PhD Programmes

Candidates will be selected based on their performance in Tezpur University Entrance Examination (TUEE) 2024 followed by Personal Interview (PI).

1) Candidates with UGC NET-JRF/ UGC CSIR NET-JRF, UGC CSIR NET (LS)/ SLET (LS), GATE, CEED or similar examinations as specified by the University are exempted from appearing Tezpur University Entrance Examination (TUEE)-2024 but they have to appear for the PI conducted by the concern department. Registration at https://www.tezuadmissions.in/public/ **is mandatory.**

2) Candidates those who have not qualified the above mentioned examinations must appear for the examination conducted by Tezpur University. For appearing in TUEE-2024 candidate must apply at https://www.tezuadmissions.in/public/

Eligibility and Research Area

S. No	Programme	Department/ Centre	Eligibility	Research Areas
1.	PhD in Assamese	Assamese	Post Graduate in Assamese or in any allied discipline/Subjects with 55% marks or equivalent grade	• Modern Assamese Literature, Film Studies & Theatre Studies • Translation Studies, Comparative Literature & Ethnic Literature • Assamese Literature & Colonial Assam, • Languages of Assam.
2.	PhD in Cultural Studies	Cultural Studies	MA 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	• Masculinity, Protest Music, Comparative Literature and Film Studies • Digital Culture • Design Ethnography • Mediaand Culture • Folklore • Visual Culture & Art History.
3.	PhD in Education	Education	Post Graduate in Educationor in any allied discipline/ subjects with 55% marks.	• Teacher Education, School Education • Language Education, Mathematics Education • Cognitive Science, Inclusive Education • Education Technology, Blended Learning, E-Content Development • Curriculum Studies, Educational Administration and Management • Education in North East India

4.	PhD in English	English	MA in English (specialization may be in American Literatureas well as in English Language Teaching, English Literature, Indian Writing in English, New Literature in English andWomen's Writing in English).	• Material Development Language Policy, Curriculum Design • Life Writing, Travel Writing, Contemporary British Literature, Translation • Gender & Literature • FilmAdaption, Indian Literature in English, Popular Culture • Anglophone South Asian Literature, Indian Writing in English, Ecocriticism • English Language Education.
5.	PhD in Hindi	Hindi	MA in Hindi	• Linguistics, Poetry and Journalism • Fictionand Modern Hindi Literature
6.	PhD in Linguistics and Language Technology	Linguistics and Language Technology	MA in Linguistics and Language Technology/MA in Linguistics/MA in Allied Subjects	• Morphology, Language Description • Documentation and Language Typology
7.	PhD in Mass Communication and Journalism	Mass Communication and Journalism	MA in Mass Communication, Mass Communication & Journalism/ Communication, Master of Mass Communication (MMC). Master of Journalism & Mass Communication (MJMC). Master of Science in Communication (MS Communication). MSc Communication. Master of Journalism	• New Media • ICT for Development.
8.	PhD in Social Works	Social Work	MA in Social Work and allied Social Sciences such as Sociology, Psychology, Rural Development, Development Studies, Law, Public Health, Education and Management	• Livelihood, Social Work practice, Gender and Queer Studies, Women and Northeast studies • Ecology and Social work, Community development, Tribal studies • Social work and Mental Health, Disaster Management, Street Children, Suicide and Application of Social Work Methods
9.	PhD in Sociology	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, Urbanization • 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

10.	PhD in Business Administration	Business Administration	MBA , MCom , MA / MSc in Economics, MA in Psychology/ Sociology/ Social Work/ Cultural Studies, MCA , MTM / MTA FCA/FCS/ FICWA.	• Human Resource Management, Organization Behaviour • Accounting, Taxation, Social Development Issues • Tourism Marketing Management/ Finance, Green Finance, FinTech, Agri-business, Stock Market • Tourism, Logistic & Supply Chain Management , • Intellectual Property Management, Community Conserved Areas • Rural Development
11.	PhD in Commerce	Commerce	1. MCom 2.MA/MSc in Economics 3. FCA/ FCMA/ FCS.	• Corporate Finance • Corporate Sustainability • Corporate Governance • Banking • Insurance • Capital Market • Financial Market and Institutions • Behavioral Finance • Accounting and Audit
12.	PhD in Chemical Sciences	Chemical Sciences	MSc in all branches of Chemical Science/ Physics/ Nanoscience/ Material Science/ Biotechnology/ Biochemistry/ Bioinformatics/ Environmental Science. ME/MTech in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering etc.).	• Polymer Chemistry • Water Purification, • Theoretical Chemistry • Organic Synthesis • Computational & Inorganic Chemistry • Ionic Liquid Based Material • Electrocatalysis • Molecular Magnetism • Organic Chemistry • Synthetic Organic Chemistry • Catalysis • Physical Chemistry.
13.	PhD in Environmental Science	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.	• Atmospheric Chemistry • Air Pollution • Climate change and forest ecosystem dynamics • Pollution Biology and Health Entomology • Plant-Insect Interface • Indoor Air Pollution • Human Environment Interactions.
14.	PhD in Mathematical Sciences	Mathematical Sciences	MA / MSc in Mathematics or MA/MSc in Statistics with requisite background in Mathematics	• Number Theory • Topology • Graphs and Matrices • Mathematical Statistics • Computational Fluid Dynamics • Coding Theory • Functional Analysis, Fixed Point Theory • Group Theory and Graph Theory • Algebra and Graph Theory, • Applications of Linear Algebra • Fractional Differential Equations • Numerical Linear Algebra

