



तेजपुर विश्वविद्यालय / TEZPUR UNIVERSITY  
(संसद के अधिनियम द्वारा स्थापित केंद्रीय विश्वविद्यालय)  
(A Central University established by an Act of Parliament)

परीक्षा नियंत्रक का कार्यालय / OFFICE OF THE CONTROLLER OF EXAMINATIONS

तेजपुर - 784028 :: असम :: भारत / TEZPUR - 784028 :: ASSAM :: INDIA

No.: F.13-5/22/2022(Acad)/3269

Dated: 08.10.2024

**ADMISSION NOTICE**

**Ph.D. Programme - (Spring Semester, 2025)**

Online applications are invited from eligible candidates for admission to the following Ph.D. programmes in the Spring Semester, 2025:

**Ph.D. programme Offering Departments / Centres:**

**Departments under School of Sciences:** 1) Chemical Sciences 2) Environmental Science 3) Mathematical Sciences 4) Molecular Biology & Biotechnology and 5) Physics.

**Departments under School of Engineering:** 1) Computer Science & Engineering 2) Electronics & Communication Engineering 3) Electrical Engineering 4) Energy 5) Food Engineering & Technology 6) Civil Engineering 7) Mechanical Engineering and 8) Applied Sciences.

**Departments under School of Management Sciences:** 1) Business Administration and 2) Commerce

**Departments under School of Humanities and Social Sciences:** 1) Cultural Studies 2) English 3) Hindi 4) Linguistics & Language Technology 5) Education and 6) Sociology.

**And,**

Centre for Multidisciplinary Research.

Candidates to the Ph.D. programmes will be selected for admission on the basis of Written Examination and Personal Interview to be conducted by the respective departments/centres. However, the candidates who had qualified with UGC NET-JRF/ UGC-CSIR NET-JRF, UGC/CSIR NET (LS)/ SLET (LS), GATE, CEED or similar examinations as specified by the University will be exempted from appearing in the Written Examination, but they will be required to appear in the Personal Interview.

**Click to view pre-Requisites and area of research for admission to Ph.D. programme and Fee Structure.**

**Reservation and relaxation:** As per Govt. of India Rules.

**How to apply:** Candidates are required to apply online through the link <https://tezuadm.samarth.edu.in> by paying application fee of Rs. 1000/- only (Rs. 500/- for SC, ST and PWD category). Payment of application fee is to be made online through Debit card / Credit card or NET-banking. Candidates should read and follow the instructions available on the admission portal carefully while filing up the online application form.

For written entrance examination syllabus and pattern, please contact the concerned department/centre.

**Important Tentative Dates:**

Date of display of online application form on the website	16 <sup>th</sup> October, 2024
Last date of submission of online applications	15 <sup>th</sup> November, 2024
Date of publication of list of applicants eligible for written test	22 <sup>nd</sup> November, 2024
Date of written test to be conducted by the concerned department/Centres	28 <sup>th</sup> November, 2024
Date of personal interview by the concerned department	3 <sup>rd</sup> & 4 <sup>th</sup> December, 2024
Date of publication of list of selected candidates	17 <sup>th</sup> December, 2024
Date of provisional admission	17 <sup>th</sup> January, 2025

Sd/-

(Prof. S.C. Deka)  
Controller of Examinations

**Pre-Requisite, area of research and intake for admission into various Ph. D. programmes in the Spring Semester 2025**

A. UGC eligibility criteria may be referred to.

**B. Pre-requisites and area of research:**

S/N	Department/Centre	Pre-requisite	Area of Research
1.	Applied Sciences <i>(PhD in Applied Physics/ PhD in Applied Mathematics/ PhD in Applied Chemistry)</i>	<p><b><u>APPLIED PHYSICS:</u></b> M.Sc./Integrated M.Sc. in Physics/ Astrophysics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science.</p> <p><b>OR</b> M. Phil., M. Tech. in Solid State Material/ Material Science/ Electronics/ Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences.</p> <p><b>OR</b> M.S in Astronomy and Astrophysics.</p> <p><b>OR</b> B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.</p> <hr/> <p><b><u>APPLIED MATHEMATICS:</u></b> M.Sc./M.A./M.E./M.Tech./MS/BS-MS/ Integrated M.Sc. in Mathematics/ Statistics/ Engineering Mathematics/ Mathematics and Computing/ Applied Mathematics/ Operations Research/ Mechanical Engg./ Industrial Engineering/ Computer Science and Engineering/ Information Technology/any allied subject with 55% marks in aggregate or equivalent CGPA.</p> <p><b>OR</b> B.Tech. in Mathematics and Computing/any allied subjects with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where B.E./B.Tech degree was obtained.</p> <hr/> <p><b><u>APPLIED CHEMISTRY:</u></b> M.Sc. in Chemistry/ Chemical Sciences/ Polymer Chemistry/ Polymer Science/ Physics/ Nano Science/ Material Science/ Environmental Science or allied subjects</p> <p><b>OR</b> M.E./M.Tech in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering/ Energy etc.)</p>	Porous Solids, Metal-Organic Frameworks, Functional Polymers

