



राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली

NATIONAL INSTITUTE OF TECHNOLOGY DELHI

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन एक स्वतंत्र संस्थान)

(An autonomous Institute under the aegis of Ministry of HRD, Govt. of India)

**ADVERTISEMENT NO: NITD/Dean(R&C)/Ph.D Admissions/18-19/01
Ph. D. Admissions (Autumn Semester- AY:2018-19)**

Applications are invited for admission to Ph.D programme in various Engineering, Sciences and Management disciplines for the Autumn Semester of Academic Session 2018-19. The application from complete in all respect must reach the office of the Registrar **latest by 5:00 PM on 23rd July 2018**. The complete details along with the application form can be downloaded from the institute website: www.nitdelhi.ac.in

Registrar

Admission to Ph.D Programme AY: 2018-19 (Autumn Semester)

Applications are invited for admission to Ph.D. (Full-Time/Part-Time/Sponsored) programme in the following Departments/Broad Area of Research for Autumn Semester of the academic year 2018-19. The application form and details are downloadable from institute website: www.nitdelhi.ac.in.

Table 1: Available Ph.D positions with institute fellowship and other financial support(refer section no. 2)

Sl. No.	Department	Broad Areas of Specialization (Indicative)
1.	Electrical & Electronics Engineering	Power System Reliability, Power System Restructuring /Deregulation, Renewable Energy, Soft Computing applications, Power Electronics, Power Systems, Electrical Machines & Drives, Solar & Wind Power conversion, Optimal Operation and Control of Power Systems, Control System, Signal and Image Processing
2.	Electronics & Communication Engineering	Analog and Digital VLSI Design, Embedded Systems, Digital Signal and Image Processing, Bio-medical Signal and Speech Processing.
3.	Computer Science and Engineering	Databases, Network Security, Machine Learning, Image Processing, Health Informatics
4.	Environmental Science & Engineering	Specialization in water and waste water Engineering, Solid waste, waste management, Bio-energy
5.	Humanities/Management	Economics and Management

*** Total No. of Ph.D positions is twelve, however the positions are tentative and may vary. Institute have the right to fill or not to fill the positions.**

Table 2: Ph.D positions though other financial support (refer section no. 2)

Sl. No.	Department	Broad Areas of Specialization (Indicative)
1.	Electrical & Electronics Engineering	Power Electronics and Drives, Application of Power Electronics to Renewable Energy, Design, Modelling and control of power dc-dc converters, dc-ac inverters, Electrical Vehicles, Smart grid, DC micro/nano grid, Control of power converters and Multi-level Inverters, Control of complex systems, Networked and Distributed Control
2.	Electronics & Communication Engineering	Optoelectronics & Optical Communication, Nanophotonics, Image and Video Processing, Microwave and Antennas, Photonic Devices, Field Theory, Optical Imaging and Instrumentation, Microwave Imaging and Instrumentation
3.	Computer Science and Engineering	Networks, Analytics
4.	Mechanical Engineering	Measurement and metrology, Metal matrix composites, Numerical Simulation, Computational Mechanics
6.	Applied Sciences a) Mathematics b) Physics c) Chemistry	(a) Mathematical modelling, Energy Methods stability and convection, Hydrodynamic stability, Heat transfer, Ferrofluids, Nanofluids, Fluid Instabilities and flow through porous medium. (b) Photonic Devices, Technology Management, Microwave and Millimeter Wave Antennas, MHD Wave and Quantum Field Theory, Field Theory, Optical Imaging and Instrumentation, Microwave Imaging and Instrumentation and Optical Metrology (c) Inorganic Chemistry, Metal Organic Frame Works (MOFs) Catalysis, Gas Absorption Metal Ion Detection

1. Eligibility:

Minimum Educational Qualifications for Admission:

1.1.1 Ph.D. in Relevant Engineering:

Master's Degree in Engineering/Technology or equivalent in the relevant area of research along with Bachelor's Degree in appropriate branch of Engineering/Technology or equivalent with a first class or equivalent Grade Point at Master's and/or Bachelor's level.