15.	PhD in Molecular Biology & Biotechnology	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. BTech/ BE 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 recordwill be preferred.	- Cancer Biology - Inflammation - Bioinformatics, Computational Biotechnology - Whole Genome Sequencing (WGS) and Metabolic Ppathway Analysis - Type 2 Diabetics - Plant Pathogenicity - Gene Ex pressions. - Snake Venom
16.	PhD in Physics	Physics	MSc in Physics/ Electronics/ Geophysics/ MaterialScience/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science. MTechin Solid State Material/ Material Science/ Electronics/Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences. BTech in Engineering Physics with 80% marks in aggregate or equivalent CGPA.	- High Energy Physics - Microwave Materials & Devices - Optoelectronics, Laser Physics - Nano- sciences, Condensed Matter Physics, Multidisciplinary - Mesoscopic Physics, QuantumSystems/ Neutrino Physics - Applied Photonics, Biomedical Instrumentation - Applied Optics & Instrumentation - Astronomy& Astrophysics Materials Science.
17.	PhD in Applied Mathematics	Applied Sciences (Applied Mathematics)	MSc/MA/ME/MTech/MS/BS - MS/ Integrated MSc 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/anyallied subjects with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where BE/BTech degree was obtained	- Differential Equations, Harmonic Analysis - Spectral Graph Theory - Operations Research, Inventory Modelling, Fuzzy Mathematics and Optimization, Mathematics Modelling.

18.	PhD in Applied Physics	Applied Sciences (Physics)	MSc/Integrated MSc in Physics/ Astrophysics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/Environmental Science and Chemical Science. Or MPhil., MTech in Solid State Material/ Material Science/ Electronics/ Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences. Or MS Astronomy and Astrophysics. Or BTech in Engineering Physics with 80% marks in aggregate or equivalent CGPA	• Theoretical Modeling of Astrophysical Flows Around Compact Object • 2D Layered Materials for Applications
19.	PhD in Civil Engineering	Civil Engineering	(a) ME/MTech/ MSc(Engg) in Civil Engineering Or allied areas or (b) MSc in relevant discipline with minimum 70% marks in aggregate or equivalent CGPA or (c) BE / BTech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/University from where BE/BTech degree was obtained.	• Geotechnical Engineering • Environmental Engineering • Transportation Engineering
20.	PhD in Computer Science & Engineering	Computer Science & Engineering	MTech in Computer Science/ IT/ Electronics, MCA, MSc in Computer Science, IT or BE /BTech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where BE/BTech degree was obtained.	• Data mining, Image processing • Computer Vision and Geometry • Bio-informatics • SDN, NFV, IoT • Speech Processing • NLP/ Pattern Recognition • Machine Learning, Computer Vision • ML, V2X, Tactile Iinternet • ML, Trust and Reputation, EDM • Data Mining • Network security, Bioinformatics, • CRN, 5g/6G, • Optical Network, SDN • Wireless Network.

21.	PhD in Design	Design	Master's Degree in Design or ME/MTech/MArch/MCA/MSc (Computer Sciences/Electronics) or Master's degree in Applied Arts/ Ergonomics/ Fine Arts/ Visual Arts/ Psychology/ Physiology/ Occupational Safety and Health/ Journalism/ Mass Media Communication, or two-year Master's degree in Management (MBA or equivalent) with relevant studies in Design field with minimum 55% marks OR Bachelor's Degree in Design /Engineering/Architecture/Planning/Interior Design (10+2+4) years / 4 Years BFA/ Recognized degree in Design related field (10+2+4) years (AICTE/UGC approved) with 75% marks in aggregate or equivalent CGPA with valid CEED/GATE Scores. OR Four-year Undergraduate Diploma in Design (NID or equivalent), with postgraduate qualification in relevant area with at least 6.0 CGPA (or 55% marks)/ A two-year Post-Graduate Diploma in Design in relevant areas (NID/CEPT or equivalent) with first class at Bachelor's level/ GD Art (5-year programme after 10th standard) with one-year professional experience, with at least 6 CGPA (or 55% marks). Valid CEED/GATE Scores will be preferred.	• Product Design and Design Methodology • Rural Technology and Innovation.
22.	PhD in Electrical Engineering	Electrical Engineering	ME/MTech in any relevant discipline in Engineering or MBBS with MD/MS or MSc in any relevant science discipline, OR BE/BTech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where BE/BTech degree was obtained	• Sensor Fabrication for Application in Food Industry,IOT & Health Monitoring, Green Energy, Sensor • Control System, Smart Energy System, Chaos, IOT, Wastewater Purification • Renewable Energy, PowerSystem, Electronic Drives, Electric Vehicles • Power Electronics & Drives, Micro Grid, Smart Grid.

