

भारतीय सूचना प्रौद्योगिकी संस्थान, नागपुर

Indian Institute of Information Technology, Nagpur "An Institution of National Importance by an Act of Parliament"

Date: 19th Nov 2024

Survey No. 140,141/1 Behind Br. Sheshrao Wankhade Shetkari Soot Girni, Village: Waranga, Po: Dongargaon (Butibori), District: Nagpur (Maharashtra) -441108

Website: www.iiitn.ac.in Email: director@iiitn.ac.in, registrar@iiitn.ac.in Phone: 9405215010

IIITN/ADMIN/PhD 2024-25/Notice 1

<u>PhD ADMISSION NOTIFICATION 2024-25 WINTER</u> Under

Regular Institute Driven PhD Program

Indian Institute of Information Technology, Nagpur (IIITN) is one of the 20 Indian Institutes of Information Technology established under the Public-Private Partnership (PPP) Scheme by the Ministry of Education (MoE), Government of India. IIITN has been declared as an "Institution of National Importance" and at present, the Institute is functioning under the Department of Higher Education, Ministry of Human Education and is supported by the Department of Higher Education, Government of Maharashtra and Tata Consultancy Services, Mumbai as Industry Partner.

IIITN is offering Under Graduate and Doctor of Philosophy (PhD) Programmes in Computer Science & Engineering (CSE) and Electronics & Communication Engineering (ECE) Courses.

The Institute is located at Survey No. 140,141/1 Behind Br. Sheshrao Wankhade Shetkari Soot Girni, Village: Waranga, Po: Dongargaon (Butibori), District: Nagpur (Maharashtra) - 441108. The development of the state-of-the-art Permanent Campus of the Institute is being undertaken on sprawling 100 acres of land.

The Institute invites applications from eligible Indian Nationals for admission to the **PhD Programme expected to start on 13**th **Jan 2025**.

Regular Institute Driven PhD Program Winter 2024-25

This Programme shall be offered in Computer Science & Engineering (CSE) and Electronics & Communication Engineering (ECE) Departments in the following areas:

| Department | Research Areas | | | |
|------------------|---|--|--|--|
| | All areas in Computer Science and Engineering including Operating | | | |
| Computer Science | Systems, Databases, Computer Networking, Compilers, Computer | | | |
| & Engineering | Graphics, Software Engineering, Image Processing and Computer | | | |
| | Vision, Big Data, Data Mining, Artificial Intelligence, Machine | | | |
| | Learning, Deep Learning, Natural Language Processing, | | | |
| | Computational Biology, Internet of Things, Information Security, | | | |
| | RTOS and Embedded Systems, and relevant areas. | | | |
| Electronics & | All areas in Electronics & Communication Engineering including | | | |
| Communicatio | MIMO Technologies, Microprocessors and Embedded Systems, | | | |
| n Engineering | Image and Video Signal Processing, Computer Vision, | | | |
| | Instrumentation, Opto-electronics, VLSI Design, Internet of | | | |
| | Things, Automotive Electronics, Mechatronics, Embedded System | | | |
| | Design, Wireless Sensor Network, Cognitive Radio, LI-FI, and | | | |
| | another Advanced topic of Electronics and Communication | | | |
| | Engineering along with Solid Mechanics, Vibration, Robotics, | | | |
| | Analytical Modeling, and relevant areas. | | | |

A. PhD Categories:

The Institute offers the PhD Programme under various Institute level categories as follows:

1. Industry Candidates:

a. Extern Candidate from Industry (EX-I)

This category shall include a candidate who is self-financed and permitted and employed by a recognized private/ government/semi-government, R&D Organization, PSU, Private/ Government/semi government Industry or companies or any Private/ government/ semi government non-academic institution for doing research work in integrated manner at the respective place of work.

The candidate must be an employee of the employer organization with minimum one year of professional experience in the respective field and is eligible for admission with B.Tech/BE or M.Tech/M.S./ME qualification with respective thesis submission period and required course work credits. Such a candidate is not eligible to receive any financial stipend or support from IIITN. At the time of admission such candidates are required to submit No Objection Certificate (NOC) from the employer organization.

b. Intern Sponsored Candidate from Industry (IN-IS)

This category shall include a candidate who is sponsored and permitted and employed by a recognized private/ government/semi-government, R&D Organization, PSU, Private/ Government/ semi government Industry or companies or any Private/ government/ semi government non- academic institution for doing research at IIITN.

