



NATIONAL INSTITUTE OF TECHNOLOGY JAMSHEDPUR – 831 014, JHARKHAND

(An Institution of National Importance under MHRD, Govt. of India, New Delhi)

Information Brochure for Admission to Ph.D. Programme 2013-14 (SPRING SEMESTER)

ADMISSION TO Ph.D. PROGRAMME FOR ACADEMIC SESSION 2013-14 SPRING SEMESTER

The institute invites applications for admission to PhD Programme in the areas as specified

Ph.D. Programme (discipline)	Qualification(s)
Engineering and Technology	<p><u>For Institute Research Scholar (IRS)</u></p> <p>Bachelor's / Master's Degree in Engineering or Technology in the relevant discipline with a minimum 6.5 CGPA or 60% marks in both Bachelor's and Master's levels from recognized Technical Institute or University. [Minimum 6.0 CGPA or 55% marks for SC/ST candidates]</p> <p><i>Only those Candidates will be considered for Ph.D. programme.</i></p> <ul style="list-style-type: none"> Whose admission to M. Tech /M.S/ME programmes was through GATE score OR Who holds a valid GATE score (i.e. those qualified in GATE 2012 or 2013) OR B. Tech. with a valid GATE Score Card(i.e. those qualified in GATE2012 or 2013).
Humanities &Applied Sciences(Chemistry, Physics and Mathematics)	<p>Bachelor's andMaster's degree in Sciences or Humanities / M. Tech in the relevant area with a minimum6.5 CGPA or 60% marks in both Bachelor's and Master's levels from recognized Institute or University.[Minimum 6.0 CGPA or 55% marksfor SC/STcandidates].</p> <p><i>Only those Candidates will be considered for Ph.D. programme.</i></p> <ul style="list-style-type: none"> Having valid GATE score card or CSIR/NBHM/UGC-NET fellowship.
Computer Applications	<p>MCA with valid GATE Score orM. Tech in Engineering with a minimum 6.5 CGPA or 60% marks in Master's levels from recognized Institute or University. [Minimum 6.0 CGPA or 55% marks for SC/ST candidates].</p> <p>Only those Candidates will be considered for Ph.D. programme.</p> <ul style="list-style-type: none"> Whose admission to M. Tech / M.S / ME programmes is through GATE Score OR Who holds a valid GATE score (i.e. those qualified in GATE 2012 or 2013)
Relaxation to SC/ST/OBC/PH candidates will be given as per GOI norms.	
<p><u>For Sponsored Research Scholar (SRS) from Industry / recognized R& D Labs. applicable to all the above disciplines</u></p> <ul style="list-style-type: none"> Whose admission to M. Tech /M.S/ME programmes was through GATE score alongwith 5 years of industrial / research experience. <p>Sponsored Research Scholar (SRS) category is without any stipend and is applicable to candidates presently employed in reputed industry/ research organisations and with minimum experience of FIVE years They are required to produce a NOC/Sponsorship Certificate from present employer, along with relevant experience certificates on employer's letter head (containing details like website address, phone and fax number, postal address etc.) from present and previous employers.</p>	
Indicative list of Broad Areas of Research:	

Civil Engineering: Structural Engineering, Concrete Technology, Soil-structure interaction, Earthquake Engineering, Geotechnical Engineering, Buckling, vibration and stability of composite plate / shell, Stability analysis, foundationengg., ground improvement, river bank filtration, Reinforced earth, environmental geo-technique, ground improvement, Transportation engineering, Surface water hydrology, river flood flow modelling, water resources systems analysis and rain water harvesting, watershed management.

Electrical & Electronics Engineering: Instrumentation and control, Control system, Power systems, AC drives, application of power electronics in power system, Power system and protection, Renewable energy systems, Electrical machines and drives.

Electronics & Communications Engineering: Industrial Control Systems, Non-conventional power generation, Instrumentation and control systems, VLSI and embedded systems.

Mechanical Engineering: Solar energy, I.C Engine, Gas turbines, Power plants, combined cycle, Energy systems; Heat transfer & Mass transfer; Mechanism; CFD, integrated energy systems, fluid flow; Thermal engineering; Renewable energy; Machine Design, CAD /CAM; Value engineering; TPM and TQM; Refrigeration and air conditioning; Vibration; Composite materials; Process integration, pinch technology.

Metallurgical and Materials Engineering: Process metallurgy; Corrosion engineering; Phase transformation, structure – property relationship; Physical metallurgy; Iron and steel making; Extractive metallurgy; Mechanical metallurgy; fatigue, fracture and failure analysis; Geology, mineral beneficiation, bio-hydro metallurgy, bio-technology; Metallic glass; Nanotechnology; Hydro metallurgy.

Manufacturing Engineering: Manufacturing processes; Manufacturing management; Product design and development; CAD/CAM; Rapid prototype and reverse engineering; Industrial engineering and management; Manufacturing Systems Engineering; Lean Manufacturing; Toyota Production system; Sustainable manufacturing; Energy management.

Humanities: American Literature, British Literature, Indian Writing in English.

Chemistry: Surface science; Environmental chemistry, waste disposal management; Biophysical, analytical chemistry, surface chemistry; Materials science.

Computer Applications: Software Quality and Reliability, Supply Chain Management

Mathematics: Fuzzy logic and its applications; Operation research and statistics; Multivariate polynomial system; Numerical analysis; Fractional calculus and integrated equations, Computer Science & Engineering.

Physics: Laser applications.

- Candidates MUST specify broad areas of research in the application form.
- Selection will be based on previous academic record and performance in the interview.
- Institute reserves the right to reject the applications for which faculty is not available/not eligible for guidance.
- Incomplete application forms and forms submitted after the last date as given below will be rejected. Institute will not be responsible for any postal delay.
- Canvassing in any form will disqualify the candidates.
- List of short-listed candidates for interview will be uploaded on our website.
- The candidates are required to see our website for fee structure/Faculty Expertise etc. and also advised to visit our website regularly for update information about the Ph.D. programme 2013-14.
- Scholarship / Assistantship: The selected candidates (who had applied in Institute Research Scholar category) shall be entitled for scholarship / assistantship as per GOI norms from time to time.
- Research scholar selected for the Ph.D. will have to complete the allotted course work within two years of the joining of Ph.D. Programme and will be governed by Ph.D. regulations of the Institute.
- Accommodation is NOT available for the Ph.D. scholars in hostel of the Institute.

Selection Procedure

The admission to Ph.D. Programme will be on the basis of weightage as given below:

- a) Overall academic performance (to be fixed by the Institute) 70%
b) Interview conducted by the Department 30%

All candidates selected for admission shall be required to deposit the requisite Institute fee at the time of admission.

Details of Ph.D Fee Structure

Sl. No.	Head of Fees	Spring SEMESTER		Autumn SEMESTER onwards	
		For General Category (in Rupees)	For SC / ST Category (in Rupees)	For General Category (in Rupees)	For SC / ST Category (in Rupees)
A. Admission / Tuition Fees (IRG)					
1	Admission Processing Fee	1000.00	1000.00	00.00	00.00
2	Tuition Fee	17500.00	17500.00	17500.00	17500.00
	Total `	18500.00	18500.00	17500.00	17500.00
B. Institute Fees (Common for all students)					
4	Electric Charge	1000.00	1000.00	1000.00	1000.00
5	Water Charge	1000.00	1000.00	1000.00	1000.00
6	e-campus Fee	500.00	500.00	500.00	500.00
7	Identity Card	100.00	100.00	00.00	00.00
8	Examination Fee	600.00	600.00	600.00	600.00
9	Training & Placement	500.00	500.00	500.00	500.00
10	Bus Charge	1000.00	1000.00	1000.00	1000.00
11	Library	1000.00	1000.00	1000.00	1000.00
12	Computer & Internet	1000.00	1000.00	1000.00	1000.00
13	Students Welfare	300.00	300.00	300.00	300.00
14	Sports	500.00	500.00	500.00	500.00
15	Cultural & Technical Activities	1000.00	1000.00	1000.00	1000.00
	Total `	8500.00	8500.00	8400.00	8400.00
C. Group Insurance (Fees will be as per actual)					
16	Insurance Fee	500.00	500.00	500.00	500.00
D. One Time Payment (at admission)					
17	Institute Caution Money (Refundable)	10000.00	10000.00	00.00	00.00
18	Development Fund	10000.00	10000.00	00.00	00.00
19	Alumni Membership	1000.00	1000.00	00.00	00.00
	Total `	21000.00	21000.00	00.00	00.00
	Grand Total ` (A+B+C+D)	48500.00	48500.00	26400.00	26400.00

How to apply for admission to Ph.D. program

The application form and other relevant information for admission to Ph.D. program may be downloaded from the Institute website: www.nitjsr.ac.in.

Applications form, duly filled in, must contain a crossed Demand Draft for ` 1,500/- for General / OBC (` 750/- for **SC / ST** candidates) towards application fee drawn in favour of **Director, National Institute of Technology, Jamshedpur** payable at **SBI RIT Jamshedpur (Code 1882)** and should reach **Chairman – (PG & R) Admission, NIT Jamshedpur 831 014 on or before 29/11/2013**.

The following documents (whichever applicable) arranged in the order given below should be enclosed along with the duly filled application:

- Three recent passport size photographs of the candidate attested by Gazetted Officer / Principal of the College / Institute last attended.
- Self-attested copy of GATE score or UGC/CRIR/NBHM/UGC-NET fellowship.
- Self-attested copy of marks-sheet & degree certificate of the qualifying examination
- Self-attested copy of provisional certificate of the qualifying examination.
- Self-attested copy of Under-Graduate degree certificate and marks-sheets.
- Self-attested copy of certificate of matriculation/ Xth class as the proof of age of the candidate.

- vii) Self-attested copy of caste certificate in case of **SC/ST** candidates from the competent authority (not below the rank of SDO/SDM/DC/DM/Tahsildar)
- viii) Self-attested copy of caste certificate in case of **OBC** candidate from competent authority (not below the rank of SDO/SDM/DC/DM/Tahsildar) indicating the status regarding Creamy layer for the financial year ending 31st March 2013.
- ix) Self-attested copy of experience certificate
- x) Research Proposal (SoP) as per the Performa
- xi) Profile of the employing company (in case of SRS category)
- xii) No-Objection-Certificate and other documents from the employer (in case of SRS category) in support of your application.
- xiii) Profile of the organization/ employer in case of SRS category candidate
- xiv) No-Objection-Certificate duly signed by the HOD/HOS in case of employee of NIT Jamshedpur
- xv) Self-attested copy of credentials including AICTE recognized short-term courses attended, research publications, professional qualifications etc.
- xvi) Demand draft towards application fee as per category for the candidate i.e. ` 1,500/- for General / OBC (` 750/- for **SC / ST** candidates).

Incomplete / incorrect applications will not be considered for admission.

Important Dates	
Newspaper Advertisement / Internal Advertisement by	05/11/2013
Last date for receipt of Application form	29/11/2013
Intimation regarding interview call to be posted on institute website	06/12/2013
Date of interview at NIT Jamshedpur	20/12/2013
Date of announcement of result	24/12/2013
Date of admission	02/01/2014 & 03/01/2014

- No separate interview letter / communication will be made to any individual.
- Visit institute website: www.nitjsr.ac.in regularly for more details and updates.

Legal Jurisdiction

All disputes pertaining to the counselling and admission for the Ph.D. programme of NIT Jamshedpur shall fall within the jurisdiction of Jamshedpur, Jharkhand only.

Disclaimer

The statement made in the information brochure and all other information contained herein is believed to be correct at the time of publication. However, the Institute reserves the right to make at any time without notice, changes in and additions to the regulations, conditions governing the admission, requirements, seats, fees and any other information, or statements contained in this information brochure. No responsibility will be accepted by the Institute / Chairman – PG & R Admission for hardship or expenses encountered by its students / any other person for such changes, additions, omissions or errors, no matter how they are caused.

ADDRESS FOR CORRESPONDENCE

Chairman – (PG & R Admission)
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