2.	Civil Engineering	(a) M.E./M.Tech. /M.Sc.(Engg.) in Civil Engg. Or allied areas or (b) M.Sc. in relevant discipline with minimum 70% marks in aggregate or equivalent CGPA or (c) B.E. / B.Tech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/University from where B.E./B.Tech degree was obtained.	Environmental Engineering/ Geotechnical Engineering/ Water Resources Engineering.
3.	Computer Science & Engineering	M.Tech. in Computer Science/ I.T./ Electronics MCA M.Sc. in Computer Science/ I.T. <b>OR</b> B.E. / B.Tech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where B.E./B.Tech degree was obtained.	Machine Learning/ Cyber Security & Bioinformatics/ Natural Language Processing/ Wireless Networks/ Optical Network/ IoT/ Pattern Recognition/ Data Mining/ Image Processing/ Computational Biology/ Network Security/ Geometric Algorithm in AI/ Speech Processing/ SDN/ NVF/ Fog Computation/ KR & R/ Recommender System/ Social Network Analysis/ Information Retrieval/ DL
4.	Electrical Engineering	ME/M.Tech. in any relevant discipline of Engineering or MBBS with MD/MS or M.Sc. in any relevant Science discipline, <b>OR</b> B.E./B.Tech. with 75% marks aggregate or equivalent CGPA with a valid GATE Score and minimum two recommendation letters from the Institute or University from where B.E. /B.Tech. degree was obtained.	Renewable Energy Sources, Power System, Electric Vehicle & power Electronics/ Power Electronics & Drive /Energy Storage, Control Systems, Electric Vehicles/Sensor & System/IoT & AI for Measurement/ Renewable Energy, Microgrid Control, Electric Vehicles.
5.	Electronics & Communication Engineering	M.E./ M.Tech./ M.Sc. Engg./ M.S. in Electronics/ Communication/ Electronics Design/ Electrical/ Instrumentation/ Control/ Microwave/ Biomedical/ Bioelectronics/ Bio – Technology/ Computer Science/ Information Technology. <b>OR</b> M.Sc. in Electronics/ Physics/ Applied Mathematics. MCA with Physics, Chemistry and Mathematics in Bachelor degree, MBBS with MD/ MS degree. <b>OR</b> B.E. / B.Tech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where B.E./ B.Tech degree was obtained.	E-mobility/ Medical Images Processing using Deep Learning, Machine Learning, Computer Vision, Image Processing/ Nanotechnology & Semiconductor/ Bioelectronics/ Robotics/ Sensor & Nanotechnology/ Image & Signal Processing, ML/DL, Precision Agriculture.
6.	Energy	M.Sc. / M.E. / M.Tech. degree in Energy Technology/ Energy Management/Energy related Engineering and Technology/ Physics/ Chemistry/Agriculture Allied subjects.	Biofuels, Bioenergy, Gasification, Building Energy, PV Systems, Instrumentation & Control, Hybrid Energy Systems, Fuel Cell, Hydrogen, Energy Storage, Solar Thermal Systems, Radiant Systems, Ground Source Heat Pump, New Energy Systems

