

Tezpur University PROSPECTUS 2024



**Napaam, Tezpur
Sonitpur, Assam (India)
Pin - 784028**

Message from the Vice Chancellor



My dear students,

Hope all is well with you!

I feel happy to welcome you to Tezpur University. This prestigious institution of higher learning came into existence on 21st January 1994 by a special Act of the Parliament of India. The University is unitary and residential in nature and is committed to excel in higher education and research.

Spread over a lush green sprawling campus of 262 acres, the University provides an excellent ambience for the pursuit of research and education. The University is currently offering 79 academic programmes (UG, PG and Ph.D.) through 27 departments under 4 Schools: Engineering, Humanities & Social Sciences, Management, and Sciences. In addition, the University offers 7 programmes in the Distance and Online mode under its Centre for Distance and Online Education (CDOE). The academic programmes offered in the University have a distinct focus on Science, Technology, Humanities and Social Sciences, reflecting the very purpose and mandate of the University.

In addition to the state-of-the-art laboratories in the Departments, the University has Sophisticated and Analytical Instrumentation Centre (SAIC), housing a number of high-end instruments. The Central Library is a knowledge repository and a learning centre with more than 1,12,888 documents comprising books, theses, e-journals, conference proceedings, CDs, along with latest academic software. The Library is fully automated and is equipped with RFID system, allowing students to issue and return books by themselves through kiosks.

The student community at the University is quite vibrant with students coming in from different parts of the country as well as from other countries. Student from several foreign countries such as Mauritius, Bangladesh, Nepal, Egypt, Ethiopia, Lesotho, Zambia, Madagascar,

Syria, Tanzania and Thailand have enrolled in various programmes. There are 6 hostels for men and 8 hostels for women, out of which two hostels are exclusive for Ph.D. scholars. The diversity among students and the various co-curricular programmes dotting the year contribute to a spirit of camaraderie. The University takes good care of the students by providing hostel, sports, gymnasium, and other essential facilities. Special care is taken to cultivate the minds of the students through various healthy practices. Tezpur University has been consistently winning accolades at the regional and national level sports and cultural events every year.

In today's rapidly changing world, where challenges are diverse and complex, the role of higher education institutions like ours is becoming increasingly significant. Therefore, the University have introduced seven innovative academic programmes for the students, which are set to commence from this academic session 2024-25.

The programmes are: Bachelor of Design (B. Des.), Bachelor in Chinese, M.Tech in Electrical Engineering, M.Tech in Data Sciences, MA in Woman Studies, Master of Education (M. Ed.) and Ph.D. in Law. In addition to these seven programmes, the University has opened Ph.D. programmes for industry personnel and professionals. The Undergraduate programmes of the University are as per Four Year Undergraduate Programme (FYUGP) of National Education Policy 2020.

Admission to various programmes in the University is through national level tests like CUET, JEE, GATE, CEED, GAT-B, CAT, MAT, NET/JRF and TUEE. This year, the University has introduced Computer Based Test (CBT) for 'TUEE 2024' which will be conducted in 39 cities of the country and also in 05 neighbouring countries such as Nepal (Kathmandu), Bangladesh (Dhaka), Bhutan (Thimphu), Myanmar (Yangon) and Thailand (Bangkok). Students under various schemes of Govt. of India like ICCR, Direct Admission of Students Abroad (DASA), Prime Minister's Special Scholarship Scheme (PMSS), QIP and ADF (AICTE) are also admitted in the University. The talent and quality of the students can be gauged from the fact that the University students have been awarded the prestigious Gandhian Young Technological Innovation (GYTI) Awards four times (2017, 2018, 2019 & 2021) for their innovative ideas.

The University believes in the importance of continuous development of human resources. The University encourages professionals working in the field to enroll in various higher education programmes of the University to upgrade themselves.

Our faculty members are equipped with respective domain competencies and quite capable of providing both knowledge and skill-based education. They have brought many laurels to the University. This year, six faculty members of the University have featured in the list of the world's top 2% scientists prepared by a team of scientists at Stanford University, USA, in 2022-23; four faculty members are already Fellows of the Royal Society of Chemistry (FRSC). Moreover, a faculty member received awards like South Asian edition of the Laadli Media and Advertising Award 2023; Sahitya Akademi Translation Award and Young Scientist/Innovator. A PhD scholar from Department of Cultural Studies has bagged 69th National Film Awards for her Assamese film Anunaad – the Resonance in Feature Films category.

Tezpur University is working towards integrating the various aspects of NEP 2020 in its true nature and spirit. It has an academic architecture integrating processes aligned to the recommendations of NEP 2020. The University has already implemented the provision of lateral entry in B.Tech programmes, lateral exit in Integrated MA/M.Com/M.Sc programmes and credit transfer system. The skill component is incorporated in the general education for each of the UG and PG programmes.

The University has registered for Academic Bank of Credit through the Digi-Locker NAD platform, for the effective implementation of NEP. Credits of the course works earned by the Ph.D. students in other Universities/Institutions such as JNU, NEHU, NIT Silchar, Dibrugarh University, IUCAA and IIT Bombay, who joined this University are transferred and the students have been exempted from course work in the University.

To catalyze multidisciplinary research, the Centre for Multidisciplinary Research (CMDR) has been established in 2021 in the University to provide a platform to address societal problems through a multidisciplinary approach with focus on research areas relevant to 21st century, (viz. Big data analytics, AI, disease biology and human health, food processing, nutrition, clean energy, and climate change).

With the introduction of the Learning Outcome Based Curriculum Framework (LOCF) by the UGC, actions have been taken to transform the curriculum towards Outcome Based Assessment (OBA). The departments have developed Course Outcomes (COs) for the courses under various programmes which are mapped to Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) of the programme. The departments under the School of Engineering have already been using the OBA system for the last several years.

With its transparent, participatory, and inclusive governance, Tezpur University has created a distinctively conducive environment leading to impressive achievements and awards, such as Visitor's Best University in 2016, THE Asian University Rankings 301-350 in 2021, NIRF Ranking 2023: 69 (Amongst Universities), QS Asia University Rankings 281-290 in 2023 and THE World University Ranking 1001-1200 in 2023.

Our system is designed to meet the aspirations of the new generation and at the same time, we continue to embrace values of inclusivity, tolerance, equality, and diversity. The prospectus provides detailed information on our programmes, fee structure, general rules, and eligibility criteria. I advise you to go through it thoroughly.

Looking forward to meeting you all,

With best wishes,

Date: 29.04.2024
(Shambhu Nath Singh)

Prof. Shambhu Nath Singh

Vice Chancellor

Telephone: +91-3712-267003(O)

Fax: +91-3712-267006

Email: vc@tezu.ernet.in

Dr. Biren Das

Registrar

Telephone: +91-3712-273100(O)

Fax: +91-3712-267005

Email: registrartu@tezu.ernet.in

Prof. Utpal Sharma

Dean, Planning & Development

Telephone: +91-3712-275959

E-mail: utpal@tezu.ernet.in

Prof. Raza Rafiqul Hoque

Dean, Academic Affairs

Telephone: +91-3712-27-3031,

Email: daa@tezu.ernet.in

Prof. Partha Pratim Sahu

Dean, School of Engineering

Telephone: +91-3712-275254

E-mail: deansoe@tezu.ernet.in

Prof. Farheena Danta

Dean, School of Humanities & Social Sciences

Telephone: +91-3712-275213

E-mail: deanhss@tezu.ernet.in

Prof. Sankar Chandra Deka

Prof. Robin Doley

Director, TU Entrance Examination (TUEE) Cell

Telephone: +91-3712-273142,

E-mail: tuee2024@tezu.ernet.in

Controller of Examinations

Telephone: +91-3712-273141

E-mail: controllertu@tezu.ernet.in

Prof. Chandan Goswami

Dean, School of Management Sciences

Telephone: +91-3712-275008,

E-mail: deanms@tezu.ernet.in

Prof. Manabendra Mandal

Dean, Students Welfare

Telephone: +91-3712-275305,

E-mail: dsw@tezu.ernet.in

Prof. Dhanapati Deka

Dean, Research & Development

Telephone: +91-3712-275056,

E-mail: deanrnd@tezu.ernet.in

Prof. Robin Dutta

Dean, School of Sciences

Telephone: +91-3712-275505,

E-mail: deanst@tezu.ernet.in

List of Academic Programmes

UG Degree/Integrated Programmes

Sl. No	Programme Names	Department/Centre	School
1.	BTech in Civil Engineering	Civil Engineering	Engineering
2.	BTech in Computer Science and Engineering	Computer Science and Engineering	
3.	BTech in Electrical Engineering	Electrical Engineering	
4.	BTech in Electronics and Communication Engineering	Electronics and Communication Engineering	
5.	BTech in Food Engineering and Technology	Food Engineering and Technology	
6.	BTech in Mechanical Engineering	Mechanical Engineering	
7.	BDes	Design	
8.	Integrated MCom (4+1 years as per NEP 2020)	Commerce	Management Sciences
9.	Integrated BSc BEd (4 Years)	Education	Humanities and Social Sciences
10.	Integrated MA in English (4+1 years as per NEP 2020)	English	
11.	BA in Chinese (4 Years)	Foreign Languages	
12.	Integrated MSc in Chemistry (4+1 years as per NEP 2020)	Chemistry	Sciences
13.	Integrated MSc in Mathematics (4+1 years as per NEP 2020)	Mathematics	
14.	Integrated MSc in Life Sciences (4+1 years as per NEP 2020)	Molecular Biology and Biotechnology	
15.	Integrated MSc in Physics (4+1 years as per NEP 2020)	Physics	

Post Graduate Programmes

Sl No.	Programme Names	Department/Centre	School
1.	MCA (Master of Computer Application)	Computer Science and Engineering	Engineering
2.	MTech in Data Sciences		
3.	MTech in Computer Science & Engineering		
4.	MTech in Civil Engineering	Civil Engineering	
5.	MDes (Master of Design)	Design	
6.	MTech in Bioelectronics	Electronics and Communication Engineering	
7.	MTech in Electronics Design and Technology		
8.	MTech in Energy Technology	Energy	
9.	MTech in Food Engineering and Technology	Food Engineering and Technology	
10.	MTech in Mechanical Engineering	Mechanical Engineering	
11.	MTech in Electrical Engineering	Electrical Engineering	
12.	MA in Cultural Studies	Cultural Studies	Humanities and Social Sciences
13.	MA in Education	Education	
14.	MEd		
15.	B Ed		
16.	MA in English	English	
17.	MA in Linguistics and Language Technology	Linguistics and Language Technology	
18.	MA in Hindi	Hindi	
19.	LL M (Master of Laws)	Law	
20.	MA in Mass Communication and Journalism	Mass Communication and Journalism	
21.	MA in Social Work	Social Work	

22.	MA in Sociology	Sociology	
23.	MA in Assamese	Assamese	
24.	MA in Women Studies	Chandraprabha Saikiani Centre for Women Studies	
25.	MBA	Business Administration	Management Sciences
26.	MBA (Executive)		
27.	Master of Tourism and Travel Management (MTM)		
28.	Certificate in NCCMP (Part Time)		
29.	M Com	Commerce	
30.	MSc in Chemistry	Chemical Sciences	Sciences
31.	MSc in Environmental Science	Environmental Science	
32.	MSc in Mathematics	Mathematics	
33.	MSc in Molecular Biology and Biotechnology	Molecular Biology and Biotechnology	
34.	MSc in Physics	Physics	

