



राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली

NATIONAL INSTITUTE OF TECHNOLOGY DELHI

(शिक्षा मंत्रालय, भारत सरकार के अधीन एक स्वायत्त संस्थान)

(An autonomous Institute under the aegis of Ministry of Education (Shiksha Mantralaya), Govt. of India)

Plot No. FA7, Zone P1, GT Karnal Road, Delhi-110036, INDIA

दूरभाष/Tele :+9111-33861000, 1001, 1005 फैक्स /Fax: +9111-27787503

वेबसाइट/Website: www.nitdelhi.ac.in

Rolling Advertisement for Admission to Post-Doctoral Fellowship (PDF)

Programme

(Autumn Semester, Academic Year: 2022-2023)

Advt. No.: NITD/ACAD/01/PDF (2022-23)

Online Applications are invited for admission to the Post-Doctoral fellowship (PDF) programme at NIT Delhi for the AY 2022-2023 in the following Departments for Autumn Semester 2022-2023. Applicants have to apply online (via Google Form), as mentioned in the “**Procedure for Online Application/ How to Apply**” Section.

S. No.	Department	Discipline/ Area of Research
1.	Computer Science and Engineering (CSE)	Refer Table I
2.	Electrical & Electronics Engineering (EEE)	
3.	Electronics Communication & Engineering (ECE)	
4.	Mechanical Engineering (ME)	
5.	Applied Sciences(AS)	Physics (PH)
		Mathematics (MA)
		Chemistry (CY)
		Environmental Science and Engineering (ENVS)

Department wise Tentative Broad Areas of Research in which applications are invited:

Table I

Department	Broad Areas of Research
Computer Science and Engineering (CSE)	Wireless Sensor Networks, Network Theory, Data Analytics, Quantum Computing in Networks, Federated Learning, Machine Learning , Motion analysis, Computer Vision, Cloud Computing, Data Security, 5G, Artificial Intelligence, Data Science, Databases, Big Data Analytics, Data Science, Health Informatics.
Electrical Engineering (EE)	Power System Restructuring/ Deregulation, Electricity Market, Distributed Generation, Renewable Energy, Security Analysis, Fault Detection, Operation and Control of Power Systems, Smart Energy Network, Electric Vehicle, Power Electronics, Application of Power Electronics to Renewable Energy Systems, Smart DC Grids (Micro/Nano), Modeling, Design and Digital Control of DC-DC Conversion System, Embedded Systems, Renewable Energy, Smart Grids, Modeling & Design of Converters, FPGA Design, Control Systems, Signal Processing, Control Systems, Biomedical Signal processing, Artificial Intelligence, Renewable Energy, Image Processing, Power Systems, Reliability Engineering, Conventional Power Systems Hybrid Power Systems, Power Systems Analysis, and Smart Grid, Failure Analysis, RAMS.
Electronics and Communication Engineering (ECE)	Wireless Sensor Networks, Digital VLSI Design, Analog IC Design, Device-circuit co-design, Performance analysis of MOSFET and TFET Devices, Standard cell library characterization, Computer Architecture, VLSI Design, Embedded Systems and Digital Image Processing, RF And Microwave Circuits, Networking, Wireless Communication(4G and 5G), Neural Networks, Signal and Image processing, Computer vision, Robotics, Machine Learning and Pattern Recognition, Artificial

	Intelligence, Optical Communication and Networks, Wireless Communication, Optoelectronics, Digital VLSI, Game theory, Peer-to-Peer Networks, Blockchain, Peer-to-Peer electricity trading, Artificial Intelligence, Semiconductor Devices; Nanophotonics etc., Signal Processing, Image Processing, Biomedical Signal Processing, Speech Processing, Communication And Instrumentation, EM Theory in different media, Antennas and wave propagation etc.
Mechanical Engineering (ME)	Additive manufacturing, Non-Conventional machining, Metal matrix composites, Metrology, Manufacturing Science, Advanced Machining Processes, Composite Materials
Applied Sciences (AS) Discipline: Physics (PH)	Nanophotonic Sensors and Devices, Plasmonics in thin films and nanostructures, Fiber Optics, Optical Device Modeling, Optical imaging & instrumentation, Biomedical optics, Digital Holography, Microwave imaging and instrumentation, EM Theory in different media, Antennas and wave propagation, MHD waves & Flow
Applied Sciences (AS) Discipline: Mathematics (MA)	Convection in Fluids, Heat Transfer, Nanofluids, Ferrofluids, Micropolar Fluids, Non-Newtonian Fluids, Porous Media, Computational Applied Mathematics.
Applied Sciences (AS) Discipline: Chemistry (CY)	Design and synthesis of new porous materials with metal skeleton and their application in catalysis, chemical technology, and host-guest chemistry (molecular adsorption and molecular recognition), electrical, optical and magnetic properties.
Applied Sciences and (AS) Discipline: Environmental Science and Engineering (ENVS)	Environmental Science and Engineering, Environmental Biotechnology, Waste Management, Waste to Energy Conversion

Minimum Eligibility/ Minimum Educational Qualifications and Student Category for Application:

- The candidate should be a PhD degree holder. Candidate with PhD Thesis submitted may also apply, but before joining the PDF program, he/she will be required to produce the certificate of award of PhD Degree from his/her University/Institute.
- All the degrees acquired by the candidate must be in first class (starting from Bachelor's Degree onwards), with at least one degree from CFTI/ Centrally Funded Institutes/ Institute of Repute.
- The candidate should apply within five years after completing his/her PhD Degree.
- The candidates, who have completed their PhD from NIT Delhi, can apply for the PDF program after 3 years of completion of their PhD degree. In the exceptional case, this condition may be relaxed, subjected to the approval of the competent authority.
- The maximum age of the candidate should be up to 35 years. Relaxation in age will be as per Government of India norms.

Important Notes:

- Merely fulfilling above minimum eligibility criteria does not ensure the selection or even eligibility for the entrance test/ interview or both.
- Regarding selection, the decision of the Competent Authority will be treated as final one.

Rules and Regulations:

All the applied/ selected candidates will be governed by the rules and regulations of the PDF Ordinance 2022-2023 of the Institute. Candidates are advised to read the ordinance clearly before proceeding for the application.

[NITD Website → Academics → Academic System → PDF Ordinance → PDF ordinance 2022-2023]

Procedure for Online Application/ How to Apply:

- The Candidates have to fill up the online Google Form within stipulated time mentioned. Late submissions will not be entertained, under any circumstances.
- Link for the Online Form: <https://forms.gle/nJRtXkJE2Nm7MmR7>
- During filling up the online Google Form, candidates are advised to read up all the requisite details

very carefully, correctly and upload all the relevant documents (**self-attested pdf format**) in the appropriate sections.

- d. Candidates are advised to visit the institute website: **www.nitdelhi.ac.in** for frequent updates.
- e. 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.
- f. There is no application fee for PDF programme.
- g. Incomplete, improper and wrong applications will not be considered for short-listing.

Admission Process:

- a. Applications for Post-Doctoral Fellowship (PDF) programs are invited from Indian and foreign nationals on the prescribed format (via online Google Form). Applications as received will be scrutinized at the departmental/ central level as per Institute norms. After scrutiny, the candidates will be communicated regarding their candidature.
- b. The selection process mainly includes Interview of the provisionally eligible candidates after document verification. The selected candidates will be informed and offered the Post-Doctoral Fellowship (PDF). The provisionally selected candidates are expected to join in a month and should submit relieving certificate, if employed somewhere.

Important Notes:

Regarding shortlisting and selection of the candidates, the decision of the Competent Authority will be treated as final one.

Reservations:

The reservation rules will be followed as per Government of India guidelines prevailing at the time of admission. Category (General/OBC/SC/ST/PH/EWS) once chosen by the applicant in his/her application form shall not be changed at a later stage. Candidate(s) claiming any reservation category (OBC/SC/ST/PH/EWS) shall attach a valid caste certificate w. e. f 1st April, 2022 along with the application.

Scholarships:

- a. A fellowship of Rs 60,000/- per month plus HRA will be offered throughout the duration of the engagement. No other allowances will be provided by the Institute.
- b. The fellowship offered is purely temporary in nature and the Institute will have the right to review the fellowship based on the performance/conduct of the fellow. Similarly, the postdoctoral fellow must give one month's notice if he/she wants to leave the fellowship.

Period of Engagement:

The duration of the fellowship will be for a period of 3 years. However, initially the offer will be made for one year and extendable for two more years based on performance evaluation. Review will be conducted every year. Review will be based on quantifiable outcomes based on the deliverables proposed in the initial proposal and publications. A progress monitoring committee (PMC) will evaluate the progress and recommend the extension.