs as well. The department is equipped with a wide range of hi-tech machines, tools and equipment to broaden the practical knowledge of students, enabling them to handle the ever-challenging needs of technical excellence in all areas of Mechanical Engineering.

The department of Mechanical Engineering offers B.Tech. programs in Mechanical Engineering, Mechatronics Engineering, Tool Engineering and M.Tech Programme in Tool Engineering at DSEU Okhla II Campus. In addition G. B Pant DSEU Okhla I Campus offers B.Tech in Mechanical Automation Engineering and M.Tech in Mechanical Engineering.

The students and the faculty of the department also interact regularly with the industry through internships, projects and research associations and hence are updated with the latest trends in the industry. The students of other reputed universities also utilize the labs of the department for their training and research work.

2.1.3. Electronics & Communication Engineering: Since the inception of the Electronics & Communication Engineering (ECE) department, the primary objective has been to become the front-runner in its core area of specialization. The ECE department has made the students grow professionally by acquiring the specialization in electronics, basic sciences and professional skills through meticulous learning and practical engineering concepts. The B.Tech and M.Tech programs in ECE are offered at G B Pant DSEU Okhla I Campus. The Department of ECE, G B Pant DSEU Okhla I (formerly G. B. Pant Govt Engineering College) was established in the year 2007. With a vision to excel in Education and Research, the department has taken the lead to establish various state-of-the-art, comprehensive and well-equipped laboratories. The department is well-known in the North India Region for its ultra-modern research facilities especially in regards to the testing and measurement of antennas and other RF and microwave devices in Anechoic Chamber located in Advanced Microwave Lab.

The dynamic and vibrant faculty of the department have been participating in the various research activities and faculty development programmes at regular intervals to equip themselves with the technologies. Further the students of the department are trained in the practical realm according to the current industry standards so as to increase the rate of employment in this sector.

Department offers research opportunities in Digital Image Processing, Digital Signal Processing, Advanced Communication Engineering, Machine Learning, Deep Learning and ANN, RF, Antenna & Microwave, Optimization, Wireless and Optical Communication, IoT.

2.2. Seat Availability

Description	Number
Total Seats	30
Seats reserved for DSEU Faculty	5
Maximum number of seats with scholarship	20

*Working professionals to provide NOC from the employer at the time of interview

Seat Availability		25	
State Code		D	OD
Delhi 85%, Outside Delhi 15%		21	4
SC	SC	2	0
	DP	0	0
	PwBD	0	0
	Total	2	0
ST	ST	1	0
	DP	0	0
	PwBD	0	0
	Total	1	0
OBC	OBC	5	1
	DP	0	0
	PwBD	0	0
	Total	5	1
General (GN)	GN	9	3
	DP	1	0
	PwBD	1	0
	Total	11	3
EWS	GN	2	0
	DP	0	0
	PwBD	0	0
	Total	2	0

2.3. Reservation Relaxations

2.3.1. In all the Ph.D. programs of the University, reservation of seats for applicants in all the categories, including SC/ST/OBC (non-creamy layer)/Person with Benchmark Disability (PwBD), Economically Weaker Section (EWS)/ Defence Personal (DP) will be applicable as per the policies of Govt. of National Capital Territory of Delhi.

2.3.2. SC/ST/OBC (non-creamy layer)/EWS/PwBD/DP applicants may be permitted 5% marks relaxation in the eligibility requirement as prescribed in clause 3.1.

2.3.3. Provided further that, if in spite of the above relaxation, the seats remain unfilled, they shall be filled by the applicants from the unreserved category.

2.4. Seat conversion rules

2.4.1. After exhausting the complete list of registered candidates in PWD and DP subcategories, remaining vacant seats in these subcategories will be transferred to respective main category (GEN/SC/ST/OBC/EWS).

