INFORMATION BROCHURE

Ph.D ADMISSION 2023-24

(Full-Time)

Advt. No.: IIITR/RG/2023/109 Date: 21/06/2023



भारतीय सूचना प्रौद्योगिकी संस्थान राँची

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, RANCHI

(An Institution of National importance under act of Parliament)

Ranchi - 834010, Jharkhand, India

www.iiitranchi.ac.in

1. ABOUT THE INSTITUTE

Indian Institute of Information Technology Ranchi is an autonomous institute setup by the MOE, Government of India, and Government of Jharkhand along with the industry partners Tata Motors, TCS and CCL on a Public Private Partnership (PPP) in the year 2016.

MOE, Government of India has taken up the initiative to setup 20 new Indian Institutes of Information Technology (IIITs) on a Public Private Partnership Model. A major objective in establishing IIITs is to set up a model of education which can produce best-in-class human resources in IT and harnessing the multi-dimensional facets of information technology in various domains. While the number of students produced by these IIITs would be small, the impact they create would be great. IIIT, Ranchi is determined to offer state-of-the-art facilities for advanced studies and research.

1.1 Location of the Institute

Presently, IIIT Ranchi is running from Science & Technology Campus, Sirkha Toli, Namkum, Ranchi, Jharkhand 834010 and JUPMI, Smart City Campus, Dhurwa, Ranchi. Construction work of permanent campus is in process at Kanke, Ranchi.

2. ADMISSION TO FULL-TIME Ph.D. PROGRAMME

2.1 Applications are invited for admission to the Full-Time Ph.D. programme at IIIT Ranchi

Applications are invited for admission to the Doctor of Philosophy (Ph.D.) programme beginning in Autumn 2023. The programme will be offered in Computer Science & Engineering (CSE), Electronics & Communication Engineering (ECE), Mathematics and Physics.

2.2 Admission categories and eligibility

The applications are invited under the below mentioned categories. All the applicants will be admitted only through the Institute's selection process. In general, the Institute can relax and/or set higher criteria for selection of suitable candidates.

TABLE-1: ADMISSION CATEGORY FOR FULL-TIME Ph.D. PROGRAMMES.

Sl. No.	Admission Category (Full-Time)
1	DIGITIZATION OF DEGLAR CHARLES AND CHARLES
1	INSTITUTE RESEARCH SCHOLAR
2	SPONSORED RESEARCH SCHOLAR
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3	FOREIGN STUDENTS UNDER ANY INTERNATIONAL SCHOLARSHIP
	SCHEME / EXCHANGE PROGRAMME

TABLE-2: QUALIFYING DEGREES FOR Ph.D. PROGRAMMES.

Sl. No.	Ph.D. Programme	Qualifying Degree		
1	Computer Science Engineering	M.Tech/M.E//B.E./B.Tech or equivalent in Computer Science and Engineering / Information Technology/ Software Engineering / Electronics and Communication / Telecommunication / Electronics / Electronics and Instrumentation / Electronics / Electronics and Electrical/Electrical with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in both Bachelor and Master degree.		
2	Electronics and Communicatio n Engineering	M.Tech/M.E/B.E/B.Tech or equivalent in Electronics Engineering/ Electronics and Communication Engineering/ Electronics and Telecommunication/ Electronics and Instrumentation / Electronics and Electrical/ Electrical with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in in both Bachelor and Master degree.		
3	Mathematics	M.Sc./Integrated M.Sc./M.Phil or equivalent degree in Mathematics/Applied Mathematics/Statistics with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in in both Bachelor and Master degree. OR B.Tech./M. Tech. / MS / M.Sc. or equivalent in Mathematics / Applied Mathematics /Statistics / Mathematics & Applied Mathematics / Statistics / Mathematics & Applied Mathematics in Computer Science. Or equivalent degree (in an appropriate field of Engineering or Technology) with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in in both Bachelor and Master degree.		
4	Physics	M.Sc./Integrated M.Sc./M.Phil or equivalent in Physics/Applied Physics with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in in both Bachelor and Master degree. OR B.Tech./M.Tech./Integrated M.Tech. or equivalent in Engineering Physics/Material Science/Nanoscience and Technology/Optoelectronics or equivalent with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in in both Bachelor and Master degree.		

