

# डा बी आर अम्बेडकर राष्ट्रीय प्रौद्योगिकी संस्थान, जालन्धर—144008 Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY, JALANDHAR - 144008

# Admission to PhD (Full-Time and Part-Time) Programme in Engineering, Sciences, Humanities and Management for the Academic Year 2025-2026 (Session July, 2025)

Applications are invited for admission to various PhD (Full-Time and Part-Time) Programme in Engineering, Sciences, Humanities and Management for the Academic Year 2025-2026 (Session July, 2025).

S.	PhD Program	Remarks			
No.					
1	Ph.D. Full-Time (REGULAR)	(i) Candidates who have qualified GATE/UGC- NET/Inspire Fellows are eligible to apply for these programs without appearing in the National Level test			
2	Ph.D. Full-Time (SPONSORED)	for admission to PhD programs conducted by NIT Jalandhar. These candidates after verification of their eligibility by the concerned departments/centre will be			
3	Ph.D. Full-Time (SELF-SPONSORED)	called for Interview/presentation. (Further details are available in this advertisement).			
4	Ph.D. (Part-Time EMPLOYED/EXTERNAL)	(ii) Candidates who are not GATE/NET qualified can also apply for the admissions. NIT Jalandhar will conduct a National Level test for admission to PhD programs as			
5	Ph.D. (Part-Time) PROJECT STAFF)	per the schedule in this advertisement. Candidates who qualify the test will be eligible/shortlisted to appear in Interview/presentation to be conducted by departments. (Further details are available in this advertisement- Institute fellowship will be awarded as per clause B1(ii) of this advertisement).			
6	Ph.D. (Full-Time) with external fellowships like JRF/DST INSPIRE etc.	The candidate who has already secured funding/fellowship from reputed external agencies like JRF/DST INSPIRE etc. can apply for admission to Ph.D. (Full-Time) programme under this category.			

The Broad areas of Research, Eligibility Criteria, Selection Procedure, Reservation, Teaching Assistantship-cum-Scholarship, etc. are also given in this advertisement.

shortlisting/eligibility based upon any Tests above, of an applicant does not confirm admission to Ph.D.

**How to apply:** The link to fill the online application form can be accessed through Institute website <a href="www.nitj.ac.in">www.nitj.ac.in</a>. Please submit separate application forms, if applying for more than one programme. An application fee of Rs.1000/-(Rs.500/- for SC/ST/PWD candidates) is required to be paid online. The candidates are required to apply online and there is no requirement to send the Hard Copy of the application form to the Institute. Application fee shall notbe refunded in any case.

- $1. \ Submission \ of online \ application \ form \ is \ from \ 07.04.2025 \ to \ 24.04.2025 \ for \ GATE/JRF/UGC \ NET/INSPIRE \ Fellows/any \ other national level fellowship holder$
- 2. Submission of online application form is from 22.04.2025 to 11.05.25 for Non-GATE/Non UGC-NET etc. candidates under National Level test to be conducted by NIT Jalandhar. Detailed guidelines/norms for the conduct of National Level test will be updated on the institute website. Candidates are therefore advised to regularly visit institute website <a href="www.nitj.ac.in">www.nitj.ac.in</a>

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





# Admission to PhD (Full-Time and Part-Time) Programme for the Academic Year 2025-2026(Session July, 2025)

# A) BROAD AREAS OF RESEARCH - Ph.D. (Full-Time, Part-Time)

Sr.	Department	Broad Areas of Research
No.	Email address of HOD	
01	Biotechnology obt@nitj.ac.in	Bioprocess Engineering, Biological hydrogen production, Microbial and Environmental Biotechnology, Biorefinery, CFD simulation, Bioseparation Engineering, Nanobiotechnology, Bioinformatics, Biofilms, Wastewater treatment, Bioremediation, Bioprocess and Bioreactor Design, Biofuels, Enzyme and Protein Engineering, Industrial Biotechnology, Enzyme Technology, Algal biotechnology, Biosynthesis of value-added chemicals, Biomaterials, Tissue Engineering, Waste Valorization, Computational Biology, Drug Delivery System, Biopolymers, Bioplastic, Aerogels / hydrogels, Proteomics, Membrane technology, fermentative production of primary and secondary metabolites, biosensors, Food Biotechnology
02	Chemical Engineering och@nitj.ac.in	CO2 sequestration, climate change, waste management and utilization, polymer films and coatings, modelling and simulation, environmental engineering, reaction engineering Wastewater Treatment, Nanomaterials, Waste Management, Biomass to value added products, catalysis, Environmental pollution, Thin film polymeric coatings, antimicrobial coatings, Coatings for energy and environment, hydrogen energy, composites, Waste to Energy, Environment Engineering, Safety, Photo catalysis, Advanced Oxidation Processes, Chemical Process Design, Transport Phenomena, Nanotechnology, Graphene, New and Renewable Energy
03	Civil Engineering oce@nitj.ac.in	Geotechnical Engineering, Structural Engineering, Transportation Engineering, Environmental Engineering, Water Resources Engineering, Construction Engineering & Management
04	Computer Science & Engineering ocs@nitj.ac.in	Mobile Edge Computing, Vehicular Networks, SDN/NFV, Safety-critical system design, Real-time scheduling theory, Real-time systems, Real-time computer vision applications, Data Science, Probabilistic Data Structures, Machine Learning, Image Processing, Cyber Warfare, Security, Artificial Intelligence, IoT, Cyber Physical System, Post Quantum Cryptography, Deep Learning, Software Systems, Numerical Computing, Computer Networks and Information Security, Time Series Forecasting, Deep Learning, Renewable Energy, Drone Vision, Lightweight Deep Learning, Computer Vision, Medical Image Processing, Numerical Computing, Software Engg, Information Retrieval, NLP, Social Network, Recommendation System, Edge and cloud computing, IoT, Wireless sensor network, Cyber Security using Deep learning, Steganography, Information-Centric Networking, 5G, D2D communication, UAV Path Planning, Communication System, pattern recognition, Data Mining, Empirical Software Engg., Oppnets
05	Electrical Engineering oee@nitj.ac.in	High Voltage Engineering, Electricity Markets, Microgrids, Power Electronics, Electric Drives, Electric Vehicle Charging System, BMS, Renewable energy systems, Power System Planning, Numerical Methods in Electrostatics and Insulation Engineering, Power System Transients, Power Quality, Control systems, Modeling and simulation of energy storage systems, Smart Grid, Cyber Security, Reliability Engineering, Application of Power Electronics in Power Systems, Electric Vehicle Technology
06	Electronics & Communication Engineering  oec@nitj.ac.in	Antenna, Electromagnetic Application for Biomedical Antennas, Machine learning, AI, Signal Processing, Acoustics and Audio, Filters, Biomedical signal and image processing, Machine learning and deep learning, RF Circuits Design and Antennas, Nanoscale devices, Low power VLSI Design, Wireless Communication Systems., Signal Processing, Plant signalling, Machine learning, Communication Network, AdHoc Networks, Computer Networks, Internet of Things, M2M Communications, RF and Microwave Circuit Designing, High frequency devices, Biomedical signal and image processing, Memory Design
07	Information Technology oit@nitj.ac.in	Artificial Intelligence, Machine Learning, Metaheuristics, Bioinformatics, Image Mining, Soft Computing, Cloud Computing, Sensor Networks, IoT, Big Data Analytics, Body Area Networks, Fog Computing, Edge Computing, Image Processing, NLP, Blockchain, Federated Learning, XAI, Cyber Security, Digital Forensic. Applied Data Science, Smart Agriculture, AI assisted, Environment Sensing, Data Science,