2.4.2. After exhausting the complete list of registered SC, ST, OBC and EWS candidates, the vacant seats will be treated as unreserved. The conversion of vacant Outside Delhi Region seats to Delhi Region seats and vice versa will be done as per the following procedure:

1. If the complete list of registered ST Delhi candidates exhausts, then the remaining vacant seats under this category will be filled from the list of SC Delhi category candidates or vice versa.
2. If the complete list of registered ST, Outside Delhi candidates exhausts, then the remaining vacant seats under this category will be filled from the list of SC, Outside Delhi category candidates or vice versa.
3. If the complete list of registered SC/ST, Delhi candidates exhausts, then the remaining vacant seats under this category will be filled by creating equal number of seats in GN, Delhi category.
4. If the complete list of registered SC/ST, Outside Delhi candidates exhausts, then the remaining vacant seats under this category will be filled by creating equal number of seats in GN, Outside Delhi category.
5. If the complete list of registered EWS, Delhi candidates exhausts, then the remaining vacant seats under this category will be filled from the list of GN, Delhi category candidates.
6. If the complete list of registered EWS, Outside Delhi candidates exhausts, then the remaining vacant seats under this category will be filled from the list of GN, Outside Delhi category candidates.
7. If the complete list of registered OBC, Delhi candidates exhausts, then the remaining vacant seats under this category will be filled from the list of GN, Delhi category candidates.

8. If the complete list of registered OBC, Outside Delhi candidates exhausts, then the remaining vacant seats under this category will be filled from the list of GN, Outside Delhi category candidates.
9. If the complete list of registered GN, Delhi candidates exhausts, then the remaining vacant seats under this category will be filled from the list of GN, Outside Delhi category or vice versa.

3. Selection Criteria

3.1. Minimum Educational Qualifications

- A. An applicant seeking admission to the Ph.D. should have a Master's Degree, or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with not less than 55% of marks in aggregate or equivalent CGPA wherever grading system is followed or an equivalent degree from a Foreign University/Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.
- B. An applicant who is not satisfying condition "A" of minimum educational qualification, but having four years Bachelor's degree should have a minimum CGPA of 7.5/10 or equivalent percentage shall be eligible to apply for the Ph.D. admission. The candidate should have demonstrated exceptional interest in research which shall include prior publications, conference presentations, or other academic work.
- C. Applicants who have cleared the M.Phil. course work with at least 55% marks in aggregate or an equivalent grade in a point scale wherever grading system is followed or an equivalent degree from a Foreign University/Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country to assess, accredit or assure quality and standards of educational institutions, shall be eligible to apply for the Ph.D. admission.

D. SC/ST/OBC (non-creamy layer)/EWS/PwBD/ Defence Personal (DP) applicants will be given 5% marks relaxation in the minimum educational qualifications.

3.2. Selection Process

3.2.1. The complete selection process is based on the entrance test, past academics, and interview, the details for which are as follows.

A. **Weightage to Entrance Test:** All the applicants seeking admission to the Ph.D. have to appear for the entrance test. The test will be of qualifying nature only. The minimum qualifying marks for the entrance test will be 50%. A relaxation of 5 % of marks (from 50% to 45%) shall be allowed for the candidates belonging to SC/ST/OBC (non-creamy layer)/EWS/PwBD/ Defence Personal (DP) in the entrance examination conducted by the University. The entrance test shall consist of 50% questions on Research Aptitude/Methodology, which may include quantitative methods/computer applications, experimental techniques etc., and 50% subject-specific questions. Regular faculty members of DSEU or faculty on deemed deputation in DSEU and the applicants who have qualified UGC/CSIR-NET/JRF examination or valid Gate score (with qualifying marks) in the relevant area of research will be exempted from taking the entrance test.

* The internal faculty members of DSEU can apply for non-reserved seats by appearing in the written test or shall get the exemption from the written test on the basis of valid Gate score/ NET/ JRF.

B. **Weightage to Past Academics:** The weightage to past academic performance will be given as follows to prepare the final merit list: 10th - 10%; 12th - 10%; UG - 15% and PG - 15%. If the result of the PG is not declared then the marks of the first three semesters will be considered.

The candidates who have applied on the basis of UG as per 3.1 (B); a weightage of 30% will be given to UG marks while preparing the final merit list.

C. **Weightage to Interview:** The entrance test shall be followed by an interview of the qualified candidates of the entrance test, for admission to this programme. Weightage of marks will be 50% for the interview.

Every candidate needs to submit a brief about her/his research area/interest along with the admission form and is required to give a presentation on the same before the interview committee

List of candidates qualified for the interview, schedule and venue of the interview will be notified on the Website.