3. REQUIREMENTS FOR FULL TIME RESEARCH SCHOLAR

INSTITUTE RESEARCH SCHOLAR: An applicant who joins Ph.D. at IIIT Ranchi under this category gets financial assistantship from the Institute.

candidate with M.Tech/M.E a) A from the Institutes recognized by UGC/AICTE/Government with a consistently good academic record relevant/related discipline. The candidate should have first division or equivalent in M.Tech/M.E and B.Tech/B.E degree. Candidates seeking admission, should have valid score in GATE (in Computer Science, Electronics and Communication or related field) or completed M.Tech with GATE Score.

OR

b) The candidate having undergraduate degree in engineering from IITs / NITs / IIITs is eligible for admission in Ph.D. under PMRF or any other government funded scheme.

OR

c) The candidate having undergraduate degree in engineering from IITs / NITs / IIITs having CGPA ≥ 8.5 is eligible for admission in Ph.D after qualifying Institute written test and/or interview.

NOTE: *A separate written test will be conducted for admission in Ph.D for Non-GATE students, which will be conducted by the respective Departments of IIIT Ranchi

SPONSORED RESEARCH SCHOLAR: An applicant who joins Ph.D. at IIIT Ranchi under this category will not get any financial assistantship from the Institute.

a) Applicants should have qualified CSIR/ UGC/ DAE/ NBHM/ DST/ DBT/ ICAR/ ICMR/ ICPR or secured funding from such an agency. In addition to the above, the minimum educational qualification for admission is M.Tech degree with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in both Bachelor and Master degree. An awardee of research fellowship from some recognized funding agency such as CSIR/ UGC/ DAE/ NBHM/ DST/DBT/ ICAR/ ICMR/ ICPR etc. They shall not receive any financial support from the institute in any form.

OR

Student/candidate financed by the Government /Semi-Government/ academic/ industry / research lab. In addition to the above, the minimum educational qualification for admission is M.Tech degree with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in both Bachelor and Master degree.

OR

Student/candidate nominated by Government of India/state under a Cultural Exchange Scholarship Programme, or a scholar admitted under an MOU. In addition to the above, the minimum educational qualification for admission is M.Tech degree with a consistently good academic record in relevant discipline. The candidate should have first division or equivalent in both Bachelor and Master degree.

FOREIGN STUDENTS UNDER ANY INTERNATIONAL SCHOLARSHIP SCHEME / EXCHANGE PROGRAMME: Foreign Nationals selected under various scholarship schemes of the Ministry, Government of India are considered for admission on the recommendation / sponsorship of the respective Ministry provided they fulfil the academic and other requirements. Such candidates should route their applications through the Ministry concerned.

Self-financing foreign students may be considered for admission provided they fulfil the requirement of qualifying examination. Offers of admission to them will be issued with intimation to the Ministry of Education, Government of India. It will be the responsibility of the prospective foreign national student to ensure that he/she has the proper visa and other related documents.

4. DURATION AND RESIDENCY PERIOD OF THE PROGRAMME

- A. The minimum duration of the Ph.D. Programme (excluding dropped semester(s)/maternity leave) is 3 years (36 months) from the date of joining.
- B. All Ph.D. students have to stay within the campus during the entire period of Ph.D. programme. However, special permission, on a case to case basis, may be considered by the competent authority for staying outside the campus.
- C. In general, Ph.D. students with Institute Scholarship can be away from the Institute only after pre-submission seminar. However, in exceptional cases, they may be permitted to leave the institute only after completion of course work. In such cases, Ph.D. category will be converted to another appropriate category, based on the eligibility. This will be based on Doctoral Scrutiny Committee (DSC) recommendation and with the approval of Chairman (Senate). This provision of conversion can be availed of only once during the programme.
- D. The maximum period for completing the Ph.D. programme is 7 years (excluding maternity leave) from the date of admission. However, financial assistantship will be up to maximum three years (with possible extension of two years after due review and recommendation from supervisor) from the date of joining.
- E. Semester drop is permitted up to two semesters in the entire duration of Ph.D. programme on bonafide grounds like medical, delay in getting relieving order from preceding organization or any other valid grounds based on DSC recommendation and approval of Competent authority. However, the maximum period of completing Ph.D. programme will remain unchanged.

