



**Admission to PhD (Full-Time and Part-Time) Programme in Engineering, Sciences,  
Humanities and Management for the Academic Year 2024-2025  
(Session January, 2025)**

Applications are invited for admission to PhD (Full-Time and Part-Time) Programme in Engineering, Sciences, Humanities and Management for the Academic Year 2024-2025 (Session January, 2025). The Broad areas of Research, Eligibility Criteria, Selection Procedure, Reservation, Teaching Assistantship-cum-Scholarship, 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](http://www.nitj.ac.in). 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 not be refunded in any case.

**Last date for submission of online application form is 15/11/2024.**

For more details, the candidates are advised to visit the Institute website [www.nitj.ac.in](http://www.nitj.ac.in) for updates.



Admission to PhD (Full-Time and Part-Time) Programme for the  
Academic Year 2024-2025(Session January, 2025)

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

Sr. No.	Department Email address of HOD	Broad Areas of Research
01	Biotechnology <a href="mailto:obt@nitj.ac.in">obt@nitj.ac.in</a>	Bioprocess Engineering, Environmental Biotechnology, Nano Biotechnology, Enzyme Technology, Algal Biotechnology, Industrial Biotechnology, Biosynthesis of value-added chemicals, Bioenergy/Biofuels, Bioprocess and Bioreactor Design, Biohydrogen, Bioprocess Optimization, Bioremediation, Microbial and Environmental Biotechnology, Metabolites and Biorefinery, Bioplastics, Enzyme and Protein Engineering, Biomaterials, Tissue Engineering, Nano- Biotechnology, Waste Valorization, Computational Biology, Drug Delivery System, Aerogels/hydrogels, Environmental Engineering, Bioinformatics, Proteomics, Environmental Remediation, Biofilms, Wastewater treatment, Applied Microbiology
02	Chemical Engineering <a href="mailto:och@nitj.ac.in">och@nitj.ac.in</a>	<u>Core Research Areas:</u> Transport Phenomena, Heat Transfer, Thermodynamics, Biomass to value-added products, Catalysis, Reaction Engineering, Kinetic Modeling, Water Treatment, Hydrocarbon Engineering, Upstream and Downstream Petroleum Technology, Solid Waste Management, Nanomaterials and Nanotechnology, New and Renewable Energy, Functional coatings, Polymers, Polymeric coatings, Process Modeling and Simulation, Membrane Separation Processes, CO2 Sequestration, Edible films and coatings, Green Energy, Waste to Wealth, Coatings for Energy and Environment, Waste to Energy, Photo-catalysis, Photo-Electrolysis of water, Green Hydrogen, Self-Cleaning Cement, Environmental Engineering, Chemical Process Safety, Process Dynamics and Control, Fire Retardant Materials, Hydrogels, Waste Water Treatment, Smart Materials, Polymeric films, Renewable Energy, Energy Technology, Environmental Remediation, Building Materials, Textile Effluent Treatment, Ligno-cellulosic Biomass Valorization, Computational Fluid dynamics (CFD), Non-Newtonian Fluids, Porous Media Flow, Nano-fluids, Bio-inspired adhesives, Microfluidics devices, Colloidal Suspensions, Rheology of Complex Fluids, Complex systems modeling, Biodegradable polymers and composites.
03	Civil Engineering <a href="mailto:oce@nitj.ac.in">oce@nitj.ac.in</a>	Structural Engineering, Geotechnical Engineering, Transportation Engineering, Environmental Engineering, Hydraulics and Water Resource Engineering, Structural Engineering, Geotechnical Engineering, Transportation Engineering, Environmental Engineering, Hydraulics and Water Resource Engineering.
04	Computer Science & Engineering <a href="mailto:ocs@nitj.ac.in">ocs@nitj.ac.in</a>	Probabilistic Data Structures, Data analytics, Machine learning and Algorithms, Mobile Adhoc and Opportunistic Network, AI, Data Science, Forecasting, Mobile edge networks, vehicular networks, wireless networks and edge computing, Cloud Computing Software Engineering, Computer Vision, Digital Image Processing, Information security. Wireless networks, Natural Language Processing, Real time Scheduling Theory, Safety- critical System Design, Mixed- criticality Systems, Cyber Warfare, Computer Vision, Biometric Security, Computer networks, real time system, multimedia communication, flying adhoc network, network security, Wireless Sensor Network Internet of Things, Information Security, Application security, Ransomware, Explainable AI, AdversarialML.