1.1.2 Ph.D. in Sciences/Humanities/Management:

Master's Degree in appropriate branch of Science/Humanities/Social Sciences/Management or equivalent with a first class or equivalent Grade Point. The candidate must also have a valid GATE score or NET certificate.

1.1.3 Ph.D. in Cognitive Engineering/Science Specializations:

Master's Degree in Engineering /Science/Technology or equivalent in the following cognitive areas of research along with Bachelor's Degree in branch of Engineering/Science/Technology or equivalent with a first class or minimum 60% marks or equivalent Grade Point at Master's and/or Bachelor's level.

Cognitive Group:

Electronics & Communication Engineering/Computer Science & Engineering/ Electrical Engineering/Electrical & Electronics/Instrumentation Engineering/Information Technology/ Computer Applications/ Biomedical Engineering/Physics In order to improve and broaden the student's area of study and research, NIT DELHI supports interdisciplinary exchange and research in the Engineering/ Science specializations. The eligibility criterion will be same as above in 1.1.1 and/or 1.1.2.

Note 1: Applicants need to appear in the **Screening test** of the subject/ specialization on the mentioned date and time, in which they want to pursue their Ph. D programme

Note 2: Relaxation in minimum Percentage/Equivalent Grade Point requirements will be given as per the National Reservation Policy of Govt. of India.

Note 3: *The norms & requirements applicable for respective student categories should also be fulfilled.*

Note 4: **Candidate have to apply separately for each department for their respective specialization.**

2. Student Category:

2.1 Full-Time Research Scholars

2.1.1. Research Scholar (RS)

Students under this category are entitled for financial assistance as per the latest MHRD norms and will be governed by NIT DELHI and MHRD rules & regulations as effective from time to time.

2.1.2. Research Scholar through Project (RSP)

Students eligible under this category are entitled to financial support from sponsored projects based on the pre-determined norms as mentioned in the project.

2.1.3. Research Scholar through Govt./ Semi Govt. Fellowship Award (RSFA)

These candidates are financially supported under various Govt./ Semi Govt. schemes (CSIR, UGC, DAE, DST,DBT, NBHM, etc.) or by some other organizations.

2.1.4. Research Scholar through Sponsorship (RSS)

These candidates are sponsored by recognized R&D organizations for doing research work in the Institute. Candidates are expected to be released for full-time research work by the parent organization in order to meet the minimum residential requirements at NIT Delhi. They will not receive any financial support from the Institute. Sponsorship letter should be brought at the time of written test and/ or interview.

2.1.5. Research Scholar through Self Finance / Study Leave (RSSF) (Indian Nationals/ Foreign Nationals)

2.1.5.1. Indian Nationals: This category refers to persons with good academic record and experience to join in the doctoral programme. They are admitted through the usual admission procedure but they would not get any financial support from the Institute. If admitted, these students have to complete their programme within prescribed duration.

2.1.5.2. Foreign Nationals: These students are admitted through Embassy of the respective country after getting approval from the Ministry of External Affairs and No Objection Certificate from MHRD.

2.1.5.3. Study Leave: This category refers to candidates who are released from the Government or Reputed Educational Institutions on study leave for a period not less than three years for doing research work at the Institute. If selected, Employer's endorsement letter / NOC for Study Leave should be submitted at the time of joining the Ph.D. programme.

2.1.6. Research Scholar through Foreign Nationals with Indian Council for Cultural Relation Award (RSICCR): These students are sponsored and awarded scholarship by their respective Governments. They should apply for admission to Institute's Ph.D. programme through Indian Embassy in their country.

2.2 Part Time Research Scholar

2.2.1. Institute Staff (IS)

This category is only for the persons employed as Institute Staff at NIT, Delhi on regular basis.

- i. Admission will be on the basis of written test and interview as applicable to the concerned programme.
- ii. If a candidate is registered under the category but is not continuing his/ her service in the institute he/she may be considered under the RSSF and not under this category.

2.2.2. Project Staff (PS)

This category refers to candidates employed at NIT Delhi as a part of sponsored projects undertaken by the Institute and admitted to the Ph.D. programme, if the duration of the Project at the time of admission is atleast 3 years or more. Under this category the research scholar will be governed by the pre-determined norms as mentioned in the project.