Sr. No.	Department Email address of HOD	Broad Areas of Research
		Medical Image and video Analysis, Computer vision
08	Instrumentation & Control Engineering oic@nitj.ac.in	Biomedical engineering and application, Signal and image processing, Physiological control system, Robotics, sensors, Artificial intelligence, Industrial Automation, Virtual Instrumentation, Cyber physical systems, Computer Vision/Digital Image Processing/Machine Vision and WSN-IoT, Renewable energy, Power system engineering, Biomedical Engineering and applications, Process control, Optimization Techniques, Cognitive science, Signal and image processing, Drone technology, Control system, Computer Vision, Power system engineering, Electrical vehicles, Cyber security, Physiological control system, Ultrasonic Instrumentation, Low temperature instrumentation, Biophotonics, Optical instrumentation
09	Industrial & Production Engineering oie@nitj.ac.in	Operations And Supply Chain Management, Ergonomics & Human Factors Engineering, Occupational Health and Safety, Non-Conventional, Energy (Solar) And Sustainability, Additive Manufacturing, Super hydrophobic Surfaces, Thermal Spray Coatings, Tribology Optimization of Manufacturing Systems, Operations and Industrial Management, Sustainable Manufacturing, Machining, Optimizing Techniques, Agriculture Machining, Life Cycle Assessment, Performance Optimization of Manufacturing Systems (CMS, FMS, RMS), Internet of Things (IoT), Numerical and Experimental Investigation of Additively Manufactured Super alloys, Modeling of Manufacturing Processes, Data Analytics, Industry 4.0, Advanced Manufacturing, Magnetic abrasive finishing, 3d printing of Composites, Composite fabrication, Microwave Sintering, Welding Technology, Tribology, EDM wirecut, Surface Coating, Surface Engineering, Thermal Texturing, Phase field modelling of Additive Manufacturing
10	Mechanical Engineering ome@nitj.ac.in	Robotics, Mechatronics, System Dynamics & Control, Modeling and Simulation of Physical System Dynamics, Biomechanics, Bond graph, Combustion and Heat transfer, Composite Material, renewable energy, Welding Technology Materials, Joining of materials creep, Thermal Polygeneration, Solar Energy, Thermal Energy Storage, Refrigeration & Air Conditioning, Heat Exchangers, Welding, Vibration, Alternative Fuels for Combustion Engines, IC engine Emission Control, Engine Combustion Investigations, Fuel Efficient Engines, Low Temperature combustion, Fluid Flow and Heat Transfer, Molecular dynamics, Finite element methods, Modal Analysis, Microwave processing of materials, Vibration engineering, Metal-Matrix, composite materials fracture mechanics, Damage Mechanics, Ballistic Impact Analysis, FEM, CAD, Machining, Hybrid Processes, Additive Manufacturing, Welding Technology, Surface Engineering, Computational Fluid Dynamics, MEMS Design and Microchannel Heat Sink, Optimization of Thermal Devices and Energy Management, Nanofluids and Nano-Enhanced Phase Change Materials in PV/T system, Battery Thermal Management System, Building integrated Photovoltaic systems, Cryogenics, Energy efficiency and Thermal Comfort in Buildings, Nanotechnology Applications in Solar Energy, Product Design and Innovation, Advanced Hybrid Manufacturing Processes and Technologies: Dieless Manufacturing, Additive Manufacturing; Friction Stir Welding; Computer Aided Design and Analysis: Topology Optimization, Biologically Inspired Design, Bio-CAD, Fluid flow and Tribology, Thermal Engineering, Optimization of thermal systems, CFD & Heat Transfer, Microchannel, thermal storage (PCM)
11	Textile Technology otx@nitj.ac.in	Technical Textiles, Fabric Structure-Property Relationship, Nonwoven Textiles, Textile Management, Sewing thread-garment interaction, Geotextiles, Yarn Manufacturing, Apparel Quality Characterization, Medical Textile, Textile Wet Processing of Fibre, Speciality Finishes such as Antibacterial, UV Protective, Bioprocessing in Textiles, Spun Yarn Technology, Dyeing of Textile Materials with Natural Dyes, Garment Design, Textile Chemistry Fibre, Gel-spun Fibre, Nano Composite Fibre, UHMWPE Tape, High Performance Fibre Protective Textiles, Shear Thickening Fluid, Laminates, Natural Fibre Reinforced Composite, Biodegradable Composite, Textile Waste Upcycling, Advanced Three Dimensional Textile Structure, 3D Weaving and 3D Braiding Machine Design and Development, Strain Monitoring Sensors, Conductive Textile, Polymers, Porous Polymeric Material, Polymer Composites, Smart Textiles, Shape Memory, Knitting.
12	Humanities & Management ohm@nitj.ac.in	Areas of specialization in Humanities: Sociolinguistics, English Literature and Language, Folklore Studies, Gender Studies, Ecofeminism, Feminism, Culinary Fiction, Literature from the Margin English Language, ELT, Professional Communication, Culture Studies, Postcolonial Theory, Comparative Literature and Media Studies
12	Management	Composite Fibre, UHMWPE Tape, High Performance Fibre Protective Thickening Fluid, Laminates, Natural Fibre Reinforced Composite, Composite, Textile Waste Upcycling, Advanced Three Dimensional To 3D Weaving and 3D Braiding Machine Design and Development, Str. Sensors, Conductive Textile, Polymers, Porous Polymeric Mat Composites, Smart Textiles, Shape Memory, Knitting.  Areas of specialization in Humanities:  Sociolinguistics, English Literature and Language, Folklore Studies, Ecofeminism, Feminism, Culinary Fiction, Literature from the Margin English Language, ELT, Professional Communication, Culture Studies