Sr. No.	Department Email address of HOD	Broad Areas of Research
		SDN/NFV, Probabilistic Data Structures, Cyber Physical System, Post Quantum Cryptography, Deep Learning, Software Systems, Numerical Computing, Computer Networks Time Series Forecasting, Renewable Energy, Drone Vision, Lightweight Deep Learning, Medical Image Processing, Information Retrieval, Social Network, Recommendation System, 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 <a href="mailto:oeec@nitj.ac.in">oeec@nitj.ac.in</a>	<p>AI Applications in Smart Grids &amp; Electricity Markets, Energy Storage System, AI-Enabled Toolkits for Multi-Energy Systems, Power System Planning, High Voltage Engineering, 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, Smart Microgrids, (DC/AC/Hybrid), Renewable Energy Sources, Applications of Power Electronics in Power Systems, Distributed Generations, PWM Based Voltage Source Converters, Power Electronics, Motor Control, Multilevel Inverters, DC-DC Converters Design, Fronted Converter, Motor Design, Power Electronics and Drives, Electric Vehicles, Battery Management System.</p> <p>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, Web based applications involving deep learning techniques, AI Applications in Power systems &amp; Electricity markets, Power system, Smart microgrids (AC/DC/HIBRID), Renewable energy systems, Distributed generations, Interconnections of Microgrids, Solar PV technology, Wind technology, Fuel cell technology, Electric vehicle technology, Applications of power electronics (DC-DC, AC-DC, DC-AC converters) in power systems and Electric vehicles, Smart-grids, Power electronics, Design of reduced switch based multi-level inverters, Electric Drives, EV Charger, BMS, PVSystem reliability Engineering, Optimization, High voltage, Dielectric and Theoretical Electrostatics.</p>
06	Electronics & Communication Engineering <a href="mailto:oeec@nitj.ac.in">oeec@nitj.ac.in</a>	Electromagnetic Applications in Biomedical, 5G Communication, RF/Wireless Communications, Human-computer interactions, RF Circuits Design, Biomedical Signal/ Image processing, Signal/ Image Processing, Telemedicine, Healthcare, Digital Signal Processing and Its Applications, VLSI Circuit Design, Nanoscale Devices and Nano electronics, Analog and Digital Design, Low Power VLSI Design, Machine learning, Intelligent Networks Wireless & Adhoc N/W Signal Processing, Antenna Engineering- EBG based antenna, Beamforming Antenna, Aperture Antenna, Conformal Antenna, RF and Microwave components and systems- Filters, couplers, circulator, Communication Network, Machine to Machine Communications, Layer protocols for IoT, MAC Protocols. Assistive Technologies, AI for Healthcare
07	Information Technology <a href="mailto:oit@nitj.ac.in">oit@nitj.ac.in</a>	Explainable AI, Generative AI, Edge computing, Federated learning, Wireless Sensor Network, Bio-Inspired Computing, Data Science, Bioinformatics, AI, Cloud Computing, IoT, Machine Learning, Network Analysis, BlockChain, Optimization, Natural Language Processing, Data Analytics, Body Network, Security.

