National Institute of Technology Silchar

Silchar – 788010, Assam.

Advertisement for Ph.D. admission for July-December 2025 session

No.: Dean (RC)/105/2025-26/2   Date: 28/04/2025

Applications are invited for admission into **Ph.D. programme** in the following departments with the area/ specializations and admission group as mentioned in the table for the session **July-December 2025**.

ADMISSION GROUP:

There are two Groups of admission to a Ph.D. Program: 1. Group A **(With Fellowship)** 2. Group B **(Without Fellowship)**

GROUP A: Ph.D. Program - Regular Category who may receive fellowship from the MoE / CSIR/UGC or any other recognized funding agency.

Fellowship: As per MoE /CSIR/UGC guidelines.

Research Fellowship is available to the scholars who are admitted to Ph.D. programmes in different departments subject to the availability as stipulated by Ministry of Education. The award and renewal of the fellowship is as per the guidelines issued by MoE, from time to time.

In case of students, who secure a new job or otherwise wish to move outside the institute and end their doctoral program prematurely, need to refund any scholarship received.

Eligibility for application in GROUP A:

All the shortlisted candidates for Group-A must appear the Centralized Written test at NIT Silchar in addition to the following eligibility criteria.

1. Students for admission into Ph.D. Programs in Engineering Departments must satisfy one of the following criteria:

    i)   M.E. / M. Tech. or equivalent with GATE / NET qualification/ Appropriate National Level Examination (**Centralized Written test at NIT Silchar**) in an appropriate area with a minimum CPI of 6.5 (on a10 point scale) or equivalent (60% of marks). For SC/ST/PwD candidates, a minimum CPI of 6.0 (on a 10 points scale) or equivalent (55% of marks).

    ii) B.E./B. Tech. with an excellent academic record with valid GATE score and with a CPI of at least 8.0 (on 10 point scale) or equivalent (75% of marks). For graduates from IITs/NITs, the minimum CPI requirement is 7.0 (on 10 point scale). For SC/ST/PwD candidates, there is a relaxation of 0.5 CPI or 55% of marks.

2. Students for admission into the Ph.D. Programs in Science departments must have a Master degree in the relevant discipline with a GATE/ UGC/ CSIR/NBHM/ NET score and Appropriate National Level Examination (**Centralized Written test at NIT Silchar**) for admission with a minimum CPI of 6.5 (on a 10 point scale) or equivalent (60% of marks). For SC/ST/PwD candidates, a minimum CPI of 6.0 (on a 10 point scale) or equivalent (55% of marks) with a GATE / UGC / CSIR / NBHM / NET score is required for admission.

3. Students for admission into the Ph.D. Programs in Department of Management Studies must have a Master's degree in Business Administration or Master degree in Engineering/ Technology with a minimum CPI of 6.5 (on a10 point scale) or equivalent (60% of marks) or Master degree in other disciplines with a minimum CPI of 6.5 (on a 10 point scale) or equivalent (60% of marks). For SC/ST/PwD candidates, a minimum CPI of 6.0 (on a10

point scale) or equivalent (55% of marks) is required. A score in NET /GATE/UGC and Appropriate National Level Examination (**Centralized Written test at NIT Silchar**) is required for all.

4. Students for admission into the Ph.D. Programs in Department of Humanities and Social Sciences (HSS) must have a Master degree in any relevant field with a minimum CPI of 6.5 (on a10 point scale) or equivalent (60% of marks) or Master degree in other disciplines with a minimum CPI of 6.5 (on a10 point scale) or equivalent (60% of marks). For SC/ST/PwD candidates, a minimum CPI of 6.0 (on a10 point scale) or equivalent (55 % of marks) is required. As score in NET/GATE/UGC and Appropriate National Level Examination (**Centralized Written test at NIT Silchar**) is required for all.

GROUP B: Ph.D. Program–No financial assistance or stipend by NIT Silchar will be provided for this GROUP.
There are six categories under this GROUP:

I) Regular – The regular students are those who work full-time for their Ph.D. and self - financed.