5. IMPORTANT DATES:

Procedure	Date		
Last date of submission of application form	September 11, 2023		
Display of list of shortlisted candidates	September 13, 2023		
Date of Written Test and/or Interview	September 15, 2023 (Tentative)		
Announcement of results	September 16, 2023 (Tentative)		
Reporting at IIIT, Ranchi	Will be notified in the Institute website		
Commencement of Semester for all Ph.D. courses for the Session 2023–24	Will be notified in the institute website		

6. RESEARCH AREAS:

All fields of ECE and CSE discipline. One can refer to faculty profile for details. However, for Full Time Research Scholar category *priority* will be given to the following areas in this Autumn admission: Cryptography and Network Security, Hardware Security, Big Data, Cloud Computing, Distributed Systems, Parallel Computing, Image Processing, Machine Learning, Wireless Sensor Networks, Internet of Things, Database Management and Microwave, Antenna, Optical Communication, Optical Wireless Communication, Silicon Photonics, VLSI, Communication for CSE and ECE students respectively. Condensed Matter Physics, Material Science, Thin Films and Optoelectronics Devices, Polymer Physics, Optical Fiber Communication, Photonic Crystal Fiber and Mathematical Modelling, Numerical Computation, Celestial Mechanics, Orbital and Space Dynamics, Fixed Point Theory, Topology and Functional Analysis, Differential Equations, Fuzzy Mathematics, Non Linear Dynamics, Thermo-Elasticity and Solid Mechanics.

7. FINANCIAL ASSISTANCE

- (a) The Institute may provide financial assistance (limited number of students) in the form of teaching or research assistantship (referred to as Institute Assistantship) to full-time Ph.D students who have qualified GATE or written test and/or interview conducted by IIIT Ranchi. Assistantships are awarded for a period of **three years**, extendable on a yearly basis by recommendation of DSC. The maximum duration of scholarship will be five years from the date of pre-registration.
- (b) The assistantship will be granted at approved rates as specified by the MoE (previously MOE), Govt. of India.
- (c) A student is expected to devote up to eight hours per week towards teaching/laboratory assistantship assigned to him/her. A report per semester on the student's performance in the assistantship task will be provided by the concerned faculty to the student's supervisor.
- (d) Sponsored research scholars and foreign students are NOT eligible for any financial assistantships from the Institute.

8. PROGRAMME FEE

A candidate will be required to deposit the first semester fee at the time of admission through online portal of SBI Collect.

The existing structure of the semester wise fees is given below:

Semester	General / EWS/OBC/SC/ST/PC (Full Time)		
I	₹ 25000/- (Tuition Fee) + ₹ 15000/- (Institute Fee) + ₹ 20000/- (Caution Money one time)		
II onwards	₹ 40,000/- (Tuition Fee + Institute Fee)		

^{*}The above fee is under revision and likely to increase.

Hostel fees and Mess fee will be charged semester-wise. Approx. hostel charges and Mess charges per semester are given below:

Mess Fee	₹18000/- semester-wise

Hostel Fee	₹18000/- semester-wise
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^{*}The above fee is under revision and likely to increase.

At the time of Reporting in-person at IIIT Ranchi, the students are required to pay the Hostel and Mess Fee to the respective hostels.

9. MEDICAL FITNESS

- (a) Candidates must be in good health. A candidate is required to submit a medical certificate (as per Annexure II) at the time of reporting at IIIT Ranchi, signed by the chief medical officer (CMO) or equivalent of a government hospital.
- (b) The candidate must check his/her eligibility criteria (wherever applicable) as given in Annexure 2 about colour blindness.
- (c) A candidate will be allowed to take admission only if the certificate produced by the candidate is verified to be satisfactory by IIIT Ranchi officials, whose decision in this regard will be final.

