



## राष्ट्रीय प्रौद्योगिकी संस्थान, राउरकेल

### NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

NITR/AC/2023/L/1955

Date- 20<sup>th</sup> Nov.,2023

#### Notice for Admission to PhD (Full-Time) under Visvesvaraya PhD Scheme Phase –II, Round – II (Round-2)

(Ref. advt. no. NITR/AC/2023/L/1570 Dated-22/09/2023)

Fresh Applications are invited from interested and eligible Indian citizens for seats lying vacant after completion of 1<sup>st</sup> round of admission on 01/11/2023 vide advt. no. NITR/AC/2023/L/1570 dated 22/09/2023 to the Ph.D (Full Time) Program under **Visvesvaraya PhD Scheme, Phase-II** of the Institute for AY 2023-24. For more details on the Visvesvaraya PhD Programme, kindly refer to the website: <https://phd.digitalindiacorporation.in/home>

#### A. Broad Areas of Research :

Sr. No.	Department	(Indicative Broad Areas of Research)	No. of Seats
01	Electronics & Communication Engineering	Hardware Security and Functional Safety in Industrial IoT, VLSI Design.	1
		* <i>The selected candidate will work on a Project under the Chip to Startup (C2S) Programme funded by the Ministry of Electronics and IT (MeitY)</i>	
		Machine and Deep Learning, Image & Video Processing, Biometrics, Security and Privacy, Computer Vision.	1
02	Electrical Engineering	Machine Learning, Design and Fabrication of Antennae for Communication Applications.	1
03	Computer Science & Engineering	Machine Learning and Deep Learning Techniques in the field of Robotics Applications, Robot Vision, Trajectory Planning, Imitation Learning, Face Recognition, Face Sketching with Intelligent Arm Manipulator.	1

#### B. Eligibility Criteria :

The minimum qualification required for admission to this PhD program under Visvesvaraya PhD Scheme is one of the following:

- Master's Degree in Engineering/Technology in the relevant area of research along with Bachelor's

Degree in appropriate branch of Engineering/Technology with a first class or minimum 60% marks (or CGPA of 6.5 on 10-point scale) in the qualifying examination.

- B Tech/B.E./BSc Engg. (4 year)/MCA/M. Sc. with a CGPA of 8.5 and above on a 10-point scale or 80% aggregate from a Centrally Funded Technical Institute (CFTI). All such candidates must be GATE qualified. Number of credit courses to be cleared will be 24 credits before comprehensive examination.

In addition to the above eligibility criteria (based on BTech, MSc, MCA, MTech, etc. examinations), the following additional criteria will also be applicable:

- a) A candidate should score minimum 6.5 CGPA or 60% marks or 1st class throughout career to be eligible for admission to PhD programme. The Departmental Research Committee (DRC), however, may make exception (marks < 60% or CGPA < 6.5) at its discretion in only one among the results of 10th, +2, BA, BSc, BCom, Diploma etc. (except qualifying degree) if the candidate has qualified in GATE/NET/GPAT or other national level fellowship tests like DST-INSPIRE, etc. or joined as JRF/SRF in any research project.
- b) For admission to Engineering, a candidate should have passed Mathematics in +2 Science or Diploma.
- c) Science students admitted to PhD programme in Engineering/Physics/ Mathematics must have passed Mathematics at +3 level. Students without Mathematics at +3 level may be admitted under the condition that they will have to register for 14 credits of 1000 and 2000 level Mathematics and 1000 level Computer Science courses (Theory and Practical) in addition to their normal course requirement, and secure at least C grade in each course.
- d) Students without having qualifying degree in the primary discipline will be required to take up additional course work of 6 credits to gain adequate knowledge on the subject so as to be considered to qualify along with students with specialization in a primary discipline, unless explicitly exempted by the Senate. List of primary disciplines for specializations under various departments is given in Clause "C" below.

However, a higher shortlisting criteria (possibly different for different departments) may be set by the Department during scrutiny of applications depending on departmental requirement, number and quality of applicants. Therefore, merely satisfying the minimum eligibility criteria does not guarantee a candidate to be called for interview and also mere attending an interview does not guarantee admission.

### **C. Qualifying Degrees and Primary Disciplines for Ph.D Programme under Visvesvaraya PhD Scheme Phase –II, Round - II:**

Qualifying Degrees and relevant primary disciplines for admission to Ph.D Programme under Visvesvaraya PhD Scheme Phase –II, Round - II of various departments will be as mentioned against respective departments in the following table.