Sr. No.	Department Email address of HOD	Broad Areas of Research
		General Management, Human Resource Management, Marketing Management, Entrepreneurship Development and Management, Green Marketing, Sustainable Purchase Behaviour, Brand Management, Services Marketing, Rural Marketing and Retail Marketing, Financial Distress Prediction, Bankruptcy Prediction, Crowdfunding, Corporate Finance, Emerging areas of Finance, Green Finance, Corporate Finance, Climate Finance, Stock Markets, Sustainable Finance and Accounting SDGs/ESG and Performance Behavioural Finance, Financial Economics, Fintech, Financial Management, Corporate Governance, Intersection of Economics, Trade and/or Finance, Finance Analytics.
13	Physics oph@nitj.ac.in	Laser Plasma Interactions, Theoretical Nuclear Physics, Radiation Physics, Experimental Nuclear Physics, Nanomaterials and Nanotechnology, Theoretical High Energy Physics, Soft condensed matter Physics (liquid crystals), Nanomaterials, Condensed Matter Physics (Experimental), Theoretical High Energy Physics, Experimental Condensed Matter Physics, High Energy Physics, Theoretical Condensed Matter Physics, Quantum Thermodynamics
14	Chemistry ocy@nitj.ac.in	Smart Materials, Drug delivery, Nanocomposites, Hydrogels as sensors, Inorganic chemistry, Nanochemistry, Coordination chemistry, Computational Chemistry, organic synthesis, Nano synthesis, Synthesis of Fluorescent organic Materials and nanomaterials for chemo sensing., Nanomaterials for hydrogen evolution, Green and sustainable nanotechnology; green fabrication of nanomaterials; Environmental remediation; sensing and removal of organic analytes, Inorganic Chemistry/Supramolecular Chemistry, Ionic liquid, smart wettability surfaces, oilwater separation, Organic synthesis, Inorganic chemistry - Coordination polymers for energy and environmental applications, Inorganic chemistry, Nanochemistry, Physical Chemistry, Computational Chemistry
15	Mathematics and Computing oma@nitj.ac.in	Partial Differential Equations, Hyperbolic Conservation Laws, Real Analysis, Fractal Geometry, Fractal Functions, Fixed Point Theory and Applications, Computer Aided Geometric Design, Quantization, Numerical analysis, Numerical methods for PDEs, Machine Learning, Operations Research ,Solid Mechanics, Differential Equations with application in control Theory, Fluid Dynamic, Neural Networks for solving ODE/PDEs, Soft Computing, Deep learning, Statics (Time Series Forecasting), Evolutionary Algorithms, Explainability of AI Models
16	Centre for Energy and Environment  ocee@nitj.ac.in	Environmental and sustainability, Biofuels and Bioproducts, Waste to energy, Solid waste Management, New and Renewable Energy, Waste to Bio-hydrogen, small-scale stationary hydrogen production, wearable devices in healthcare. Membrane Separation, Process Safety, Biomaterials, Robust and Resilient Control Design, Machine Learning, Reinforcement Learning, Cyber Physical System & Control, RESs, MicroGrid, Modern Power System Operation, Stability & Control, Power Electronics Converters, EV, 3D woven preforms and their composites for automobiles and drones, Condition monitoring of transformers, Acoustic emission partial discharge, Life time estimation of cables, Harmonic effect on tree growth of cables, Generative AI for T-F images, Uncertainty Quantification, IoT/Blockchain/AI/ML enabled applications for energy and environment,
17	Sports and Healthcare Research Centre  arunangshu@nitj.ac.in	Biomedical signal and image processing, machine Learning and Deep learning algorithms, Biophotonics, Wearable ultrasound devices, Photoacoustics, Biosensors, Laser generated ultrasound sensing and imaging systems for cancer diagnostics, Biomaterials, Tissue Engineering, Nano-Biotechnology, Waste Valorization, Computational Biology, Drug Delivery System, 3D Printing, Nanomedicine, Digital Signal Processing and Its Applications, DSP in VLSI Circuits, Control Applications in medical applications, Biomedical Instrumentation and Machine Learning; computational and experimental approaches for rehabilitation; Ayurveda and Biomedical Engineering, Medical Textiles & Healthcare Applications, Compression & Recovery Textiles, Sports Textiles, ML and DL in Healthcare, Sports Biomechanics, Rehabilitation Engineering, Muscle fatigue analysis, Assistive devices and prosthetic device development, Algal biotechnology, Anaerobic digestion, Bioprocess Engineering, Biosynthesis of value-added chemicals, Biofilms, Food and nutrition, Wearable Health Technologies, Human Activity Recognition, Computer/Machine Vision, Artificial Intelligence based Health Care System, Hybrid Manufacturing for Biomedical Application
18	Centre for Reliability Improvement in Industry ocrii@nitj.ac.in	Smart Grids, Power System Deregulation, Electrical Engineering, Operations and Supply Chain Management, Non-Conventional and Sustainability, Operations and Industrial Management, Reliability and Maintenance Engineering, Electric Vehicle, Bio-electrical Engineering.

#### B) Eligibility Criteria

#### 1) Ph.D. Full-Time (REGULAR)

- (i) Educational Qualifications-
- (a) PhD in Engineering Departments (Sr. No. 1 to 11 & 16):
  - Master's Degree in Engineering/Technology/Science in the relevant area of research along with a Bachelor Degree
    with first-class or minimum 60% marks or minimum CGPA of 6.5 on a 10 point scale or equivalent in the
    qualifying examination.
  - For all Engineering Departments (Sr. No. 1 to 11 & 16), direct Ph.D. admission is also available in case of candidates with B Tech/B.E./BS (4 year)/department specific eligibility as per Annexure -I with a CGPA of 8.5 and above on a 10-point scale or 80% aggregate from a Centrally Funded Technical Institute (CFTI). All such candidates must have **valid GATE score**. For these candidates, the number of credit courses to be cleared will be 24 credits before the comprehensive examination
- **(b) PhD in Science Departments:** Master's degree in Science/Engineering/Technology in a relevant area with a first-class or minimum 60% marks or minimum CGPA of 6.5 on a 10 point scale or equivalent in the qualifying examination.
- (c) PhD in Humanities and Social Sciences/Management: Master's degree in a relevant area with at least 60% marks or a CGPA of 6.5 on 10 point-scale equivalent in the qualifying examination.

(DETAILED DEPARTMENT SPECIFIC EDUCATIONAL QUALIFICATIONS ARE LISTED IN ANNEXURE-I of this Advertisement)

(ii) ESSENTIAL REQUIREMENTS FOR AWARD OF INSTITUTE FELLOWSHIP/FINANCIAL ASSISTANTSHIP-

Following candidates are eligible for Fellowship from the institute/ from the external funding agency -

- a) Candidates with ME/MTech or equivalent degree having qualified GATE examination.
- b) The candidates with four-year Bachelor's degree (BE/B.Tech./B.Des. or equivalent) as qualifying degree must have a **valid and qualifying GATE score.**
- c) The candidates with MSc as qualifying degree must have valid and qualifying GATE score or valid CSIR-NET(JRF)/UGC NET, INSPIRE/NBHM-PhD qualification, etc.
- d) The candidates having MA in Humanities and Social Sciences subjects or /equivalent/commerce/Management Degrees must have valid UGC-NET qualification.
- e) Candidates with ME/MTech qualifications who qualify National Level test conducted by NIT Jalandhar for admission to PhD full time program (Session July 2025) in Engineering Departments/Centres, and are recommended by interaction/interview committee, will also be awarded Institute Fellowship.