PhD Programmes

Sl. No	Programme Names	Department/Centre	School
1.	PhD in Applied Physics	Applied Sciences	Engineering
2.	PhD in Applied Chemistry		
3.	PhD in Applied Mathematics		
4.	PhD in Civil Engineering	Civil Engineering	
5.	PhD in Computer Science and Engineering	Computer Science and Engineering	
6.	PhD in Electronics and Communication Engineering	Electronics and Communication Engineering	
7.	PhD in Design	Design	
8.	PhD in Energy	Energy	
9.	PhD in Food Engineering and Technology	Food Engineering and Technology	
10.	PhD in Mechanical Engineering	Mechanical Engineering	
11.	PhD in Electrical Engineering	Electrical Engineering	
12.	PhD in Assamese	Assamese	Humanities and Social Sciences
13.	PhD in Cultural Studies	Cultural Studies	
14.	PhD in Education	Education	
15.	PhD in English	English	
16.	PhD in Linguistics and Language Technology	Linguistics and Language Technology	
17.	PhD in Hindi	Hindi	
18.	PhD in Mass Communication and Journalism	Mass Communication and Journalism	
19.	PhD in Sociology	Sociology	
20.	PhD in Social Work	Social Work	
21.	PhD in Women Studies	Chandraprabha Saikiani Centre for Women Studies	
22.	PhD in Law	Law	
23.	PhD in Business Administration	Business Administration	Management Sciences
24.	PhD in Commerce	Commerce	

25	PhD in Chemical Sciences	Chemical Sciences	Sciences
26	PhD in Environmental Science	Environmental Science	
27	PhD in Mathematical Sciences	Mathematical Sciences	
28	PhD in Molecular Biology and Biotechnology	Molecular Biology and Biotechnology	
29	PhD in Physics	Physics	
30	PhD in Multi-Disciplinary Research	Centre for Multi-Disciplinary Research	

Admission at a Glance

1. 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 must appear for the PI conducted by the concern department. Registration at <https://www.tezuadmissions.in/public/> is still a **mandatory requirement**.
- 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/>

PhD Programmes by Industry Personnels and Professionals

Industry professionals refer to persons employed in a formal organization dealing with goods and services, manufacturing, and allied areas. Practicing professionals include persons working in self-employed professions or entrepreneurs like chartered accountant, cost accountant, company secretary, medical professionals including physicians and any other relevant professions. The candidates eligible to apply needs to possess the minimum experience/credential, as given below.

Sl. No	Category of Candidate	Minimum Experience/Credentials
1.	Industry personnel with relevant postgraduate degree	5 years industry experience
2.	Industry personnel with Bachelors Degree in Engineering	10 years of industry experience or 5 years of industry experience along with at least one patent
3.	Practicing professionals with relevant postgraduate degree	5 years professional practice
4.	Practicing professionals with Bachelors Degree in engineering	10 years of professional experience or 5 years of professional experience along with at least one patent

Interested candidates from the relevant industry and professional fields fulfilling the minimum academic qualifications prescribed by the concerned Department/Centre shall apply for admission to the PhD programmes of the departments through the Tezpur University admission portal at <https://www.tezuadmissions.in/public/>. The candidates need to submit

NOC from the employer (Format for NOC can be downloaded from the admission portal). Detailed guidelines for the pursuance of PhD programme by industry personnel and professional is available in the university webpage.

The selection process shall include TUEE-2024 Test followed by personal interviews in the Physical mode in the respective departments. Admitted candidates should complete the minimum course work required as per the PhD regulation in force. In case the physical attendance of the scholar is not possible, appropriate technology (like MOOCs, live streaming, blended mode etc.) may be adopted with the approval of the competent authority. It is imperative that all scholars shall attend the examination in person in the designated examination hall.

2. PG Programmes

2.1 MTech Programmes

- i) **GATE Candidates-** Candidates with valid GATE score in relevant discipline will be admitted directly on merit basis however they have to apply online at <https://www.tezuadmissions.in/public/> through TUEE channel. However, candidate may or may not appear the test conducted by Tezpur University.
- ii) **Non-GATE Candidates-** Candidate should appear for TUEE-2024 or CUET-PG for admission into M.Tech programmes.
 - a) For admission through **CUET-PG 2024**, candidate should register at <https://www.tezuadmissions.in/public/> through CUET channel using CUET-PG 2024 registration no in the 1st phase and update the form with the CUET-PG 2024 score during the 2nd phase after the declaration of result by NTA.
 - b) For admission through **TUEE 2024**, candidates have to apply online at <https://www.tezuadmissions.in/public/> and appear for the test conducted by Tezpur University.

GATE qualified candidates can also apply for non-GATE seats through TUEE-2024 or CUET-PG. However, if seats are not filled through GATE, it will be filled through TUEE 2024 score or CUET-PG score.

2.2 MA/MSc/LLM/MTM/MCA/MCom/MEd/BEd Programmes

Admissions will be based on performance in TUEE, 2024 or CUET-PG. Out of the total seats in a programme, 80% of the seats will be filled through TUEE-24 and 20% of the seats will be filled through CUET-PG 2024. MA in Mass Communication and Journalism and MA in Social Work will hold Personal Interviews following TUEE 2024.

- 1) For admission through **TUEE 2024**, candidate should apply at <https://www.tezuadmissions.in/public/> and appear for the test conducted by Tezpur University.

- 2) For admission through **CUET-PG 2024**, candidate should register at <https://www.tezuadmissions.in/public/> through CUET channel using CUET-PG 2024 registration no in the 1st phase and update the form with the CUET-PG 2024 score during the 2nd phase after the declaration of result by NTA.

For appearing in CUET (PG) visit <https://cuet.samarth.ac.in>.

2.3 MDes Programme

M.Des admissions will be based on either CEED/GATE/DAT 2024 score or TUEE 2024 score. The merit list will be prepared based on CEED/ GATE/DAT or TUEE score, portfolio and Personal Interview (PI).

- i) Candidate with **CEED/GATE/DAT 2024 score** should apply at <https://www.tezuadmissions.in/public/> through TUEE 2024 channel. However, candidate may or may not appear the test conducted by Tezpur University.
- ii) For admission through **TUEE 2024**, candidate should apply at <https://www.tezuadmissions.in/public/> and appear for the test conducted by Tezpur University.
- iii) For admission through **CUET-PG 2024**, candidate should register at <https://www.tezuadmissions.in/public/> through CUET channel using CUET-PG 2024 registration no in the 1st phase and update the form with the CUET-PG 2024 score during the 2nd phase after the declaration of result by NTA.

2.4 MSc in Molecular Biology and Biotechnology (MBBT) Programme

Admission to M.Sc. in MBBT will be based on valid GAT-B score. All GAT-B qualified candidates should apply at <https://www.tezuadmissions.in/public/> for registration. Notification for filling of forms will be made available after the declaration of GAT-B 2024 results conducted by NTA.

2.5 MBA Programme

Candidates are admitted based on: (i) score obtained in CAT/MAT/CMAT/XAT/ATMA, (ii) Group Discussion, and (iii) Personal Interview. Notification for online application starts in the first week of November of the preceding year and PI is completed in month of April for that academic session.

3. Integrated Programmes (4+1 as per NEP 2020)

For admission into Integrated MCom/integrated MSc/integrated MA/integrated BSc BEd, candidates will be selected based on the performance in the CUET (UG)-2024 conducted by NTA. Candidate should apply at <https://www.tezuadmissions.in/public/> with CUET-UG registration number and update the form with the CUET-UG score during the 2nd phase.

For appearing in CUET-UG visit <https://cuet.samarth.ac.in>

4. UG Programmes

4.1 BTech Programmes

Candidates will be selected for admission to various B.Tech. programmes based on All India Rank (CRL) of JEE (Main)-2024 conducted by the NTA.

Out of the total seats, 60% seats are reserved for permanent residents of Northeastern states to be filled up through the counselling conducted by the B.Tech. Screening and Selection Committee (BSSC) of the University and remaining 40% seats are open for filling up through the Central Counselling conducted by CSAB/JoSAA.

4.2 BTech (Lateral Entry) Programmes

Candidates will be admitted based on their performance in the TUEE-2024 to be conducted by TUEE Cell, Tezpur University. Candidate should apply at <https://www.tezuadmissions.in/public/> for appearing in TUEE-2024.

4.3 BDes programme

B.Des. admission will be based on valid UCEED (IITB)/ DAT (Prelim), (UG NIDA scores) JEE (Mains: NTA) and TUEE 2024. Candidate should apply at <https://www.tezuadmissions.in/public/> with score from the above test. 60% of the seats are reserved for NE states and 40% of seats will be filled from all India states. Out of the total 30 seats, 16 seats will be filled through UCEED score; 10 will be filled from JEE Mains score and 04 seats will be filled from TUEE: 2024 score. However, if any seat remains vacant under UCEED and JEE (mains) categories, it will be filled through TUEE 2024 score.

4.4 BA in Chinese

- i) For admission into BA in Chinese, candidates will be selected based on the performance in the CUET (UG)-2024 conducted by NTA. Candidate should apply at <https://www.tezuadmissions.in/public/> with CUET (UG) registration no. and update the form with the CUET-UG score during the 2nd phase.

For appearing in CUET-UG visit <https://cuet.samarth.ac.in>

How to Apply at Tezpur University

Candidates can check the Online prospectus for eligibility and intake of each academic programme.

- The Admission-cum-Counseling Form (ACF) is available at <https://www.tezuadmissions.in/public/>
- Candidates need to register online to get Login-id and Password.
- Candidate should fill up the Admission-cum-Counseling Form (ACF) and need to pay the required fee using login ID and Password.
- Candidates can apply for two (02) programmes with a single application form.
- Candidates can apply for a maximum of two (02) PhD programmes at different departments.
- No candidates will receive any application form by post or courier.

Examination Pattern

For the academic session 2024-25, Tezpur University will conduct all the entrance examinations through "Computer Based Test (CBT)-Examination" in the examination centres in various cities of India and other countries.

The duration of the online examination will of two (02) hours. Question paper will contain 50 multiple choice questions with four (4) alternative answers. Each question will carry 2 marks for correct answer and 0.5 marks will be deducted for wrong answers.

Tentative schedule

Activity	Date
Opening of TU Admission portal for registration for TUEE/CUET-PG and CUET-UG	14 th Feb 2024
Closing of registration for TUEE	30 th April 2024
Sending of admit card to TUEE candidates	19 th to 29 th May 2024
TUEE Examinations	11,12 and 13 June 2024
Publication of TUEE/CUET-PG/CUET-UG final merit list	25 th June 2024
Admission	5 th July to 20 th July 2024
Start of Autumn 2024 classes	29 th July 2024

Application Fee

The payment of the application fee is to be made online using credit card/debit card/net banking/UPI. The transaction detail may be printed and preserved for later references. The submission of admission cum counselling form will remain incomplete until the required fee is transferred successfully. Programme-wise fee details for Indian students are given in the table below.

