



डा बी आर अम्बेडकर राष्ट्रीय प्रौद्योगिकी संस्थान, जालन्धर—144011
Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY, JALANDHAR - 144011

Admission to PhD (Full Time & Part Time) Programme in Engineering, Sciences, Humanities and Management for the Academic Year 2019-2020 (Session July-2019)

Applications are invited for admission to PhD (Full Time & Part Time) Programme in Engineering, Sciences, Humanities and Management for the Academic Year 2019-2020 (Session July-2019). The Broad areas of Research, Eligibility Criteria, Selection Procedure, Reservation, Teaching Assistantship-cum-Scholarships etc. are given in this advertisement.

How to apply: The link to fill the online application form can be accessed through Institute website www.nitj.ac.in. Please submit separate application forms, if applying for more than one programme. Copy of the application forms duly filled, accompanied by self-attested copies of the relevant certificates/testimonials, along with details of Application Fee of **Rs.1000/- (Rs.500/- for SC/ST/PWD candidates)**, in an envelope which must be superscribed as, “**APPLICATION FOR ADMISSION TO PhD (FULL TIME/PART TIME) IN THE DEPARTMENT OF _____**,” should reach the **concerned ‘Head of the Department’** by the due date as per schedule given in this advertisement.

For more details, the candidates are advised to visit the Institute website www.nitj.ac.in for updates.

Incomplete applications and received after due date (**5:00 PM of 15th May 2019**) or without application fee as applicable/without attested copies of documents/certificates/testimonials shall be rejected during scrutinizing. Application fee shall not be refunded in any case.



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A) Ph D (Full Time, Admission under financial support from NIT Jalandhar and Part-Time without financial support):

Sr. No.	Department Email address of HOD	PhD (Full Time/Part-Time) (Broad Areas of Research)
01	Biotechnology obt@nitj.ac.in	Bioprocess Engineering, Environmental Biotechnology, Microbial Biotechnology, Biomaterials and biopolymers, Tissue Engineering, Nanobiotechnology, Biofilms based bioprocess, Bioremediation, Ecotoxicity of pollutants
02	Chemical Engineering och@nitj.ac.in	Transport Phenomena, New and Renewable Energy, Hydrocarbon Engineering, Environmental Engineering, Chemical Process Safety, Nanotechnology, Process Modelling and Simulation, CFD, Catalysis and Reaction Engineering, Bio - Materials, Polymers, New trends in Chemical Engineering.
03	Civil Engineering oce@nitj.ac.in	Structural Engineering, Geotechnical Engineering, Transportation Engineering, Open Channel Hydraulics, Environmental Engineering, Geo-Environmental Engineering
04	Computer Science & Engineering ocs@nitj.ac.in	Computer Networks, Information Security, Digital Image Processing, Scientific Computing.
05	Electronics & Communication Engineering oc@nitj.ac.in	Autism and Assisted Technologies, Soft Computing, Artificial Intelligence and Machine Learning, Games for Health, Biomedical Signal/Image Processing, Signal/Image Processing, Telemedicine, Digital Signal/Image Processing and Applications, Plant Signalling, VLSI Design, Analog and Digital Design, Nano electronics Devices, Nanoscale Semi conductor Devices, Low Power VLSI Design, Microelectronics, Wireless Communication, Sensor Networks, 5G Communication Systems, Antenna Design, EBG Structure and Meta material, P2P Network, Complex Network, Computer Networks, M2M Communications, Internet of Things, RF Circuit Design, Amplifier Design, Electro magnetic Analysis
06	Instrumentation & Control Engineering oi@nitj.ac.in	Instrumentation and Control, Control Application and Optimization, Biomedical Instrumentation, Sensors and Wireless Sensor Networks, Robotics, Power System Operations and Control, Virtual instrumentation and AI
07	Industrial & Production Engineering oi@nitj.ac.in	Industrial Engineering, Production Engineering and Manufacturing Technology.
08	Mechanical Engineering	Machine Design, Composite Materials, Applied Mechanics, Mechatronics, Robotics, Modeling & Simulation of Physical System, Engineering materials, Tribology, Vibrations, Welding Technology, Heat Transfer, IC Engines, Thermal System Design, Turbo Machinery, Fluid Mechanics, Refrigeration and Air Conditioning, Renewable Energy.
09	Textile Technology otx@nitj.ac.in	Mechanical and wet processing of textiles, Fabric structure- property relationship, Technical Textiles, Fibre Science, Clothing Comfort, Textile Management, Sustainable Textile, Reduction in waste water load in Textile Industry, Garment Technology
10	Humanities & Management ohm@nitj.ac.in	Management Area: General Management, Marketing Management, Human Resource Management, Entrepreneurship Development. Branding, Consumer Confusion. Financial Economics, Stock Market Analysis, Portfolio Management, and Cost Accounting. Green Marketing, Rural Marketing, Marketing Management, Consumer Behaviour and Sustainable Behaviour Humanities Area: Gender Studies, Diaspora, Postcolonial Studies, Comparative Literature, Soft Skills. Literary Theory and Criticism, Psychoanalytic Criticism, Post-Colonization, Lacanian Metacriticism, Foucauldian Discourse Analysis, Marxist Criticism, Structuralism/Poststructuralism, and Schizoanalysis of Literature.
11	Physics oph@nitj.ac.in	Laser Plasma Interaction, Nuclear Physics, Radiation Physics, Particle Physics, Liquid Crystal, Thin Films, Condensed Matter Physics, Nanotechnology
12	Chemistry ocy@nitj.ac.in	Nano- and environment friendly functional smart materials, Ionic liquids and thermodynamic studies, Synthetic organic and inorganic chemistry, Materials chemistry
13	Mathematics oma@nitj.ac.in	Analysis, Operation Research, Applied Mathematics, Algebra, PDEs, Soft Computing.