#### **2)** Ph.D. FULL-TIME (SPONSORED)

- (i) A candidate in this category is sponsored by a recognized R&D organization, academic institution, government organization or industry for doing research in the Institute on a fulltime basis. The Institute does not provide any fellowship to such a candidate.
- (ii) The candidate under this category must be a regular employee of his/her organizationwith at least one year of experience at the time of applying and be engaged in professional work in the discipline in which admission is sought.
- (iii) The candidate should submit Sponsorship Letter from the employer along with the application. The application without Sponsorship Letter will NOT be considered.
- (iv) Appearing & Qualifying the National level PhD admission test of NIT Jalandhar (applicable in case of non GATE/non NET/JRF etc candidates) is essential to be shortlisted for interview/presentation.
- (v) The admission to all Ph.D. programmes 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. Mere shortlisting/eligibility of an applicant does not confirm admission to Ph.D. Programme
- (vi) The final admission to the candidates under this category is based on the performance in the written test and/or interview conducted by the concerned academic department/center, academic credentials of the candidates, etc.
- (vii) These candidates, if selected, will not be provided any fellowship/contingency grant by the Institute.

#### **3)** Ph.D. FULL-TIME (SELF-SPONSORED)

- (i) The candidates under PhD Full-Time Self-Sponsored programme will be admitted without financial assistantship from NIT Jalandhar.
- (ii) The students under this category must be able to attend classes regularly as per the schedule of the Institute during the course work and do research work by reporting every day to the supervisor/department.
- (iii) Appearing & Qualifying the National level PhD admission test of NIT Jalandhar (applicable in case of non GATE/non NET/JRF etc candidates) is essential to be shortlisted for interview/presentation.
- (iv) The admission to all Ph.D. programmes 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. Mere shortlisting/eligibility of an applicant does not confirm admission to Ph.D. Programme
- (v) These candidates, if selected, will not be provided any fellowship/contingency grant by the Institute.

#### 4) Ph.D. programmes (PART-TIME EMPLOYED/EXTERNAL):

A RS in this category is a professionally employed person (including the staff of NIT Jalandhar), who pursues the PhD Programme while continuing the duties of his/her service. The Institute does not provide any assistantship/fellowship to such a RS. Such candidates have to submit a "No Objection Certificate" from

their employer, failing which their candidature will not be considered.

- (i) The candidates under PhD Part-Time Employed/External programme are professionally employed persons (including regular employees of NIT Jalandhar) or sponsored by a recognized R&D organization, academic institution, governmentorganization or industry with adequate Research Facilities for doing PhD at NIT Jalandhar. These candidates should be able to complete their course work as per the Institute norms.
- (ii) The candidate under this category must be a regular employee of his/her organizationwith at least one year's of experience at the time of applying and be engaged in professional work in the discipline in which admission is sought.
- (iii) The PhD student under external category may be carry out the PhD Thesis ResearchWork mainly at his/her parent organization under a Local Supervisor but with the overall guidance provided by a faculty member (NITJ Main Supervisor).
- (iv) The candidate under this category must be a regular employee of his/her organizationwith at least 1-year of experience at the time of applying and be engaged in professional work in the discipline in which admission is sought.
- (v) They should submit No Objection Certificate from the employer along with the application. The application without No Objection Certificate will NOT be considered.
- (vi) Appearing & Qualifying the National level PhD admission test of NIT Jalandhar (applicable in case of non GATE/non NET/JRF etc candidates) is essential to be shortlisted for interview/presentation.
- (vii) The admission to all Ph.D. programmes 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. Mere shortlisting/eligibility of an applicant does not confirm admission to Ph.D. Programme
- (viii) These candidates, if selected, will not be provided any fellowship/contingency grant by the Institute.

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 incase of Regular candidates.

#### 5) Ph.D. (Full-Time) with external fellowships like JRF/DST INSPIRE etc.

The candidate who has already secured funding/fellowship from reputed external agencies likeJRF/DST INSPIRE etc. can also apply for admission to Ph.D. (Full-Time) programme. These candidates, if selected, will not be provided any fellowship/contingency grant by the Institute.

# 6) Ph.D. (PART-TIME PROJECT STAFF) for candidates/staff working under the Research Projects sponsored by MHRD/DST/UGC or some other government agency at NIT, Jalandhar/any other institute

Candidates/staff working under the Research Projects sponsored by MHRD/DST/UGC or some other government agency at NIT, Jalandhar/any other institute may pursue PhD under Part Time Category subject to the fulfilment of the following eligibility conditions:

- (i) The candidates under Project Staff and Part Time Category are presently working onsponsored R&D projects at NIT Jalandhar/any other Institute.
- (ii) They pursue PhD programme at the Institute on part time basis.
- (iii) The remaining duration of the project at the time of admission should be at least one year. If the project gets completed before the student completes his/her PhD Programme, then his/her category will be converted to that of SELF-FINANCED unless he/she is absorbed in some other R&D Projects or he/she is granted an fellowship from any other agency.
- (iv) They are not entitled to receive Fellowship from the Institute.
- (v) They should submit No Objection Certificate from the Dean-R&C, NIT Jalandhar/concerned PI of that Institute along with the application. The application without No Objection Certificate will NOT be considered.
- (vi) Appearing & Qualifying the National level PhD admission test of NIT Jalandhar (applicable in case of non GATE/non NET/JRF etc candidates) is essential to be shortlisted for interview/presentation.
- (vii) The admission to all Ph.D. programmes 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. Mere shortlisting/eligibility of an applicant does not confirm admission to Ph.D. Programme
- (viii) These candidates, if selected, will not be provided any fellowship/contingency grant by the

The academic qualifications for the programmes mentioned at Sr. No. 2, 3, 4,5, & 6 will be same as that for Ph.D. (Full-Time) as mentioned at Sr. No. B (1).

**Note 1:** Only primary mode of evaluation (CGPA or percentage) as mentioned in the qualifying degree certificate/mark sheet will be considered while verifying eligibility. Conversion from CGPA to percentage or vice versa given by individual Institute/University will not be allowed

**Note 2:** For the SC / ST / PwD applicants, the eligibility requirement of marks be relaxed by 5%, or by a CGPA of 0.5 (on a 10 point scale) at both the Bachelor's and Master's level.

#### C) Seat Matrix:

The number of seats depends upon the number of available research guides in the Institute, vacancies available with the guide and research infrastructure in the concerned Department. The admission of candidates to Ph.D. programme depends on the expertise available in a department and the willingnessof the candidate to work in the corresponding research areas. The following table shows the tentative number of seats available in various Departments for admission during July-December, 2025 session,however, it is not obligatory for the Institute or concerned Department to fill all the seats mentioned in this matrix. The number of seats may increase/decrease as per the vacancies available at the time of admission.