The final merit list will be prepared as per the following criteria:

Particulars	Weightage (For Candidates applying on the basis of PG)	Weightage (For Candidates applying on the basis of UG)
Entrance Test	Qualifying Nature (50% Marks)	Qualifying Nature (50% Marks)
10th	10%	10%
12th	10%	10%
UG	15%	30%
PG	15%	—
Interview	50%	50%

3.2.2. Result Declaration: Result will be declared on the University Website www.dseu.ac.in. No separate intimation will be sent to the candidates regarding declaration of results and commencement of interview/admission.

4. Course Work

- 4.1. Each research scholar shall be required to take course work as prescribed by the Academic Advisor.
- 4.2. The credits requirement for the Ph.D. course work shall be:
 - a) A minimum of 20 credits for scholars with an acquired master's degree.
 - b) A minimum of 32 credits for scholars with an entry after a 4-year bachelor's degree.
 - c) Eight credits have to be acquired through courses on Research Design, Thinking and Methodology (4 credits), Philosophy of Science (2 credits), and Seminar (2 Credits) which could cover areas such as quantitative

methods, computer applications, research ethics, review of published research in the relevant field, training, field work, writing research papers, etc. Other courses shall be advanced level courses preparing the scholar for Ph.D. degree.

- d) In special cases, for students with advance standing by virtue of their academic preparedness and/or by virtue of research publications and/or by virtue of their professional work experience, some of the course work requirements may be waived. All such waivers shall be decided upon by the DRC on the recommendation of the academic advisor.

4.3. All research scholars admitted to the Ph.D. program shall be required to complete the course work prescribed by the University during the first two semesters.

4.4. Candidates already holding a M Phill degree from any recognized university/institution and admitted to the Ph.D. program, may be exempted by the Department Research Committee from the Ph.D. course work, subject to meeting the requirements as per clause 4.2.

4.5. A Ph.D. scholar has to obtain a minimum of 60% marks in each of the courses taken in order to be eligible to continue in the program and submit the thesis. If the marks obtained by any scholar in the prescribed course work are below the required marks, the research scholar has to take up additional courses to bring up the marks equal to or above 60% marks in each of the courses taken in order to be eligible to continue in the programme and submit the thesis.

*The timeline for scholars, for coursework, comprehensive evaluation and proposal defense, with undergraduate degrees will be six months more than the candidates with master's degree.

5. Minimum and Maximum Registration Period

5.1. The duration of the Ph.D. program shall be for a minimum period of three years and a maximum period of six years from the date of provisional registration.

5.2. In exceptional cases, the Vice-Chancellor may grant a relaxation up to a maximum of one year in the maximum duration for the submission of a thesis on the basis of a six-monthly progress report.

- 5.3.** Women and PwBD candidates shall be allowed a relaxation on a six-monthly basis up to a maximum period of two years in the maximum duration by the Vice-Chancellor on the recommendation of the research supervisor and Dean Research.

6. Fellowship and Grants

- 6.1.** The research scholars will be provided with Teaching-cum-Research Fellowship as per UGC guidelines. The award of fellowship shall be reviewed every semester, based on the performance report provided by the respective Department Research Committee on recommendation of the Research Advisory Committee.
- 6.2.** The duration of the fellowship is normally for four years and shall be extended for a maximum period of one year by the competent authority. Continuation of the fellowship is subject to satisfactory research performance and satisfactory academic performance in the discharge of responsibilities assigned to the research scholar.
- 6.3.** The admission to the program and award of fellowship are not linked. Admission to any program does not guarantee the award of the fellowship. Those who are not awarded fellowships can continue with the program as self-financing scholars.
- 6.4.** The fellowship shall be paid on a monthly basis. The research scholar with fellowship would be expected to contribute 8 hours per week to the university through designated teaching assistance, laboratory, assignments, and other work of academic nature and requirement.
- 6.5.** Travel and contingency grants will be allowed to the scholars as per University norms.

7. Procedure for Online Registration & Application Process

7.1. Online Registration

- 7.1.1.** All candidates interested in seeking admission in Ph.D. programs of Delhi Skill & Entrepreneurship University (DSEU) are required to visit the website www.dseu.ac.in, and fill an online registration form.
- 7.1.2.** While registering, the candidate has to provide the name, father's name, mother's name, date of birth, mobile number and email-id. These details cannot be changed after registration, so candidates need to be extra cautious while registering.

