TEZPUR UNIVERSITY
(A Central University established by an Act of Parliament)
TEZPUR – 784 028

No. F.11-3/4/2003 (Acad)/1459-A   Dated 06.1.2022

ADMISSION NOTICE
Ph.D. (Spring Semester) Programme- 2022

Online applications are invited from eligible candidates having valid UGC-NET/JRF, UGC-CSIR NET/JRF, DBT-JRF, ICAR-NET, ICMR-JRF and GATE for admission into the Ph.D. programme (Spring Semester – 2022) in the following departments:

Applied Sciences, Chemical Sciences, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Electrical Engineering, Energy, English, Environmental Science, Food Engineering & Technology, Mathematical Sciences, Molecular Biology & Biotechnology, Mechanical Engineering, Physics and Sociology and Centre for Multi-Disciplinary Research.

Pre-Requisites, area of research and Fee Structure are given below.

Selection will be made on the basis of performance in the Personal Interview which will be conducted through virtual mode by the concerned Department. Reservation of seats and relaxation of marks will be as per Govt. of India rules.

How to apply: Candidates are required to apply online through the link www.tezuadmissions.in by paying application fee of Rs.800/- only (Rs.400/- 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.

Note: Hostel accommodation will not be available to the admitted students.

Important tentative dates:
- Date of display of online application form on the website: 7th January, 2022
- Last date of submission of online applications: 28th January, 2022
- Date of publication of list of applicants eligible for personal interview: 4th February, 2022
- Date of personal interview by the concerned department: 10th -12th February, 2022
- Date of publication of list of selected candidates: 22nd February, 2022
- Date of payment of fees and provisional admission: 23rd – 25th February, 2022

Sd/-Dr. L. Boral
Controller of Examinations
Tezpur University

Pre-Requisite & area of research for admission in to various disciplines of Ph. D. programmes (Spring Semester 2022)

A. UGC eligibility criteria in the Prospectus may be referred to.

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

S.No	Department/Centre	Pre-requisite	Area of Research
1	Applied Sciences	PHYSICS BRANCH: M.Sc./Integrated M.Sc. in Physics/ Astrophysics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science. **OR** M.Phil., M.Tech. in Solid State Material/ Material Science/ Electronics/ Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences. **OR** M.S Astronomy and Astrophysics. **OR** B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.	Theoretical Modeling of Astrophysical Flows, Study of X-ray Binaries, X-ray Data Analysis and Interpretation/ Low-dimensional Material Physics, Optical Spectroscopy, Electron Energy Loss Spectroscopy, Scanning Transmission Electron Microscopy.
		MATHEMATICAL SC. BRANCH: M.Sc./M.A./M.E./M.Tech./MS/BS-MS/Integrated M.Sc. Degree 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. **OR** 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.	Differential Equations, Harmonic Analysis/ Spectral Graph Theory, Graphs and Matrices/ Operations Research, Fuzzy Mathematics and Optimization, Mathematical Modelling.

		CHEMICAL SC. BRANCH: M.Sc in Chemistry/ Chemical Sciences/ Polymer Chemistry/ Polymer Science/ Physics/ Nano Science/ Material Science/ Environmental Science or allied subjects **OR** M.E./M.Tech in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering/ Energy etc.)	Functional Organic and Metal-organic Polymers, Materials for Energy and Environmental Applications.
2	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.).	Polymer Chemistry/ Organic Synthesis & Heterocyclic Chemistry/ Computational & Inorganic Chemistry/ Chemical Sensors & Biosensors/ Molecular Magnetism.
3	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.	Geotechnical Engineering/ Environmental Engineering.
4	Computer Science & Engineering	M.Tech. in Computer Science/ I.T./ Electronics MCA M.Sc. in Computer Science/ I.T. 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.	Natural Language Processing, Speech Processing Wireless Networks, Cognitive Radio Networks/ Data Mining, Image Processing/ Algorithms/ Pattern Recognitions, Remote Sensing, Image Analysis/ Computational Biology / Bioinformatics/ Blockchain, Network Security, Image Recognition, NDN/ Trust & Reputation, Machine Learning/ Artificial Intelligence.

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. M.Sc. in Electronics/ Physics/ Applied Mathematics. MCA with Physics, Chemistry and Mathematics in Bachelor degree, MBBS with MD/ MS degree. 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.	Image Processing/ Semiconductor Devices, Biosensors, Flexible Electronics/ Computer vision, Deep learning/ Machine learning for smart biosensor/ Robotics, Biomedical Signal Processing.
6	Electrical Engineering	(a) M.E./M.Tech./MS in Electrical/ Electronics/Communication/ Power System/Power Electronics/ Instrumentation/Control/ Computer Science & Engineering/ MBBS with MD/MS and any other relevant discipline. (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.	Power Electronics & Drivers, Power Quality, Microgrid/ Sensor & Transduces Technology, Green Energy, IoT/ Smart energy system, control system, fractional order chaos, water management.
7	Energy	M.Sc. / M.E. / M.Tech. degree in Energy Technology/ Energy Management/Energy related Engineering and Technology/ Physics/ Chemistry/Agriculture Allied subjects.	Energy and Sustainable Development, Bridging Urban Rural Divide through intervention of RET/ Biomass Gasification, Building Energy, Thermal Comfort, Photovoltaic Systems, Energy Access/ Solar Energy, Heat Transfer, Hydrogen Technology, Energy Storage, Nanoparticles/ Biofuel and Bioenergy systems, Development of Renewable catalyst, Catalytic transformation of biomass into biofuel and chemicals, Modern Biofuel and Bio-refinery, Algal based biofuel system.

8	English	M.A. in English (specialization may be in Literature, English Language Teaching or Linguistics), M.A. in Linguistics.	Life Writing, Travel Writing, Indian Writing, Contemporary British Lit./ Indian Writing in English.
9	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.	River morphology and landform, Riverine Hazards, Application of RS & GIS techniques in atmospheric, Urban Climate hydro geomorphic and socio-environmental studies/ Ecosystem functions (hydrochemistry & geochemistry), Wetland productivity, Nano technology in environmental research, Pollution indexing, Geostatistics/ Pollution biology and health, Plant insects interaction; Role of plant extracts in controlling insects pests/ Environmental pollution air, water and soil, Human-environment interactions.
10	Food Engineering & Technology	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.	Food Technology.
11	Mathematical Sciences	M.A. / M.Sc. in Mathematics or M.A./M.Sc. in Statistics with requisite background in Mathematics.	Topology and Fuzzy Mathematics/ Number Theory/ Numerical Analysis, Finite Element Methods/ Fractional Differential Equations.

12	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.	Genomics and System Biology/ Insulin resistance and type 2 diabetics/ DNA structure and functions.
13	Mechanical Engineering	M.E. / M.Tech. / M.Sc. (Engg.) Degree in Mechanical Engg. Or any other relevant engineering branches including Chemical Engineering and Material Science and Engineering, or, 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 B.Sc. level, Or, 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.	Heat transfer systems, Renewable energy/ Optimization, Robotics.

14	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. B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.	High Energy Physics/ Microwave Materials & Devices / Optoelectronics, Laser Physics/ Nanoscience and Soft Matter/ Applied photonics, Biomedical instrumentation/ Applied Optics & Instrumentation/ Astronomy & Astrophysics/ Astroparticle Physics.
15	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.	Development, Migration, Urbanisation/ Social Movement, Agrarian Structure/ Tribal Studies/ Development, Governance, Health/ Masculinity Studies/ Agrarian Structure, Rural Livelihood, Gender/ Sociology of Science/ Sociology of Religion, Ritual Studies, Kinship Studies.
16	Centre for Multi Disciplinary Research	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. B.Tech/BE with minimum 80% 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.	Nano electronic Devices, Biosensors, Flexible Electronics/ Integrative modelling of plant stress adaptation under changing climate/ Gender and Labour/ Snakebite Burden in Rural Tropics of Assam: A Prospective Study and Mitigation strategies/ Achi Lhamu Dance of Arunachal Pradesh/ Intellectual Property Right, Community Conserved Areas.

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FEE STRUCTURE FOR Ph.D. STUDENTS TO BE ADMITTED IN SPRING SEMESTER, 2022

Particular of Fee	Full Time (Non-hosteller)	Part Time
A. Once at the time of admission		
Admission	500	500
Registration	150	150
Identity card	50	50
Convocation	1000	1000
Provisional certificate	100	100
Alumni Association	500	500
B. Per semester		
* Hostel admission/re-admission		
Tuition	1500	2000
Library	400	400
Students' activity	500	500
Medical	300	300
Transport	1000	1000
Laboratory (including computer usage)	1050	1050
Research Fee	3000	4000
Infrastructure and amenity	1100	1100
Fan, Electricity and Water charge	400	400
Students' Welfare Fund	150	150
Departmental Development Fund	2500	2500
**Consumable Charge	2000	2000
Menial Charge		
*** Health Insurance	143	
C. Refundable Caution Deposit **(Once at the time of admission)**		
Caution deposit (Library and Laboratory)	2000	2000
Hostel Caution deposit		
Total fee to be paid by the students of the Dept. of Chemical Sc./MBBT//FET/ Environmental Sc. at the time of admission	18343	19700
Total fee to be paid by the students of other departments at the time of admission.	16343	17700

*   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 this scheme.

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