Student Type	Category	Programmes through CUET (UG/PG)	Programme through TUEE 2024
Indian Student	General/ OBC/ OBC-NCL	₹ 600.00	₹ 1000.00
	SC/ST/ EWS/ PWD	₹ 300.00	₹ 500.00
International Students	-	-	USD 30

**Examination Centers
Indian Cities**

Sl. No	State	Centre Code	Name of the City
1	Arunachal Pradesh	AP01	ITANAGAR
2	Assam	AS01	BARPETA ROAD
3	Assam	AS02	DIBRUGARH
4	Assam	AS03	DIPHU
5	Assam	AS04	GOALPARA
6	Assam	AS05	GUWAHATI
7	Assam	AS06	JORHAT
8	Assam	AS07	KOKRAJHAR
9	Assam	AS08	MAJULI
10	Assam	AS09	NORTH LAKHIMPUR
11	Assam	AS10	SILCHAR
12	Assam	AS11	TEZPUR
13	Bihar	BR01	PATNA
14	Delhi	DL01	DELHI
15	Gujarat	GJ01	AHMEDABAD
16	Haryana	HRO1	CHANDIGARH
17	Jammu and Kashmir	JK01	SRINAGAR
18	Jammu and Kashmir	JK02	JAMMU

Sl. No	State	Centre Code	Name of the City
19	Jharkhand	JH01	RANCHI
20	Karnataka	KA01	BENGALURU
21	Kerala	KE01	THIRUVANANTHAPURAM
22	Madhya Pradesh	MP01	BHOPAL
23	Maharashtra	MH01	PUNE
24	Maharashtra	MH02	MUMBAI
25	Manipur	MN01	IMPHAL
26	Meghalaya	ML01	SHILLONG
27	Mizoram	MZ01	AIZAWL
28	Nagaland	NL01	KOHIMA
29	Odisha	OD01	BHUBANESWAR
30	Rajasthan	RJ01	JAIPUR
31	Tamil Nadu	TN01	CHENNAI
32	Telangana	TL01	HYDERABAD
33	Tripura	TR01	AGARTALA
34	Sikkim	SK01	GANGTOK
35	Uttar Pradesh	UP01	LUCKNOW
36	Uttar Pradesh	UP02	VARANASI
37	Uttarakhand	UT01	DEHRADUN
38	West Bengal	WB01	KOLKATA
39	West Bengal	WB02	SILIGURI

Outside India

Sl. No.	Country	Centre code	City
1	Nepal	NP01	KATHMANDU
2	Bangladesh	BD01	DHAKA
3	Bhutan	BT01	THIMPHU
4	Sri Lanka	SL01	COLOMBO
5	Myanmar	MY01	YANGON
6	Thailand	TH01	BANGKOK

Section II

Introducing Tezpur

Tezpur is the headquarter of the centrally located Sonitpur district in Assam. Mythologically known as Sonitpur, Tezpur is famous as a seat of Assamese culture. Located on the northern bank of the river Brahmaputra, 180 kms north- east of Guwahati, Tezpur overlooks the beautiful snow peaks of the Himalayas throughout the winter. Several ancient sites such as Bamuni hills, Hazara tank, Da-Parbatia Gate, Mahabhairab temple, Bhairabi temple, Agnigarh etc. in and around Tezpur are worth visiting. The Chitrallekha Udyan, the 3.02 kms long Kalia Bhomora Bridge over the Brahmaputra are two spots which attract many visitors. Other important tourist spots around Tezpur include Bhalukpong (64 kms), Tipi (68 kms) which are famous for the largest orchid garden in Asia, the Nameri National Park (60 km), the Orang Sanctuary (40 km) etc. The Kaziranga National Park, which is the habitat of the great Indian one-horned rhinoceros, is just 75 kms away from Tezpur.

Connectivity to Tezpur

By Road: Bus services to Tezpur are available from all major places in Assam. Frequent buses from Guwahati are available (ASTC, Green Valley, Blue Hill services, etc.) from the Inter State Bus Terminus (ISBT) at Guwahati. Shared cabs also operate from Paltan Bazar, near the Guwahati railway station. Normally, Guwahati to Tezpur is four hours' drive by rental car.

By Rail: Tezpur is connected to Kamakhya Railway Junction by a broad-gauge line from the new Dekargaon Railway Station via Rangapara and Rangia Railway Junctions.

By Air: Guwahati is well connected by air with all major places in India. Direct flights to Tezpur from Kolkata via Guwahati are also available. Other nearby airport is Hollongi Airport (Itanagar, Arunachal Pradesh) which is 110 km away from Tezpur University campus.

Reaching Tezpur University

Tezpur University is situated near by National Highway 715 (300 metres). University Bus Services are available from Tezpur ASTC Bus Station, Tezpur via Dolabari to the University Campus in scheduled time. Besides the University Bus Service, taxis/auto rickshaws are available from Tezpur Town (near ASTC Bus Station and Idgah Maidan) or Mission Chariali to reach the University.

Historical Places

Da-Parbatia

The ruins of the door frame of the Da-Parbatia temple, a few kilometres away from Tezpur, is perhaps the finest and oldest specimen of sculptural art in Assam. Its carving is characteristic of the style of the early Gupta School of sculpture.

Agnigarh

The place where the legendary romance of Princess Usha and Prince Anirudha blossomed. According to mythology, Usha was confined inside the palace which was surrounded by a wall of fire. This is the place where the famous war between the Hari and the Har was fought. The place gives a panoramic view of the mighty Brahmaputra River and Tezpur.

The Hazara Pukhuri

The large tank preserves the name of the local ruler Harzara Varman in Tezpur. It was excavated in the early part of the 19th century. This is the third largest tank in the area sprawled over 70 acres.

Bamuni Hills

The ruins of Bamuni Hills are famous for their exemplary artistic finesse. The sculptural remains date back to the ninth and tenth century A.D. The Bhairavi and Mahabhairab (where king Bana worshipped Mahabhairab, an incarnation of Shiva) temples and the twin tanks of Bar Pukhuri and Padum Pukhuri are the other architectural attractions of Tezpur.

Parks and Sanctuary

Cole Park

It is, undoubtedly, one of the most beautiful places in Tezpur. Established by a British Deputy Commissioner, Mr. Cole, the park has two ornamented stone pillars, and the sculptural remnants of the famous Bamuni Hills.

Bhalukpong

Bhalukpong is a charming picnic and angling spot, 60 km from Tezpur, on the road to Tawang in Arunachal Pradesh. Other attractions of Bhalukpong are a hot spring and a huge orchid garden.

Nameri National Park

Near the Jia Bhoroli River, the Nameri National Park sprawls over from Assam to Arunachal Pradesh. As in Kaziranga, the best way to travel within the park is atop elephants. There are no roads inside the park. The park is home to tiger, Indian bison, different species of hornbills, and the rare white winged wood duck, which is among the most endangered avian species in the world.

Orang Wild-life Sanctuary

This sanctuary sprawled over an area of 72 sq. km, is only 65 km from Tezpur. The species of fauna which the area abounds in, are the one-horned rhinoceros, buffalo, leopard, sambhar, barking deer and tiger.

Bhomoraguri

A mammoth stone inscription made by the Ahom General Kalia Bhomora Phukan, who planned to construct a bridge over Brahmaputra. Almost two centuries later, a bridge at the same site now stands completed. The 3.02 km bridge, named after the great Ahom General, connects Nagaon district with Tezpur

Introducing Tezpur University

Tezpur University was established on January 21, 1994, by an Act of Parliament of India, The Tezpur University Act, 1993 (Act No. 45), as a non-affiliating and residential Central University. The University is located at Napaam, about 15 km east of Tezpur town in the Sonitpur District of Assam. The serene and green University campus of about 262 acres provides the best of the ambience including modern infrastructure conducive for learning and dedicated research.

The academic programmes offered in the University have a distinct focus on science, technology, management, humanities, and social sciences, reflecting the objective of the University. At present, the University offers several programmes on undergraduate degree/diploma/certificate levels, integrated programmes, post-graduate degree/diploma programmes and Doctor of Philosophy degree in various disciplines. The University offers add-on courses on yoga and violin too. During the last twenty-seven years of its existence, the University has engaged itself in the process of capacity building, both in terms of infrastructure and human resource development. The University has mounted tremendous efforts in developing it into a modern University incorporating all elements from the contemporary scientific and socio-cultural milieu.

The University has already developed several state-of-the-art laboratories, computing facilities, internet connectivity, a dedicated power supply system with DG backup and a rich library having connectivity to several digital libraries. Other basic amenities like central water supply, campus security, guest house, canteen, gymnasium, outdoor and indoor sports facilities, post office, banks with ATMs, schools, swimming pool etc., are also available to cater to the needs of the University community. Being a Central University, it is privileged to receive funds from the Ministry of Human Resource and Development, Government of India, through the University Grants Commission. The University promotes industry-academy alliance.

Safe and Sustainable Campus

The 262-Acre campus of the University is in a safe and quiet environment. The campus is gender friendly and offers all its stakeholders' equal opportunity to excel in their domain. The University maintains a 24x7 security arrangement supervised by a Security Committee consisting of faculty members and officers. There is a single point entry under the round the clock watch of security personnel. CCTV cameras are installed at the vital locations of the campus.

The eco-friendly campus encourages its students and employees to ride bicycles. Further, the University has installed 1000 kW rooftop grid-connected solar photovoltaic power plant on its campus. The solar power plant installed in the University generates approximately 22% of its electricity requirement on average. Solar water heaters have been placed in the hostels. Quite a good number of the campus streetlights are powered by solar photovoltaic cells. A food waste-based bio-gas generation facility has been put into operation and the use of LPG in hostel messes has been partially replaced. The University has adopted a policy of replacing the conventional lights with energy efficient LED lights. It is a matter of pride that Tezpur University is the first academic institution to install a MW-scale solar power plant in the entire Northeastern region.

Major Awards and Accolades

1. NAAC Accreditation: A+ Grade.
2. THE Asia University Rankings 2023: 401-500
3. NIRF Ranking 2023: 69 (Amongst Universities)
4. Visitor's Award in "Research" category: 2017, 2018 & 2021 in Technology Development
5. QS India University Rankings 2023: 501-550.
6. THE World's top 20 Best Small Universities 2018: 20.
7. Visitor's Best University in 2016.
8. Sahitya Akademi Translation Award
9. Young Scientist/Innovator Awards
10. In 2022-23 six faculty members of the University have been featured in the list of world's top 2% Scientists
11. Fellow of the Royal Society of Chemistry (FRSC): 4
12. INSA Teachers Award: 2017, 2018 & 2019.