The candidate must be an employee of the sponsoring organization with a minimum three years of professional experience in the respective field and is eligible for admission with B.Tech/BE or M.Tech/M.S./ME qualification with respective thesis submission period and required course work credits. Such a candidate is not eligible to receive any financial stipend or support from IIITN instead will be receiving the same from the sponsoring organization. It is mandatory for such candidates to present the certificate of financial assistance provided by the sponsoring organization. He/ She shall remain present at IIIT Nagpur campus during the course of research.

2. Academic Institution(s) Candidates:

a. Extern Self-financed candidates from Academic Institutions (EX-A)

This category shall include a candidate who is self-financed and permitted and employed by a recognized private (autonomous or university affiliated)/ government (state or central)/semi-government academic institution for doing research in work integrated manner at the respective place of work.

The candidate must be an employee of an organization and is eligible for admission with M.Tech/M.S./ME qualification with respective thesis submission period and required course work credits. Such a candidate is not eligible to receive any financial stipend or support from IIITN. At the time of admission such candidates are required to submit NOC from an organization.

b. Intern Sponsored Candidate from Academic Institutions (IN-AS)

This category shall include a candidate who is sponsored and permitted and employed by a private (autonomous or university affiliated)/ government (state or central)/semi government academic institution or sponsored under QIP schemes for doing research at IIITN.

The candidate must be an employee of the sponsoring organization and is eligible for admission with M.Tech/M.S./ME qualification with respective thesis submission period and required course work credits. Such a candidate is not eligible to receive any financial stipend or support from IIITN instead will be receiving the same from the sponsoring organization. It is mandatory for such candidates to present the certificate of financial assistance provided by the sponsoring organization. He/ She shall remain present at IIIT Nagpur campus during the course of research.

c. Extern Sponsored Candidate from Academic Institutions (EX-AS)

This category shall include a candidate who is sponsored and permitted and employed by a private (autonomous or university affiliated)/ government (state or central)/semi government academic institution for doing research at IIITN. The candidate must be an employee of the sponsoring organization and is eligible for admission with M.Tech/M.S./ME qualification with respective thesis submission period and required course work credits. Such a candidate is not eligible to receive any financial stipend or support from IIITN, instead will be receiving the same from the sponsoring organization. It is mandatory for such candidates to present the certificate of financial assistance provided by the sponsoring organization.

3. Other Candidates:

a. Intern Self Sponsored Candidates (IN-U)

This category shall include a candidate who is self-financed and unemployed. He/She shall remain present at IIITN campus during the course of research. The candidate is eligible for admission with M.Tech/M.S./ME qualification with respective thesis submission period and required course work credits. Such candidate is not eligible to receive any financial stipend or support from IIITN.

b. Intern Externally Funded or Sponsored or Project Staff Candidates (IN-ES)

This category shall include a candidate who has received fellowship or scholarship or funding from Private trusts/Private industry/ Government or semi government agency or department and is unemployed or a candidate working as SRF or JRF at IIITN under a funded research project, will be doing research at IIITN. The candidate is eligible for admission with M.Tech/M.S./ME qualification with respective thesis submission period and required course work credits. Such candidate is not eligible to receive any financial stipend or support from IIITN. Instead in case of SRF/JRF like IIITN project staff, the stipend will be under the respective research grant and for other candidates the stipendwill be through the scholarships or fellowships they will be receiving. He/ She shall remain present at IIIT Nagpur campus during the course of research.

c. Intern Self-Sponsored Project Staff Candidates SRF/JRF (IN-PS)

This category shall include a candidate who is working as SRF or JRF at IIITN under a funded research project will be doing research at IIITN. The candidate is eligible for admission with M.Tech/M.S./ME qualification with respective thesis submission period and required course work credits. Such candidate is not eligible to receive any financial stipend or support from IIITN. Instead in case of SRF/JRF like IIITN project staff the stipend will be under the respective research grant. He/ She shall remain present at IIIT Nagpur campus during the course of research.