Sr. No.	Department Email address of HOD	Broad Areas of Research
08	Instrumentation & Control Engineering <a href="mailto:oiic@nitj.ac.in">oiic@nitj.ac.in</a>	Biomedical Instrumentation & Signal Processing, Biomedical Instrumentation, physiological control system, control system & Digital Signal Processing, Digital image processing / Machine vision and DL, WSN, IIoT systems , Smart sensors, Digital agriculture, Smart health care, Intelligent VI system, Renewable Energy, Microgrids, Power System Operation and Control, Machine Intelligence, Applications of Soft Computing, Biomedical Engineering, Brain-computer interface, rehabilitation engineering, Machine Vision, Machine/Deep Learning, Soft Computing & Optimization Techniques, Control and Optimization, Adaptive and Robust Control, Process Design, Robotics and AI, Automation, Mobile Robot Perception and Navigation, Machine/Deep/Quantum Learning for Computer Vision, Unmanned System Technology and Navigation, Applied Soft Computing & Optimization Techniques, Nonlinear process design, integration, control and optimization, Renewable Energy (waste to Bio-fuel), biomedical instrumentation, Machine Learning for biomedical engineering, soft computing in biomedical applications, Model Order Reduction, Control Theory and Applications, Optimization, Robotics, UAVs, Artificial Intelligence, DC-DC Converters and Renewable Energy, Renewable Energy, Control Systems, AI Techniques, Electric Vehicle, Control System, Robotics, AI, Biomedical Signal Processing and Control, Control System Design, Process Control, Renewable Energy, Optimization, Soft Computing techniques for industrial applications, Biomedical Signal Analysis, Machine learning applications to biomedical signals and systems, Biomedical instrumentation, Machine learning, Measurement, and Instrumentation for space applications, Biophotonics, Bioinstrumentation, Laser based instrument development, Photoacoustic imaging and sensing for cancer diagnosis, Biosignal Processing, Laser generated focused ultrasound, AI-assisted technologies for biomedical diagnosis, nanotechnology for biomedical and food-based application, Robust and Resilient Control, Machine Learning, Cyber Physical System & Control, MicroGrid, Modern Power System Operation, control and stability, Electric Vehicles.
09	Industrial & Production Engineering <a href="mailto:oiie@nitj.ac.in">oiie@nitj.ac.in</a>	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, Surface Coating, Tribiology 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, Advanced manufacturing processes, Mechanical behavior of materials, Welding Engineering, Nano-finishing, Additive Manufacturing, Bio Material, Reliability and Maintenance Engineering, Solid Mechanics, Experimental & analytical fracture mechanics, fatigue crack growth

Sr. No.	Department Email address of HOD	Broad Areas of Research
10	Mechanical Engineering <a href="mailto:ome@nitj.ac.in">ome@nitj.ac.in</a>	Robotics, Mechatronics, System Dynamics & Control, Modeling and Simulation of Physical Systems, Biomechanics, Bond Graph, Combustion and Fluid flow and Heat transfer, Combustion and Fluid flow and Heat transfer, Welding Technology, Alternate Propulsion system and technologies, Appropriate Engineering solutions, Startups, Fatigue of composites, Creep of materials, Heat Exchangers, Condensation and Boiling, Solar Thermal Polygeneration and Solar Tracking, Alternative Fuels for Combustion Engines, IC engine Emission Control, Engine Combustion Investigations, Fuel Efficient Engines, Low Temperature combustion, Fluid Flow and Heat Transfer, Vibration Engineering, Microwave Processing of materials, FEM, Thermal and Fluid Sciences, Composite materials, Solar Thermal Technology, Design and Manufacturing, CFD and Heat Transfer, PCM, Solar Energy, Microchannel, Technology for rural development, Flow Fluid and Tribology, Thermal Engineering, Energy Efficiency, Tribology of Composite Materials, Advance Manufacturing sheet metal forming additive manufacturing, Battery thermal management system, Thermal management of electronics devices, Microfluidics and Nanofluidics
11	Textile Technology <a href="mailto:otx@nitj.ac.in">otx@nitj.ac.in</a>	Technical Textiles, Textile material characterization, Nonwoven fabrics, Sewing thread-garment interaction, Geotextiles, Apparel engineering, Yarn manufacturing, Environmental pollution, Quality control in spinning, Structure property relationship in textiles, Medical Textile, Fabric manufacture, Quality control & marketing in textiles, Functional textiles, Sustainable textile wet processing, Bioprocessing in textiles, Garment comfort, Textile waste recycling, 3D weaving and structural composites, Textile based strain monitoring sensors, Gel-spun fibre, Nano composite fibre, UHMWPE tape, High performance fibre Protective Textiles, Shear thickening fluid, Conductive Textile, Textile Chemical Processing, fibers, Polymers, Porous polymers, Shape Memory, Knitting.
12	Humanities & Management <a href="mailto:ohm@nitj.ac.in">ohm@nitj.ac.in</a>	<p><b>Areas of specialization in Humanities:</b></p> <p>English Language, English Language Teaching (ELT), Professional Communication, Culture Studies, English Language and Literature, Folklore Studies, Gender Studies, Ecofeminism, Feminism, Culinary Fiction, Literature from the Margin.</p> <p><b>Areas of specialization in Management:</b></p> <p>General Management, Financial Management, Human Resource Management, Marketing Management and Entrepreneurship Development and Management. Green Marketing, sustainable purchase behaviour, Brand Management, Services Marketing, Rural Marketing and Retail Marketing. ESG and performance measurement, Behavioural Finance, Sustainable Finance/Climate/Green Finance and Accounting, Climate Finance, Financial Economics, Stock Markets, Financial Analytics, Intersection of Economics, trade, and/ or finance, Fintech, Corporate Governance, Financial Distress Prediction, Bankruptcy Prediction, Crowdfunding, Corporate Finance and emerging finance areas.</p>