S. Name of Department			Full Time Institute Fellowship Seats						Part	Part	Total
No.	-	Deptt. wise total seats	UR	OBC- NCL	SC	ST	EWS	Inspire Fellow ship	Time at NITJ	Time under Projects at NITJ	Nos.
1.	Biotechnology	10	4	3	1	1	1	11	05	06	32
2.	Centre for Energy & Environment	09	4	2	1	1	1	02	08	01	20
3.	Chemical Engineering	14	6	4	2	1	1	12	23	07	56
4.	Chemistry	08	3	2	1	1	1	09	06	02	25
5.	Civil Engineering	17	7	4	3	1	2	01	05	00	23
6.	Computer Science & Engineering	20	8	5	4	1	2	15	21	03	59
7.	Electrical Engineering	10	4	3	1	1	1	00	23	00	33
8.	Electronics & Communication Engineering	19	8	5	3	1	2	16	29	05	69
9.	Humanities & Management	05	2	1	1	0	1	14	00	00	19
10.	Industrial & Production Engineering	13	5	4	2	1	1	00	13	00	26
11.	Information Technology	14	6	4	2	1	1	20	24	14	72
12.	Instrumentation & Control Engineering	16	6	5	2	1	2	05	19	05	45
13.	Mathematics and Computing	09	4	2	1	1	1	13	01	00	23
14.	Mechanical Engineering	23	9	6	4	2	2	03	22	03	51
15.	Physics	08	3	2	1	1	1	09	01	04	22
16.	Textile Technology	11	4	3	2	1	1	06	11	07	35
17.	Sports and Healthcare Research Centre	14	6	4	2	1	1	10	17	06	47
18.	Centre for Reliability Improvement in Industry								05		05
	TOTAL	220	89	59	33	17	22	146	233	63	662

NOTE: UR means Unreserved Seats and any candidate can apply under this category of seats subject to the condition that he/she will not be granted any relaxation in the qualifying marks/written test marks etc. meant for the reserved category candidates.

Reservation of the Ph.D. (Full-Time) Institute Fellowship Seats shall be as per Government of India norms and number of seats available in the respective Department. Horizontal Reservation of 5% to PwD candidates in each category (UR, EWS, SC, ST, OBC) shall be applicable

Candidates are advised to apply accordingly. No request for admission to a reserved category seatwhich is 'NIL' as per this advertisement shall be considered.

#### D) Admission Procedure

- i. Candidates with GATE/NET (JRF/LS)/ UGC (JRF/LS) /GPAT/ Inspire etc, need not qualify National level PhD Admission test of NIT Jalandhar. These candidates will be given preference for admission. For all other candidate it is essential to appear and qualify the National level PhD entrance test of NIT Jalandhar. Mere shortlisting of an applicant doesnot confirm admission to Ph.D. Programme. The admission shall be solely based upon the performance of individuals during "presentation and interaction" and availability of the Supervisor in the proposed area of research.
- ii. 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. Mere shortlisting of an applicant does not confirm admission to Ph.D. Programme.
- iii. Shortlisting/eligibility of candidates (other than GATE/NET (JRF/LS)/ UGC (JRF/LS)/GPAT/ Inspire Fellow ) shall be done by Departmental Admission Committee for the process of "presentation and interaction" for the applicants. For this purpose, a National level PhD entrance test shall be conducted by NIT Jalandhar at NIT Jalandhar as per the schedule mentioned in this advertisement. Only those applicants who score marks above the cutoff of 40%, i.e. 24 marks out of 60 for UR 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 test shall not be counted for preparation of final merit list of the successful candidates.
- iv. The Pattern of Examination shall be as of GATE and NET examination. The Screening Test will be of MCQ Mode.
- v. 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 National level PhD entrance test of NIT Jalandhar shall not be counted for preparation of final merit list of the successful candidates.
- vi. 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" and availability of the Supervisor in the proposed area of research. The Department Admission Committee/Institute reserves the right not to recommend any candidate for admission to Ph.D. 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) shallbe final.
- vii. 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 Ph.D. programme and his/her name shall not be recommended for admission by Departmental Admission Committee. The list of recommended candidates for admission to Ph.D. (Full-Time) programme shall be made in order of merit.

#### E) Other Issues

- i. An applicant is required to apply on different application forms by paying separate fee, in case he/she wants his/her candidature to be considered in more than one Department/program.
- ii. Category (UR/EWS/OBC/SC/ST/PWD) once chosen by the applicant in his/her application form shall not be changed at a later stage.
- iii. OBC-NCL/EWS Certificate must have been issued on or after 1<sup>st</sup> April, 2025 so that the candidates from creamy layer are identified. No certificate issued before this date shall be acceptable.
- iv. All the candidates should ensure that they possess the required educational qualification by the last date of submission of the application under this Advertisement.
- 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 Ph.D. programmes need to apply through proper channel. Any application without "No Objection Certificate" from the employer shall notbe 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.

#### F) Reservation

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

#### **G)** 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 as mentioned at B1(ii) above.

- (i) No Teaching Assistantship-cum-Scholarships /Scholarship/Fellowship and Contingency grantshall be given to the candidates admitted as under Part-Time Ph.D. programme. However, Stipend-cum-Teaching Assistantship/Scholarship/Fellowship and Contingency grant to the candidate working under the Sponsored Projects coordinated by the faculty of the institute shallbe given as per the terms and conditions of the project.
- (ii) In case, the provisional 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.
- (iii) Stipend-cum-teaching assistantship for Research Scholars admitted to the appropriate discipline under Institute support shall be started from the date of his/her joining in the Department .

#### Note:

The RS receiving Institute fellowships is required to perform academic duties of 8 hours perweek as assigned by the DPGC.

The RS receiving fellowships from any other external funding agency is also required to perform the academic duties as per the norms of the respective funding agencies.

The continuation of the Institute fellowship or its enhancement is subject to satisfactory academic progress and performance of the assigned duties by the RS as per prevailing norms.

#### **H) Important Dates**

Part-A: For admission under GATE/JRF/UGC NET/INSPIRE Fellows/any other national level fellowship holder

Sr.	Activity	Date
No.		
1.	Submission of Applications (Strictly through Online Mode)	07.04.2025 to 24.04.2025
2.	Last Date of application	24.04.2025
2.	Display of list of eligible candidates by the concerned HOD on the	25.04.2025
	Institute website	
3.	Interview for candidates qualified GATE/JRF/UGC NET/INSPIRE	08.05.2025
	Fellows/any other national level fellowship holder	
4.	Display of list of selected candidates	09.05.2025
5.	Deposition of fee (Online)	12.05.2025 to 22.05.2025
6	Physical Reporting in the Departments/ Document Verification and	23.07.2025-25.07.2025
	Constitution of RACs	
7	Commencement of Classes	28.07.2025

Part-B: For admission of Non-Gate candidates under National Level test conducted by NIT Jalandhar

Sr.	Activity	Date
No.		
1.	Submission of Applications (Strictly through Online Mode)	22.04.2025 to 11.05.2025
Detai	led guidelines/norms for the conduct of National Level test will be upda	ited on the institute website.
Cand	idates are therefore advised to regularly visit institute website <u>www.nit</u>	j.ac.in
2.	Display of list of eligible candidates by the concerned HOD on the	14.05.2025
3.	Institute website	20.05.2025 (Enidov.)
3.	National Level Test (if required, in the New Lecture Theatre, NIT Jalandhar)	30.05.2025 (Friday)
	Through offline (Physical) mode only.	
4.	Display of list of candidates eligible for presentation & interaction (based on written test held on 30.5.2025)	30.05.2025 by 5:00 PM
5.	Presentation/interaction by eligible candidates through test	31.05.2024 (Saturday)
	Through offline (Physical) mode only.	
6.	Display of list of selected candidates	05.06.2025
7.	Deposition of fee (Online)	07.06.2025 to 20.06.2025
8	Physical Reporting in the Departments/ Document Verification and	23.07.2025-25.07.2025
	Constitution of RACs	
9	Commencement of Classes	28.07.2025

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

- I) It is mandatory for all applicants to fill the preferences of prospective supervisors as per the mandatory requirement for admission to Ph.D. Program in the online application form. The research domain of the Faculties is available on the Institute Website <a href="www.nitj.ac.in">www.nitj.ac.in</a> and the candidates can view the same under the Faculty head on the Institute website.
- J) All disputes pertaining to the admissions shall fall within the jurisdiction of Jalandhar only.
- K) 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.