University Campus Life

Campus Facilities

Student Accommodations

The University provides separate accommodation for men and women students and research scholars, having more than 3700 capacities. As a result, barring a few, all students reside in the 14 hostels (6 for boys and 8 for girls). The rooms are large enough for two people, and come equipped with attached wardrobes, shelves, tables, chairs, and beds. Generally, rooms are two-seater with two beds, two wardrobes, two shelf, two tables, two chair, one fan. The University also has a Scholars' Home with a capacity of more than thirty-six 2BHK apartments to accommodate married scholars with family and visiting faculty members. Hostel seats are allotted on merit basis as per availability. Hostels are equipped with modern facilities like-

1. Network connectivity through WiFi
2. Television with DTH
3. Newspapers & Magazines
4. Photocopying facility
5. Indoor and outdoor games
6. Intercom facility
7. Guest room
8. Canteen
9. Pantry system
10. Music system
11. Washing machine
12. 24 hours water supply

13. Common rooms
14. Modern kitchen equipment & dining hall
15. Cycle stand
16. Water purifiers and coolers for drinking water
17. Solar power
18. Water heating system
19. Mini canteen
20. Bio-gas plant

The seats are allotted at the time of admission as per the hostel and University rules. The University ensures that all foreign students get hostel facilities inside the University.

Hostel Admission

Admission to the hostel is subject to the availability of seats though efforts are made to accommodate all the students in the hostels. At the time of admission, students are given options to stay in the hostel or arrange their private accommodation. If opted to stay in the hostel, a duly filled in application form as well as a declaration signed by the parent(s)/guardian must be mandatorily submitted at the time of admission/registration for a semester.

The hostel messes are run by the boarders of the hostels. Regular maintenance work of the hostels is done for proper upkeep of the hostels. Each hostel is administered by a group of designated people. Senior warden, warden(s), prefect, and assistant prefect(s) are responsible for hostel level administration.

Health Centre

Health Centre of Tezpur University has been functioning since 1995. It provides health care services mainly to the students, faculty members, staff along with their families and others those who are involved with the University. At present we have over 6000 beneficiaries.

Sl. No.	Designation of the Medical Staff	Number
01.	Chief Medical Officer	1
02.	Medical Officer	2
03.	Nurse	2
04.	Pharmacist	1
05.	Laboratory Technician	2
06.	Radiographer	1
07.	Multi-Tasking Staff	2

Services /Facilities available

Health Centre offer OPD services and ten beds are also available to provide initial care to the indoor patients including emergency cases.

Important Activities

- The Medical Officers give visits to the hostels and canteens for assessing the prevailing hygiene of the dining hall and the drainage system of the surroundings to check for any outbreak of waterborne diseases.
- Fogging in the campus is done to prevent any outbreak of mosquito-borne diseases.
- During Covid-19 pandemic period, various suggestions and advice were given to the TU Covid-19 Task Force and patients.
- Health Centre organizes Pulse Polio Immunization camp time to time in the campus as per directive of the Govt.

Visit by Specialists

The University has engaged specialists of different disciplines (pediatrics, obstetrics and gynecology) who visit the Health Centre on different days of the week on regular basis for the benefit of the University community.

A clinical psychologist is also regularly available on working days to provide counselling on stress related problems. A physiotherapist visits the Health Centre twice a week for offering physiotherapy to the differently abled students as well as other patients.

Transport Facility

The University provides shuttle bus service that connects Tezpur town to the University via major routes. The service is for students and staff who need to travel between town and the University campus to meet their academic timetable. For commuting to and from hostel, students and residence use alternatives such as walking, cycling and personal vehicles.

Shopping Complex and Eateries

To provide and supply day-to-day essentials for the students and residence of the University, a shopping complex is located inside the University. A wide variety of small eateries that provide delicious food, including Indian, Chinese, bakery items, fresh fruit juice etc. are located inside the Campus.

Pre-Primary School

Takshashila Vidyapeeth is a pre-primary school located within the University. It was established on 13th of May 2006 with a vision to promote pre-primary education for the campus residents as well as for the people staying around the University. It also welcomes people in and outside Tezpur. The school functions as play group, nursery, lower K.G, and upper K.G. classes with minimum of two sections in each.

Kendriya Vidyalaya Tezpur University

It is a co-education, English medium, senior secondary school, affiliated with CBSE and located within Tezpur University. It comes under Kendriya Vidyalaya Sangathan and aims at providing a conducive environment to stimulate intellectual growth of each child, thereby ensuring that their energy is properly channelized in the right direction.

Banks

There are two banks and several ATMs inside and within close proximity to the campus. State Bank of India Tezpur University Branch is located inside the University campus. There are five ATM points, two outside the university gate, one near the main entrance of the University inside, one near the Essentials market complex, and another one is placed close to the Restaurant in School of Engineering. Punjab National Bank (PNB) also have their branch inside the University campus.

Post-Office

A post office is situated inside the University and is located near the main entrance of the University (next to the SBI, Tezpur University Branch) where all postal services including savings bank facilities etc. Speed post, Registered post can be availed in all working days.

Auditorium

Kalaguru Bishnu Prasad Rabha (KBR) Auditorium, named after Kalaguru Bishnu Prasad Rabha, is the main auditorium of Tezpur University. The auditorium is fully air conditioned and is equipped with state-of-the-art Bose PA system. The auditorium has a capacity of 850 seats with comfortable seats and delicate interiors. The auditorium has two galleries, and the stage has a good viewing angle from both the top gallery as well as the ground floor seating arrangement. Cultural programmes and other events of the University are organized in this auditorium. The auditorium has a well-maintained garden and a spacious area for any pre/post event gathering.

Community Hall

The community hall serves as an open auditorium for events which need large gatherings and audience. The hall has an open seating space and does not have a fixed seating arrangement so that chairs can be arranged and removed as per the requirement of the event. The hall is equipped with lighting facilities and an open area where the audience can sit and view plays, concerts, and other events. Since the hall is situated next to the large sports ground of the University, one can create more side space, so that it becomes bigger and broader depending on the need of the event.

Seminar Rooms

Almost all the departments in the University have dedicated seminar rooms and multi-purpose halls to host seminars, symposia, and workshops.

Gardens

All the departments, hostels and the administrative building has well-maintained gardens. The University has a collection of trees that are planted all over the University campus. The trees are catalogued and labeled across for visitors to learn and

enjoy. The University maintains citrus gardens inside the campus. Assam has a wide range of citrus varieties and the garden inside the University boast of growing all varieties on the campus.

Staff Quarters

The University provides residential facilities to its teaching and non- teaching employees in the campus. The residential quarters are RCC multi-storied building and Assam type buildings.

Guest House

Sited on a two-acre green campus, the University Guest House has 45 well furnished rooms, a 30-seater conference room, a 40-seater dining hall (all air-conditioned), lounges, perfectly matching upholsteries, and a catering that carefully prepares and serves vegetarian, non-vegetarian and continental cuisines. It also facilitates 24-hour accessibility to the internet. Also, there is an annex of the Guest House with well- furnished rooms.

CENTRAL LIBRARY

About the Central Library

The Central Library of Tezpur University was founded in 1994, coinciding with the commencement of the university. The library has set its sights on being the ideal university library not just in the region but also in the country. The Central Library is a very significant asset for students, researchers, and faculty members of the University. The Central Library is located in the heart of the University campus, within a visually appealing three-story structure spanning an area of 4,734 square metres.

The Central Library possesses a varied collection of over one lakh books, journals, and other study materials, available in both physical and digital formats. It is a fully automated library using Koha Open source ILMS - an integrated multi-user library management system that supports all its in-house operations. Additionally, the library has completely modernised with the implementation of a Radio Frequency Identifier (RFID) system. Furthermore, it has digital-repository developed using open-source software 'DSpace' to store, disseminate and preserve the research publications, thesis/dissertations and other materials produced by the stakeholders of our university.

The library's collection encompasses the most up-to-date information resources in the fields of Science, Engineering, Management, Social Science, and Humanities which can easily be retrieved from Web-OPAC (Online Public Access Catalogue). Along with that, to meet the academic requirements of its users, the library has subscribed to various e-books, e-journals, e-resources/ databases, and other online materials which can be accessed from any devices within the University campus.

In addition to subscribed e-collections, the library offers access to various online databases and e-resources from eShodhSindhu (eSS) & DeLCON consortium. These online resources and databases are also available for access remotely 24X7 through INDIAN Access Management Federation (INFED) using Shibboleth.

To support academic and research activities, the library is one of the significant distributors of theses and dissertations in *Shodhganga* Repository – an initiative by Ministry of Education (formally MHRD), Gov. Additionally, the library has signed MoUs with INFLIBET's *ShodhShuddi* and *ShodhChakra* initiatives for the prevention of plagiarism and to help the researcher scholars in their research activities. Lastly, being a member of the NDLI Club and DELNET, the library has access to a substantial number of e-resources and databases, as well as the ability to facilitate Inter-Library Loan (ILL).

OPENING HOURS

The Central Library is open from 9.00 AM (Morning) – 3.00AM (night) throughout the year except government/public holidays.

COLLECTIONS AND RESOURCES

Total Collection	1,45,934
Books	1,16,643
Print Journals	52
E-Books	361
E-Journals	9,309+
Back Volumes of Journals	10,844
Online Databases	14
Thesis	978
Dissertations	2,007
Braille Books Collection	239
CDs/DVDs	3,040
VHS Cassettes	36
Newspaper/Magazines	07
Manuscripts	32

SERVICES AND FACILITIES

The Central Library provides the following services:

✓ Library Webpage	✓ RFID Self-Service KIOSK for issue/return
✓ Online Public Access Catalogue (OPAC)	✓ TEZU IRINS Faculty Profile
✓ RFID Self-Book Drop Unit	✓ Braille Section for Specially Abled Users
✓ Document Delivery Services (DELNET, JCCC)	✓ Newspaper Clipping
✓ ETDs Repository with OCR Scanner	✓ Remote Access Facility (INFED)
✓ Inter-Library Loan (DELNET)	✓ Plagiarism Detection Tools (Drillbit and Turnitin)
✓ Research Support Service	✓ Current Awareness Service (CAS)
✓ Digital Resource Centre (DRC) Lab	✓ Govt. Publication Section
✓ Journals & Magazines Section	✓ Library at a Glance Board
✓ Library HF Smart ID Card	✓ Reading Halls
✓ Children Library Section	✓ Group Discussion Room
✓ Web-OPAC Terminal (Wall-Mount)	✓ Wi-Fi Facility
✓ CCTV Surveillance	✓ Refreshment / Stationery Outlet (Outsourced)
✓ Accessible Stairs /Washroom for Specially abled Users	✓ Property Counter

EVENTS/PROGRAMMES ORGANIZED

1. General Orientation Programme organised by Central Library, Tezpur University for B.Tech. Students [11th August, 2023].
2. "Walk to the Library" Programme Organised by Central Library, Tezpur University [12th September, 2023].
3. EBSCO Training Programme Organised by Central Library, Tezpur University [13th September, 2023].
4. Guidance Lecture "Research Ethics and Plagiarism" Organised by Central Library, Tezpur University [22nd September, 2023].
5. Departmental-wise Orientation Programme organised by Central Library, Tezpur University [21st September, 2023 to 8th November, 2023].

Common Facilities

Computing Facility

The University started using computers from its very inception both in its academic and administrative activities. The University has state-of-the-art central computing facilities, in addition to departmental computer laboratories. Apart from a large number of PCs and servers, the University also has a High-Performance Computing Centre (PARAM-TEZ) consisting of 12 TF HPC system with 50TB storage capacity and 3 C-DAC's indigenously built PARAM Shavak having computing capacity of around 3 TF each. All computing facilities are in a high-speed campus LAN, which is connected to the internet through 1-Gbps National Knowledge Network (NKN) optical fiber link.