2.2.3. External candidates, sponsored by recognized R&D organizations (EX)

- i. The candidates employed in recognized R&D organizations may apply as for Ph.D. programme as external candidates at NIT Delhi while remaining in employment. These candidates will be allowed to register for Ph.D. with a Supervisor (internal) as decided by NIT Delhi and a Co-supervisor (external) from their parent organization. A candidate from an educational institute with atleast one year of teaching experience may also be considered under this category.
- ii. At the time of test/interview, the candidate has to submit a Sponsorship Certificate from the organization in which she/he is employed giving an undertaking that the candidate would be released from the normal duties to complete the course work and the mention of available facilities relevant to the research programme.
- iii. To promote interaction and association among the Institute Faculty and concerned external organization, a meeting between the internal and external supervisors should be arranged at least once in a year to ensure continuous dialogue and participation.
- iv. The option of external registration is for applicants who are working in well equipped scientific institutions, laboratories, R&D establishments and industrial organizations engaged in research based activities and having collaboration with NIT DELHI and other educational institutes not considered otherwise.

2.3 Ph.D Scholar under TEQIP

This category is only for the persons employed as Institute Staff under TEQIP.

- i. Candidate should apply through proper channel and submit the application along with No objection certificate from the serving institute.
- ii. Admission will be on the basis of screening test and selection process as applicable to the concerned programme.

3. Screening Test

All the eligible candidates shall be required to appear in a screening test of the same discipline in which Ph.D. Programme is to be joined. The screening test will be of MCQ mode having **60 questions to be attempted in 1.5 hour**. A candidate securing at least 40% marks in the screening test shall be declared qualified for the selection process. The syllabus for the written test will be the same as latest GATE/NET syllabus in related branch of Engineering/Technology/Science.

4. Selection process

The candidates who have qualified the screening test will be called for the interview. At the time of interview, candidate will be asked to present their research interest/area along with interaction with the subject experts.

5. Reservation:

The reservation rules will be followed as per Government of India guidelines prevailing at the time of admission. Category (General/OBC/SC/ST/PH) once chosen by the applicant in his/her application form shall not be changed at a later stage. Candidate(s) claiming any reservation category shall attach a valid caste certificate (In case of OBC - not older than six months) along with the application.

6 Teaching Assistantship-cum-Scholarships:

Ph. D. (Full-Time) students will be awarded scholarship cum teaching assistantship as per the guidelines of Ministry of HRD. The scholarship cum teaching assistantship are limited subject to availability of scholarship cum teaching assistantship, otherwise candidate may be consider for Full-Time without scholarship cum teaching assistantship. The selected candidates without scholarship cum teaching assistantship are required to submit undertaking on judicial stamp paper that they will not claim scholarship cum teaching assistantship from the Institute in future. However, they can submit research proposal to different funding agencies or they can apply to different outside funding agencies for scholarship.

7. How to apply:

1. The application form can be downloaded from the institute website www.nitdelhi.ac.in.
2. Candidates are advised to visit the institute website: www.nitdelhi.ac.in for frequent updates.
3. A candidate interested in applying in more than one department/ category shall be required to submit separate application forms along with appropriate fees and documents.
4. A non-refundable **application fee of Rs.1000/- (Rs.500/- for SC/ST/PH candidates)** is to be paid through a crossed demand draft drawn in favour of **Director, National Institute of Technology Delhi** payable at **Delhi**.
5. Sponsored candidates should send their applications through proper channel. Late applications shall not be entertained.
6. Incomplete applications and applications received after due date will not be considered for admissions.
7. The envelope must be superscripted as "**APPLICATION FOR ADMISSION TO PhD PROGRAMME (Full-Time / Sponsored) IN THE DEPARTMENT OF _____ under the student Category _____**".
8. Application form duly filled, accompanied by self-attested Photostat copies of the relevant certificates/testimonials/documents, along with original demand draft should be sent to following address latest by **5:00 PM on 23rd July 2018**.