II) Sponsored – who are employed in a Central/ State Govt. Departments /PSUs /Reputed Educational Institutes/ Research organizations/ Reputed Industries for doing research in the Institute on a full-time basis. He/ She should have at least two years of working experience in the respective field before last date of application. The candidate must submit the filled-in sponsorship letter (FORM I) from the employer with the application for admission. He / She shall not be entitled to any financial support from the Institute.

III) Part-Time – This category refers to the candidates who are professionally employed personnel. They have to stay in the Institute/around the Institute at least during the period of course work so that they can attend regular classes as per the Institute academic norm. The applicant must be an employee of a State/Central Govt. Departments/ PSUs/Reputed Educational Institutes/Research organizations/ Reputed Industries at the time of admission having at least one year experience in the discipline in which admission is sought. No financial assistance shall be provided by the Institute to such students. A No Objection Certificate from the Head of the Institute/Organization, in which he/she is employed, must been closed with application in FORM II.

IV) Institute Employees – Employees of NIT Silchar. A No Objection Certificate from the concerned Head of the Department and the Director must been closed with application form (FORM II-B).

V) Project Staff –This category refers to the candidates who work on sponsored projects in the Institute. A No Objection Certificate from the Principal Investigator of the concerned project and Dean(R &C) must be enclosed with application form (FORM II-A).

VI) Sponsored (External Registration) – Candidates employed in R&D organizations/educational Institutes having adequate research facilities. Sponsorship certificate (FORM III) from the Head of the organization where the candidate is employed must be enclosed at the time of application.

Eligibility for application in GROUP B:

All the shortlisted candidates for Group-B must appear the Centralized Written test at NIT Silchar in addition to the following eligibility criteria.

Engineering Departments:

1. Students for admission into Ph.D. Programs in Engineering Departments must satisfy one of the following criteria:

   M.E/ M. Tech. or equivalent in an appropriate area with a minimum CPI of 6.5 (on a10 point scale) or equivalent (60% of marks). For SC/ST/PwD candidates, a minimum CPI of 6.0 (on a 10 point scale)

or equivalent (55% of marks).

Science Departments:

1. Students for admission into the Ph.D. Programs in Science departments must have a Master degree in the relevant discipline with a minimum CPI of 6.5 (on a10 point scale) or equivalent (60% of marks). For SC/ST/PwD candidates, a minimum CPI of 6.0 (on a 10 point scale) or equivalent (55% of marks) is required.

Department of Management Studies:

1. Students for admission into the Ph.D. Programs in Department of Management Studies must have a Master Degree in Business Administration or Master Degree in relevant disciplines with a minimum CPI of 6.5 (on a 10 point scale) or equivalent (60% of marks). For SC/ST/ PwD candidates, a minimum CPI of 6.0 (on a10 point scale) or equivalent (55% of marks) is required.

Department of Humanities and Social Sciences (HSS)

1. Students for admission into the Ph.D. Programs in Department of Humanities and Social Sciences (HSS) must have a Master degree in relevant field with a minimum CPI of 6.5 (on a10 point scale) or equivalent (60% of marks). For SC /ST/ PwD candidates, a minimum CPI of 6.0 (on a 10 point scale) or equivalent (55 % of marks) is required.

APPLICATION PROCEDURE

The applicant can apply for the PhD program through the online application portal available at admission.nits.ac.in (else, copy the link and paste in the browser)

An Application Fee of **Rs.1000**/- (for Open/OBC) or **Rs**.**500/-** (for SC/ST/ PwD/EWS) must be paid via online payment and steps for online payment is as follows:

1. www.onlinesbi.sbi
2. State Bank Collect (SB Collect).
3. Accept and proceed.
4. State of Institute>Assam.
5. Type of Institute>Educational institute>Go.
6. Educational Institutions Name>Select online fee collection account NIT Silchar>Submit.
7. Select payment category as "**Application fee for PhD Admission**".
8. Fill the required information and submit.

The payment reference number and date of payment to be mentioned in the online application form, otherwise the application form will be treated as cancelled.

The applicant must upload all relevant self-attested documents, in connection with the credentials claimed by the applicant in pdf format.