10. RESERVATION OF SEATS

- a) Reservation for SC/ST/OBC (Non-Creamy Layer)/EWS/PC candidates will be as per Government of India rules.
- b) Form of OBC (Non-Creamy Layer) Certificate (given in Annexure I) must be produced by OBC (Non-Creamy Layer) candidates in the format for 'Admission to Central Educational Institutions (CEIS) under the Government of India' and should be issued on or after April 01, 2023 or Valid document.
- c) Parental Income Certificate for EWS category (as per GoI) must be produced by candidate in the format for 'Admission to Central Educational Institutions (CEIS) under the Government of India' and should be issued on or after April 01, 2023 or Valid document.

11. ADMISSION PROCEDURE

- (a) Application form is required to be submitted, which will remain available on the IIIT Ranchi website www.iiitranchi.ac.in. The GATE candidates will also have to apply through the same process.
- (b) Non-refundable application fee of each programme for candidates is **Rs. 1000**/for UR/EWS/OBC candidates and **Rs. 500**/- for SC/ST/PC/Women/PWD
 candidates. The application fee is to be paid by Payment Portal for Ph.D.
 Admission 2023-24 at **SBI** collect
 (https://www.onlinesbi.com/sbicollect/icollecthome.htm).
- (c) The duly completed application form along with self-attested copies of supporting documents/testimonials/certificates, payment receipt of fee etc. are required to sent by speed/registered post to the Registrar, Indian Institute of Information Technology Ranchi, Science & Technology Campus, Sirkha Toli, Namkum, Ranchi-834010, Jharkhand, India. The envelope containg the application be super scribed as "PhD Admission (Full-time) in ECE/CSE/Mathematics/Physics". Candidates can also apply for more than one programme in separate application.
- (d) The application form with self-attested copies of supporting documents and payment receipt in a single pdf should be sent via email

<u>assodean.rd@iiitranchi.ac.in</u> and <u>skumar@iiitranchi.ac.in</u> on and before September 11, 2023.

- (e) List of applicants shortlisted for further participation in the selection process such as written-test and/or Interview will be displayed on the Institute website. No separate communication/intimation in this regard shall be made by the Institute. The date and time of written-test and/or Interview will be informed only through the Institute website.
- (f) It is the responsibility of the candidate, to ensure that he/she satisfies all eligibility criteria for a particular programme, as mentioned in this information brochure.
- (g) The PhD admission will be based on the GATE score and/or written test and/or interview by the respective departments.
- (h) The following documents are required along with application form
 - (i) Recent passport size photograph and signature.
 - (ii) Qualifying M.Tech/M.SC Degree Marks-Sheet of final semester/ final year (4th semester / pre-final year marks-sheet for the 'appearing candidates' whose final semester / final year results are pending)
 - (iii) Qualifying B.Tech/B.SC Degree Marks-Sheet of final semester / final year (7th semester / pre-final year marks-sheet for the 'appearing candidates' whose final semester / final year results are pending).
 - (iv) 10th & 12th Passing Certificate and Mark sheet.
 - (v) Valid GATE score card as indicated in the application form (for GATE-candidates).
 - (vi) Caste certificate/EWS income certificate to avail seat reservation under respective reserved category. The OBC (NCL) certificate as per Annexure I and issued on or after **April 01**, **2023**. Parental Income Certificate for EWS category (as per GoI) must be produced by candidate in the format for 'Admission to Central Educational Institutions (CEIS) under the Government of India' and should be issued on or after **April 01**, **2023**.
 - (vii) Physically Challenged (PC) persons are required to attach a certificate of disability from the authorized medical board attached to one of the following - Vocational Rehabilitation Centre (VRC) for Physically Handicapped persons/ Special Employment Exchange for Physically Handicapped/ Government Hospital (District and State level).
 - (viii) Endorsement certificate from the present employer (for Sponsored candidates).
- (i) The candidate is to Report in-person/online at IIIT Ranchi on the scheduled date, time and venue for appearing the written test and/or interview and completing his/her admission. If the candidate fails to report at the test/admission venue in-person/online along with the requisite documents in original by that date and time, he/she will not be considered afterwards for admission.
- (j) In addition to original copy of above-mentioned documents following documents must be produced by the selected candidates at the time of **reporting/joining** to IIIT Ranchi to complete his/her Admission:
 - (i) Copy of Admission fee payment receipt.
 - (ii) The Migration Certificate or College Leaving Certificate.
 - (iii) Medical fitness certificate as per Annexure II.