2. Fees Structure: The payment of Annual Fees may be done on a semester basis as under:

| Odd Semester (Ex. 1st, 3rd etc.) | In the month of July |
|--|-------------------------|
| Even Semester (2 nd , 4 th etc.) | In the month of January |

The Semester wise Fees Structure for all the categories of candidates is as under:

| Sr. | Dautianlans | Amount (in Rs) | | |
|-----|--------------------------|----------------|----------------------|--------------------------|
| No. | Particulars | Odd Semester | Even Semester | Total Annual Fees |
| 1 | Tuition Fee | 35000 | 35000 | 70000 |
| 2 | Development Fee | 6000 | 6000 | 12000 |
| 3 | Registration Fee | 1500 | 1500 | 3000 |
| 4 | Library Fee | 2000 | 2000 | 4000 |
| 5 | Internet Charges | 1000 | 1000 | 2000 |
| 6 | Infrastructure Usage Fee | 2000 | 2000 | 4000 |
| 7 | Welfare Fee | 1250 | 1250 | 2500 |
| 8 | Gymkhana Activity & | 1250 | 1250 1250 | 2500 |
| | Magazine Fee | 1230 | 1230 | 2300 |
| | Total Fees = | 50,000/- | 50,000/- | 1,00,000/- |

C. Eligibility Criteria:

The relevant details of the eligibility criteria are as under:

| Sr. No. | Category | Minimum Duration for Thesis Submission | Eligibility |
|------------|--|---|---|
| 1 | Candidates from Industry (EX-I) (IN-IS) | Three academic years for candidates with Master's Degree And Four academic years for candidates with Bachelor's Degree, from the date of joining the programme till the date of submission of Thesis | Essential: 1. Master's Degree in Engineering / Technology with Bachelor's inEngineering / Technology with First class or 60% marks (55% marks for SC / ST / PwD) / CPI or CGPA ≥ 6.75 (6 for SC / ST / PwD) on a 10-point scale. OR Bachelor's Degree in Engineering / Technology with First Class or 60% marks (55% marks for SC / ST / PwD) / CPI or CGPA ≥ 6.75 (6 for SC/ST/PwD) on a 10-point scale. AND 2. Minimum 3 years of relevant experience in CSE/ECE/IT and allied fields. Desirable: A valid GATE score is desired. |
| 2 | Academic Institution (s) Candidates (EX-A) (IN-AS) (EX-AS) | Three academic years from the date of joining the programme till the date of submission of Thesis | Essential: Master's Degree in Engineering / Technology with Bachelor's in Engineering / Technology in ECE/CSE and allied disciplines with First Class or 60% marks (55% marks for SC/ST/PwD) / CPI or CGPA ≥ 6.75 (6 for SC/ST/PwD) on a 10-point scale. Desirable: A valid GATE Score. |
| 3 | Other Candidates (IN-U) (IN-ES) (IN_PS) | Three academic years from the date of joining the programme till the date of submission of Thesis | Essential: Master's Degree in Engineering / Technology with Bachelor's in Engineering / Technology in ECE/CSE/MECH/INDUSTRIAL and Allied Disciplines with First Class or 60% marks (55% marks for SC/ST/PwD) / CPI or CGPA ≥ 6.75 (6 for SC/ST/PwD) on a 10-point scale. Desirable: A valid GATE Score. |

D. Application Procedure:

- 1. The applications are to be filled in online mode with all relevant documents attached and a separate hard copy of the same, application filled in Online mode along with photo copies of the relevant documents must be sent by post to IIITN as a backup. To avail the online form, a Gmail account is essential.
 - Link for Online Prescribed Application Form: https://forms.gle/PtpumRBxotgSYuNm8 Link to download Annexure 1 and Annexure 2: https://shorturl.at/jm7eT
- 2. Applications which are not in prescribed format / without relevant supporting enclosures /received after the last date/ without application fees will be outrightly rejected. No correspondence shall be entertained in this regard. Interim correspondence will also not be entertained or replied to.
- 3. Institute will not be responsible under any circumstances for any sort of postal delay/ loss of the application form.
- 4. The last date for submission of online application form is 3/12/2024 17:00 Hrs and submission of hardcopy of the application is 9/12/2024 up to 17:00 Hrs.
- 5. Application Fee shall be as under:

| Sr. No. | Particulars | Application Fees | GST | Total Fees |
|------------|---------------------------------|---------------------|-----------|---------------|
| 1 | General/ OBC-NCL Candidates/EWS | Rs. 1000/- | Rs. 180/- | Rs. 1180/- |
| 2 | SC/ST/PwD Candidates | Rs. 500/- | Rs .90/- | Rs. 590/- |