The final pdf copy of the Application form is mandatory to email to **phd_admission@nits.ac.in on or before 25.05.2025. Subject line should be "Application for Ph.D. program-***Name of the department (applying for)***-Group A /Group B". No need to send the hard copy of the Application form.**

The candidates are advised to give their latest contact numbers/ e-mail ids in the application form. The Institute reserves the right to reject any or all applications or it may amend any of the clauses above as per orders of the competent authority/Government of India.

The result will be available in the website.

Important Dates:

(i)	Last date of submission of form to the Institute:	25.05.2025
(ii)	Date of publication of Shortlisted candidate for interview & written test	30.05.2025
(iii)	Date of interview & written test by the department	16.06.2025 – 17.06.2025
(iv)	Date for publication of provisionally selected candidates for admission	18.06.2025
(v)	Date of Registration	19.06.2025 - 26.06.2025

Selection Procedure:

Selection process will comprise of following steps:

- Shortlisting will be made by the department on the basis of academic performance (starting from Class X onwards).

- All shortlisted candidates (Group-A and Group-B) need to appear for a **Centralized Written test at NIT Silchar** for the respective department as per the GATE/NET/UGC syllabus and followed by personal interview at the respective departments.

- Mere qualifying the written test and interview will not bestow confirmation of selection for the Ph.D. program at NIT Silchar.

GENERAL TERMS AND CONDITIONS

1. The Institute reserves the right to cancel the candidature without assigning any reason thereof.

2. The prescribed qualification is minimum and mere possession of the same does not entitle candidates to be called for written test and interview.

3. No correspondence will be entertained from any candidates who have not been shortlisted for centralized written test.

4. Canvassing in any form will resulting qualification of candidature.

5. Legal disputes, if any, will be restricted within the jurisdiction of Silchar Court only.

6. Candidates should submit their application form along with all supporting documents duly self-attested at the time of verification.

7. All reserved category candidates shall be required to submit self-attested copies of latest Caste certificate issued by competent authority.

8. Candidates must produce original mark sheets and certificates during document verification if called for written test.

9. Candidates appearing for final year ME / M.Tech. / M Sc. / MA / MBA are also eligible to apply. However, their final result must be published on or before the final admission.

10. The date of written test, interview and provisional selection list will be published in the institute website including waitlisted candidates and the period of Registration will be published as per the above date.

11. **Candidates are requested to check the institute website regularly for updates.**

12. Hostel accommodation is subject to availability.
13. Candidates are requested to provide their active email Id/mobile phone numbers/land line phone numbers in the application form for easy contact.
14. No TA/DA will be paid for attending the Centralized written test at NIT Silchar.

Department wise area of research

Department	Arear of Research	Group
Civil Engineering	➢ Transportation Engineering and Planning / Traffic Engineering and Safety / Pavement Materials and Design ➢ Structural Engineering / Structural Dynamics and Earthquake Engineering / Civil Engineering Materials ➢ Geotechnical Engineering / Geotechnical Earthquake Engineering ➢ Water Resources Engineering / Coastal Engineering / Remote Sensing and GIS ➢ Environmental Engineering	A&B
Computer Science and Engineering	➢ Artificial Intelligence, Machine Learning, and Deep Learning ➢ Natural Language Processing ➢ Security and Cryptography ➢ Audio, video and image processing ➢ Computer Networking and Social networking ➢ Bioinformatics ➢ Quantum Computing ➢ All relevant areas of Computer Science & Engineering.	A & B
Electronics & Communication Engineering	➢ Micro/nanoelectronics devices, circuits and systems, ➢ Nanotechnology, ➢ Analog, digital and mixed mode VLSI design, Embedded system, ➢ Advance semiconductor devices, memory technologies, chip design, ➢ photonics, ➢ MEMS/NEMS, Solar Photovoltaics, ➢ 7. Robotics, IoT, ➢ Signal processing, Speech Processing, Image and Video Processing, Biomedical Signal and Image Processing, ➢ Machine Learning, Soft Computing Techniques, ➢ 5G/6G and beyond, RF & THz technologies, Antenna, Microwave & Millimeter Wave engineering, Metamaterials, ➢ 11. Wireless Communication, Cognitive Radio Networks, Wireless Sensor Networks, Communication Systems, Millimeter Wave Communications, Green Communications, Massive / Cooperative MIMO, Optical Communication, ➢ Computer Vision, Medical Imaging, Machine Learning, Soft Computing Techniques, Energy Harvesting	A&B
Electrical Engineering	➢ Power and Energy System Engineering ➢ Control Systems Engineering ➢ Power Electronics and Drives ➢ VLSI, Embedded System and Image Processing ➢ High Voltage Engineering	A&B