- (iv) 4 passport size and 10 stamp size colour photographs.
- (v) Undertaking regarding not claiming institute scholarship for sponsored/foreign candidate.
- (vi) Certificate for degree equivalence (if applicable).
- (vii) It is important for the 'Appearing candidates' to note that their admission will be provisional even after completing all other procedures & formalities which will be confirmed only after submission of final semester / final year marks-sheet of qualifying degree and college leaving certificate / migration certificate in original to the Academic Section through the coordinators of the respective M. Tech. Programmes latest by September 30, 2023. Such candidates will not be entitled for any scholarship till confirmation of their admission, if otherwise eligible. Failure to submit the requisite document by the stipulated date will lead to cancellation of admission of all such candidates and names of all such candidates will be deleted from the rolls of the Institute. In such cases the candidates will be refunded only caution money deposited at the time of admission.
- (k) The documents of the candidates will be verified by IIIT Ranchi officials. Admission of only those candidates, whose documents are found in order and verified as satisfactory, will be confirmed.
- (1) All other formalities related to identity card, hostel and bank account, etc. will be completed subsequently by the candidate.
- (m)Mess fee for the first semester have to be paid at the time of Reporting to IIIT Ranchi. Caution money is refundable only after completion of the Programme.

11. OTHER IMPORTANT POINTS

- (a) In the event of any information being found false or incorrect or incomplete or non-eligibility being detected at any time before or after admission, his/her candidature is liable to rejection without further communication.
- (b) Students are required to observe prescribed Rules & Regulations and orders issued by the IIIT Ranchi authorities from time to time.
- (c) The rules for GATE scholarship are as follows:
 - (i) The Assistantship will be awarded in the first instance on the basis of GATE score.
 - (ii) The continuation of the Assistantship during each semester is contingent upon Academic and Research performance.

12. DISCLAIMER

This information has been launched to provide candidates and public-at-large, information about IIIT Ranchi Ph.D Admission. If you do not agree to the terms and conditions given below, do not access this site or any pages thereof.

COMMUNICATION WITH IIIT RANCHI

Any further query/communication through email should be addressed to <u>assodean.rd@iiitranchi.ac.in</u> and <u>admission@iiitranchi.ac.in</u> with full identification of the candidate, i.e., name, email, mobile, Programme name(s), category, GATE/Sponsored and other identifying codes given by IIIT, Ranchi. *Before asking a query a candidate must go through this Information Brochure / instructions in the Institute website properly*.

IIIT Ranchi will not issue any letter by post to any candidate regarding any admission related activity. The candidate must visit the institute website (*www.iiitranchi.ac.in*) regularly in this regard for any update / instruction / result /announcement.

FORM OF CERTIFICATE TO BE PRODUCED BY OBC (NON-CREAMY LAYER) APPLYING FOR ADMISSION TO CENTRAL EDUCATIONAL INSTITUTIONS (CEIS), UNDER GOVERNMENT OF INDIA