Advanced Experimental Facilities

The University established the Sophisticated Analytical Instrumentation Centre (SAIC) to cater to the need of various sophisticated equipment for advance research. Several sophisticated instruments, like TEM, SEM, Single Crystal XRD, NMR etc., are installed in SAIC. The Centre also extends these facilities to other educational institutions and industries within the northeastern region of India and beyond to improve and promote research in different disciplines.

Museums

The Department of Cultural Studies has a departmental museum of ethnographic materials collected from different parts of the state of Assam, and a few from outside the state. Items such as domestic articles, agarbark manuscripts, musical instruments, toys etc. representative of relevant cultural traditions of the region are added in the collection. An archive of various relevant cultural resources in the forms of photographs, slides, cassettes, CDs and DVDs has also been set up.

Neelpawan Baruah Museum of Modern Art

Artist Neelpawan Baruah, born in 1936, is one of the most significant artists of North-East India and Assam, who has made immense contribution to the modern art discourse of the entire region. With a formal degree in Fine Arts from Santiniketan in 1968, Neelpawan Baruah ushered a new direction in the art scene with his artistic experimentations as well as organisational leadership by establishing the Assam Fine Arts & Crafts Society in 1971.

The Neelpawan Baruah Museum of Modern Art in Tezpur University is an archive and permanent display of some of his most significant artworks. Handed over to the Tezpur University by the artist himself for educational and conservational purposes, the museum has the collection of total 55 artworks in different artistic media from oil painting on canvass to sketches in ink and acrylic. The museum has been set up under the aegis of the Centre with Potential for Excellence in Particular Area (2016 - 2021), a special scheme awarded by the University Grants Commission to Tezpur University in 2016 with the Department of Cultural Studies as the lead department.

Farms and Horticulture Section

The Horticulture Section of Tezpur University is entrusted to carry out landscaping and beautification activities on the University campus. The Assistant Horticulturist employed at Horticulture Section looks after the whole horticultural/landscaping activities under the supervision of a Campus Horticultural Committee with a teacher as coordinator. A total of 935 seedlings of different ornamental plants/ shrubs, fruit trees and medicinal plants etc. are planted in different parts of the University campus. Essential maintenance of all existing planted trees is carried out annually. A Vermicompost Unit is running successfully and has fulfilled the need of organic manure to some extent in the University. The University has a nursery of its own, which has been the source of seedlings of ornamental and fruit trees of different types; shrubs; indoor plants and some seasonal flowers for the use of the University.

Campus Life

Cosmopolitan Students' Community

At present approximately 4349 students are on the campus. Almost equitable composition of male (2302) and female (2047) students provide a healthy gender ratio. There are students' groups from all corners of India particularly from the northeastern states, Bihar, Maharashtra,

J&K, Jharkhand, Uttar Pradesh, Uttaranchal, and West Bengal. Maximum number of students are from the northeastern states. The state of Assam contributes major portion to student's population. Approximately 15% of students belong to other than the northeastern states. The University also attracts students from different countries such as Sri Lanka, Thailand, Ethiopia, Palestine, Botswana, Tanzania, Mauritius, Egypt, Syria, Iran, Zimbabwe and Sierra Leone amongst others. Different students from diversified social and cultural backgrounds make the campus a vibrant multicultural society.

Important Rules

- During studentship of the University, students are governed by the disciplinary rules of the University, on and off the campus.
- Use of motorized vehicles by students are not allowed in the campus. Students are rather advised to use bicycles.
- Consumption or possession of any kind of intoxicating substances like alcoholic beverages/items etc. is strictly prohibited. Also, entering/staying in the campus in an inebriated state will be considered as an offence.
- There may be penalty for violation of discipline including maintenance of cleanliness, late payment of hostel dues, etc.
- Participation of the students/boarders in common events of the University/hostel, like celebrations, competitions, is subject to their willingness and is not mandatory.

More Than a Degree

Study at Tezpur University is not just for a degree but for all round development of an individual. Apart from classroom teaching, the University takes special care to cultivate the talented minds of the students through various curricular and co-curricular activities. Our students showcased their talent & quality in various events and competitions.

In the field of sports, students participated in several AIU national and zonal sports meets. Some of them are Inter Zonal Archery Tournament, East Zone Basketball, East Zone Badminton, and East Zone Cricket. One student of Tezpur University also

represented Assam in the 40th Junior National Archery. An alumnus also got selected for the Assam Cricket Team under 23 categories.

Students' Campus Life

The University has an in-built section to deal with the welfare of the students presently headed by the Dean of Students Welfare. The section comprises various clubs and centres like the TEDx, Movie Club, Astronomy Club, Philately Club, Drama Club, Nrityangan Dance Club, Adventure Sports and Adda-The Quizzing Club, Sports Complex, Gymnasium etc.

Students' Representation

Students have the representations in almost all the administrative and governing bodies of the University. DSW nominates students to different bodies in consultation with TUSC as below.

- Board of Management: two student members.
- Academic Council: two student members.
- Research Committee: two Ph.D. student members
- Students' Disciplinary Committee: two student members.
- Library Committee: one student member.
- Grievance Redressal Committee: two student members.
- Anti-Ragging Committee: fourteen student members.

Students' Bodies

Tezpur University Students' Council (TUSC)

The University has a vibrant student council for the welfare of the students. The members of the councils are elected annually by the students themselves through electoral process.

Tezpur University Students' Council 2023-24.

Sl No.	Post	Name	Cont. No.	Email
1	President	Niyar Pathak	7636055623	pathakniyar89@gmail.com
2	Vice-President	Nipul Kalita	9394921100	nipulkalita233@gmail.com
3	General Secretary	Partha Pratim Kalita	9101119326	partha8july@gmail.com
4	Assistant General Secretary	Nirmita Saikia	9365103792	nirmitasaikia5175@gmail.com
5	Indoor Games Sports Secretary	Ashutosh Yadav	6200211268	yashutosh928@gmail.com

6	Outdoor Games Sports Secretary	Tamoghna Saha	9064023563	tamoghna.1005@gmail.com
7	Cultural Secretary	Sneh Meend	6002686704	meendsneh2019@@gmail.com
8	Literary Secretary	Dipjyoti Gowala	9707791170	dipjyotigowala564@gmail.com
9	Hobby Club Secretary	Drishita Das	6001695365	dasdrishita5@gmail.com
10	Social Service Secretary	Sourav Das	6002961371	soursvdas30121999@gmail.com
Executive Members				
11	Department of Computer Science and Engineering	Akhilesh Kumar	7409774000	akhil.kumar147932@gmail.com
		Udaya Chetri	6002758891	udayachetri07@gmail.com
		Harshit Mahla	8306253707	mahlaharshit01@gmail.com
12	Department of Electronics and Communication Engineering	Kushal Khawas	9144257937	kushalkhawas40@gmail.com
		Aariyan Krishnatria	7002945887	krishnatria@gmail.com
13	Department of Mechanical Engineering	Tridib Kumar Chowdhury	6296088817	tridibkumarchowdhury@gmail.com
		Owen Rumon Garg	8822084087	owenrumongarg@gmail.com
14	Department of Food Engineering & Technology	Sumantra Choudhury	7001264484	sumantra009@gmail.com
15	Department of Civil Engineering	Rituraj Borah	7002874687	riturajborah732@gmail.com
		Jyotiraj Kakati	7399844189	kakati_jyotiraj@gmail.com
16	Department of Electrical Engineering	Arohi Patel	8797100532	patelaarohipatel2003@gmail.com
17	Department of English	Barnika Hazarika	6003055363	barnikahazarika02@gmail.com
		Anubhab Handique	7896763673	anubhab16handique@gmail.com
18	Department of Cultural Studies	Pallavi Rabha	9871293033	pallavirabha76@gmail.com
19	Department of Social Work	Anwasha Das	8721957791	anwasha190@gmail.com
20	Department of Business Administration	Bastab Tapan Bordoloi	8368479452	bastabtapan4@gmail.com
21	Department of Commerce	Nidarshana Gohain	7086157825	nidarshanagohain@gmail.com
22	Department of Chemical Sciences	Priyanku Borah	9101820359	chi21014@tezu.ac.in
23	Department of Physics	Shubham Das	7896397804	dasshubham022@gmail.com

Society of Automotive Engineers (SAE)

With the prime motto to develop the automotive culture in the University, SAE encourages students to participate in national and international competitions like BAJA, EFFICYCLE etc. Tezpur University is the largest collegiate club of SAE in the entire Northeastern region.

Tezpur University Robotics Society (TURS)

Aims to promote exchange of information about robotics to simulate education in sciences and to promote the enjoyment of robotics as a hobby.

Hobby Clubs

There are several other clubs with the initiative of the students and mentored by faculty members such as (i) Photography Club, (ii) Movie Club, (iii) Adventure Sports Club, (iv) Nrityangan: Dance Club of Tezpur University. Photography Club organises photographic exhibitions and competitions in the University. Trekking to mountains has been some popular programmes by Adventure Sports Club. Nrityangan is an initiative for bringing all the dancers of different dance style into a single platform initiated by a section of dance loving students at the University. Astronomy club encourages the students to study and observe major astrophysical phenomena. Students with interest in quiz form Adda Quiz Club and organizes quiz competitions regularly. There is also an active Yoga Centre under the mentorship of a faculty member to cater the need of the students' physical and mental well-being.

Child Rights and You (CRY) Volunteer Chapter

It works for the upliftment of the children of the society. It works with a motive to provide best facilities for the underprivileged children around the town.

Students' Activities

Round the year activities make students busy, providing them opportunities to grow in their fields of choice. Some of the major activities are mentioned below.

National Cadet Corps (NCC)

NCC Tezpur University, established in 2011 under the 5 Assam Battalion NCC Tezpur in the NER Directorate. Grooming a vibrant community, NCC unit comprises 60 NCC cadets' boys and Girls (SD/SW) and one Associate NCC Officer Lt (Dr) Hitesh Sharma who have completed Pre-Commissioning and NCC refresher course from the NCC Officers training Academy. NCC cadets are from various departments, fostering a spirit of discipline and patriotism. Engaging in a spectrum of activities, NCC Tezpur University is more than just a military unit; it's a dynamic hub for holistic development of cadets. NCC cadets have been actively participating in impactful initiatives such as blood donation drives, tree plantation campaigns and the Recognitions and accolades decorates were received by the NCC cadets such as the best cadet award, prestigious Bir Chilarai award, representation at the Republic Day Camp in New Delhi, and participation in international forums through the Youth Exchange Program. Moreover, LCPL Mrinanga Swargiary and Cadet Surajit Konwar have been selected for the esteemed RDC 2024 at Rajpath, exemplifying dedication and skill. Cadet Mrityunjay Chandra Jha and Cadet Hridisha Bhuyan have successfully completed the All India Thal Sainik Camp, undergoing rigorous training akin to the Indian Army.