23.	PhD in Electronics & Communication Engineering	Electronics & Communication Engineering	ME / MTech / MSc Engg / MS in Electronics/ Communication/ Electronics Design/ Electrical/ Instrumentation/ Control/ Microwave/ Biomedical/ Bioelectronics/ Bio-Technology/ Computer Science/ Information Technology. or MSc in Electronics/ Physics/ Applied Mathematics. MCA with Physics, Chemistry and Mathematics in Bachelor degree, MBBS with MD/ MS degree. OR BE / BTech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where BE/ BTech degree was obtained.	• Robotics, Biomedical Signal Processing • Image Processing, Computer Vision, Deep Learning- based Signal and Image Analysis, Biomedical Signal Processing • Bio-electronics, Bio-electronic Devices • Semiconductor Devices Flexible Electronics/Neuro-engineering • Semiconductor Devices, Simulation and Modeling • Bio-sensors, Quantum Technology/Machine Learning for Smart Sensing, Sensors • Sensor and Nanotechnology • Vehicular Electronics.
24.	PhD in Energy	Energy	MSc / ME / MTech degree in Energy Technology/ Energy Management /Energy related Engineering and Technology/ Physics/ Chemistry/Agriculture Allied subjects.	• Energy Management, Bio-energy, IoT for Biogas • Bio- fuels, Catalytic transformation of Biofuels, Energy-Environment/ Building Energy, Biomass Energy • Hybrid Energy System, Grid Integration, Instrumentation and Control • Waste Management • Fuel Cell, Green Hydrogen, Battery Supercapacitor, Hybrid UAV based Air Quality Monitor • Solar Energy, Photovoltaic, Energy Systems, Solar Hybrid Systems • Heating & Ventilation, Radiant System, Ground Source Heat

25.	PhD in Food Engineering & Technology	Food Engineering & Technology	MTech/ ME/ Integrated MTech in Food Engineering and Technology/ Food and Dairy related other programme/ Mechanical Engineering/ Chemical Engineering/ Bio-process/ Bio-chemical/ Biotechnology Or MSc/ Integrated MSc in Food Engineering and Technology/ Food and Dairy related other programme/ Applied Microbiology/ Microbiology/ Bio-Chemistry/ Chemistry/ Biotechnology/ Biosciences 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.	• Functional Foods and Food Chemistry • Food Packaging, Food Processing Waste Utilization • Food Process Engineering
26.	PhD in Mechanical Engineering	Mechanical Engineering	ME / MTech / MSc (Engg) in Mechanical Engineering or any other relevant Engineering branches including Chemical Engineering and Materials Science Engineering Or MSc Degree in any relevant discipline with CSIR-UGC JRF/NET Qualified certificate or a valid GATE score. Candidates other than those with MSc Mathematics must have studied Mathematics up to BSc level. Or, BE / BTech degree with 75% marks in aggregate or equivalent CGPA with valid GATE Score. Minimum two recommendation Letters from the Institute /University from where BE/BTech degree was obtained	• Design and Analysis of Heat Exchangers, Thermodynamic modelling and optimization of (i) Solar thermal power and cooling systems (ii) Gas turbine based combined power systems with Steam Rankine, Organic Rankine and Kalina as bottoming cycles (iii) Vapour absorption cooling systems • Optimum design of structures and systems using evolutionary algorithms with special emphasis to multi-objective combinatorial optimization problems • Solar Thermal Energy Applications, Drying Technology Including Solar Hybrid Drying, Thermal Energy Storage • Solar Thermal Energy Storage, Material Characterization • Thermal Engineering, Heat Transfer System • Rehabilitation Robotics - Prosthetic Hand, Single Objective and Multi-objective Optimization Facility Layout Problem, Mechatronics • Stress Analysis, Plasticity, Autofrettage, Fracture Mechanics.

27.	PhD in Multi-Disciplinary Research	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 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.	• Climate change, livelihood, natural calamities • Net zero target: technologies and issues • Technology disruption: prospect, issues and impact of new technologies (viz., robotics, IoT, big data etc) in the contexts of society, environment and economy • Sustainable development and developmental disparity • Indian Knowledge System towards holistic approaches for well-being and sustainability • Mental Health and well-being – innovative and technology-driven approaches of investigation • Intellectual Property Rights: policy, issues and impact • Modern Energy Storage system: Applications (e.g., e-vehicles, drones, biomedical applications) and contemporary issues • Communication for health, culture, social issues and development
28.	PhD in Law*	Law	Master's Degree in Law from any recognized University securing not less than 55% marks or its equivalent CGPA.	• Human Rights Law, • Criminal Law, • Criminology, • International Law, • Family Law, • Constitutional Law, • Child Laws, • Gender and Law, • Customary Laws.

New programme introduced in academic session in 2024-2025