This	is to certify that Shri/Smt./Kum		Son/Daughter of			
Shri/	/Smt of Vi	of Village/Town				
	in the	State belongs to the				
Comr	munity which is recognized as a backv	vard class under:				
(i)	i) Resolution No. 12011/68/93-BCC(C) dated 10/09/93 published in the Gazette of India Extraordinary Part I Section I No. 186 dated 13/09/93.					
(ii)	Resolution No. 12011/9/94-BCC dated Part I Section I No. 163 dated 20/10/9		tte of India Extraordinary			
(iii)	i) Resolution No. 12011/7/95-BCC dated 24/05/95 published in the Gazette of India Extraordinary Part I Section I No. 88 dated 25/05/95.					
(iv)	Resolution No. 12011/96/94-BCC date					
(v)	Resolution No. 12011/44/96-BCC date Part I Section I No. 210 dated 11/12/9		tte of India Extraordinary			
	Resolution No. 12011/13/97-BCC date					
) Resolution No. 12011/99/94-BCC date					
	i)Resolution No. 12011/68/98-BCC date					
(ix)	Resolution No. 12011/88/98-BCC date Part I Section I No. 270 dated 06/12/9		tte of India Extraordinary			
(x)	Resolution No. 12011/36/99-BCC date Extraordinary Part I Section I No. 71 da		azette of India			
(xi)	Resolution No. 12011/44/99-BCC date Extraordinary Part I Section I No. 210		azette of India			
(xii)) Resolution No. 12015/9/2000-BCC dat	ed 06/09/2001.				
	i)Resolution No. 12011/1/2001-BCC dat					
	r)Resolution No. 12011/4/2002-BCC dat					
(xv)	Resolution No. 12011/9/2004-BCC dated I Section I No. 210 dated 16/01/2006.	I 16/01/2006 published in the Gaze	ette of India Extraordinary Part			
N.B.	Strikeout whichever resolutions (i-xv) is	s/are not applicable.				
Shri/S	Smt./Kum.		and/or his family			
ordin	arily reside(s) in the	Dis	strict/Division of			
		This is also to certify that h				
	ons/sections (Creamy Layer) mention rtment of Personnel & Training O.M. N	ed in Column 3 of the Schedule	e to the Government of India,			
OM N	No. 36033/3/2004 Estt.(Res.) dated 09/03/2 14/10/2008 and OM36033/1/2013-Estt. (I	2004 and further modified vide OM	I No. 36033/3/2004-Estt. (Res.)			
Dated						
		ict Magistrate/Deputy Commissio Authority (Seal	oner/Competent			
*Plea	ase delete the word(s) which are not apE:		,			

- a) The term 'Ordinarily' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.
- b) The authorities competent to issue Caste Certificates are indicated below:
 - DistrictMagistrate/AdditionalMagistrate/Collector/DeputyCommissioner/AdditionalDeputy Commissioner/ Deputy Collector/Ist Class Stipendiary Magistrate/Sub-Divisional magistrate/Taluka Magistrate/Executive Magistrate / Extra Assistant Commissioner (not below the rank of Ist Class Stipendiary Magistrate).
 - Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate.
 - Revenue Officer not below the rank of Tehsildar' and
 - Sub-Divisional Officer of the area where the candidate and/ or his family resides.

MEDICAL FITNESS CERTIFICATE OF APPLICANT for PhD Admission 2023

(To be provided by a Chief Medical Officer (CMO) or Equivalent of a Government Hospital)

I, Dr	after	r examining	(with	necessary	investigations)
Mr./Ms	Son/Daughter	of Mr./Mrs			
born on	nfirmity unfittin ctical Engineer	ng him/her no /Technologis	w, or lil	cely to unfi	t him/her in
1. Mark of identification	:				
2. Weight	:				
3. Height (in cm)	:				
4. Blood Pressure	:				
5. Pulse rate (beats/min)	:				
6. Blood Group	:				
7. Abuse of substances (if any)	: Smoking / A	Alcohol / Drug	-	y other xpanded:	c
8. Chest measurements	: Contracted:	cm	m	-	
9. Vision:	Right Eye:	Near:		Dista	ant:
	Left Eye:	Near:		Dista	ant:
10. Colour Blindness, congenital of	or other disease	of eye (if any	/):		
11. Hearing: Right ear: GOOD / FAIR / POOR Left ear: GOOD / FAIR / POOR					
12. X-ray PA view of chest with proper identification mark: Satisfactory / Not satisfactory If not satisfactory, then specify why:					
13. If any other abnormality noticed:14. Remarks / Special Recommendations, if any:					
Conclusion: Certified that the above and fit tostay in hostels provided by III					able disease
Date : Place :					
Declaration by the candidate : I declare my knowledge. I fully understand that				and correct	

Candidate's Signature with date: