



NATIONAL INSTITUTE OF TECHNOLOGY JAMSHEDPUR
Jamshedpur (Jharkhand) - 831014
(An Institution of National Importance under MHRD, Govt. of India, New Delhi)

Advt. No: NITJSR/ACD/Ph. D/CD/2018-19/263 Date:14/05/2018

ADMISSION TO Ph. D. PROGRAMME

Applications are invited for admission as Research Scholar to Ph.D. Programme of the Institute for the Autumn Semester of 2018-19. The detailed information brochure and on-line application form are available on Institute website www.nitjsr.ac.in. Last date for receiving completed application form is **15/06/2018**.

Registrar (I/c)

- The application form of the candidate will be acceptable only when he has registered himself, filled on-line application form and paid on-line requisite fee (SBI i-collect).
- Registration fee is Rs. 1,000/- for OPEN/OBC candidates and Rs. 500/- in case of SC/ST candidates.



NATIONAL INSTITUTE OF TECHNOLOGY JAMSHEDPUR JAMSHEDPUR-831014, JHARKHAND

(An Institution of National Importance under MHRD, Government of India)

Admission to Ph.D. Programme for Autumn Semester 2018-19

INFORMATION BROCHURE

1. ABOUT THE INSTITUTE

National Institute of Technology Jamshedpur is one of the Institute of National Importance for Technical Education in India. This was formerly known as Regional Institute of Technology Jamshedpur. National Institute of Technology (NIT) Jamshedpur is an Institution of National Importance set up by an Act of Parliament (Act 29 of 2007) namely, the National Institutes of Technology Act, 2007, which received the assent of the President of India on the 5th June, 2007. The provision of the Act has come into force with effect from 15th August, 2007 as per Notification S.O.1384 (E) dated 9th August, 2007 of the MHRD (Department of Higher Education), New Delhi. As per the provision of the said Act, this Institution runs on non-profitable basis. NIT Jamshedpur offers academic programmes: B. Tech. (Hons.), M. Tech., MCA and Ph.D. in the various disciplines. NIT Jamshedpur has well qualified faculty and dedicated supporting staff.

2. Admission to Ph.D. Programme for Autumn Semester 2018-19.

2.1 Name of the Departments offering the Ph.D. Programme and Research Areas

SlNo.	Name of the Department	Research Areas
1	Civil Engineering	Structural Engineering, Concrete Technology, Earthquake Engineering, Geotechnical Engineering, Vibration and Stability, Stability Analysis, Foundation Engineering, Ground Improvement,, Reinforced Earth, Transportation Engineering, Water Resources Engineering, Open Channel Hydraulics, Ground Water Hydrology, Environmental Engg.
2	Computer Applications	Supply Chain Management, Data Mining, Computational Complexity, Software Engineering, Soft Computing
3	Computer Science and Engineering	Image Processing, Comp Networks, Network Security, Software Engineering, Database analysis etc.
4	Electrical and Electronics Engineering	Control Systems, Power Systems, Power Electronics, Power System Protection, Renewable Energy Systems, Electrical Machines and Drives.
5	Electronics and Communication Engineering	Industrial Control Systems, Non-conventional Power Generation, Instrumentation and Control Systems, VLSI and Embedded systems, Communication Systems
6	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.
7	Mechanical Engineering	Solar Energy, I.C Engines, Gas Turbines, Power Plants, Combined Cycle, Energy Systems, Heat & 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, Thermodynamics of Energy Systems.
8	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 Gas, Nanotechnology, Hydro Metallurgy.
9	Physics	Laser Applications, Nuclear Physics

10	Chemistry	Surface Science, Environmental Chemistry, Waste Disposal Management, Physical Chemistry, Analytical Chemistry, Surface Chemistry, Materials Science, Aerosol, Atmospheric Chemistry, Organic Chemistry.
11	Mathematics	Operation Research, Statistics, Multivariate Polynomial System, Numerical Analysis, Fractional Calculus, Integrated Equations.
12	Humanities, Social Sciences and Management	American Literature, English Literature, Indian Writing in English

2.2 Categories of Ph. D program:

- (a) **Institute Research Scholars (Full Time):**
Candidates under this category are entitled for fellowship from the Institute as per MHRD norms. The candidate must have qualified GATE.
- (b) **Sponsored Research Scholars (Full Time):**
Candidates under this category receive financial support from AICTE under QIP scheme or from Government Institutes/ organisations under study leave. Foreign students shall be sponsored by their Government or awarded scholarship by Govt. of India, ICCR or other such organisations/agencies.
- (c) **Self Financed Research Scholars (Full Time):**
Candidates under this category are those who support themselves or receive fellowship from other agencies such as UGC, CSIR, DST etc.
- (d) **Self Financed Research Scholars (Part Time):**
- (i) Candidates under this category shall be persons employed in nearby (within 30 km radius from N.I.T. Jamshedpur) Industries/R&D organisations. They shall be required to furnish no objection certificate from the employer.
 - (ii) Candidates employed in Industries/Institutes/R&D organisations outside 30km radius shall be required to get leave from the employer to meet minimum residential requirement of one year to complete coursework. There should be adequate research facilities and supervisor with Ph. D degree in the relevant area of research should be available at their work place. The candidate is required to be present at least for 30 days in each semester in institute campus after course work.
- (e) **Faculty/Staff/Sponsored Project Fellow of N.I.T. Jamshedpur (Part Time):**
Regular faculty members, regular staff members and sponsored project fellows of N.I.T. Jamshedpur are eligible for admission to Ph. D program in concerned Departments.

2.3 Qualification for Eligibility:

- (a) **Ph. D in Engineering:**
- Master Degree in relevant branch of Engineering/Technology with minimum 60% marks or equivalent CPI 6.5
- OR
- Bachelor's degree in relevant branch of Engineering/Technology with minimum 75% marks or equivalent CPI 8.0
- (b) **Ph. D in Sciences, Computer Applications, Humanities, Social Sciences and Management**
- Master's Degree in the relevant subject with a minimum 60% marks or equivalent CPI 6.5

3.0 Selection Procedure

The selection procedure for admission to Ph.D. Programme is based on consistently good academic record throughout and test/interview performance. Reservations for SC/ST/OBC/PWD are applicable as per GOI norms.

4.0 How to Apply

The online application form and the information brochure for admission to Ph.D. programme are available on Institute website: www.nitjsr.ac.in. **Registration fee** is Rs. 1,000/- for OPEN/OBC candidates and Rs. 500/- in case of SC/ST candidates.

- The candidates who are employed and wish to do Ph.D. under Part-time Research Scholar (PRS) category must submit SPONSORSHIP / NO OBJECTION CERTIFICATE from the employer at the time of admission, without which admission will not be possible.
- Check the following documents are attached to the application form:
 - Proof of Payment
 - Self-attested copy of SSC in support of Date of Birth
 - Self-attested copy of intermediate /(10+2) Certificate
 - Self-attested copies of Degree certificates and Mark Memos of the all qualifying examinations
 - Self-attested copy of the caste certificate (in case of SC/ST candidates)
 - For OBC candidates, self-attested copy of OBC certificate issued after 31/03/2018 as per the format given in the Annexure-I only is accepted
 - List of publications (if any)

5.0 Important Dates

Advertisement in the Newspapers and Institute website	16/05/2018 (Wednesday)
Last date for receipt of application forms	15/06/2018 (Friday)
Intimation regarding interview call to be posted / uploaded on institute website	22/06/2018 (Friday)
Date of written test and interview at NIT Jamshedpur	06/07/2018 (Friday)
Date of announcement of results	09/07/2018 (Monday)
Date of admission	16/07/2018 (Monday)

Note: Students may require one more days if interview not completed on 06/07/2018.

6.0 GENERAL

- Candidates should specify broad areas of research in the application form
- 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 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 the interview will be uploaded on Institute website only.
- 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 admission to Ph.D. programme for the Autumn Semester 2018-19.
- No separate interview letter / communication will be made to any individual
- All candidates selected for admission shall be required to deposit the Institute fee at the time of admission
- **The application form of the candidate will be acceptable only when he has registered himself, filled on-line application form and paid on-line requisite fee (SBI i-collect).**

Address for Correspondence

Dean (Academic)
National Institute of Technology Jamshedpur
Jamshedpur - 831 014, Jharkhand, India
Telephone: 0657-2374248, 23724245.

ANNEXURE- I

Proforma for Other Backward Class (OBC Certificate)

(CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES 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 Village/Town

_____ district/Division

_____ in the _____ State belongs to the

_____ Community which is recognized as a backward class under:

- 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 19/10/94 published in the Gazette of India Extraordinary Part I Section I No. 163 dated 20/10/94.
- iii) 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 dated 09/03/96.
- v) Resolution No. 12011/44/96-BCC dated 6/12/96 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 11/12/96.
- vi) Resolution No. 12011/13/97-BCC dated 03/12/97.
- vii) Resolution No. 12011/99/94-BCC dated 11/12/97.
- viii) Resolution No. 12011/68/98-BCC dated 27/10/99.
- ix) Resolution No. 12011/88/98-BCC dated 6/12/99 published in the Gazette of India Extraordinary Part I Section I No. 270 dated 06/12/99.
- x) Resolution No. 12011/36/99-BCC dated 04/04/2000 published in the Gazette of India Extraordinary Part I Section I No. 71 dated 04/04/2000.
- xi) Resolution No. 12011/44/99-BCC dated 21/09/2000 published in the Gazette of India Extraordinary Part I Section I No.210 dated 21/09/2000.
- xii) Resolution No. 12015/9/2000-BCC dated 06/09/2001.
- xiii) Resolution No. 12011/1/2001-BCC dated 19/06/2003.
- xiv) Resolution No. 12011/4/2002-BCC dated 13/01/2004.
- xv) Resolution No. 12011/9/2004-BCC dated 16/01/2006 published in the Gazette of India Extraordinary Part I Section I No.210 dated 16/01/2006.

Shri/Smt./Kum. _____ and/or his family ordinarily reside(s) in the

_____ District/Division of _____ State. This is also to certify that he/she does not belong to the Persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the Government of India, Department of Personnel & Training O.M. No. 36012/22/93-Estt.(SCT) dated 08/09/93 which is modified vide OM No. 36033/3/2004 Estt. (Res.) dated 09/03/2004 or the latest notification of the Government of India.

Dated:

District Magistrate/Competent Authority:

Seal

NOTE:

- (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:
 - i) District Magistrate / Additional Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner /Deputy Collector / 1st Class Stipendiary Magistrate / Sub-Divisional Magistrate /Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner (not below the rank of 1st Class Stipendiary Magistrate)
 - ii) Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.
 - iii) Revenue Officer not below the rank of Tehsildar' and
 - iv) Sub- Divisional Officer of the area where the candidate and / or his family resides.
- (c) The annual income /status of the parents of the applicant should be based on financial year ending March 31, 2018.

Declaration /undertaking - for OBC Candidates only

I, _____ Son/Daughter of Shri _____

resident of village/town/city _____ district _____ State hereby declare that I belong to the _____ community which is recognized as a backward class by the Government of India for the purpose of reservation in services admission in Central Government Institutions as per orders contained in Department of Personnel and Training Office Memorandum No. 36012/22/93 – Estt. (SCT), dated 8/9/1993. It is also declared that I do not belong to persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the above referred Office Memorandum, dated 8/9/1993, which is modified vide Department of Personnel and Training Office Memorandum No. 36033/3/2004 Estt. (Res.) dated 9/3/2004 or the latest notification of the Government of India.

I also declare that the condition of status/annual income for creamy layer of my parents/guardian is within prescribed limits as on financial year ending on March 31, 2018.

Place:
Date:

Signature of the Candidate

Declaration/undertaking not signed by Candidates will be rejected