Department	Academic Eligibility / Primary Disciplines for Ph.D (Full Time) under Visvesvaraya PhD Scheme Phase – II, Round - II
Computer Science & Engineering (CS)	B. Tech. / M. Tech. in Computer Science & Engineering / Information Technology <b>OR</b> MCA <b>OR</b> M. Sc. in Computer Science / Information Technology
Electronics & Communication Engineering (EC)	B.Tech. / M. Tech. in Electronics Engineering / Electrical Engineering / Electronics & Communication Engineering / Electronics & Telecommunication Engineering / Electronics & Instrumentation Engineering / Applied Electronics & Instrumentation Engineering/ Electrical and Electronics Engineering * M.Tech. in VLSI Design and Embedded Systems (To work in the Chip to Startup (C2S) funded project)
Electrical Engineering (EE)	MTech/ME/M.S. in Electrical/ Electronics/ Communications/ Computer Science/ Instrumentation / Control Engineering or equivalent or Microelectronics/Solid-state Technology/MEMS/Nano Science/Nano Technology/Material Science/Engineering Physics or equivalent, relevant to the area of research <b>OR</b> BTech/BE in Electrical/Electronics/Communications/ Computer Science/ Instrumentation / Control Engineering or equivalent or Microelectronics/Solid-state Technology/MEMS/Nano Science/Nano Technology/Material Science/Engineering Physics or equivalent

#### D. Equivalent Degree / Specialisation / Discipline:

In the case of applicants not having exact Degree / Specialization / Discipline as mentioned above, but who claim to have an equivalent Degree / Specialization / Discipline, onus of proving equivalency shall lie with the concerned applicant(s) by submitting applicable notifications issued by any Government controlling/regulatory body like MHRD, UGC, AICTE, etc. Any notification and/or certification from the Institute/University/College of the applicants will not be acceptable. However, decision of the Institute shall be final and binding in this matter.

#### E. Applicants Awaiting Results

- For thesis based Postgraduate degrees [(M. Tech. (Research), MS or equivalent)], a student is permitted to submit the final result within one year from the date of thesis submission. However, one documentary evidence (proof of thesis submission) from the candidate's Institute/University is required to be submitted at the time of admission.
- For all course based degrees [B. Tech., M. Sc., M. Tech. (Regular), etc.] results need to have been published before admission is granted.

#### F. NOTES

- Where regular mode of education is available for any Degree/Qualification then Degree/Qualification obtained through any modes other than regular mode, i.e. Distance Learning, Correspondence Course, etc. will NOT be considered for the purpose of admission to

PhD program of the Institute.

2. For selection of research scholars in any engineering discipline, students with BTech degree will be given preference over students with MSc degree, even if the latter may have an MTech Degree.
3. Students with any other relevant background may be eligible, but only with approval of the Senate or Chairman, Senate on the recommendation of the Departmental Research Committee (DRC).
4. There is no relaxation in academic requirement for SC/ST/OBC/EWS/PWD students, because the minimum academic requirements have been set to meet the basic challenges of the academic program.
5. If the evaluation system is in grades, CGPA value will be considered and if the evaluation system is in marks, percentage value will be considered.
6. Students of one discipline may seek admission in a related department which will be considered on the basis of merit of the individual case(s).
7. Selection will be made on the basis of academic record, relevance of qualification, candidate's research interest, existing research programs and facilities of the departments, and performance of the candidate in tests and/or interviews. Therefore, merely attending a tests and/or an interview does not guarantee admission.
8. All admissions will be provisional till these are confirmed subject to medical fitness, payment of all the fees, fulfilment of eligibility conditions, and verifications of certificates by the Academic Section of the Institute.
9. The Institute reserves the right to modify or cancel this Advertisement/any part of this Advertisement at any stage.
10. All the admitted candidates shall be governed by the PhD regulations of the Institute, guidelines of the Visvesvaraya PhD Scheme Phase –II funded by Ministry of Electronics and IT (MeitY) and other instructions issued by the Institute time to time as well as the Ministry of Electronics and IT (MeitY).

## G. Fellowship

The candidates admitted under this Advertisement will be eligible for fellowship as mentioned in the Table below. Fellowship shall be paid as per the guidelines of the Visvesvaraya PhD Scheme Phase – II funded by Ministry of Electronics and IT (MeitY) and other instructions issued by the Ministry of Electronics and IT (MeitY) in this regard. The period of the project is 05 years or till the completion of the project whichever is earlier. Fellowship will be started from the date of joining by the candidate in the Department and fellowship will be paid for a maximum duration of 05 Years or till the completion of project whichever is earlier (as per project guidelines).