6. The Application Fee shall be payable through Demand Draft drawn in favor of Director, IIIT, Nagpur payable at Nagpur or by UPI/NEFT/RTGS in the following Bank Account (Attach Receipt with submitted application):

| Account Name | Indian Institute of Information Technology Nagpur GENERAL |
|------------------|---|
| Account Number | 41759739179 |
| Name of the Bank | State Bank of India, VRCE Branch, South Ambazari Road, |
| | VNIT, Nagpur |
| Bank Code | 06702 |
| IFSC Code | SBIN0006702 |
| MICR Code | 440002005 |

7. Candidates are required to write his/her name and contact number on the UPI/NEFT/RTGS Receipt.



- 8. The Application Fee is non-refundable.
- 9. The duly completed Application Form along with fees & enclosures (Self Attested Photo copies of all the listed documents) are also required to be sent by Speed Post / Registered Post/Courier/Hand Delivery to:

The Registrar,

Indian Institute of Information Technology, Nagpur

S.No. 140,141/1 Behind Br. Sheshrao Wankhade Shetkari

Sahkari SootGirni, Village-Waranga, PO-

Dongargaon(Butibori), Nagpur-441108 Maharashtra

Ph No: 9405215010 (In Working Hours Only)

For any query contact Ph No: 9461057601/8055156130 (In Working Hours Only)

- 10. The envelope containing the Application Form shall mention on the top inbold "Application for Regular Institute Driven PhD Program in the Department of <CSE> or <ECE>" with the candidate's name, address and phone number written on it.
- 11. Employed candidates are required to submit the NOC from the respective organization in the format provided in **Annexure-1**.
- 12. No TA/DA and/or Lodging/Boarding will be paid for attending the Written Test / Interview. The Institute may arrange for accommodation in its Guest House ON SHARED & CHARGEABLE BASIS subject to availability and "First Come First" basis for attending the Written Test / Interview. The details of the Guest House Charges are available on the website of the Institute. For booking of the Guest House the candidates may send an email on aosd@iiitn.ac.in.
- 13. Any corrigendum/changes/updates shall be made available only on the Institute's Website viz. www.iiitn.ac.in. The candidates are advised to keep on watching the Institute's Website for any information/updates on the PhD Admission Process.

E. Selection Process:

The PhD Admissions shall be based on Written Test/Computer Based Test (CBT) and Offline Interview.

The procedure shall be as follows:

<u>Stage1:</u> Written/CBT- Eligible candidates are required to appear for the Written/CBT.

Qualifying Score in Written / CBT: The minimum qualifying score shall be a normalized score decided taking into account the number of candidates to be called for interview. But in no case, it will be less than 40%.

<u>Stage 2:</u> Interview – Candidates qualifying the Written / CBT shall be eligible to appear for a Personal Interview.

<u>Stage 3:</u> Calculation of Combined Score – A Combined Score shall be calculated based on the score in Written/CBT, Score in Personal Interview and GATE Qualification as under:

| | | Weightage Distribution | | |
|-----------------------------|--------------------------------------|------------------------|----------------------|------------------------|
| Candidate Category | Total Marks | Written/ CBT | Offline Interview | GATE Qualification* |
| Regular Inst | Regular Institute Driven PhD Program | | | |
| Industry Category | 100 | 40 | 50 | 10 |
| Academic and Other Category | 100 | 50 | 40 | 10 |

^{*}Candidates with GATE Qualification shall be obtaining the allotted marks. The Final MeritList shall be prepared based on Combined Score.

F. Examination Pattern:

a. Written/CBT:

The question paper for the written/CBT shall comprise of two sections.

<u>Section-1</u> shall be common for all categories and would comprise of questions on General Ability and Communication Skills.

<u>Section-2</u> shall have questions based on the syllabus for all respective categories except Candidates from Industry category as under:

| Stream | Syllabus | |
|---|---|--|
| Electronics and Communication Engineering | Engineering Mathematics, Networks, Signals and Systems, Electronic Devices, Analog Circuits, DigitalCircuits, Control Systems, Communications, Electromagnetics. | |
| Computer Science and Engineering | Engineering Mathematics, Digital Logic, Computer Organization and Architecture, Programming and Data Structures, Algorithms, Theory of Computation, CompilerDesign, Operating Systems, Data bases, Computer Networks. | |

Note: For candidates from Industry category, questions based on the syllabus like Basic Engineering Mathematics, Basic Programming and Engineering Knowledge and Skills, Engineering Logical Analysis, Arithmetic, Industry Standards.

b. Submission of Statement of Purpose (SoP):

All the candidates are required to attach a Statement of Purpose (SoP) in the format available in Annexure–2 to the online soft copy as well as hard copy application.