NCC Tezpur University, where discipline meets diversity, and individual achievements contribute to collective excellence. Our legacy is not just military; it's a tapestry of accomplishments, camaraderie, and a commitment to service. Embrace a journey that goes beyond textbooks, shaping leaders for a dynamic future.

Tezpur University NCC team won the first position in Republic Day March-Past 2024 at Church Field, Tezpur.

National Service Scheme (NSS) (to be updated)

NSS in Tezpur University intends to involve the students in nation building process by maintaining a link between the campus and the surrounding community.

Annual Meet

The Annual Meet of Tezpur University is organized by the Students Council every year. There are provisions for both group and individual competitions. The group competitions are either inter-departmental or inter-hostel. Some of the major events are dances, drama, song, literary, debate, photography, fine arts, wall magazine, cultural procession etc. Every year a grand cultural night is organized on the last day of the Annual Meet inviting reputed artists.

Spring Festival

Student council also organizes Spring Festival with several competition events like photography, poster making, rangoli making, skit, Indian group song, western group song, folk dance, folk orchestra, movie making etc. followed by cultural night.

InSCIgnis

The annual, national level science festival of Tezpur University InSCIgnis is organized with the initiative of students belonging to School of Sciences. Celebrated on the occasion of National Science Day, it is one of the largest science-fest of the northeastern region. It showcases an array of events ranging from experimentation and designing, innovative events, quizzes, workshops, observational events, fun events, webinars, and lecture series from eminent scientists from around the globe.

Sampark

Sampark is another annual event of Tezpur University organized by the students belonging to the School of Management Sciences. It aims at establishing a synergic relationship and interface platform where the management fraternity from both the corporate and academic world can share their experience, thereby enriching the students.

Outreach Programme

Numerous outreach programmes like blood donation, health awareness, flood relief, tree plantation etc. are organized from time to time in coordination with NSS, NCC units.

Days of National Importance and Remembrance

Office of the DSW also supports to organize different events of national importance with active participation of students such as Independence Day, Republic Day, Gandhi Jayanti, Yoga Day, Birthday of Sri Atal Bihari Bajpayee, Anniversary of Sardar Ballabh Bhai Patel, Ambedkar Jayanti, Remembrance Day of Dr Bhupendra Hazarika, Rabha Divas, Shilpi Divas, National Unity Day, National Education Day, International Yoga Day etc.

36th Inter-University Youth Festival 2022-2023 Tezpur

Tezpur University, with a contingent of 41 members have participated in the 36th Inter-University Northeast Zone Festival held at USTM, Meghalaya from January 3, 2023, to January 8, 2023, amidst 15 universities of the Northeast. The results are –

1. Quiz – 1st position
2. Cultural Procession – 2nd position
3. Instrumental Non-Percussion (Solo) – 2nd position
4. Indian Group Song – 3rd position
5. Western Vocal Solo – 3rd position
6. Folk Dance Group – 3rd position
7. Installation (Fine Arts-Group) – 3rd position

Additionally, TU has bagged overall 2nd position in Literary and 3rd position in Dance category.

Tezpur University has qualified for the National Youth Festival held at Jain Deemed-to-be University, Bengaluru from February 24, 2023, to February 28, 2023 and participated among 120 universities across India. The results are as follows:

1. Indian Group Song – 1st position
2. Quiz – 3rd position
3. Western Vocal Solo – 3rd position
4. Folk Dance Group – 3rd position

Students' Support System

Pre-arrival Support and Settling in

The University prepares a detailed academic calendar at the beginning of every academic year and all activities are carried out while strictly adhering to the same. Week-long orientation programmes for newly admitted students are conducted at

the beginning of every academic year. The students are familiarized with the facilities and the scope which the University offers and made known the expectations bestowed upon them.

At the beginning of every new academic year, a Walk to Library programme is organized to inculcate amongst the students the habit of reading and to expose them to the vast resources of the Central Library of the University. Counselling and icebreaking sessions are carried out at the department and hostel level as well.

Students' Well Being

The University has a Centre for Inclusive Development looking into the affairs of SC/ STs, counselling, placement activities etc. The Equal Opportunity Cell under this centre engages in affirmative actions towards the needy sections of students and society.

Mentoring System

Student mentoring is done at the departmental level. Each faculty member is assigned a small group of students to mentor for their overall development.

Counselling and Mental Health Support

Psychological counselling sessions are organized for students every week to address their various psychological needs. A Resident Clinical Psychologist is appointed to provide counselling services and referrals.

Financial Support

The University provides generous financial support to the needy students from economically and socially backward sections. This assistance is over and above the externally funded scholarship instituted by government and other agencies. Bicycles are also provided to economically underprivileged girl students and other needy sections of students to commute to their classes. A limited number of institutional fellowships is provided to meritorious Ph.D. students as per the University rules.

Support for Differently Abled Students

The University provides vehicles for differently abled students to commute to their classes. The University has adopted the policy of providing extra time in all the examinations for the benefit of differently abled students. All buildings are provided with ramp facilities.

Academic Writing Guidance

Periodically, academic writing workshops and seminars are organized by the departments and Placement Cell for students enrolled in Ph.D., graduate, and undergraduate programmes.

Redressal of Discrimination and Harassment

The University has an Internal Complaint Committee (ICC) that examines complaints of sexual harassment at workplace within the framework of The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. ICC has zero tolerance policy against discrimination and sexual harassment.

The ICC at Tezpur University actively organized sensitization programme for officers, non-teaching staff, faculty members, security staff, local vendors, students etc. An orientation programme is also organized every year for the newly admitted students to sensitize them on prevention, prohibition and redressal of sexual harassment and the role of ICC. The committee has nominated members from all the departments/centres.

Students' Publications

The Tezpur University Students Council brings out Srijan, an annual magazine with articles written in English, Assamese, Hindi etc.

A science and society-based publication under the aegis 'InSCIgnis' is brought out every year and edited by a committee of students during National Science Day celebration.

A Souvenir for Sampark is released on business-academia interaction.

Hostels and departments bring out their own wall magazines every year during the University Annual Meet

Study Abroad

World-Class Partners

The University has tied up with several top rated educational/research institutions as well as with industry by signing MoUs. Some of the notable international collaborations are:

- KTH Royal Institute of Technology Stockholm, Sweden
- University of Auckland, New Zealand
- Vietnam Military Medical University, Hanoi, Vietnam
- University of Malaya, Malaysia
- Queen's University Belfast, UK
- National Chung Hsing University, Taiwan

Directorate of International Affairs

The International Students Office (ISO) of Tezpur University was established in February 2013. The office is run by a part-time director and two assistant coordinators. Over the years, the International Students Office has handled the admission of international students, organized talks and seminars on overseas education and research opportunities and facilitated collaboration between the University and institutions abroad.

Profile of International Students

There has been a definite upward swing in the number of international students selecting Tezpur University as their destination of choice. This is partly because of the University's global and national rankings. Apart from the academic programmes on offer, which are of international standards, Tezpur University strictly adheres to its announced academic calendar. This works well for foreign students (who are either self-financing or on time-bound fellowships). Most of the foreign students currently at the University are full time students from countries like Sri Lanka, Thailand, Botswana, Malawi, Tanzania, Zimbabwe, Lesotho, Egypt, Palestine, Ghana, Nepal, and Guyana in undergraduate, post-graduate, and doctoral programmes. Some international students also visit the University for short durations for research works.

Categories of International /NRI Students

- Sponsored by the Govt. of India (through ICCR) on cultural exchange programme.
- Sponsored by the home country of the concerned students and/or funding agencies.
- Self-financing direct entry (with the clearance of Govt. of India).
- NRI students.

Admission Information

A student willing to join the University for various programmes will get the information about the application form and the information on the eligibility requirements, courses available, and admission procedure from the prospectus or the website of the University (International Student Office, Tezpur University).

Provisional Admission Form

The application for provisional admission is to be submitted to the ISO along with the prescribed fees on or before the last date specified. The office will then check the eligibility and issue the provisional eligibility letter. This is required to get the visa and to complete other formalities.

Provisional Admission Procedure

Apply for provisional eligibility in the prescribed form which can be downloaded from the University website. The prescribed eligibility fee must be deposited along with the form before the last date specified.

Attach with the application form photocopies of the statement of marks of the last qualifying examinations duly attested by:

- Indian Embassy in the country of the student, or
- High Commissioner of the country of the student in India, or
- Ministry of Education in the country of the student.
- Attach Migration Certificate in original with the application form. This is obligatory for those coming from any other statutory Indian University.
- Attach affidavit to the application form relating to the gap between year of passing and the last qualifying examination and the date of application for admission to this University (This is not required for PhD programmes).

In case of PhD programme, enclose 6 (six) copies of the outline of the proposed research along with the application form.

The ISO will issue the provisional eligibility letter after scrutinizing the forms and based on credentials verified by the University and the Association of Indian Universities.

Visa Application

A foreign student will require a visa endorsed only to Tezpur University for joining a full-time programme. No other endorsement is acceptable. Visa should cover the duration of the academic programme.

English Language Proficiency

Foreign students should have a certificate of English language proficiency issued by a recognized language institute such as TOEFL or IELTS or by a duly qualified University teacher of English.

Pre-Arrival Support International Welcome Programme/Orientation

Students will have to attend a brief orientation programme soon after arrival. Student volunteers and designated faculty members will also assist students during the initial settling down period.

Accommodation

Tezpur University follows a policy of providing hostel accommodation to all its foreign students.

The International Students Office does a certain amount of hand holding. The University has effective support systems for all its student, including foreign ones.

For any communication please contact:

The Director
Directorate of International Affairs
Room nos. 66 and 67.
(Administration Building)
Tezpur University
Ph no. 03712-275802
Email: io@tezu.ernet.in, chandan@tezu.ernet.in, rboruah@tezu.ernet.in

For detail information visit: <https://www.tezu.ernet.in/io/index.php>

International Collaboration

In a significant development of academic collaborations between India and the UK at University level, Tezpur University has entered into a multi-level collaborative deal with the Queen's University, Belfast, one of the oldest and top ranking universities of the world under which young faculties and research scholars will benefit academically. The collaborative project, which has been approved by the Ministry of Human Resource Development and the University Grants Commission, is for a period of six years.

The following are some other international collaborations:

1. Department of Energy and Research Centre for Natural Sciences, Institute of Materials and Environmental Chemistry, Budapest, Hungary .
2. Department of Cultural Studies with Department of Dance Studies, University of Auckland, New Zealand.
3. Department of Chemical Sciences with the University College of London.
4. Department of English with International Institute of Social History, Amsterdam, Netherlands.
5. Collaboration with Yunnan University of Finance and Economics, China.
6. Department of Physics with University of Southampton under the UK-India Education and Research Initiative (UKIERI).

Section III: ACADEMIC PROGRAMMES OFFERED AND ELIGIBILITY

3.1. UG Programmes and Eligibility

Candidates seeking admission to the undergraduate programmes offered by Tezpur University are required to appear in the CUET-UG-2024 to be conducted by NTA, New Delhi and admission will be based on score obtained in CUET-UG-2024.

For admission into B. Des programme, candidates must have valid UCEED-2024 (IITB)/DAT-2024 Prelims (UG: NIDA) scores / qualified or must have qualified TUEE-2024.