Sr. No.	Department Email address of HOD	Broad Areas of Research
13	Physics <a href="mailto:oph@nitj.ac.in">oph@nitj.ac.in</a>	Laser Plasma Interactions, Theoretical Nuclear Physics, Radiation Physics, Experimental Nuclear Physics, Theoretical High Energy Physics, Soft Condensed Matter Physics- Experimental (Liquid Crystals), Condensed Matter Physics (Experimental), Theoretical Condensed Matter Physics, High Energy Physics, Experimental Condensed Matter Physics, Quantum Thermodynamics, Nanomaterials and Nanotechnology
14	Chemistry <a href="mailto:ocy@nitj.ac.in">ocy@nitj.ac.in</a>	Smart materials and nanotechnology, Nano- and environment-friendly functional smart materials, Materials chemistry/Surface Chemistry, Smart Polymers, Organic Synthesis, Synthetic organic chemistry, advanced materials for sensing, and hydrogen production; Synthesis, Crystallographic and computational studies of some coordination complexes and advanced materials and their applications in sensing and catalysis; Green nanomaterials fabrication, Wastewater treatment by advanced nanomaterials, Multifunctional Porous Materials (Metal-Organic Frameworks and Covalent Organic Frameworks) for Energy, Environment and Catalysis applications, Nanomaterials for Chemo- and Biosensing and Catalysis, Inorganic Chemistry (Catalytic applications of metal complexes), Supramolecular chemistry (Optical Chemo-sensing Applications), Supramolecular Chemistry, Hybrid nanomaterials for sensing and catalytic applications, Heterocycles, Fluoroorganic Chemistry, Drug delivery, Ionic Liquid, Oil-water separation, smart wettability surfaces, Hybrid nanocomposite materials for catalytic applications
15	Mathematics and Computing <a href="mailto:oma@nitj.ac.in">oma@nitj.ac.in</a>	Statistical Analysis, Statistical Inference, Sampling Techniques and Data Science, Inequalities, Operations Research, Soft Computing, Computational Intelligence Evolutionary Computation, Multi-Objective Optimization, Neural Networks for solving differential equations, Deep learning, Time Series Forecasting, Fuzzy Optimization, Fluid Dynamics, Partial Differential Equations, Hyperbolic Conservation Laws, Real Analysis, Fractal Geometry, Fractal Functions, Fixed Point Theory and Applications, Computer Aided Geometric Design, Differential Equations with Applications in Control Theory, Neural Networks with Applications in Secure Communications, Dynamical Systems, Time Scale Calculus, Machine Learning/ Data Science Applications in Healthcare, Image processing Theoretical and numerical analysis of partial differential equations for linear and non-linear parabolic and hyperbolic PDEs. Solid Mechanics Commutative Algebra, Algebraic Number Theory
16	Centre for Energy and Environment <a href="mailto:oce@nitj.ac.in">oce@nitj.ac.in</a>	Environmental and sustainability, Biofuels and Bioproducts, Waste to energy, Solid Waste Management, New and Renewable Energy, Waste to Bio-hydrogen, Green hydrogen production, Photo-Nano- catalysis, Advanced Oxidation Processes, Waste Water Treatment, 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, Electric Vehicles, Circular Economy, 3D woven preforms and their composites for automobiles and drones, Hydropower system, Condition monitoring of transformers, Acoustic emission partial discharge, Lifetime estimation of cables, Harmonic effect on tree growth of cables, Energy Management, Energy Efficient Solutions with emerging technologies: Wireless sensor networks, Generative AI for T-F images, Uncertainty Quantification, Computer networks, IoT, Blockchain, AI-ML -enabled applications for energy and environment.