L) Candidates are advised to go through the fee refund policy of the institute. Fee refund rules/policy of the institute is available here:

https://nitj.ac.in/files/1739170167546-FEE REFUND POLICY.pdf

- M) Only applications submitted on the website of the institute (www.nitj.ac.in) with supporting documentation will be considered. Hardcopy applications or applications by email will not be considered.
- N) The admission for this July-December, 2025 session and the award of the Ph.D. degree shall be strictly in accordance with the Ordinances and Regulations for PH.D. PROGRAMME 2023approved by the Senate the copy of which are available on <a href="https://www.nitj.ac.in/template/index.html?id=64ccc1baf936ec1417f91875?category=newpage">https://www.nitj.ac.in/template/index.html?id=64ccc1baf936ec1417f91875?category=newpage</a>
- O) For all purposes, the date of commencement of classes will be treated as the Registration Datefor all admitted students of this July-December, 2025 session.
- P) In case of any urgent requirements/exigencies the interactions may be conducted through online mode for the deserving candidates. The request in this regard will betaken care by the DPGC of the concerned department.
- Q) All the admitted candidates shall be governed by the Ph.D. regulations of the Institute and other instructions issued by the Institute time to time.
- R) The Institute reserves the right to modify or cancel this Advertisement/any part of this Advertisement at any stage.

*-Sd/-*Dean Academic

#### **Detailed Department Specific Educational Qualifications:**

(For Grant of Institute Fellowship conditions mentioned in Section B1(ii) of this advertisement shall apply in all departments)

#### **Bio Technology (Contact Head BT at -hbt@nitj.ac.in for any clarifications)**

- (a) The Candidate should be B.E./B.Tech and/or M.E./M.Tech in the relevant branches of Engineering/Technology out of which either B.E./B.Tech. or M.E./M.Tech should be in Biotechnology/ Environmental Biotechnology/ Biochemical engineering/ Bioengineering/Bioinformatics/ Environmental engineering/ Chemical Engineering/ Biomedical engineering/ Biological science and Bioengineering/ Computational biology or allied areas.
- (b) Apart from above qualification, the Candidate with M.Sc./MS/M.Pharma/MBBS in relevant discipline with GATE/NET/GPAT or any other national level test in Biotechnology/Life sciences/Pharmacy/Medicine are also eligible. This changes in basic qualification is only for the purpose of PhD admission.
- (c) The candidates with GATE/CSIR/ICMR/DBT/ICAR/UGC NET/GPAT or any other Central Government National Level Test do not require to clear Institute written examination for shortlisting towards "presentation and interaction" session. The admission to the Ph.D. programme shall be solely based upon performance of the individual candidates during "presentation and interaction" and availability of the Supervisor in the proposed area of research.
- (d) It is also possible for direct Ph.D admission in case of candidate with B.Tech./B.E./B.S./B.Pharma (4 years) with CGPA of 8.5 and above in a 10 point scale or 80% aggregate from a Centrally Funded Technical Institute. All such candidates must be GATE/CSIR/ICMR/DBT/ICAR/UGC NET/GPAT qualified.
- (e) The M.E./M.Tech/M.Pharma candidates without GATE/NET/GPAT or any other Central Government National Level Test need to clear Institute written examination for shortlisting towards "presentation and interaction" session. Once selected based on the "presentation and interaction" session, they can join in Ph.D. (part time) programme without stipend.

#### Chemical Engineering (Contact Head CH at -hch@nitj.ac.in for any clarifications)

#### Full Time (with Institute fellowship)\*

M.Tech. in Engineering/Technology along with Bachelor's Degree in Engineering/Technology

OR

B.Tech. in Engineering/Technology with CGPA of 8.5 and above on a 10-point scale or 80% aggregate from Centrally Funded Technical Institute (CFTI)

OR

M.Sc. in Sciences with JRF-NET/GATE Score

OR

M.Pharm with GATE/GPAT Score.

#### Part time\*

M.Tech. in Engineering/Technology along with Bachelor's Degree in Engineering/Technology

OR

B.Tech. in Engineering/Technology with CGPA of 8.5 and above on a 10-point scale or 80%aggregate from Centrally Funded Technical Institute (CFTI)

OR

M.Tech in Engineering/Technology

OR

MSc in Sciences

OR

M.Pharm

#### Self Sponsored\*

M.Tech. in Engineering/Technology along with Bachelor's Degree in Engineering/Technology

OR

B.Tech. in Engineering/Technology with CGPA of 8.5 and above on a 10-point scale or 80%aggregate from Centrally Funded Technical Institute (CFTI)

OR

MSC in Sciences

OR

M.Pharm

\*Other terms and conditions are as per the Institute norms.

#### Civil Engineering (Contact Head CE at -hce@nitj.ac.in for any clarifications)

#### Candidate with GATE in "Civil Engineering"

1. M.E/M.Tech first class in any discipline

OR

2. B.E/B.Tech in Civil Engineering with minimum CGPA of 8.5 and above on a 10-point scale or equivalent in the qualifying exam.

#### Non-GATE candidates

- B.Tech (Civil Engineering/ Architecture/Agriculture Engineering/ Chemical Engg/Biotechnology/ Mechanical Engg/ Industrial and production Engg/ Energy and Environment Engg/ Computer Engineering/ Artificial Intelligence/ Machine Learning/ Mathematics and Computing/ Remote Sensing/ GIS/ Electronics and Communication Engg/ Instrumentation Engg/ Data Sciences/ Textile Engineering) followed by M.Tech in relevant areas.
- 2. M.Sc (Physics/Chemistry/Maths/Biotechnology/ Geology/ Earth Sciences/ Water Resources/Water Management/ Environmental Sciences/Biochemistry/ Agriculture/ Soil Sciences) followed by M.Tech in relevant area.

#### Computer Science and Engineering (Contact Head CSE at -hcs@nitj.ac.in for any clarifications)

Candidate with qualified GATE in "Computer Science and Information Technology/ Data Science and Artificial Intelligence"/ UGC NET in Computer Science & Applications

1.M.E./M.Tech. first class in any discipline, with UG Degree with first class OR

2.\*B.E./B.Tech. (in any discipline)/ MCA from a Centrally Funded Technical Institute (CFTI) with minimum CGPA of 8.5 and above on a 10-point scale or equivalent in the qualifying examination.

