



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

**Admission to Ph D(Full Time, Part Time & Sponsored) in Engineering, Sciences, Management, English Literature and Linguistic, M Tech\* (Part Time and Sponsored), MBA and M Sc Programmes 2014-2015**  
**Modified and uploaded at 5 pm 28-04-2014**

Applications are invited for admission to Ph D (Full Time, Part Time and Sponsored) in Engineering, Sciences, Management, English Literature and Linguistic, M Tech\* (Part Time and Sponsored), MBA and M Sc programmes in various disciplines for the academic session 2014-15. The details of seats available in the programmes, Eligibility Criteria, Selection Procedure, Reservation, Teaching Assistantship-cum-Scholarships, Broad areas of Specialization etc. are available on Institute website [www.nitj.ac.in](http://www.nitj.ac.in).

**\*The admission to M Tech(Full Time) programme will be conducted through “Centralized Counseling for M Tech/M Plan. Admissions, 2014-CCMT, details are available at [www.ccmt.in](http://www.ccmt.in). For vacant seats (if any) after conduct of CCMT-2014 the details will be available on the institute website and seats will be filled through SPOT Round as per guidelines of CCMT. The vacant seats will be declared on tentatively July 19, 2014 and Spot Round of admission will be managed during the period proposed between July 21-24, 2014.**

**\*The admission are also open for Foreign Nationals/ Persons of Indian Origin/ Non-Resident Indians under Direct Admission of Students Abroad (DASA) Scheme for Undergraduate and Postgraduate Programmes (B.Tech, M.Tech and MBA) for the academic year 2014-15. Details are available at [www.dasanit.org](http://www.dasanit.org).**

**How to apply:** The application form can be downloaded from the institute website [www.nitj.ac.in](http://www.nitj.ac.in). Please submit separate application forms, if applying for more than one programme. Application form duly filled, accompanied by self-attested Photostat copies of the relevant certificates/testimonials, alongwith a crossed demand draft of Rs.1000/- (Rs.500/- for SC/ST candidates) towards “application fee” drawn in favour of “Director, Dr B R Ambedkar National Institute of Technology, Jalandhar” payable at ‘Jalandhar’ should reach the concerned ‘Head of the Department’ by due date as per schedule:

The envelope must be superscripted as “APPLICATION FOR ADMISSION TO \_\_\_\_\_PROGRAMME (FULL/PART TIME) IN THE DEPARTMENT OF \_\_\_\_\_”. Sponsored candidates should send their applications through proper channel. Late applications shall not be entertained. Candidates are advised to visit the institute website: [www.nitj.ac.in](http://www.nitj.ac.in) for frequent updates.

Incomplete applications and applications received after due date (05.00 PM) will not be considered for admissions.

**Dean (Academic)**



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**Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY, JALANDHAR - 144011**

**Admission to Ph D, M Tech and M Sc Programmes 2014-2015**

Applications are invited for the admission to the following Ph D, M Tech\* (Part Time) and M Sc programmes for the academic session 2014-2015:

| <b>DEPARTMENTS</b> |                                  |   |                                     |  |
|--------------------|----------------------------------|---|-------------------------------------|--|
| <b>S.No</b>        | <b>Department</b>                | <b>M Tech (Full-Time)</b>   | <b>M Tech (Part-Time)</b>           | <b>Ph D (Full-Time/Part-Time) (Broad area of specialization)</b>   |
| 1.                 | Biotechnology                    | <b>* The admission to M.Tech (Full Time) programme will be conducted through "Centralized Counseling for M. Tech/M. Plan. Admissions, 2014-CCMT 2014, details are available at <a href="http://www.ccmt.in">www.ccmt.in</a>. For vacant seats (if any) after conduct of CCMT-2013 the details will be available on the institute website_ and seats will be filled through SPOT Round as per guidelines of CCMT. The vacant seat will be declared on July 19, 2014 and Spot Round of admission will be managed during July 21-24, 2014.</b> | Not being offered                   | Bioprocess Engineering, Environmental Biotechnology, Enzyme Technology, Microbial Technology   |
| 2.                 | Chemical Engineering             |   | Chemical Engg (20)                  | Hydrocarbon Engineering, Environmental Engineering, New and Renewable Energy, Transport Phenomena, Multiphase Flow and Reactors, Polymer Science and Engineering   |
| 3.                 | Civil Engineering                |   | Structural & Construction Engg (20) | Concrete Composites, Concrete Technology, Geotechnical and Geo-environmental Engineering, Laminated Composites, Pavement Design, Off-shore Structures, Reliability of Structures, Structural Engineering   |
| 4.                 | Computer Science & Engg          |   | Computer Sc & Engg (20)             | Computer Networks, Scientific Computing, Mobile Computing, Information Security, Numerical Analysis, Optical and Wireless Networks, Software Engineering, Image and Natural Language Processing, Sensor Networks, Radio over Fiber   |
| 5.                 | Electronics & Communication Engg |   | Not being offered                   | VLSI Design, RF Design, Biomedical Signal/Image Processing, Telemetry, Communication, Wireless System Design, Nano Scale Semiconductor Devices   |
| 6.                 | Instrumentation & Control Engg   |   | Not being offered                   | Wireless Network, Bio Medical Instrumentation and Signal Processing, Medical Imaging, Wireless Sensor Network, Applications and Virtual Instrumentation, Power System Operation and Control/ Artificial Intelligence, Artificial in Human Machine Interface, Robotics.   |
| 7.                 | Industrial and Production Engg   |   | Industrial Engg (20)                | Optimization of Production Systems, Human Factors Engineering, Reliability & Maintenance, Sustainable Supply Chain Management, Machining & Metal Cutting, Change Management, Non-traditional Machining, Fracture Mechanics   |
| 8.                 | Mechanical Engg                  |   | Mechanical Engg (20)                | Machine Design, Vibrations, CAD, Finite Element Methods, Composite Materials, Mechatronics, Robotics, System Dynamics & Control, Modeling & Simulation of Physical System, Bio Mechanics, Heat Transfer, Fluid Mechanics, CFD, Combustion Diagnostics, Alternative Fuels for I.C. Engines, Fuel Efficient Engines, Thermal System Design, Alternative Refrigerants, Heat Exchanger Design, Power Plant Engineering, Turbo Machinery, Welding, Renewable Energy, Bulk Material Handling, synthesis of carbon nano tubes and Nano-composite materials. |
| 9.                 | Textile Technology               |   | Textile Technology (20)             | Structure – Property relationship for fibre and fibrous assembly, Mechanics of yarn, Weaving, Knitting and Stitching Process, Comfort and related properties, Testing and process control, Textile Chemical Processing, Waste Water Management, Absorption in Textiles, Non-wovens and Technical Textiles areas including Gas and Liquid Filtration, Medical Textiles, Sportech, Composite and Conductive Textiles, Sewing Threads and Garment Interaction, Seam Characterization, Apparel Production and Quality Control                            |

| S.No. | Department              | PG Programme                                | Ph D (Full-Time/Part-Time)<br>(Broad area of specialization)  |
|-------|-------------------------|---|---|
| 10.   | Humanities & Management | MBA (Full Time)*                            | Entrepreneurship Development & Management, Human Resource Management and Marketing Management, English Literature, Linguistics  |
| 11.   | a) Physics              | M Sc Physics (Full-Time) (31)               | Laser Plasma Interaction, Electromagnetic Field Theory, Nuclear Physics, Radiation Physics, Particle Physics, Liquid Crystal, Condensed Matter Physics  |
|       | b) Physics              | M Tech (Part Time) in Material Science (13) |   |
| 12.   | Chemistry               | M Sc Chemistry (Full-Time) (31)             | Smart Polymers, Environment/Nano Surface Chemistry, Polymers/Organic Chemistry, Bio-inorganic Chemistry, Nano-chemistry/Organic Chemistry, Sensor, Heterogeneous Catalysis, Solution Thermodynamics, Biophysical Chemistry, Ionic Liquids, Coordination Chemistry & its applications. |
| 13.   | Mathematics             | M Sc Mathematics (Full-Time) (31)           | Finite element and Wavelet Methods for Partial Differential & Integral Equations, Elasticity, Micropolar Elasticity.  |

\*For details regarding MBA admission. Please refer to Institute website.