7.	Food Engineering & Technology	<p>M.Tech. / M.E. /Integrated M. Tech in Food Engineering and Technology/Food and Dairy related other programme/Mechanical Engineering/Chemical Engineering/Bio-Process/Bio-Chemical/Biotechnology, or, M.Sc. and Integrated M.Sc. in Food Engineering and Technology/Food and Dairy related other programme/Applied Microbiology/Microbiology/Bio-Chemistry/ Chemistry/ Biotechnology/Bioscience and Informatics, or,B.E./B.Tech (in Food Engineering and Technology/Food and Dairy related other programme) with 75% marks in aggregate or equivalent CGPA with valid GATE Score). Minimum two recommendation Letters from the Institute/University from where B.E./B.Tech degree was obtained.</p>	<p>Food Product Design/ AI/ML for Food, Process Modelling and Analysis/ Non-thermal Processing, Food Rheology, Cereal Malting, UV and Pulsed UV-based Hurdle Technology/ Biodegradable Packaging/ Fruits and Vegetable Technology, Aerogel, Sensors/ Sustainable Food Packaging, Food Processing Waste Utilization/ Functional Food Ingredients/ Non-thermal Technology in Food Processing/ Food Bioprocessing.</p>
8.	Mechanical Engineering	<p>M.E. / M.Tech. / M.Sc. (Engg.) in Mechanical Engineering or any other relevant Engineering branches including Chemical Engineering and Materials Science Engineering.  <b>OR,</b>  M.Sc Degree in any relevant discipline with CSIR-UGC JRF/NET Qualified certificate or a valid GATE score. Candidates other than those with M.Sc. Mathematics must have studied Mathematics up to BSc level.  <b>OR,</b>  B.E. / B.Tech degree with 75% marks in aggregate or equivalent CGPA with valid GATE Score. Minimum two recommendation Letters from the Institute /University from where B.E./B.Tech degree was obtained.</p>	<p>Design and Optimization/ Solar Thermal Energy, Drying Technology, Thermal Energy Storage, Biomass gasification, Renewable Energy, Rural Technology and Innovation/ Photovoltaic-Thermal system modelling and optimization, Computational hemodynamics, Computational gas dynamics/ Design and Manufacturing, Soft Computing, Natural composite, Mechatronics/ Fiber-reinforced composites, Graphene and carbon nanotube-reinforced nanocomposite, Finite element analysis/ Materials Engineering and Manufacturing, Microalloying, Metal Casting, Heat Treatment Technology, Thermo-Mechanical Treatments, Microstructural Characterization, Mechanical Metallurgy, Structure-Property correlation, Friction Stir Welding, Machinability Analysis, Metal Forming, Tribology, Failure Analysis, Creep and High Temperature Deformation, Computational Material Science/ Renewable Energy and Heat transfer/ Composite Materials, Biocomposites, Manufacturing and Materials Engineering/ Six Sigma, Data Science, Statistical optimization, Thermal Engineering/ Robotics, Mechatronics, Optimization.</p>
9.	Cultural Studies	<p>M.A. in any of the disciplines in Humanities or Social Sciences with a uniformly good academic career. Candidates with UGC JRF, UGC NET or NE SET will be given preference.</p>	<p>Film Studies, Literary Studies/ Digital Humanities, Folklore Studies, Heritage Studies/ Border Studies, Medical Anthropology, Cultural Tourism/ Migration Studies, Folklore.</p>