B) Eligibility Criteria

1) (Full Time & Part Time)

- **Engineering Departments (Sr. No. 01 to 09):** 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.
- **Science Departments:** Master's Degree in appropriate branch of Science with a first class or minimum 60% Marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination.
- **Humanities & Management:** Master's degree in Management/related areas of Management (Commerce, Public Administration, Engineering Law, Mathematics, Statistics, Psychology, Economics, Business Economics, Sociology etc.) with:
 - i) 60% Marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination in Management.
 - ii) 55% marks in Humanities or Social Sciences (or a CGPA of 6.0 on 10 point scale)

Candidates for PhD admission in Sciences Departments must be NET/GATE qualified and in Humanities and Management must be UGC-NET qualified for the award of stipend cum teaching assistantship as per Ministry of HRD norms.

(Relaxation in minimum Percentage/Equivalent Grade Point requirements will be given as per the National Reservation Policy of Government of India).

2) Ph D programmes (Part-Time):

Faculty/Technical/Scientific staff of NITJ; Project staff working under the projects sponsored by MHRD/DST/UGC or some other government agency and coordinated by the institute faculty as certified by the concerned Principal Investigator/Coordinator; External candidates sponsored by Industry/Institute having R & D facility recognized by NITJ having minimum two-years experience and possessing the same academic qualifications as that for Ph.D. regular candidates, are eligible to apply for Ph.D. Programme as a part-time candidate. In-service candidates must have to submit No Objection Certificate from their employer in which it must be stated that they will be relieved at least for six months in a stretch for course work.

Candidate/staff working under the projects at NIT Jalandhar, those having appropriate provisions for salaries and contingency grant for the required duration which are sponsored by reputed industrial organization (s) and coordinated by the NIT Jalandhar faculty as Principal Investigator/Coordinator shall also be eligible for admission to Ph.D. programme only if they have at least two years of remaining period at NIT Jalandhar.

For a foreign national candidate who applies through Ministry of Human Resource Development, Govt. of India, or Indian Council of Cultural Relations, Govt. of India, are eligible to apply provided that they possess the same minimum qualifications as required for Ph D admission in case of Regular candidates.

3) PhD (Full Time) with external fellowships like JRF/DST INSPIRE etc.

Candidate who have already secured funding/fellowship from reputed external agencies like JRF/DST INSPIRE etc. can also apply for admission to PhD (Full Time) programme. These candidates, if selected, will not be provided any fellowship/contingency grant by the Institute

The academic qualifications for PhD (Part-time) programmes/ PhD (Full Time) with external fellowships like JRF/DST INSPIRE etc. are the same as that for PhD (Full Time) as mentioned at Sr.No.B.

C) Admission Procedure

- i. The admission to Ph.D programme (Full Time & Part Time) in all disciplines mentioned in this advertisement shall be made purely on the basis of a "presentation" to be made by the shortlisted applicants in their proposed area of research followed by "interaction" to be conducted by the respective Department Admission Committee.
- ii. Shortlisting of candidates shall be done by Departmental Admission Committee for the process of "presentation and interaction" for the applicants. For this purpose, a screening test shall be conducted by

the respective Departments. Only those applicants who score marks above the cutoff of 40%, i.e. 24 marks out of 60 for General category candidates, and 35% i.e. 21 out of 60 for SC/ST/OBC/EWS/PWD candidates in the screening test shall be eligible for presentation and interaction process. Marks obtained in the screening test shall not be counted for preparation of final merit list of the successful candidates. The details of the Syllabi and Pattern of Examination will be separately notified on the Institute website i.e. www.nitj.ac.in

- iii. The Department Admission Committee for each Department shall recommend the suitable candidates for admission based on its assessment of presentation and interaction. Marks obtained in the screening test shall not be counted for preparation of final merit list of the successful candidates.
- iv. Merely shortlisting of an applicant does not confirm admission to Ph.D. programme. The admission shall be solely based upon performance of individuals during “presentation and interaction”. The Department Admission Committee/Institute reserves the right not to recommend any candidate for admission to PhD in the respective Department if the performance of the shortlisted candidates is not found satisfactory during “presentation and interaction”. The decision of Department Admission Committee (approved by the competent authority of the Institute) shall be final.
- v. The merit list of the selected candidates (based on presentation & interaction) shall be prepared on marks basis. A candidate who scores less than 40 marks (out of 100) for “presentation & interaction” shall not be considered “qualified” for admission to PhD programme and his/her name shall not be recommended for admission by Departmental Admission Committee.