7.2. Application Process

- 7.2.1.** The candidate will be required to authenticate himself/herself using the credentials provided at the time of registration.
- 7.2.2.** While filing in the application form, the candidate is required to select the program(s)/ stream(s) he/she is interested in seeking admission. A candidate can apply in one or more PhD programs. However, only one application needs to be filled for all the programs applied for; however the fee needs to be paid for each department.
- 7.2.3.** Candidates are required to provide the following details while filling the application form:
- a) Personal Details
 - b) Types of Candidature:
 - i) Internal Faculty/Staff: A candidate working as a Regular faculty member/staff of DSEU.
 - ii) Candidature with Fellowship: The candidate devoting full time for completing the degree requirements. She/he shall not be allowed for any permanent/temporary job. The research scholar with fellowship would be expected to contribute 8 hours per week to the university through designated teaching assistance, laboratory, assignments, and other work of academic nature and requirement.
 - iii) Candidature without Fellowship: A candidate working full time somewhere shall be allowed to pursue PhD in this category. She/he needs to fulfill the minimum residential requirement of the program.
 - iv) Sponsored Candidate: A candidate sponsored by Government or Private Research & Development Organizations, Public Sector Undertakings, Industries and Educational Institution of repute, devoting full time for completing the degree requirements.
- 7.2.4.** Candidates need to upload the documents in support of the details filled in the registration/application form, as applicable:
- i) Photo and Signature of Candidate (Upto 100kb size max)

- ii) Certificates and Marksheets of examinations (Class X, XII, Diploma, Degree, Masters, M.Phil)
- iii) Valid Gate Score Card
- iv) NET/JRF Certificate
- v) Research Paper Published (Best two in a single pdf)
- vi) Proposed Theme and Scope of Research (in 500 Words)
- vii) Caste Certificate (SC/ST/OBC(NC) category)
- viii) EWS Certificate as per Annexure I
- ix) Defence category certificate as per Annexure II
- x) PwBD Certificate as per Annexure III
- xi) Work Experience Certificate*
- xii) Proof of DSEU Faculty/Staff
- xiii) Letter of Sponsorship*

All mentioned documents can be uploaded in JPG/JPEG/PDF format. The maximum size of each document can be 5MB except the photo and signature.

*If a candidate is not able to submit the documents while filling the application form then she/he may upload an undertaking pertaining to the same; which then needs to be submitted at the time of interview.

7.2.5. Once the application form is complete in all respects and all the required documents have been uploaded, the candidate needs to confirm his/her application form. The candidate will not be permitted to edit/change details filled in the application form after the final submission.

7.2.6. Once the application form is completed and confirmed by the candidate, she/he will have to pay a non-refundable registration fee of Rs. 500/- (plus bank charges as applicable) for application processing in each department.

7.2.7. If payment fails, the fee should be paid again for registration without waiting for the refund. The candidate may inform DSEU Delhi by sending an email to phd_admissions@dseu.ac.in providing the candidate's details (Applicant Name, Mobile Number, E-mail Id provided at the time of registration, Date and Time of Transaction).

8. Fee Details

8.1. Program Fee

8.1.1. Annual fee is Rs. 10,000/- which is to be paid at the beginning of each year.

8.1.2. A one-time sum of Rs. 20,000/- as caution money will be charged from each student seeking admission to the University in the Academic Year 2022-23. The amount is interest free and will be refunded to the students at the time of withdrawal or at end of their Programme, whichever is later, after deduction of dues, if any.

8.2. Refund of Fee

The amount of program fee/other charges deposited by the student may not be refunded if the candidate does not join the programme or leave the University and intimate the same after the last date of registration. Fee refund shall be done as per the University policy.

9. Syllabus for Entrance Test

The syllabus of the entrance test will contain two parts. Part A will be common for all the programs and part B will be discipline specific.

Part A (Common for all the programs)

Types of data, description of data, frequency distributions, bar, pie charts, graphs, mean, median, mode, standard deviation, error bars, dependent and independent variables, discrete and continuous random variables, probability, sample space, outliers, statistical inference, standard normal distribution, statistical significance, chi square test, comparing data, correlations, curve fitting' This part shall contain questions-pertaining to General Aptitude with emphasis on logical reasoning, graphical analysis. analytical and numerical ability. quantitative comparison, series formation, puzzles etc.

Part B (Computer Science and Engineering/Applications)

Digital Logic: Boolean algebra. Combinational and sequential circuits. Minimization. Number representations and computer arithmetic (fixed and floating point).

Computer Organization and Architecture: Machine instructions and addressing modes. ALU, data-path and control unit. Instruction pipelining, pipeline hazards. Memory hierarchy: cache, main memory and secondary storage;

Programming and Data Structures: Programming in C. Recursion. Arrays, stacks, queues, linked lists, trees, binary search trees, binary heaps, graphs.

Algorithms: Searching, sorting, hashing. Asymptotic worst case time and space complexity. Algorithm design techniques: greedy, dynamic programming and divide-and-conquer. Graph traversals, minimum spanning trees, shortest paths

Theory of Computation: Regular expressions and finite automata. Context-free grammars and push-down automata. Regular and context-free languages

Compiler Design: Lexical analysis, parsing, syntax-directed translation. Runtime environments. Intermediate code generation. Local optimisation, common subexpression elimination.

Operating System: System calls, processes, threads, inter-process communication, concurrency and synchronization. Deadlock. CPU and I/O scheduling. Memory management and virtual memory.

Databases: ER-model, Relational model (Relational algebra, Tuple calculus), Integrity constraints, Normal Forms- 1 NF, 2 NF, 3 NF and BCNF, Query languages (SQL), Transactions and concurrency control.

Software Engineering: Software Process, Modeling Languages, Requirement and feasibility analysis, Process Models, Planning and managing the project, Domain specific modeling, Software architecture and design patterns, Software reliability and testing techniques.

Part B (Electronics and Communication Engineering)

Network Theory: Node Analysis, Mesh Analysis, Superposition Theorem, Thevenin's Theorem, Norton's Theorem, Maximum Power Transfer Theorem, Reciprocity Theorem, Wye-Delta Transformation, Two Port Network Parameters, Steady State Analysis of R,L,C, Circuits

Analog Electronics: Intrinsic and Extrinsic Semiconductors, Energy bands, Diffusion and Drift Currents, Mobility, Equation of Continuity, P-N Junction diode, Zener Diode, Light Emitting Diode (LED), Photodiode, Clipping and Clamping Circuits, Rectifiers, Filters, BJTs & MOSFETs with their Biasing and Small Signal Analysis, Op-amp Circuits and their Applications like Adder, Integrator, Differentiator and Differential Amplifier

Digital Circuits: Number System, Boolean Algebra, Logic Gates, K-Map, Multiplexers, Demultiplexers, Encoders, Decoders, Code Converters, Flip-Flops, Counters, Registers, ADCs

and DACs, Computer Organization: Addressing Modes, Internal Architecture of 8085 Microprocessor, Pipelining, Virtual Memory, Cache Memory and Mappings.

Signals and Systems: Classification of Signals, Classification of various Systems, LTI Systems, Impulse Response, Poles and Zeros, Convolution and Correlation, Fourier Series, Fourier Transform, DTFT, DFT, Z-Transform, Laplace Transform, Sampling Theorem, FIR and IIR Filters, Multi-rate Digital Signal Processing

Communication Systems: Amplitude Modulation and Demodulation, Angle Modulation and Demodulation 1, Noise, Noise Figure, White Noise, Random Variables and Processes, Power Spectral Density, Entropy, Channel Capacity, Error Detection and Correcting Codes, Cyclic Codes, Multiple Access Techniques, PCM, DPCM, Line Coders, DM, ADM, ASK, FSK, PSK, QAM, Intersymbol Interference, Matched Filter, Gram Schmitt Orthogonality

Electromagnetic Theory: Gauss's Law in Electrostatics and Magnetostatics, Boundary Conditions for Dielectrics, Faraday's Law of EM Induction, Ampere's Law, Maxwell's Equations and their Differential & Integral Forms, Wave Equations, Poynting Theorem

Uniform Plane Waves, Reflection and Refraction, Phase Velocity, Group Velocity, Wave Propagation in Conductors and Dielectrics, Depth of Penetration

Transmission Line Equations, Impedance Matching, Smith Chart

Control Systems: Open Loop and Closed Loop Systems, Transfer Function, Block Diagram Reduction and Signal Flow Graphs, Routh-Hurwitz Criterion, Bode Plot, Root Locus Plot, Polar Plot, Nyquist Stability Criterion, Lag, Lead and Lag-Lead Compensators, State variables, State Equations and their Solutions

Part B (Mechanical Engineering)

Production Engineering: Metal Cutting, Metal Forming, Welding, Metal Casting, Material Characterization, Non-traditional Manufacturing Processes, Measurements & Metrology, Grinding of Ceramics and Metal Matrix Composites, Powder Metallurgy, Microcellular Injection Moulding, Finite Element Applications in Manufacturing, CAD/CAM, Rapid Prototyping, Manufacturing Automation, Additive manufacturing, Laser material processing,

Fluid Mechanics and Thermal Sciences Fluid Mechanics: Fluid properties; fluid statics, manometry, buoyancy, forces on submerged bodies, stability of floating bodies; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; dimensional analysis; viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings.