10.	Education	Post Graduate in Education or in any allied discipline/subjects with 55% marks.	Educational Psychology, Inclusive Education, Curriculum, Teacher Education, Pedagogy Science Education/ Educational Planning and Administration, Teacher Education, Education for Disadvantaged Groups, Curriculum Studies/ Language Education, Inclusive Education/ Mathematics Education, Cognitive Science, Blended Learning, e-Content development, Inclusive Education, Educational Technology/Inclusive Education, Science Education.
11.	English	MA in English (specialization may be in American Literature as well as in English Language Teaching, English Literature, Indian Writing in English, New literature in English and Women's Writing in English).	English Language Education (Materials Development, Curriculum Design, Language Policy)/ English Language Education, Second Language Acquisition.
12.	Hindi	M.A. in Hindi.	Bhasha Vigyan, Lok Sahitya Aur Bhartiya Kavysastra
13.	Linguistics and Language Technology	M.A. in Linguistics and Language Technology/MA in Linguistics/MA in Allied Subjects.	Phonetics, Phonology, Semantics, Sociolinguistics, Optimality Theory, Historical Linguistics, Linguistic Typology, Language Documentation, Ethnolinguistics
14.	Sociology	Post-Graduation in Sociology/ Cultural Studies/ Anthropology (with specialization in Social Anthropology)/ Economics / History / Political Science/ Philosophy/ Mass Communication/ English/ Law/ Management/ Social Work.	Agrarian Sociology, Social Movement/ Development & Governance/ Gender, Ecology.
15.	Business Administration	M.B.A., M.Com., M.A./M.Sc. in Economics, M.A. in Psychology/ Sociology/Social Work/ Cultural Studies, MCA, M.T.M. / M.T.A. FCA/ FCS/ FICWA.	Services Marketing, Tourism/ Marketing, Consumer Psychology, Eco Tourism/ Knowledge Management, IT in Management
16.	Commerce	1. M.Com., 2. M.A./M.Sc. in Economics, 3. FCA/ FCMA/ FCS.	Climate Change and Natural Capital, Corporate Sustainability and Sustainable Development, Risk Management, Corporate Governance/ Accounting, Auditing, Forensic Accounting, Anti-Money Laundering/ Economic Growth, Environmental Sustainability, Financial Development, Econometrics/ Corporate Finance, Corporate Governance, Corporate Sustainability, Carbon Performance, Earning Management/ Banking, Finance, Behavioural Finance, Developmental Finance, Capital Market/ Corporate Finance, Accounting.
17.	Chemical Sciences	M.Sc. in all branches of Chemical Science/Physics/Nanoscience/ Material Science/ Biotechnology/ Biochemistry/ Bioinformatics/ Environmental Science. M.E./M.Tech. in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering etc.).	Organic Synthesis/ Computational Inorganic Chemistry/ Organic Synthesis and Catalysis/ Catalysis/ Electrocatalysis/ Physical Chemistry/ Organic/Medicinal Chemistry.

18.	Environmental Science	Masters in any Science/ Applied Science / Engineering discipline with at least 55% marks or equivalent CGPA. At Bachelor's level the candidate must have attended Science / Technology programme.	Hydro-Geomorphology, Riverine Hazards, Application of RS-GIS to environmental aspects, Coupling study between Hydro-geomorphology and Ecology, Vulnerability and Risk Assessment/ Forest Ecology, Ecosystem Dynamics, Carbon sequestration and Climate change, Wildlife and Biodiversity Conservation/ Aquatic Biology, Aquatic Toxicology, Toxic effects of pollutants in fish models/ Vermiculture technique, Soil health management, Solid waste management, Nano-enabled agriculture, Crop production and sustainable agriculture, Waste Management & Emerging organic pollutants/ Water and sediment geochemistry, Microplastics pollution/ Air Pollution monitoring and assessment/ Environmental System Modelling; Air Pollution Meteorology; Climate Impact Modelling; Extreme Events Analysis; Noise pollution Modelling; Machine Learning applications in Environmental Systems; Nonstationary Stochastic Models; Neuro-fuzzy Systems/ Ecohydrology, Ecotoxicology, Environmental Pollution, Nanotechnology in environmental research.
19.	Mathematical Sciences	M.A. / M.Sc. in Mathematics or M.A./M.Sc. in Statistics with requisite background in Mathematics.	Number Theory/ Topology, Fuzzy Mathematics/ Functional Analysis and Operator Theory/ Graphs and Matrices, Applications of Linear Algebra/ Mathematical Statistics/ Computational Fluid Dynamics/ Coding Theory/ Functional Analysis, Fixed Point Theory/ Numerical Analysis, Finite Element Methods/ Numerical Linear Algebra
20.	Molecular Biology & Biotechnology	Masters in any branches of Life Sciences/ Physical Sciences/ Chemical Sciences/ Mathematical Sciences/ Agricultural Sciences / Veterinary or Sciences/ Engineering Sciences/ Medical Sciences or in any allied field. +B. Tech./ B. E. degree with 80% marks in CGPA (with GATE score > 90.00 percentile) in Chemical Engineering/ Chemical Sciences/ Bioinformatics or any allied field. MBBS or BVSc. Degree with at least 60% marks or equivalent CGPA. Apart from the above, candidates having consistently good academic record will be preferred.	Cancer Biology/ Inflammation, Cancer Research, Traditional Medicinal Plants against Cancer/ Molecular Biology, Cancer Biology/ Genome Bioinformatics/ Human Molecular Genetics, Synthetic Biology/ Type 2 Diabetes/ Computational Biology/ Plant Cell walls and Translational Regulation.
21.	Physics	M.Sc. in Physics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science. M.Phil., M.Tech. in Solid State Material/ Material Science/ Electronics/Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences.	Condensed Matter Physics & Nanotechnology/ High Energy Physics / Photonics/ Optoelectronics/ Microwave Engineering/ Condensed Matter Physics / Astro plasma Physics.