Electronics and Instrumentation Engineering	➢ Automation, Control, Robotics, and Systems. ➢ Biomedical Engineering. ➢ Communication Systems. ➢ Signal and Image Processing. ➢ Energy Storage & Renewable Energy Systems ➢ Microelectronics & Nano Electronics. ➢ AI, Analytics and Computation in Engineering. ➢ Drone Technology.	**A&B**
Mechanical Engineering	➢ Thermal Engineering. ➢ Manufacturing Sciences. ➢ Materials Engineering. ➢ Design. ➢ Renewable Energy	**A&B**
Chemistry	➢ Organic Chemistry ➢ Inorganic Chemistry ➢ Renewable Energy ➢ Physical Chemistry ➢ Environmental/Analytical Chemistry ➢ Nanoscience and Nanotechnology ➢ Computational Chemistry and Molecular Modeling ➢ Supramolecular Chemistry ➢ Biomass and Bioenergy ➢ Two-dimensional (2D) and three-dimensional (3D) porous materials and applications ➢ Catalysis/Photocatalysis ➢ Waste Management and Recycling	**A&B**
Physics	➢ Experimental Condensed Matter Physics ➢ Theoretical and Computational Condensed Matter Physics ➢ Theoretical High Energy Physics	**A&B**

Mathematics	➢ Numerical Analysis, Finite Element Methods, Differential Equations ➢ Functional Analysis, and Operator Theory ➢ Differential Equation, Mathematical Modelling ➢ Numerical methods for engineering problems ➢ Computational Fluid Dynamics: Micro-nanofluidics Modelling ➢ Theory of Partitions and the mathematics influenced by Ramanujan ➢ Fuzzy decision making ➢ Single and Multi-objective Optimization, Networking Optimization, MCDM, AI and ML ➢ Fuzzy set theory and application ➢ Bio-Mechanics, Fluid Mechanics, Differential Equations-Wavelet Transforms ➢ Numerical methods to PDE ➢ Mathematical Modelling, Spectral Element Methods for Partial Differential Equations, Computational Fluid Dynamics (CFD) ➢ Operations Research & Optimization Techniques, Supply Chain Management, ➢ Inventory Management, Mathematical Modelling, Elastodynamics ➢ Complex Analysis	**A&B**
Humanities and Social Science	➢ Macro and micro economics ➢ Financial, Environmental, Agricultural & Behavioural Economics ➢ Literary and Translation Studies, Colonialism and Colonial Modernity ➢ 1947 Partition Studies, Eco-literature; Folklore Studies; Indigenous Studies.	**A&B**
Management Studies	➢ Marketing Management ➢ Sustainability ➢ Innovation and Technology Management ➢ Global Business and International Management ➢ Neuromarketing ➢ Marketing Analytics Financial Management ➢ Behavioural Finance ➢ Econometrics ➢ Financial Accounting ➢ FinTech ➢ Financial Modelling ➢ Portfolio Optimization ➢ Human Resource Management ➢ Organisational Behaviour ➢ Human Resource Analytics ➢ Industrial Relations and Labour Laws ➢ General Management ➢ Entrepreneurship ➢ Strategic Management ➢ IPR Management and Commercialization ➢ IP and Technology Transfer ➢ IP in Digital & Internet Law ➢ IP for Start Up and Entrepreneurship	**A&B**

FORM I

SPONSORSHIP LETTER FOR FULL-TIME PH.D. PROGRAM

(Should be typed on the letter head of the sponsoring organization)

Reference No.

Date:

To

The Director
National Institute of Technology Silchar
Assam788010

Sub: Sponsoring an Employee for Ph.D. Program

Dear Sir,

We here by sponsor the candidature of Mr./Ms./Mrs._____,

Designation:_____who is a regular employee in our organization, for joining Ph.D. Program

in the department of_____at your Institute as a full-time student.

It is certified that he/she has completed two years of service in our organization as a regular employee.

He/she has gained experience in the field(s)_____.

If selected, we shall relieve him/her from his/her duties to join the program during the first three years of the Ph.D.

Program.

Signature and Seal of the Sponsoring Authority

FORM II

No Objection Certificate for Part-Time Students

(Should be typed on the letter head of the sponsoring organization)

Reference No.

Date:

To

The Director

National Institute of Technology Silchar
Assam 788010

Sub: No objection Certificate

Dear Sir,

We have no objection if Mr./Mrs/Ms._____,Designation: _____an employee/project staff in our organization, is admitted to the Ph.D. Program in the department of_____at your Institute as a part-time student.

It is certified that he/she has completed one year of service in our organization. If selected, we shall sanction him/her leave of absence to attend classes/research work at NIT Silchar during the Ph.D. program.

Signature and Seal of the Sponsoring Authority

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

FORM II-A

No Objection Certificate for Admission into Ph.D. Program (Project Staff)

Reference No.

Date:

To

The Director
National Institute of Technology Silchar
Assam 788010

Sub: No objection Certificate

Dear Sir,

We have no objection if Mr./Mrs/Ms._____,Designation: _____a project staff, under the project: (title of the project), Sanction letter no. _____, in the department of_____, is admitted to the Ph.D. Program in the department of_____of NIT Silchar as a Group-B Regular student. It is certified that the said project shall continue for one more year.

If selected, we shall allow him/her to attend classes/research work under the said project at NIT Silchar during the Ph.D. program without affecting normal project work assigned to him/her.

Signature of Project Investigator   Signature of Dean (R & C)
        (Name)

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR

FORM II-B

No Objection Certificate for Admission into Ph.D. Program (Institute Employee)

Reference No.

Date:

It is certified that we have no objection if Mr./Mrs/Ms._____,

Designation:_____,a (regular / contractual) employee

of this Institute, working in the department of. _____,

is admitted into the Ph.D. Program in the department of _____

at this Institute as a part-time student.

If selected, he/she shall be allowed to attend classes/research work without affecting normal duties assigned to him/her.

Signature of Head (Department:…….)   Signature of Director

FORM III

Sponsorship Certificate for External Registration

(This should be typed on the letter head of the sponsoring organization)

Reference No.

Date:

To

The Director
National Institute of Technology Silchar
Assam 788010

Sub: Sponsoring an Employee for Ph.D. Program under external registration

1. Name of the sponsoring organization:

2. Address:

3. Name of the Candidate:

4. Designation of the applicant:

5. Present status of the applicant:

    (regular/year of completed service)

6. Department/Division/Center where research work is proposed to be done:

7. Name of the Local (Joint Supervisor):

    (Bio-data of the Local supervisor (Joint Supervisor) to be enclosed giving details of designation,

    qualification, research experience etc.)

8. Details of relevant facilities which will be made available to the candidate:

9. Statement of Local supervisor (Joint Supervisor):

Dear Sir,

If Mr./Mrs./Ms._____is admitted to the Ph.D. program at
National Institute of Technology Silchar, I agree to supervise his/her research program jointly with the Supervisor
from NIT Silchar.

Signature of Local supervisor (Joint Supervisor)

If Mr./Mrs./Ms._____is admitted to the Ph.D.
program, we agree to relieve him / her to reside at NIT Silchar / around NIT Silchar during one/ two semester(s)
of his /her Ph.D. program to complete his/her course work requirement.

Mr./Mrs./Ms._____will be
permitted to carry out research at our organization under the guidance of Dr. _____
leading to Ph.D. degree from NITSilchar. Necessary facilities will be provided for this purpose.

Signature and Seal of the Sponsoring Authority

22