Heat-Transfer: Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan-Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis.

Thermodynamics: Thermodynamic systems and processes; properties of pure substances, behaviour of ideal and real gases; zeroth and first laws of thermodynamics, calculation of work and heat in various processes; second law of thermodynamics; thermodynamic property charts and tables, availability and irreversibility; thermodynamic relations.

Applied Thermal Engineering: Air and gas compressors; vapour and gas power cycles, concepts of regeneration and reheat. I.C. Engines: Air-standard Otto, Diesel and dual cycles. Refrigeration and air-conditioning: Vapour and gas refrigeration and heat pump cycles; properties of moist air, psychrometric chart, basic psychrometric processes. Turbomachinery: Impulse and reaction principles, velocity diagrams, Pelton-wheel, Francis and Kaplan turbines

Engineering Materials: Structure and properties correlation; engineering materials (metals, ceramics, polymers and composites) – properties and applications; stress-strain behaviour of metals and alloys; iron-carbon phase diagram, heat treatment of metals and alloys, its influence on mechanical properties, stress-strain diagrams for engineering materials.

Mechanics of Materials: Stress and strain, elastic constants, Poisson's ratio; failure theories; Mohr's circle for plane stress and plane strain; thin cylinders; shear force and bending moment diagrams; bending and shear stresses; deflection of beams; torsion of circular shafts; Euler's theory of columns; energy methods; thermal stresses; strain gauges and rosettes; testing of materials with universal testing machine; testing of hardness and impact strength.

Theory of Machines: Displacement, velocity and acceleration analysis of plane mechanisms; dynamic analysis of linkages; cams; gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses; gyroscope. governors and fly wheels; design of bolted, riveted and welded joints; interference/shrink fit joints; design of shafts, keys, spur gears, belt drives, brakes and clutches; pressure vessels. Vibrations: Free and forced vibration of single degree of freedom systems, effect of damping; vibration isolation; resonance; critical speeds of shafts.

Machine Design: Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements- bolted, riveted and welded joints; shafts, gears, rolling and sliding contact bearings, brakes and clutches, springs.

Industrial Engineering: Quality, Reliability and Maintenance, Lean Manufacturing, Time study, Motion study, Agile Manufacturing, Statistical quality control, Operations Management, Project Management, Supply Chain Management, Reverse Logistics, Inventory management

Operations Research: Linear Optimization Models, Assignment and Transportation Models, Queuing Theory, CPM/PERT

Government of NCT of Delhi

(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/Street ----- 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 lakhs (Rupees Eight Lakh only) for the financial year -----.
His/Her family does not own or possess any of the following assets***:

- I. 5 acres of agricultural land and above;
 - II. Residential flat of 1000 sq. ft. and above;
 - III. Residential plot of 100 sq. yards and above in notified municipalities;
 - IV. Residential plot of 200 sq. yards and above in areas other than the notified municipalities.
2. Shri/Smt./Kumari ----- belongs to the ----- caste which is not recognized as a Scheduled Caste, Scheduled Tribe and Other Backward Classes.

Signature with Seal of Office -----

Name -----

Designation -----

* Income covered from all sources, i.e. salary, agriculture, business, profession, etc.

** The term “Family” for this purpose includes the person who seeks the 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.