#### A) Eligibility Criteria

##### 1) Ph D programmes (Regular):

**Engineering Departments:** 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 in 10 point scale) in the qualifying examination in Engineering.\*.

**Science Departments:** Master's Degree in appropriate branch of Science with a first class or minimum 60% Marks (or CGPA of 6.5 in 10 point scale) in the qualifying examination in Science\*.

**Humanities & Management:** Master's degree in Management/ related areas of Management (Commerce, Public Administration, Engineering Law, Mathematics, Statistics, Psychology, Economics, Business Economics, Sociology etc.).

1. 60% Marks (or CGPA of 6.5 in 10 point scale) in the qualifying examination in Management.
2. 55% marks in Humanities or Social Sciences (or a CGPA of 6.0 in 10 point scale)

*\*Relaxation in minimum Percentage/Equivalent Grade Point requirements will be given as per the National Reservation Policy of Govt. of India.*

##### 2) Ph D programmes (Part-Time & Sponsored):

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 preferably having 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 of their employer.

Candidate/staff working under the projects, 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.

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 given for Ph D (Regular).

- 3) **M Tech (Full-Time) programmes:** As per CCMT-2014. Please refer to [www.ccmt.in](http://www.ccmt.in)
- 4) **M Tech (Part-Time) programmes:** Bachelor's degree in Engineering/Technology in relevant allied discipline with minimum 60% marks or equivalent grade point and preferably two years of experience.
- 5) **M Tech (Sponsored) programmes:**
- 6) **MBA programme:**
- 7) **M Sc (Full-Time) programme:** Bachelor's degree in relevant discipline with 60% aggregate marks or equivalent grade point. For admission to M Sc in Physics, the candidate must have studied Mathematics as compulsory subject in Bachelor's degree.

#### B) Selection Procedure:

1. The admission to **Ph.D. programme (Full Time, Part Time and Sponsored)** in all disciplines shall be made through an entrance test to be conducted by the respective department. Only those candidates who qualify the entrance test shall be called for interview. To prepare merit list, 80% weightage shall be given to the entrance test score and 20% to the interview.
2. Admission to **M Tech (Full-Time) programmes** will be as per CCMT-2014. Please refer to [www.ccmt.in](http://www.ccmt.in)
3. Admission to **M Tech (Part-Time and Sponsored) programmes** will be based upon the performance (merit) of the candidates in a written test to be conducted in the respective department(s) as per schedule.
4. Admission to MBA Programme will be made on the basis of CMAT (80% weightage), Group Discussion (10% weightage) and Interview (10% weightage).
5. Admission to **M Sc (Full-Time) programmes** will be based upon the performance (merit) of the candidates in the written test to be conducted in the respective department(s) as per schedule.