**The Registrar,
National Institute of Technology Delhi,
Sector A-7, Institutional Area,
IAMR Campus, Narela, Delhi - 110040.**

8. Venue of Entrance Test and Interview

**National Institute of Technology Delhi
Sector A-7, Institutional Area,
IAMR Campus,
Near Raja Satyawadi Harish Chandra Hospital
Narela, Delhi-110040.**

9. Important Dates:

Last date for submission of Application form	23.07.2018
Display of list of eligible candidates	25.07.2018
Written Test	31.07.2018
Display of short listed candidates for Interview/Presentation	31.07.2018
Interview/Presentation for those who qualified the written test	31.07.2018
Display of provisional list of selected candidates	To be notified later
Reporting date for admission/registration and deposition of Fee	To be notified later
Commencement of regular classes	To be notified later
Note: All the dates mentioned above are tentative and may be changed at any stage by competent authority. All the candidates interested for admission are advised to kindly visit the institute website regularly for any change in the above schedule.	



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(An autonomous Institute under the aegis of Ministry of HRD, Govt. of India)

सेक्टर ए-७, इन्स्टिट्यूशनल एरिया, नरेला, दिल्ली-११००४०, भारत/ Sector A-7, Institutional Area Narela, Delhi-110040, INDIA

दूरभाष/Tele: +9111-27787500-503, फ़ैक्स/ Fax: +9111-27787503

वेबसाइट/Website: www.nitdelhi.ac.in

APPLICATION FORM FOR ADMISSION TO Ph.D PROGRAMMES 2018-2019 (Autumn Semester)

Advt. No.: NITD/Dean(R&C)/Ph.D. Admissions/18-19/01

dated: 02/07/ 2018

S.No. _____

Application Fee : Rs.500/- (SC/ST/PH), Rs. 1000/- (Others)

- * To be filled in by the Candidate in his/her own handwriting in capital letters
- ** Please attach attested copies of all the documents/certificates/testimonials.
- *** Please attach 1-2 pages write up on proposed area of research.
- **** Original demand draft should be attached on the top of the application.

Self attested
Passport
size
PHOTOGRAPH

Details of Registration fee:

Demand Draft No. _____ Dated _____ Amount _____ Bank/Branch _____

1. Programme to which admission sought (Please Tick)
- (i) Ph. D (Full time) (ii)
- Ph. D (Part time)

Student category (as applicable from point-2 of advertisement) _____

Whether applied for Ph.D. programme in past. If yes mention the month and year: _____

2. Discipline of study/Area of specialization _____
(AS PER ADVERTISEMENT ONLY)
3. Department/ Stream in which applied _____
4. Name in full (in block letters as per matriculation certificate)
(In English) _____
(In Hindi) _____
5. Father's Name _____
6. Mother's Name _____
7. Date of Birth (as per matriculation certificate) _____
8. Nationality _____
9. (a) Category (General/SC/ST/OBC/PH/Minority) _____

(Category once chosen shall not be changed at any stage)

(b) Sponsored (In-service)

Yes No

10. Correspondence Address with telephone no., if any

 STD Code _____ No. _____
 Mobile No _____

11. Correspondence Address with telephone no

 STD Code _____ No. _____
 Mobile No _____

12. Educational Qualifications:

Examination	Year of passing	Institution	University	Subject(s)	Marks obtained / Max Marks	%age of marks (upto one decimal)
10 th						
10+2						
Diploma in Engg. (if applicable)						
B.Sc/B.E./B.Tech						
M.Sc/ M.Tech						
Any other Exam. (GATE/NET)						

13. (a) Whether qualified in NET-JRF / NET-LS (or any other exam) _____

If yes, JRF/LS: _____ Year of qualifying: _____

Valid upto: _____ Discipline: _____

(b) Whether qualified GATE

If yes, GATE score: _____ Year of qualifying: _____

Valid Upto: _____ Discipline: _____

14. Experience in chronological order starting form the latest: (if applicable)

Sr. No.	Name of organization with address	From	To	Total Period

15. Was there any gap in your studies? If yes, mention period and reason:

- a) Period (give dates) From _____ To _____
b) Reasons _____

Have you passed the qualifying examination in the first attempt:

Yes/No

List of Enclosures:

- | | |
|--|--------|
| 1. Application Fee (Demand Draft) | Yes/No |
| 2. Matric/Higher Secondary Part-I certificate (as proof of age) | Yes/No |
| 3. 10+2 Examination certificate | Yes/No |
| 4. B.Sc./B.Tech/B.E. Examination certificate indicating the detail marks | Yes/No |
| 5. M.Sc./PG (as applicable) Examination certificate indicating the detail marks | Yes/No |
| 6. M.Tech/M.Phil (of applicable) Examination certificate indicating the detail marks | Yes/No |
| 7. Character certificate from the Head of the Institution last attended | Yes/No |
| 8. Certificate in support of claim under reserved category | Yes/No |
| 9. No objection certificate from Employer (for sponsored candidates only) | Yes/No |
| 10. GATE/JRF qualifying certificate | Yes/No |
| 11. Original Migration Certificate* | Yes/No |
| 12. Write up (1-2 pages) on proposed area of research (for PhD candidates only) | Yes/No |

UNDERTAKING BY THE APPLICANT

I clearly understand that my admission to Ph.D. programme in the Discipline _____ is SUBJECT TO THE RULES AND REGULATIONS OF National Institute of Technology Delhi. I also understand that the admission is being allowed to me on the basis of the certificates and documents produced by me. I also undertake that the certificates and documents produced by me in original are correct, genuine and true to the best of my knowledge. If any information/documents/particulars is found to be forged or false at any stage in future, then the NIT Delhi can cancel my admission and all the fees deposited by me shall be forfeited. If any degree will be awarded based on my admission on the basis on my forged documents then that certificate/degree awarded by NIT, Delhi shall be automatically cancelled. In such case, I shall have no claim, whatsoever, in respect of my admission.

(Full Signature of Candidate)

Dated:

Place:

(FOR OFFICE USE ONLY)

The application form/documents has been checked and verified.

- A. The applicant is eligible for admission to Ph. D programme Full Time/Part Time in the Discipline _____ under the student category _____
- B. The applicant is not eligible.

Chairman, Admission Committee

Annexure – I
National Institute of Technology Delhi
(For internal candidates only)

APPLICATION FORM FOR ADMISSION Ph. D (Full time/Part time) PROGRAMME

1. Name and present Position _____
2. Whether regular or on contract basis _____
3. Department/Centre _____
4. Date of Joining the Institute _____
5. Date of joining the present position _____
6. Indicators of Research aptitude
a) Any R&D project sanctioned/handled/Submitted (please enclose a copy of the sanction letter/project proposal) _____
b) If project under Thrust Area of technical education sanctioned/handled/submitted (please enclose a copy of the sanction letter/project proposal) _____
c) If any patent registered (Please enclose a copy of the registration letter) _____
d) No. of Research Publications in
(i) International Journals/Conferences _____
(ii) National Journals/Conferences _____
(please attach the list)
7. No. of short term courses organized/attended (please attach the list) _____
8. No. of monographs/books published, if any (please attach the list) _____
9. Any other relevant information _____

Date:

Signature: Name :

Recommendation of Head of the Department:

Date:

Signature

: Name : Department:

Entrance Test Admit Card for Ph.D Programme (July 2018)

(OFFICE COPY)

Test Venue: National Institute of Technology, Sector A-7, Institutional Area, Narela, Delhi-110040

Roll No. Department:.....

Name _____

Father's Name: _____

Address: _____

Self Attested

Photograph

Signature of the Candidate

Signature of Controller of Exam

-----Cut from here-----

Entrance Test Admit Card for Ph.D. Programme (July 2018)

(APPLICANT'S COPY)

Note: Applicants should bring the applicant's copy with them on the day of written test and interview

Test Venue: National Institute of Technology, Sector A-7, Institutional Area, Narela, Delhi-110040

Roll No. Department:.....

Name _____

Father's Name _____

Address: _____

Self Attested

Photograph

Signature of the Candidate

Signature of Controller of Exam