# **Non-GATE Candidates**

 $1.\,M.E./M.$  Tech first class in any of the disciplines mentioned in annexure I, with merit list prepared on qualifying marks in the test conducted by the Institute.

OR

2.\*B.E./B.Tech. in any of the disciplines mentioned in annexure I/MCA from a Centrally Funded Technical

Institute (CFTI) with minimum CGPA of 8.5 and above on a 10-point scale or equivalent in the qualifying examination with merit list prepared on qualifying marks in the in the test conducted by the Institute.

\* This will be a direct PhD admission and therefore, PhD course credit requirement will be different.

Annexure-1	$\dashv$
List of B.E./B.Tech. & M.E./ M.Tech Branches	+
Artificial Intelligence (AI) and Data Science	+
Artificial Intelligence and Machine Learning	_
Computer Engineering (Software Engineering)	+
Computer Science and Applied Mathematics	+
Computer Science and Biosciences	<b>-</b>
Computer Science and Business Systems	
Computer Science and Design	
Computer Science and Engineering (Artificial Intelligence and Machine Learning)	$\perp$
Computer Science and Engineering (Artificial Intelligence)	
Computer Science and Engineering (Cyber Security)	
Computer Science and Engineering (Data Science)	$\perp$
Computer Science and Engineering (Internet of Things and Cyber Security Including Block Chain Technology)	
Computer Science and Engineering (Internet of Things)	
Computer Science and Engineering (Networks)	
Computer Science and Medical Engineering	
Computer Science and Social Sciences	
Computer and Communication Engineering	
Computer Engineering	
Computer Engineering and Application	
Computer Networking	
Computer Science	
Computer Science and Engineering	
Computer Science and Information Technology	
Computer Science and Systems Engineering	
Computer Science and Technology	
Computer Technology	
Computing in Computing	
Computing in Multimedia	
Computing in Software	
Information and Communication Technology	
Information Engineering	
Information Science	
Information Science and Engineering	
Information Technology	
Information Technology and Engineering	
Software Engineering	
Robotics and Artificial Intelligence	$\dashv$
Mathematics and Computing	$\dashv$
Data Science and Engineering	+
Data Delenee and Engineering	_

#### Electrical Engineering (Contact Head EE at <u>hee@nitj.ac.in</u> for any clarifications)

**Master degree:** Applicant must have a Master's degree in a relevant discipline, such as Electrical Engineering including all specializations/Instrumentation and Control (ICE)/ Electronics and Communication Engineering(ECE) /Information Technology(IT) & allied branches

**Bachelor's degree:** Applicant must have a Bachelor's degree Electrical Engineering (EE) / Electrical and Electronics Engineering (EEE)/ Electronics and Communication Engineering(ECE)/ /Instrumentation and Control Engineering(ICE)/ Computer Science and Engineering (CSE) /Information Technology(IT) & allied branches.

GATE qualified in any discipline

#### Electronics & Communication Engineering (Contact Head ECE at <u>-hec@nitj.ac.in</u> for any clarifications)

#### Candidate with GATE in "Electronics and Communication Engineering"

- 1. B.E./ B. Tech. in any discipline/M.Sc Physics/M.Sc Electronics/M.Sc Mathematics and Computing.
- 2. ME/M.Tech/MS/M.Tech by Research in ECE, Signal Processing, Electrical Engineering, VLSI Design, IC or any other relevant areas.

#### Non-GATE Candidates-

1. B.E./B.Tech in any discipline.

And

3. ME/M.Tech/MS/M. Tech by Research in ECE, Signal Processing, Electrical Engineering, VLSI Design, IC or any other relevant areas.

#### Information Technology (Contact Head IT at <u>-hit@nitj.ac.in</u> for any clarifications)

- (i) Master's degree in Engineering/Technology in the relevant area of research with minimum CGPA of 6.5 on a 10-point scale or equivalent in the qualifying examination. The candidates having B. Tech degree in other than CSE/IT must be GATEqualified in CS/IT/Data Science and Artificial Intelligence discipline or must be NET qualified.
  - (ii) Bachelor's degree in Engineering/Technology from a Centrally Funding Technical Institutes (CFTI) with minimum CGPA of 8.5 or above on a 10-point scale or equivalent in the qualifying examination. In such cases, the candidates have to fulfil the requirement of minimum of 24 credits of course work.
  - (iii) MCA with M.Tech. (relevant branch) having minimum CGPA of 6.5 on a 10-point scale having GATE qualified in CS/IT/Data Science and Artificial Intelligence discipline or NET qualified. **OR**
  - (iv) The candidates should have valid JRF(UGC/CSIR) or valid GATE score (CS/IT) and satisfy anyone of the following criteria:
  - a) M.Sc. (CS/IT) with M. Tech (relevant branch) research with minimum CGPA of 6.5 on a 10-pointscale or equivalent in the qualifying examination.
  - b) M.C.A. from CFTI/Top 100 NIRF Institutes in last 2 years with minimum CGPA of 8.5 or above on a 10-point scale or equivalent in the qualifying examination. In such cases, the candidates have to fulfil the requirement of minimum of 24 credits of course work.

# Instrumentation and Control Engineering (Contact Head ICE at <u>-hic@nitj.ac.in</u> for any clarifications)

- (a) Candidates with ME/MTech or equivalent degree in any discipline having qualified GATE examination in any discipline.
- (b) The candidates with four-year Bachelor's degree (BE/BTech or equivalent) in any discipline as qualifying degree must have a valid and qualifying GATE score in any discipline.
- (c) The candidate with MSc as qualifying degree in any discipline must have valid and qualifying GATE score or

valid CSIR-NET (JRF)/INSPIRE/NBHM-PhD qualification, etc in any discipline.

# Industrial and Production Engineering (Contact Head IPE at <a href="https://en.lip.go.in.go.in/">https://en.lip.go.in/</a> for any clarifications)

Candidates with M.Tech. in any discipline and MBA in Operations, Supply Chain Management, Information Technology and Business Analytics will be considered eligible for admission in Ph.D. Programme in the department, provided they are willing to undertake research in relevant areas of expertise available in the Department.

Mechanical engineering (Contact Head ME at -hme@nitj.ac.in for any clarifications)

#### **Full Time (with Institute fellowship)**

**Educational Qualification:** M.E/M.Tech in Engineering/Technology along with Bachelor's Degree in Engineering/Technology in any discipline. All such candidates must be GATE qualified in any discipline.

OR

B.E/B.Tech in Engineering/Technology in any discipline with CGPA of 8.5 and above on a 10-point scale or 80% aggregate from Centrally Funded Technical Institute (CFTI). All such candidates must be GATE qualified.

OR

M.Sc in any discipline with CGPA of 8.5 and above on a 10-point scale or 80% aggregate from Centrally Funded Technical Institute (CFTI). All such candidates must be JRF-NET/GATE Score qualified.

(b) Part Time\*

**Educational Qualification:** M.E/M.Tech in Engineering/Technology along with Bachelor's Degree in Engineering/Technology in any discipline.