## **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-**

Fellowships from the institute, shall be awarded only to candidates fulfilling the following requirements-

- 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)/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**.

**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 full-time 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 organization with 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) 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.
- (v) 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) 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.
- (iv) 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, government organization 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 organization with 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 Research Work 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 organization with 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) 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) The Institute does NOT give any fellowship to the students under this category.
- (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 like JRF/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 on sponsored 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) 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.

**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.

**Note 3: Screening Test-** Candidates with GATE/NET (JRF/LS)/ UGC (JRF/LS) /GPAT/ Inspire Fellow / Sponsored by some outside agency as a full-time candidate need not clear Institute written examination. For all other candidate(s), Institute written examination is to be cleared. However, GATE/NET (JRF/LS)/ UGC (JRF/LS) /GPAT/ Inspire Fellow/ Sponsorship from outside agency or Institute Examinations are only for shortlisting of the applicants. Mere shortlisting of an applicant does not confirm admission to Ph.D. Programme. The admission

### 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 willingness of 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, 2024 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. No.	Name of Department	Full Time Institute Fellowship Seats					DST/JRF/Inspire Fellowship	Part Time at NITJ	Part Time under Projects at NITJ	Total Nos.	
		Deptt. wise total seats	UR	EWS	SC	ST					OBC-NCL
1.	Biotechnology	06	2	1	1	0	2	12	04	04	26
2.	Centre for Energy & Environment	04	2	0	1	0	1	01	09	-	14
3.	Chemical Engineering	12	5	1	2	1	3	10	24	10	56
4.	Chemistry	03	1	0	1	0	1	15	26	02	46
5.	Civil Engineering	13	5	1	2	1	4	11	31	02	57
6.	Computer Science & Engineering	21	9	2	3	2	5	02	17	02	42
7.	Electrical Engineering	08	3	1	1	1	2	-	11	-	19
8.	Electronics & Communication Engineering	16	7	2	2	1	4	03	20	04	43
9.	Humanities & Management	06	2	1	1	0	2	08	11	06	31
10.	Industrial & Production Engineering	13	5	1	2	1	4	09	02	05	29
11.	Information Technology	09	4	1	1	1	2	06	01	04	20
12.	Instrumentation & Control Engineering	14	6	1	2	2	3	16	-	-	30
13.	Mathematics	10	4	1	1	1	3	12	-	01	23
14.	Mechanical Engineering	19	8	2	3	1	5	05	12	01	37
15.	Physics	06	2	1	1	0	2	12	21	07	46
16.	Textile Technology	06	2	1	1	0	2	-	14	-	20
<b>TOTAL</b>		<b>166</b>	<b>67</b>	<b>17</b>	<b>25</b>	<b>12</b>	<b>45</b>	<b>122</b>	<b>203</b>	<b>48</b>	<b>539</b>

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 seat which is 'NIL' as per this advertisement shall be considered.

#### D) Admission Procedure

- i. **Candidates with GATE/NET (JRF/LS)/ UGC (JRF/LS) /GPAT/ Inspire Fellow / Sponsored by some outside agency as a full-time candidate need not clear Institute written examination (Screening Test). For all other candidate Institute written examination is to be cleared.** However, GATE/NET (JRF/LS)/ UGC (JRF/LS) /GPAT/ Inspire Fellow/ Sponsorship from outside agency or Institute Examinations are only for shortlisting of the applicants. Mere shortlisting of an applicant does not 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 of candidates (other than GATE/NET (JRF/LS)/ UGC (JRF/LS)/GPAT/ Inspire Fellow / Sponsored by some outside agency as a full-time candidate) 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 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 screening 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 screening test 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) shall be 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 in case he/she wants his/her candidature to be considered in more than one Department.
- 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, 2024** 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 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.