#### Important:

1. 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 programme.
2. Category (General/OBC/SC/ST) once chosen by the applicant in his/her application form shall not be changed at a later stage. Candidate(s) claiming any reservation category (OBC/SC/ST) and also General category should apply on separate application forms for the purpose. Candidate be advised to bring the certificates issued after January 1<sup>st</sup> 2014 at the time of interview/admission.
3. OBC Certificate must have been issued on or after 1<sup>st</sup> April, 2014 so that the candidates from creamy layer are identified. No certificate issued before this date shall be acceptable.
4. A programme (M Tech – Part Time and M Sc – Full Time) shall be allowed to start only if minimum five (05) students are admitted to that programme. In case less than 05 students will deposit the fee upto the last date then full fee will be refunded to the selected candidates.
5. Tie Break in the case of written test: If the marks obtained by the candidates in the written test are same then the following criterion will be used:
  - i. Candidate having higher score in last qualifying examination shall be given preference.
  - ii. If the score in qualifying examination is same, then the candidate having qualified the examination earlier shall be given preference.
  - iii. If the score in the last qualifying examination is same, then the candidate born earlier shall be given preference.
6. Submission of Result of Qualifying Examination: 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 30<sup>th</sup> September of the calendar year in which admission is being held.
7. Certificate Checking: The certificates of all the candidates recommended for Admission shall be checked by the individual department before deposition of fee by the candidates.
8. Minimum Eligibility marks in Qualifying Examination: As per the past practice and Admission regulations, for general category candidates minimum marks is 60% whereas for SC/ST candidates, 55% marks are prescribed as per Government of India reservation policy.

**Reservation:** The reservation rules will be followed as per Government of India guidelines prevailing at the time of admission.

#### C) Teaching Assistantship-cum-Scholarships:

- (i) **All M Tech (Full-Time) students (GATE qualified)** will be awarded scholarship-cum-teaching-assistantship as per the guidelines of Ministry of HRD (please visit our website [www.niti.ac.in](http://www.niti.ac.in)).
- (ii) **Ph D (Full-Time) students** will be awarded scholarship cum teaching assistantship as per the guidelines of Ministry of HRD (please visit our website [www.niti.ac.in](http://www.niti.ac.in)). **The scholarship cum teaching assistantship are limited subject to availability of scholarship cum teaching assistantship,**

otherwise candidate may be consider for full time without scholarship cum teaching assistantship. The selected candidate(s) without scholarship cum teaching assistantship is required to submit undertaking on judicial stamp paper that they will not claim scholarship cum teaching assistantship from the Institute in future. However, they can submit research proposal to different funding agencies or they can apply to different outside funding agencies for scholarship.

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**Incomplete applications and applications received after due date (05:00 PM) will not be considered for admissions.**

**Note:** Those candidates, who are appearing in the final year/final semester of their qualifying examination in the year 2014 may also apply provided they are able to submit their final/confidential result meeting ‘eligibility criteria’ as mentioned above, latest by **September 15, 2014 (Tuesday)**, failing which their admission will be automatically stands cancelled, and the seat shall be offered to the Candidate(s) in waiting list.

#### **Important Dates (Tentative)**

|  | <b>Ph D</b>                                  | <b>M Tech<br/>(Part-Time) *</b> | <b>MBA</b> | <b>M Sc</b> |
|--|--|---------------------------------|------------|-------------|
| <b>Last date for submission of Application form</b>                              | 26.05.2014                                   | 26.05.2014                      |            | 26.05.2014  |
| <b>Display of list of eligible candidates</b>                                    | 02.06.2014                                   | 02.06.2014                      |            | 02.06.2014  |
| <b>Written Test (9.00 a.m.)</b>  | 05.06.2014                                   | 05.06.2014                      |            | 05.06.2014  |
| <b>Interview/presentation for Ph D candidates who qualified the written test</b> | 16.07.2014,<br>17.07.2014<br>&<br>18.07.2014 | N.A                             |            | N.A.        |
| <b>Display of list of selected candidates</b>                                    | 21.07.2014                                   | 06.06.2014                      |            | 06.06.2014  |
| <b>Deposition of Fee</b>   | 28.07.2014                                   | 07.07.2014                      |            | 07.07.2014  |
| <b>Registration/Commencement of regular classes</b>                              | 30.07.2013                                   | 15.07.2014                      |            | 15.07.2014  |

All the dates mentioned above are tentative subject to change at any stage by competent authority. All the candidates interested for admission are requested to kindly see the website regularly for any change in date.

The details for admission to MBA Programme are available on website separately. For any clarification please contact concerned Head of the Department.

**Dean, Academic**