OR

B.E/B.Tech in Engineering/Technology in any discipline with CGPA of 8.5 and above on a 10-point scale or 80% aggregate from Centrally Funded Technical Institute (CFTI).

OR

M.Sc in any discipline with CGPA of 8.5 and above on a 10-point scale or 80% aggregate from Centrally Funded Technical Institute (CFTI).

\* Other terms and conditions as per the Institute norm

#### **Textile Technology (Contact Head TT at -htt@nitj.ac.in for any clarifications)**

M.Tech. in Engineering/Technology along with Bachelor's Degree in Engineering/Technology with qualified GATE Score

OR

B.Tech. in Engineering/Technology with CGPA of 8.5 and above on a 10-point scale or 80% aggregate from Centrally Funded Technical Institute (CFTI) with qualified GATE Score

OR

 $M.Sc.\ in\ Textile, Textile\ Design, Fashion\ Design/Technology,\ Clothing\ Science,\ Apparel\ Science/Technology\ with\ qualified\ JRF-NET/GATE\ Score$ 

OR

MBA with qualified NET Score

\*Other terms and conditions as per the Institute norms

Humanities & Management (Contact Head HM at <u>-hhm@nitj.ac.in</u> for any clarifications)

- Humanities:
- **Ph.D.** (English Literature): Master's degree in English or English Language Teachingwith at least 60% marks or a CGPA of 6.5 on 10 point-scale.
- **Ph.D.** (Linguistics): Master's degree in Linguistics or English or English LanguageTeaching with at least 60% marks or a CGPA of 6.5 on 10 point-scale.
  - Management:

**Ph.D.** (Management): Master's degree in Management or Commerce or Economics or Psychology with at least 60% marks or a CGPA of 6.5 on 10 point scale.

The candidates in Humanities and Management must be NET/GATE qualified and must have a valid score for the award of stipend-cum- teaching assistantship as per Ministry of HRD norms and Institute norms.

# PHYSICS (Contact Head PH at <a href="https://en.ph/enitj.ac.in">-hph@nitj.ac.in</a> for any clarifications)

Master's Degree in appropriate branch of Science with a first class or minimum 60% Marks (or CGPA of 6.5on 10 point scale) in the qualifying examination. For getting institute-level Teaching Assistantship-cum-Scholarships, candidates with a Master's degree in science/mathematics/statistics must havevalid and qualifying GATE score or valid CSIR-NET(LS/JRF)/INSPIRE/NBHM-Ph.D. qualification,etc

#### CHEMISTRY (Contact Head CY at -hcy@nitj.ac.in for any clarifications)

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. For getting institute-level Teaching Assistantship cum-Scholarships, candidates with a Master's degree in science/mathematics/statistics must have valid and qualifying GATE score or valid CSIR-NET(LS/JRF)/INSPIRE/NBHM-Ph.D. qualification, etc

#### Mathematics & Computing (Contact Head MC at <u>-hma@nitj.ac.in</u> for any clarifications)

#### Candidates with a valid GATE/NET score in Mathematics/ CSE/IT

- (a) BSc first class and MSc first class in Mathematics/Statistics/Mathematics and Computing.

  OR
- (b) B.E/B.Tech first class and M.E/M.Tech first class in Mathematics and Computing/Computer Science & Engineering/Information Technology/Electronics and Communication Engineering/Mechanical Engineering with minimum CGPA of 6.5 or above on a 10-point scale or equivalent in the qualifying examination or 60% marks.

OR

(c) B.Sc (Computer Science/Information Technology)/BCA first class **and** MCA from Centrally Funded Technical Institute (CFTI) with minimum of 8.5 or above on a 10 point scale or equivalent in the qualifying examination.

OR

(d) BTech in Mathematics and Computing/Computer Science & Engineering/Information Technology/Electronics and Communication Engineering/Mechanical Engineering, from Centrally Funded Technical Institute (CFTI) with minimum of 8.5 or above on a 10 point scale or equivalent in the qualifying examination.

#### **Non-GATE Candidates**

BSc first class and MSc first class in Mathematics/ Statistics/ Mathematics and Computing with merit list prepared based on the test conducted by the Institute.

# **Centre for Energy and Environment**

The Candidate should be B.E./B.Tech and/or M.E./M.Tech in any branch of Engineering/Technology with GATE/NET with a first class or minimum 60% marks(or CGPA of 6.5 on 10 point scale) in the qualifying examination.

Or

Candidates with M.Sc./ MS/ M.Pharma with GATE/NET/GPAT are also eligible with a first class orminimum 60% marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination.

#### **Sports and Healthcare Research Centre**

PhD Full-Time (With Institute Fellowship)

The Candidate should be M.E/M Sc/M Tech/M Pharm/MD/MDS with JRF-NET/GATE/GPAT/ NEET-PG Score in the relevant branches of Engineering/Science/Technology/Medicine, and the degree should be preferably in Medicine/Surgery/Physiology/ Pathology/ Dental/ Radiology/ Biotechnology/ Biomedical Engineering/ Medicinal Chemistry/ Biochemistry/ Sports Sciences/ Rehabilitation Engineering/ Physiotherapy/ Biotechnology/ Biomedical engineering/ Data Science/ Artificial Intelligence/ Health Informatics/ Medical Instrumentation/ Naturopathy/ Nanotechnology/Kinesiology/ Textile Technology/ Applied Machine Learning/ Automation and robotics/ Design/ Material Science/ Instrumentation and Control/ Manufacturing Technology/ Radiation Physics/ Medical Radiation Physics/ allied areas along with Bachelor's Degree in appropriate Engineering/Technology/Science/Medicine with a first-class or minimum 60% marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination.

Or

B.E./B. Tech/B. Pharm/MBBS/BDS in Engineering/Technology/Medicine with CGPA of 8.5 and above on a 10-point scale or 80% aggregate Score from Centrally Funded Technical Institute (CFTI) with the specialization mentioned above with GATE/GPAT/NEET- PG.

Note: Candidates without JRF-NET/GATE/GPAT/ NEET-PG Score will also be considered for PhD Full Time without Institute Fellowship (self-sponsored). The final admission to the candidates under this category (without JRF-NET/GATE/GPAT/NEET-PG Score) is based on the performance in the written test and/or interview conducted by the concerned academic department/center, academic credentials of the candidates, etc.

#### Ph.D. (Part-Time) Programme

Academic qualifications are the same as Full-Time Candidates with/without JRF-NET/GATE/GPAT/NEET-PG Score. The final admission to the candidates under this category (without JRF-NET/GATE/GPAT/NEET-PG Score) is based on the performance in the written test and/or interview conducted by the concerned academic department/center, academic credentials of the candidates, etc.

#### **Centre for Reliability Improvement in Industry**

Eligibility Criteria: M.Tech in Engineering/Technology, in a relevant discipline, Electrical Engineering/Instrumentation and Control/Power Systems and Reliability, and allied branches.

Bachelor's degree: Applicant must have a Bachelor's degree in Engineering and Technology

GATE: GATE (Electrical Engineering/Instrumentation and Control Engineering) qualified candidates will be preferred