Position	PhD fellowship	
Fellowship Amount and other Benefits	Fellowship	Rs. 38750/- (1 <sup>st</sup> and 2 <sup>nd</sup> year)
		Rs. 43750/- (3 <sup>rd</sup> , 4 <sup>th</sup> and 5 <sup>th</sup> year)
	Reimbursement of Rent	As per Funding Agency Norms
	Research Contingency grant	Rs. 1,20,000/ year
<b>Other/detailed Terms and Conditions:</b> As per Visvesvaraya PhD Scheme Phase –II, Round - II funded by Ministry of Electronics and IT (MeitY). Link : <a href="https://phd.digitalindiacorporation.in/home">https://phd.digitalindiacorporation.in/home</a>		

## H. Fee Structure

Fees to be paid at the time of admission to PhD Program under Visvesvaraya PhD Scheme is as follows: -

#	Fee Particulars	Amount
1.	Admission fee (One time)	Rs.2500/-
2.	Tuition fee	Rs.7500/- [ Nil for SC/ST students]
3.	Other fees (Exam., Library, Electricity etc.)	Rs.3000/-
3.	Student activity fee	Rs.2000/-
5.	Hostel Seat Rent	Rs.5000/-
6.	Medical fee	Rs.2000/-
7.	Caution Money (One time) (Refundable if program is completed)	Rs.10000/-
8.	Hall Establishment fee	Rs.5000/-
9.	Mess Advance	Rs.19500/-
<b>TOTAL FEE</b>		<b>Rs.56,500/-</b> <b>(Rs. 49,000/- for SC/ST students)</b>

### Notes

- The above fee is only for the 1st semester. For remaining semesters the approximate fee will be Rs.44,000/- per semester (Rs.36,500/- for SC/ST students) which is inclusive of Mess dues. However, the Institute reserves the right to amend the fee structure from time to time, which will be implemented with immediate effect for all students irrespective of the date of admission.
- Fee will be paid by the selected students online in the Institute payment portal details of which will be notified along with selection result.

### Refund of Fee

If a student is removed or withdraws/leaves himself/herself from the Institute after admission without completing the entire program, all fees paid including the caution money deposit will be forfeited by the Institute. Mess advance may be refunded after deduction of dues, if any. This clause is applicable even before formal registration to the 1<sup>st</sup> semester and starting of classes.

## I. Application Fee and Procedure

Interested candidates satisfying the eligibility criteria may submit their **online application at <http://eapplication.nitrkl.ac.in>**. The applicants are advised to:

- a) Read this advertisement and the instructions to fill up the online application form given in the online portal carefully,
- b) Pay non-refundable Application Fee of Rs.1000/- (Rs.500/- for SC/ST/PWD candidates) through SBI Collect only. No other mode of payment is acceptable. The applicant has to search SBI COLLECT -> EDUCATIONAL INSTITUTIONS -> ODISHA -> DIRECTOR NIT ROURKELA -> APPLICATION FEE of Visvesvaraya Ph.D. Scheme Phase-II. Note down the SB Collect Reference Number. Application fee once paid shall not be refunded under any circumstances.
- c) Fill up the online application form and enter the SB Collect Reference Number in the appropriate column of Application Fee section and submit the same.

Applicants are **NOT** required to send hard copy of the application form or any other document(s) to NIT Rourkela. However, candidates who will be called for interview will be required to submit signed copy of the application form, a set of photo copies of all certificates and original Sponsorship Certificate (for Sponsored/Local Sponsored candidates only) at the time of interview. They also need to produce original certificates from HSC onwards for verification.

## J. Tentative Schedule

Sl. No.	Event	Tentative Date
1	Last date for submission of Applications	10/12/2023
2	Publication of result of scrutiny in the website	13/12/2023
3	Test and/ Interview (To be informed)	15/12/2023
4	Publication of result of Interview in the website	19/12/2023
5	Admission	22/12/2023
6	Semester Registration	To be intimated later

The list of selected candidates will be displayed in our Institute website [www.nitrkl.ac.in](http://www.nitrkl.ac.in) and no postal intimation will be sent to the selected candidates. **The applicants are required to visit the "Notice Board" section in the "Home Page" of the Institute website regularly for further updates.**

## K. How to reach the Institute

Rourkela is located in the Howrah-Mumbai main Train route. Train connections are also available from Bhubaneswar and Ranchi. Night AC/Non-AC bus services are available from all major cities of Odisha (Bhubaneswar/Berhampur/Balasore, etc.). The Institute is located around 8 km. away from the Railway Station and 2 km away from Sector-3 Bus Stop. Usual rate of auto fare at present is Rs.150/- to Rs. 200/- and Rs. 100/- respectively. App based taxi services are also available in Rourkela.

For any queries mail to: - [admission@nitrkl.ac.in](mailto:admission@nitrkl.ac.in)

**Sd/-**

**Assistant Registrar (Academic)**