G. Tentative Admission Schedule:

| Sr. No. | Particulars | Tentative Dates |
|------------|---|---|
| 1 | Advertisement and availability of application forms | 19th Nov 2024 |
| 2 | Last date for submission of completed application forms | 3 rd Dec 2024 [online] 9 th Dec 2024 [hard copy] |
| 3 | Display of list of eligible candidates for Written/CBT | 16th Dec 2024 |
| 4 | Written/CBT (for all categories) and display of the list of candidates qualified for interview. | 2 nd Jan 2025 |
| 5 | Online/Offline Interview (for all categories) | 2 nd and 3 rd Jan 2025 |
| 6 | Declaration of Results | 6 th Jan 2025 |
| 7 | Payment of PhD fees on or before | 7 th Jan 2025 |
| 8 | Registration | 7 th and 8 th Jan 2025 |
| 9 | Semester Begins | 13 th Jan 2025 |

H. Submission of Documents/Certificates:

The <u>self-attested copies</u> of the following documents are required to be attached with the hardcopy of Application form and scanned copies of the same to be attached with online forms, failing which the application shall not be evaluated and shall stand summarily rejected:

- 1. The hard copy of the Online Prescribed Application Form is duly signed on all the pages.
- 2. 10th Standard Certificate.
- 3. 12th Standard Certificate/Diploma Certificate.
- 4. Graduation Mark-Sheets for all years.
- 5. Graduation Degree Certificate.
- 6. Master's Degree & Mark-Sheets for all semesters.
- 7. NOC from the Current Employer.
- 8. Experience /Service Certificate for all the previous employments (if in period of five years).
- 9. EWS and OBC-NCL Certificate (wherever applicable) issued in the current financial year only as per Central Government Format.
- 10. Cast Validity Certificate for SC/ST/OBC-NCL candidates belonging to the State of Maharashtra.
- 11. SC/ST/PwD Certificates (wherever applicable) in prescribed pro-forma of Central Government Only.

12. Scanned Copy of NEFT payment receipt or scanned copy of DD for online form and actual DD or original NEFT receipt for hard copy form.

Original documents and ID proof would have to be produced during the documentation verification process to be undertaken on the date of Interview failing which the candidate may not be allowed to appear for the selection process.

I. Minimum Exit Criteria:

All the registered PhD students need to complete the requirement of coursework of 6 credits by M. Tech Degree Holders and 12 credits by B.Tech Degree Holders in either of the following modes:

- a. Courses offered by the Institute.
- b. Credits can be earned through successful completion of the online courses available on MOOC platforms like NPTEL, MIT-OCW, Coursera, edX, etc. (The total minimum course hours for an online course should be 40 hours/12 weeks.

Publications:

The minimum requirement for submitting the thesis is publication in 1 SCI/SCIE indexed journal and 1 SCI/SCIE/Scopus indexed journal.

J. General Terms & Conditions:

- 1. M.Tech final year appeared candidates are also eligible to apply under a suitable category provided that the candidate must submit the M.Tech provisional degree on the declaration of results.
- 2. In case of any dispute regarding the PhD Admission Process, the place of jurisdiction shall be Nagpur, Maharashtra (India) only.
- 3. The decision of the Director, IIITN shall be final in all the matters related to Admission Process.
- 4. The Institute reserves its right to cancel/postpone/hold the Admission Process at any stage without citing any reason thereof.
- 5. Mere eligibility doesn't ensure selection. The Institute reserves the right to select a limited number of PhD candidates in each of the departments at the sole discretion of the Director, IIITN.
- 6. The list of short-listed candidates shall be displayed on the Institute's Website. Candidates are advised to visit the IIITN website www.iiitn.ac.in regularly. No correspondence regarding reasons for not shortlisting the candidate shall be entertained.

- 7. The candidates are required to have at least one working email and mobile number which will be used during the entire admission process for communication, if required.
- 8. In case of any inadvertent mistake in the process of admission detected at any stage even after the registration of the candidate for PhD Programme, the Institute reserves the right to modify/withdraw/cancel any communication made to the candidates.
- 9. For more details candidates can refer to the Academic Rulebook available on the Institute Website viz.www.iiitn.ac.in.
- 10. Canvassing in any form shall lead to disqualification of the candidate for admission.
- 11. Clarification or queries in the context of the Admission Process may be sent on the email id viz. phdcell@iiitn.ac.in.

Place: Nagpur

Date: 19/11/2024

-----Sd------Director