*** 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.

**CERTIFICATE FOR AVAILING ADMISSION AGAINST DEFENCE QUOTA ISSUED
BY THE SECRETARY KENDRIYA SAINIK BOARD, DELHI OR SECRETARY,
ZILA/RAJYA SAINIK BOARD OR OFFICER-IN-CHARGE, RECORD OFFICE OF
CONCERNED SERVICE FOR SERVING PERSONNEL**

This is to certify that Mister/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 during
.....
- (c) Died in peace time on
..... with death attributable to military service
- (d) Disabled in peacetime with disability attributable to military service.
- (e) Gallantry Award Winner (.....)
- (f) Ex-Serviceman.
- (g) Serving Soldier

(Category _____ above)

Mister/Miss.son/daughter of the above-named officer/ JOO/ OR
is eligible for Admission inprogram in
..... Board against the Defence quota under priority
. His/ Her Ex-Serviceman Widow Identity Card No. is DLH-01...../RSB

(Round stamp of Office)

SECRETARY

(Zila/Rajya Sainik Board)

Certificate For Availing Admission Against Person with Disabilities Quota

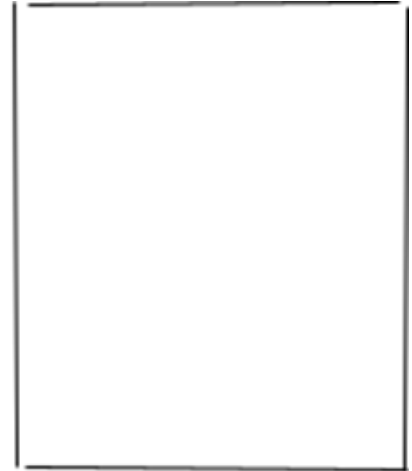
(To be issued by Medical Board from Government Hospital)

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 Diploma/ Undergraduate/Postgraduate (program name)

_____.

(*Strike out whichever is not applicable)

Doctor

Doctor

Chief Medical Officer

Date

Seal of Office

Note:

- The medical board must have three members.
- Candidates having temporary or progressive handicap will not be considered against these seats.

Form-I

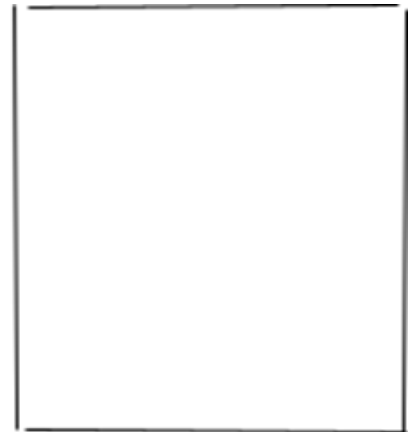
Disability Certificate

(In cases of amputation or complete permanent paralysis of limbs and in cases of blindness)
(NAME AND ADDRESS OF THE MEDICAL AUTHORITY ISSUING THE CERTIFICATE)

Certificate No. _____

Date: _____

This is to certify that I have carefully examined Shri/Smt.
_____ son/wife/daughter of Shri/Smt.
_____ Date of Birth
(DD/MM/YY) _____ Age _____ years,
Male/Female _____



Registration No. _____

Permanent resident of:

House No.- _____ Ward/ Village/ Street

Post Office _____

District _____ State _____

whose photograph is affixed above, and I am satisfied that:

1. He/ She is a case of:
 - a. Locomotor Disability
 - b. Blindness(Please tick as applicable)
2. The diagnosis in his/her case is _____
3. He/She has _____% (in figure) _____ percent (in words) permanent physical impairment/blindness in relation to his/her _____ (part of body) as per guidelines (to be specified).

4. The applicant has submitted the following document as proof of residence:-

Nature of Document	Date of Issue	Details of authority issuing certificate

(Signature and Seal of Authorised Signatory of notified Medical Authority)

Disability Certificate

(In cases of multiple disabilities)

(NAME AND ADDRESS OF THE MEDICAL AUTHORITY ISSUING THE CERTIFICATE)

Date:

Certificate No. _____

This is to certify that I have carefully examined Shri/Smt.
 _____ son/wife/daughter of Shri
 _____ Date of Birth
 (DD/MM/YY) _____ Age _____ years, male/female

Registration No. _____

Permanent resident of:

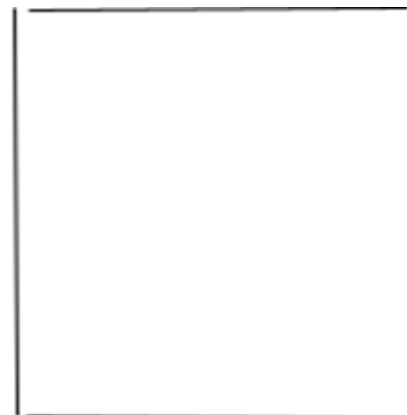
House No.- _____

Ward/Village/Street _____

Post Office _____

District _____

State _____



whose photograph is affixed above, and are satisfied that:

1. He/She is a Case of **Multiple Disability**. His/Her extent of permanent physical impairment/disability has been evaluated as per guidelines (to be specified) for the disabilities ticked below, and shown against the relevant disability in the table below:

S. No.	Disability	Affected Part of Body	Diagnosis	Permanent physical
				impairment/ mental
				disability (in %)
1	Locomotor disability	@		
2	Low vision	#		

3	Blindness	Both Eyes		
4	Hearing impairment	£		
5	Mental retardation	X		
6	Mental-illness	X		

@ - e.g. **Left/ Right/ Both arms/ legs**

- e.g. **Single eye/ Both eyes**

£ - e.g. **Left/ Right/ Both eyes**

2. In the light of the above, his/her overall permanent physical impairment as per guidelines (to be specified), is as follows:

In figures: _____ percent

In words: _____ percent

3. The above condition is progressive/non-progressive/likely to improve/not likely to improve.

4. Reassessment of disability is:

a. Not necessary

b. Is recommended/after _____ years _____ months, and, therefore, this certificate shall be valid till (DD/MM/YY) _____.

5. The applicant has submitted the following document as proof of residence:

Nature of Document	Date of Issue	Details of authority issuing certificate

6. Signature and seal of the Medical Authority:

Name and Seal of Member Name of Seal of Member Name and Seal of Chairperson

1. In words: _____ percent
2. The above condition is progressive/non-progressive/likely to improve/not likely to improve.
3. Reassessment of disability is:
 - a. Not necessary
 - b. Is recommended/after _____ years _____ months, and, therefore, this certificate shall be valid till (DD/MM/YY) _____.
4. The applicant has submitted the following document as proof of residence:

Nature of Document	Date of Issue	Details of authority issuing certificate

5. Signature and seal of the Medical Authority:

Name and Seal of Member Name of Seal of Member Name and Seal of Chairperson

ANNEXURE - IV

Form of Medical Certificate

(To be signed by a registered medical practitioner holding a Medical Degree)

(TO BE SUBMITTED AT THE TIME OF ADMISSION BY ALL CANDIDATES)

I certify that I have carefully examined Mr./Ms. _____ Son/Daughter of Shri/Smt. _____ whose signature is given below. Based on the examination, I certify that he/she is in good mental and physical health and is free from any physical defects which may interfere with his/her studies including the active outdoor duties required of a professional.

From the candidate records we know the candidate has undergone treatment/is undergoing treatment for:

1. Name of ailment (s) (physical/mental) _____
2. Treatment _____ (completed or continuing)
3. Treating Doctor _____

In case of emergency or need, please get in touch with _____

Marks of Identification _____

Signature of the Candidate _____

Place:

Date:

*Please, note that this information will be kept confidential and will not in anyway be used for making selection decisions

Name & signature of the Medical Officer with
seal and registration number

* *Strike whichever is not applicable.*

CHECK-LIST

DOCUMENTS REQUIRED AT THE TIME OF REPORTING FOR FINAL ADMISSION

1. Two passport size photographs
2. Photo ID Proof and Address Proof
3. Payment receipt of online initial admission fee payment made by the candidate.
4. Proof of Date of Birth (Secondary School Certificate) (Original and One self-attested photocopy).
5. Certificate and Mark Sheet of the examination (Class X, XII, ITI, Diploma, Degree, Masters as applicable) . In case the original certificate is not awarded at the level of the your Institution, a Provisional Certificate/ downloaded copy of the mark-sheet duly authenticated by the concerned School Principal/Director/Head of the Institution will be considered.
6. GATE, UGC-NET (JRF) Certificate
7. Research Paper Published (2 best papers).
8. SC/ST/OBC(NC) certificate issued by the competent authority.
9. EWS certificate as per Annexure I
10. Defence Category certificate as per Annexure: II.
11. PwBD Certificate as per Annexure: III.
12. Medical Fitness certificate as per Annexure - IV.
13. Employment Experience Certificate and NOC from the current Employer.
14. Proof of Faculty/Staff of DSEU.

Candidates must bring a self-attested copy along with all the original documents (as applicable).