		B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.	
22.	Multi-Disciplinary Research	<p>Master's degree in any discipline with minimum 55% or equivalent grade from a recognized University in India or equivalent degree from abroad with a good academic career. Candidates with GATE, UGC/CSIR -JRF, UGC/CSIR-NET or NE-SET will be given preference.</p> <p>B.Tech/BE with minimum 75% or equivalent grade will also be considered eligible for PhD admission. For candidates having more than 10 years of industrial experience, minimum marks may be relaxed.</p>	<p>Climate change, livelihood, natural calamities; Sustainable development and developmental disparity/ Net zero target: technologies and issues; Road safety: multidisciplinary approach handling technology advancement and human behavior; Sustainable garbage management: multidisciplinary approach/ Technology disruption: prospect, issues, and impact of new technologies (viz., robotics, IoT, big data etc) in the contexts of society, environment and economy/ Big data including its applications in Biology and medicine/ Study of emotions (Multidisciplinary approach of investigation)/ Intellectual Property Rights: policy, issues, and impact/ Sustainable Energy Storage: with multidisciplinary approach of chemistry/ mathematical modelling/ Artificial Intelligence/ environment and relevant areas/ Naamghar and other traditional places of worship: modernity, cultural vibrancy/ Innovation in tackling environmental issues/ Pharmaceutical Research/ Renewable and Sustainable Energy System/ History of Science/ Technology and Learning/ New applications of mechatronics/ Language, Grammar, Linguistics, Culture, Ethnography, Folf narratives/ Plastic waste management and biodegradation/ Data science for solving engineering problems (Prospect, issues, and impact of new technologies in the contexts of society, environment, and economy)/ Mental Health and well-being (Innovative digital technology driven investigation and intervention)/ Agri - Entrepreneurship (Issus, Challenges and Roadmap)/ Indian Knowledge System (Retrieval, Investigation, Dissemination and Application)</p>

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**Fee Structure for Admission to Ph.D. Programme in the Spring Semester 2025**

Particular of Fee Structure	Full Time (Hosteller)	Full Time (Non-hosteller)	Part Time	TU Employee (Part Time)
<b>A) Once at the time of admission</b>				
Admission	600	600	600	600
Registration	150	150	150	150
Identity card	250	250	250	250
Convocation	1000	1000	1000	1000
Provisional certificate	100	100	100	100
Alumni Association	500	500	500	500
<b>B) Per semester</b>				
* <i>Hostel Admission/Re-admission</i>	3000			
Tuition	1500	1500	2000	2000
Library	400	400	400	
Students' activity	500	500	500	500
Medical	300	300	300	
Transport	1000	1000	1000	
Laboratory (including computer usage)	1050	1050	1050	1050
Research Fee	3000	3000	4000	4000
Infrastructure and amenity	1100	1100	1100	1100
Fan, Electricity and Water charge	400	400	400	400
Students' Welfare Fund	150	150	150	150
Departmental Development Fund	2500	2500	2500	2500
** <i>Consumable Charge (applicable for Chemical Scs./MBBT/FET/Environmental Sc.)</i>	2000	2000	2000	2000
Menial Charge	1500			
*** <i>Health Insurance</i>	143	143		
<b>C) Refundable Caution Deposit (Once at the time of admission)</b>				
Caution Deposit (Library and Laboratory)	2000	2000	2000	2000
Hostel Caution Deposit	3000			
<b>Total Admission Fee to be paid by the students of the Dept. of Chemical Scs./M.B.B.T./F.E.T./ Environmental Sc. at the time of admission</b>	26143	18643	20000	18300
<b>Total Admission Fee to be paid by the students of other departments at the time of admission.</b>	24143	16643	18000	16300

\* SC/ ST candidates are exempted from the paying the hostel seat rent of Rs. 675/-.

\*\* Consumable Charge is to be paid by the Ph.D. students admitted in the Dept. of Chemical Science/MBBT/FET/ Environmental Science.

\*\*\* Students above 30 years of age are not covered in the Health Insurance scheme.

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(Prof. S.C. Deka)  
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