#### **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 grant shall 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 shall be 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 per week 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

Sr. No.	Activity	Date
1.	Last date for submission of Applications (Strictly through Online Mode)	15.11.2024
2.	Display of list of eligible candidates by the concerned HOD in the Institute website	19.11.2024
3.	Written Test (if required, in the respective Department. Reporting time 10.00 AM) <b>Through offline (Physical) mode only.</b>	25.11.2024
4.	Display of list of candidates eligible for presentation & interaction	25.11.2024 by 4:00 PM in the respective Departments
5.	Presentation/interaction by all eligible candidates <b>Through offline (Physical) mode only.</b>	26.11.2024
6.	Display of list of selected candidates	02.12.2024
7.	Deposition of fee (Online)	04.12.2024 to 11.12.2024
8.	Physical Reporting in the Institute/ Document Verification and Constitution of RACs	15.01.2025-16.01.2025
9.	Commencement of Classes	16.01.2025

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 visit the 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 [www.nitj.ac.in](http://www.nitj.ac.in) 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) After payment of admission fee, no fee refund request shall be entertained in any case of surrender of seat.

M) Only applications submitted on the website of the institute ([www.nitj.ac.in](http://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 January, 2025 session and the award of the Ph.D. degree shall be strictly in accordance with the Ordinances and Regulations for PH.D. PROGRAMME 2023 approved by the Institute Senate the copy of which are available on <https://www.nitj.ac.in/template/index.html?id=64ccc1baf936ec1417f91875?category=newpage>.

O) For all purposes, the date of commencement of classes will be treated as the Registration Date for all admitted students of this January, 2025 session.

P) In case of any urgent requirements/exigencies the entrance test and interactions may be conducted through online mode for the deserving candidates. The request in this regard will be taken 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.

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**

- (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****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**

**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**

1. **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.

OR

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**

**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**

**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

Computer Science and Business Systems

Computer Science and Design

Computer Science and Engineering (Artificial Intelligence and Machine Learning)

Computer Science and Engineering (Artificial Intelligence)

Computer Science and Engineering (Cyber Security)

Computer Science and Engineering (Data Science)

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

Mathematics and Computing

Data Science and Engineering

Computer Science and Engineering (Information Security)

*\*All other branches within the field of computer science that are equivalent to the aforementioned branches*

### **Electrical Engineering**

**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**

**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.

OR

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**

(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 GATE qualified 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 any one of the following criteria:

a) M.Sc. (CS/IT) with M. Tech (relevant branch) research with minimum CGPA of 6.5 on a 10-point scale 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**

(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.
<b>Industrial and Production Engineering</b>
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.
<b>Mechanical engineering</b>
<b>Full Time (with Institute fellowship)</b>
<b>Educational Qualification:</b> 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*
<b>Educational Qualification:</b> 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
<b>Textile Technology</b>
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
<b>Humanities &amp; Management</b>
<ul style="list-style-type: none"> <li>• <b>Humanities:</b></li> <li>• <b>Ph.D. (English Literature):</b> Master's degree in English or English Language Teaching with at least 60% marks or a CGPA of 6.5 on 10 point-scale.</li> <li>• <b>Ph.D. (Linguistics):</b> Master's degree in Linguistics or English or English Language Teaching with at least 60% marks or a CGPA of 6.5 on 10 point-scale.</li> <li>• <b>Management:</b></li> <li>• <b>Ph.D. (Management):</b> 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.</li> </ul>

<p>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.</p>		
<p><b>PHYSICS</b></p>		
<p>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</p>		
<p><b>CHEMISTRY</b></p>		
<p>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</p>		
<p><b>Mathematics &amp; Computing</b></p>		
<p><b>Candidates with a valid GATE/NET score in Mathematics/ CSE/IT</b></p> <p>(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 &amp; 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 <b>and</b> 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 &amp; 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.</p> <p><b>Non-GATE Candidates</b></p> <p>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.</p>		
<p><b>Centre for Energy and Environment</b></p>		
<p>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 or minimum 60% marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination.</p>		