D) Other Issues

- i. An applicant is required to apply on different application forms in case he/she wants his/her candidature to be considered in more than one Department.
- ii. Category (General/EWS/OBC/SC/ST/PWD) once chosen by the applicant in his/her application form shall not be changed at a later stage. Candidate(s) claiming any reservation category (EWS/OBC/SC/ST/PWD) and also General category, should apply on separate application forms for the purpose.
- iii. OBC/EWS Certificate must have been issued on or after **1st April 2019** so that the candidates from creamy layer are identified. No certificate issued before this date shall be acceptable.
- iv. Submission of Result of Qualifying Examination and other documents: For candidates whose result of qualifying examination is awaited, they shall be given provisional admission after an undertaking that they shall submit the result upto **30th September 2019**, failing which their admission shall automatically stand cancelled.
- v. Certificate Checking: The certificates (in original) of all the candidates recommended for admission shall be checked by the individual Department before deposition of fee by the candidates.
- vi. The candidate (in service) applying for full-time PhD programmes need to apply through proper channel. Any application without “No Objection Certificate” from the employer shall not be considered for shortlisting.
- vii. The application without proof of application fee as applicable/self-attested copies of documents/certificates/testimonials shall be rejected and shall not be considered for shortlisting.

E) Reservation

The reservation rules will be followed as per Government of India guidelines prevailing at the time of admission, at the Institute level(i.e. 40.5% for General, 27% for OBC, 15% for SC and 7.5% for ST and 10% for EWS category). The reservation shall be observed at Institute level and not at individual Department level.

F) Teaching Assistantship-cum-Scholarships

Eligible candidates for stipend cum teaching assistantship shall be paid as per instructions issued by Ministry of Human Resource Development (MHRD) **from time to time**.

After the admission in Ph.D. programmes at NIT Jalandhar, stipend cum teaching assistantship (from the Institute under support from MHRD) shall be offered to those admitted Full Time Research Scholars only, who are having:

- (i) Post Graduate Degree in Engineering/Technology at the time of admission (for Engineering Departments) or
- (ii) Post Graduate Degree in Science / Mathematics and have qualified GATE/NET examination (for Sciences Departments) or
- (iii) Post Graduate Degree in Humanities/Management and have qualified UGC-NET Examination (for Management/Humanities streams).
- (iv) In case, the admission is done under some project grant/financial support from other funding agencies, the relevant rules of the funding agency shall be implemented for the disbursement of stipend/scholarship. No financial assistance shall be given by the Institute in such cases. All other criteria of admission to Ph.D. programmes shall remain same for such candidates.
- (v) Stipend-cum-teaching assistantship for Research Scholars admitted to the appropriate discipline under Institute support shall be started from the date when the admitted candidate submits the original degree/provisional degree/result of his/her qualifying examination (**latest by 30th September 2019**).

G) Important Dates

Sr. No.	Activity	Date
1.	Last date for submission of Applications	15.05.2019
2.	Display of list of eligible candidates	20.05.2019
3.	Written Test (in the respective Department. Reporting time 9:00 AM)	27.05.2019
4.	Display of list of candidates eligible for presentation & interaction	27.05.2019 by 4:00 PM in the respective Departments
5.	Presentation/interaction by the candidates who have qualified the test	28.05.2019 and 29.05.2019
6.	Display of list of selected candidates	31.05.2019
7.	Deposition of fee& Registration	15.06.2019
8.	Last date of deposition of fee, registration and commencement of classes	Shall be notified on the Institute Website

All the dates mentioned above are tentative subject to change at any stage by the competent authority. All the candidates interested in seeking admission are requested to visit the Institute website regularly for updates.

- H) All disputes pertaining to the conduct of Entrance Examination and admissions shall fall within the jurisdiction of Jalandhar only.
- I) All admissions will be provisional till these are confirmed subject to medical fitness, payment of all the fees, fulfillment of eligibility conditions, and verifications of certificates by the Academic Section of the Institute. The candidates whose result will be awaited as on date of counselling must have to submit the result (original/revaluation) immediately after its notification but latest by September 30, 2019, failing which the admission may be cancelled.