For admission in B.A. LLB programme candidates will have to qualify TUEE-2024.

Eligibility, Total Intake and Duration

Sl. No.	Name of the programme	Intake	Duration (Semesters)		Eligibility
			Minimum	Maximum	
1.	Integrated MSc in Chemistry (4+1 Years as per NEP 2020)	25	10	14	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Chemistry, Physics and Mathematics.
2.	Integrated MSc in Life Sciences (4+1 Years as per NEP 2020)	25	10	14	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Biology, Chemistry, Physics and/or Mathematics.
3.	Integrated MSc in Mathematics (4+1 Years as per NEP 2020)	25	10	14	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Biology, Chemistry, Physics and/or Mathematics.
4.	Integrated MSc in Physics (4+1 Years as per NEP 2020)	25	10	14	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Chemistry, Physics and Mathematics.

5.	Integrated MCom (4+1 Years as per NEP 2020)	33*	10	14	10+2 standard pass in Science/Commerce Stream with minimum 60% aggregate marks or equivalent grade point, where applicable.
6.	Integrated MA in English (4+1 Years as per NEP 2020)	25	10	14	10+2 standard pass in any stream with minimum 60% aggregate marks or equivalent grade point with General English as one of the compulsory subjects.
7.	Integrated BSc BEd	39	08	12	10+2 standard pass in science stream with minimum 60% aggregate marks or equivalent grade point in Chemistry, Physics, English, Mathematics, Biology.
8.	BDes*	30	08	12	10+2 with Science/ Arts & Humanities /Commerce with minimum 60% marks or equivalent grade and passed any one relevant combination of subjects individually with English / MIL as a compulsory subject in board final examinations conducted by a Central or State Boards The candidates must have valid UCEED-2024 (IITB)/DAT-2024 Prelims (UG: NIDA) scores / qualified or must have qualified TUEE-2024 (Design UG Test).
9.	BA in Chinese*	20	08	10	Minimum Requirement 45% Pass marks in aggregate in 10+2 from any recognized State or Central Board of Education in any stream Humanities, Commerce, Science.

*

New

programme from Academic session 2024-25

3.2 . BTech Programmes and Eligibility

Candidates seeking admission to the BTech programmes are required to appear in the JEE (Main) – 2024 to be conducted by NTA, New Delhi. All admission shall be on the basis of JEE (Main) - 2024 All India Rank/CRL.

Eligibility, Total Intake and Duration

Sl. No	Branch	Intake	Duration (Semesters)		Common Eligibility
			Minimum	Maximum	
1.	Civil Engineering	68	08	12	10+2 standard or equivalent examination with minimum 60% aggregate marks or equivalent grade point, where applicable and pass marks or equivalent grade point in (1) Physics, (2) Mathematics, (3) Language, (4) Chemistry/Biology/Biotechnology/Technical vocational subject (any one of them), and (5) any other subject.
2.	Computer Science and Engineering	68	08	12	
3.	Electrical Engineering	38	08	12	
4.	Electronics and Communication Engineering	68	08	12	
5.	Food Engineering and Technology	56	08	12	
6.	Mechanical Engineering	68	08	12	

3.3. Lateral Entry to the 2nd year of BTech Programmes and Eligibility

- a) As per the provisions of AICTE, engineering diploma holders may apply for admission to the 2nd year of existing B.Tech. programmes at Tezpur University.
- b) Candidates seeking admission must appear for TUEE-2024 to be conducted by Tezpur University through CBT mode across India.

Eligibility, Intake and Duration for Lateral Entry

Sl. No.	Branch	Intake	Duration		Eligibility
			Minimum	Maximum	
1.	Civil Engineering	06	6	10	Passed minimum 3 years/2 years (Lateral Entry) diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category SC/ST) in the respective branch of Engineering and Technology
2.	Computer Science and Engineering	06	6	10	
3.	Electrical Engineering	06	6	10	
4.	Electronics and Communication Engineering	06	6	10	
5.	Mechanical Engineering	06	6	10	
6.	Food Engineering and Technology	06	6	10	

Note:

- a) Exact number of candidates to be admitted in each discipline will be notified separately on the university webpage after facilitating internal branch sliding among continuing students.
- b) Candidates, who are appearing for the final year of diploma examinations, are also eligible, subject to the condition that they shall submit the provisional certificate at the time of admission, along with final grade sheet to support fulfilment of eligibility criteria.

3.4 M. Tech. Programmes

Candidates with GATE score will be given preference. If the seats are vacant due to non-availability of GATE qualified candidates, such vacant seats will be filled through TUEE-2024 test to be conducted in CBT mode across various India by Tezpur University and CUET-PG conducted by NTA. **80% of the seats is reserved for TUEE-2024 qualified candidates and 20% of seat is reserved for CUET-PG qualified candidates. For admission into MDes, candidates with valid CEED (Conducted by IITB) /GATE / DAT (Conducted by National Institutes of Design) score will be preferred.**

Eligibility, Total Intake and Duration

Sl. No	Department	Programme	Intake	Duration)		Eligibility
				Minimum	Maximum	
1.	Civil Engineering	MTech in Civil Engineering	11	4	8	BE/BTech in Civil Engineering with minimum 50% aggregate marks or equivalent grade point, where applicable.
2	Computer Science and Engineering	MTech in Computer Science & Engineering	28	4	8	BE/BTech or equivalent Bachelor's degree in Computer Science and Engineering or MCA with minimum 50% aggregate marks or equivalent grade point.

3		MTech in Data Sciences	18	4	8	BE/BTech or equivalent Bachelor's degree in Computer Science and Engineering/ Information Technology/ Electronics and Communication Engineering/any other allied Discipline, or MCA or its equivalent degree, or MSc in Computer Science/ Information Technology/ Electronics/ Mathematics/ Statistics. Minimum 50% aggregate marks or equivalent grade point in the above qualifying exams. Candidates selected under GATE should have a valid GATE score in Computer Science and Information Technology (CS) or Data Science and Artificial Intelligence (DA).
4	Design	Master of Design (MDes)	18	4	8	Bachelor's Degree in Design/ Engineering/ Architecture/Planning/Interior Design (10+2+4) years /4 Years Diploma in Design/4 Years BFA/Any recognized (AICTE/UGC) degree in Design related field (10+2+4) years/Master Degree in Art/Science/MCA/MSc Computer Sciences/Electronics) with minimum 50% marks in graduation/ and Post-graduation/Equivalent CGPA/CPI/Qualifying degree (Relaxation of percentage marks for the reserved categories is as per Govt. of India rules). CEED (Conducted by IITB) /GATE / DAT (Conducted by National Institutes of Design) qualified candidates will be preferred.
5	Electronics and Communication	MTech in Bioelectronics	19	4	8	BE/BTech or equivalent Bachelor's degree in Electronics and Communication Engineering/ Instrumentation/ Chemical Engineering/ Computer Science and Engineering/ Electrical Engineering/ Biomedical Engineering/ Bioengineering/ Neuroengineering/ Genetic Engineering/ Biotechnology or MSc in Biotechnology/ Biochemistry/ Chemistry/ Polymer Science/ Physics/ Electronics/ Nano Science and Technology/ Instrumentation or MBBS with minimum 50% aggregate marks or equivalent grade point.

6.		MTech in Electronics and Design Technology	35	4	8	BE/BTech or equivalent Bachelor's degree in Electronics/ Electrical/ Instrumentation Engineering or MSc in Electronics/ Instrumentation/ Physics (Electronics as specialization) with minimum 50% aggregate marks or equivalent grade point.
7.	Energy	MTech in Energy Technology	35	4	8	BE/BTech or equivalent Bachelor's degree in Mechanical/ Electrical/ Electronics/ Instrumentation/ Chemical/ Agricultural/ Energy Engineering / Civil/ Petroleum/ Material Science/ Engineering Physics/ Renewable Energy. Or M.Sc. in Physics/ Chemistry/ Material Science/ Engineering Physics/ Engineering Science/ Polymer Science/ Renewable Energy/ Energy/ Nanoscience/ MVoc in Renewable Energy with minimum 50% aggregate marks or equivalent grade point.
8.	Food Engineering	MTech in Food Engineering and Technology	23	4	8	BE/BTech /MSc in Food Engineering and/or Technology/ Agricultural Engineering/ Chemical Engineering and/or Technology/ Dairy Engineering and/or Technology with minimum 50% aggregate marks or equivalent grade point. Also, candidates must have Mathematics at 10+2 standard with minimum 50% marks or equivalent grade point or as a subsidiary subject in the specified degree programmes.
9.	Mechanical Engineering	MTech in Mechanical Engineering	23	4	8	BE/BTech or equivalent Bachelor's degree in Mechanical/ Aerospace/ Automobile Engineering or in any other relevant engineering discipline with minimum 50% aggregate marks or equivalent grade point.
1	Electrical Engineering	MTech in Electrical Engineering	12	4	8	BE/BTech or equivalent bachelor's degree in Electrical/ Electronics /Electrical & Electronics / Electronics and Communication Engineering/ Mechanical/Instrumentation/ Power Engineering/Energy Engineering/ Engineering Physics/ Renewable Energy/others relevant to Electrical Engineering.

						Or MSc in applied and Basic Sciences/ Renewable Energy/ Energy/ Nanoscience with minimum 50% aggregate marks or equivalent grade point.
--	--	--	--	--	--	---

3.5. MA/MSc/MEd/MCA Programmes

For admission into MA/MSc programmes candidates will be selected based on the performance in the TUEE-2024 test to be conducted in CBT mode across India by Tezpur University and CUET-PG conducted by NTA. **80% of the seats are reserved for TUEE-2024 qualified candidates and 20% of seats are reserved for CUET-PG qualified candidates. For admission into MSc in MBBT, candidates will have to qualify GAT-B 2024. For admission into MBA, candidates must have valid CAT/ MAT/ XAT/ ATMA/ GMAT/ CMAT score.**

Eligibility, Total Intake and Duration

Sl No	Department	Programme	Intake	Duration (Semesters)		Eligibility
				Minimum	Maximum	
1.	Assamese	MA in Assamese	20	4	8	Bachelor's degree with at least 45% in major/honours in Assamese or Bachelor's degree with Assamese (MIL) with minimum 50% marks or equivalent grade point,
2.	Cultural Studies	MA in Cultural Studies	30	4	8	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point in the major/ honours subject, or 50% aggregate marks or equivalent grade point, if not having any major/ honours subject.
3.	Education	MA in Education	38	4	8	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point in the major/ honours subject, or 50% aggregate marks or equivalent grade point, if not having any major/ honours subject.
4.		MEd	50	4	8	Bachelor's degree in B.Ed/ BA. B.Ed.

						BSc BEd/B.El.Ed with 50% marks or equivalent grade. Any graduate with D.El.Ed with 50% marks in each.
5.		BEd	63	4	8	Bachelor's degree in any discipline (BA/BSc/BTech/BE) with minimum 55% marks or equivalent grade point,
6.	English	MA in English	63	4	8	Bachelor's degree with Major/Honours in English with minimum 45% marks or equivalent grade point in the major/ honours subject.
7.	Linguistics and Language Technology	MA in Linguistics and Language Technology	38	4	8	Bachelor's degree with minimum 45% marks or equivalent grade point, where applicable in major/ honours in Linguistics/English/any other allied subject, or 50% marks or equivalent grade point. in any of the specified subjects as well as in aggregate if not having major/ honours in any of the specified Subjects.
8.	Hindi	MA in Hindi	31	4	8	Bachelor's degree with minimum 45% marks or equivalent Grade Point, where applicable in Major/Honours in Hindi, or 50% marks or equivalent grade point in Hindi as well as in aggregate if not having major/ honours in Hindi.
9.	Law	Master of Laws (LLM)	25	4	8	Bachelor's degree in Law with minimum 50% aggregate marks or equivalent grade point.

10.	Mass Communication and Journalism	MA in Mass Communication and Journalism*	44	4	8	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point, in the major/ honours subject, or 50% aggregate marks or equivalent grade point, if not having any major/ honours subject.
* Final selection of candidates for admission will be based on TUEE score and Personal Interaction / viva voce. (70 % weightage from TUEE and 30 % from PI)						
11.	Social Work	MA in Social Work	22	4	8	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point in the major/ honours subject, or 50% aggregate marks or equivalent grade point if not having any major/ honours subject.
12.	Sociology	MA in Sociology	38	4	8	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point in the major/ honours subject, or 50% aggregate marks or equivalent grade point if not having any major/ honours subject.
13.	Chandraprabha Saikiani Centre for Women Studies	MA in Women Studies*	20	4	8	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point, in the major/ honours subject, or 50% aggregate marks or equivalent grade point, if not having any major/ honours subject.
14.	Business Administration	MBA#	58	4	8	A Bachelor's degree in any discipline from a recognized Indian or foreign university/

						institution (foreign degree must have UGC approval) with a minimum of 50% of marks (or equivalent grade) in major subject or in aggregate. <i>Note: Candidates who aspire for the MBA programme at Tezpur University must have valid CAT/ MAT/ XAT/ ATMA/ GMAT/ CMAT score.</i>
15.		MBA (Executive)#	30	3	6	A Bachelor's degree in any discipline (except fine arts) with a minimum of 50% marks or equivalent grade in aggregate or in major subject from a recognized Indian or Foreign University / Institution (foreign degree must have UGC approval). Full time post qualification work experience of 5 years or above is essential.
16.		Master of Tourism and Travel Management (MTTM)	19	4	8	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point, where applicable in major/ honours subject or in aggregate.
# Admission for academic session 2024-2025 is over						
17.	Commerce	MCom	17	4	8	BCom with minimum 50% marks or equivalent grade point in major/ honours. Mathematics at degree level is desirable.
18.	Chemical Sciences	MSc in Chemistry	30	4	8	Bachelor's degree with minimum 55% marks or equivalent grade point in major/ honours in Chemistry, or 60% marks or equivalent grade point in Chemistry as well as in

						aggregate if not having major/ honours in Chemistry. Also, candidates should have Physics or Mathematics as subsidiary subjects in Bachelor's degree.
19.	Environmental Science	MSc in Environmental Science	38	4	8	Bachelor's degree with minimum 45% marks or equivalent grade point, where applicable in major/ honours in Physical/ Biological/ Earth/ Environmental Sciences, or 50% marks or equivalent grade point in any of the specified subjects as well as in aggregate if not having major/ honours in any of the specified subjects, or Bachelor's degree in Agriculture with minimum 50% aggregate marks or equivalent grade point.
20.	Mathematical Sciences	MSc in Mathematics	53	4	8	Bachelor's degree with minimum 45% marks or equivalent grade point in major/ honours in Mathematics/Statistics, or 50% marks or equivalent grade point, where applicable in Mathematics as well as in aggregate if not having major/ honours in Mathematics/ Statistics. Also, candidates with major/ honours in Statistics should have Mathematics as a subsidiary subject in Bachelor's degree with minimum 50% marks or equivalent grade point.

21.	Physics	MSc in Physics	38	4	8	Bachelor's degree with minimum 45% marks or equivalent grade point in major/ honours in Physics, or 50% marks or equivalent grade point in Physics as well as in aggregate if not having major/ honours in Physics. Also, candidates should have Mathematics as a subsidiary subject in Bachelor's degree.
22.	Molecular Biology and Biotechnology	MSc in Molecular Biology and Biotechnology	30	4	8	Bachelor's degree with minimum 45% marks or equivalent grade point, where applicable in major/honours in Physical/ Biological/ Agricultural/ Veterinary/ Fisheries Science or 50% marks or equivalent grade point in any of the specified subjects as well as in aggregate if not having major/ honours in any of the specified subjects, or Bachelor's degree with minimum 50% aggregate marks or equivalent grade point in Pharmacy/Engineering/ Technology/Physician Assistant Course/ Medicine.
For admission in MSc MBBT, candidates must have valid GAT-B 2024 score. Out of the total 30 seats, 20 seats will be filled from all India and 10 seats are reserved for candidates of North East state domiciles with valid GAT-B score. Notification for admission will be notified separately in the University webpage.						
23.	Computer Science and Engineering	Master of Computer Application (MCA)	56	4	8	Passed any graduation degree (e.g.: BE / BTech/ BSc / BCom / BA/ BVoc/ BCA etc..) preferably with Mathematics

						at 10+2 level or at Graduation level. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
--	--	--	--	--	--	--

* New programme introduced from academic session 2024-2025

Admission for academic session 2024-25 is over.

3.6 PhD Programmes

Candidates will be selected based on their performance in Tezpur University Entrance Examination (TUEE) 2024 followed by Personal Interview (PI). However, 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 will have to appear for the PI conducted by the concern department. All candidates should apply online for appearing in TUEE-2024 at <https://www.tezuadmissions.in/public/>.

Note: Candidates who are exempted from appearing TUEE-2024 as per para given above, still require registering online for admission 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • Masculinity, Protest Music, Comparative Literature and Film Studies • Digital Culture • Design Ethnography • Media and Culture • Folklore • Visual Culture & Art History.
3.	PhD in Education	Education	Post Graduate in Education or in any allied discipline/ subjects with 55% marks.	<ul style="list-style-type: none"> • 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	<p>Master 's Degree with minimum 55% marks in Major/Honours in English for General, and 50% marks for SC/ST.</p> <p>M.A. 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).</p>	<ul style="list-style-type: none"> • American Literature, • Critical Theory, • Postcolonial Studies, • Modernist Poetics, • Indian Writing in English, • English Language Education, • Curriculum Development, • Materials Production, • Language Policy, • Life Writing, • Translation Studies, • Travel Writing, • Contemporary British Literature • Gender and Literature, • New Literatures in English, • Indian Vernacular Literature, • Adaptation Studies, • Film Studies • South Asian English Literature

5.	PhD in Hindi	Hindi	MA in Hindi	<ul style="list-style-type: none"> Linguistics, Poetry and Journalism Fiction and 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • Corporate Finance • Corporate Sustainability • Corporate Governance • Banking • Insurance • Capital Market • Financial Market and Institutions • Behavioural 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/	<ul style="list-style-type: none"> • Polymer Chemistry • Water Purification, • Theoretical Chemistry • Organic Synthesis • Computational & Inorganic Chemistry • Ionic Liquid Based Material • Electrocatalysis

			Polymer Technology/ Material Sciences/ Environmental Engineering etc.).	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Cancer Biology • Inflammation • Bioinformatics, Computational Biotechnology • Whole Genome Sequencing (WGS) and Metabolic Pathway Analysis • Type 2 Diabetes • Plant Pathogenicity • Gene Expressions. • Snake Venom

			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.	
16.	PhD in Physics	Physics	MSc in Physics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science. MTech in 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.	<ul style="list-style-type: none"> • High Energy Physics • Microwave Materials & Devices • Optoelectronics, Laser Physics • Nano- sciences, Condensed Matter Physics, Multidisciplinary • Mesoscopic Physics, Quantum Systems/ 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/any allied subjects with 75% marks in aggregate or equivalent CGPA with a valid	<ul style="list-style-type: none"> • Differential Equations, Harmonic Analysis • Spectral Graph Theory • Operations Research, Inventory Modelling, Fuzzy Mathematics and Optimization, Mathematics Modelling.

			GATE Score. Minimum two recommendation Letters from the Institute/ University from where BE/BTech degree was obtained	
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	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • Geotechnical Engineering • Environmental Engineering • Transportation Engineering

20.	PhD in Computer Science & Engineering	Computer Science & Engineering	<p>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.</p>	<ul style="list-style-type: none"> • 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 Internet • ML, Trust and Reputation, EDM • Data Mining • Network security, Bioinformatics, • CRN, 5g/6G, • Optical Network, SDN • Wireless Network.
21.	PhD in Design	Design	<p>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</p>	<ul style="list-style-type: none"> • Product Design and Design Methodology • Rural Technology and Innovation.

			<p>equivalent CGPA with valid CEED/GATE Scores.</p> <p>OR</p> <p>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.</p>	
22.	PhD in Electrical Engineering	Electrical Engineering	<p>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</p>	<ul style="list-style-type: none"> • Sensor Fabrication for Application in Food Industry, IOT & Health Monitoring, Green Energy, Sensor • Control System, Smart Energy System, Chaos, IOT, Wastewater Purification • Renewable Energy, Power System, Electronic Drives, Electric Vehicles • Power Electronics & Drives, Micro Grid, Smart Grid.
23.	PhD in Electronics & Communication Engineering	Electronics & Communication Engineering	<p>ME / MTech / MSc Engg / MS in Electronics/ Communication/ Electronics Design/ Electrical/ Instrumentation/ Control/ Microwave/ Biomedical/ Bioelectronics/ Bio-Technology/ Computer Science/ Information</p>	<ul style="list-style-type: none"> • 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

			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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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, GreenHydrogen, Battery Supercapacitor, Hybrid UAV based Air Quality Monitor • Solar Energy, Photovoltaic, EnergySystems, 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/	<ul style="list-style-type: none"> • Functional Foods and Food Chemistry • Food Packaging, Food Processing Waste Utilization • Food Process Engineering

			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.	
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	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> • 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*

4. GENERAL INFORMATION

Important Notes

- Interested eligible candidates may **apply Online** through the link: <https://www.tezuadmissions.in/public/> for the BTech; BTech (Lateral Entry); MTech (with valid GATE score); MSc and MSc in MBBT (with valid GAT-B score) and PhD programmes
- A candidate can apply for multiple programmes (02) in a single application by paying application fee only once. The candidate must select the desired number of programmes in the programme selection section of the online application. However, a PhD candidate can select a maximum of only 02 programmes during the application process.
- In the case of B.Tech. programmes, selection of multiple programmes is not available. The selected candidates will opt for the programme/department/discipline based on the availability of seats at the time of their turns during the counselling-cum-admission process.
- Candidates yet to obtain the last qualifying degree/diploma/ certificate: Candidates who have already finished their qualifying examinations or expect to finish all the components, including practical, viva-voce (if any), and backlog courses/ papers of earlier semesters before the date of admission may also apply.
- Foreign candidates may be enrolled on supernumerary basis and their admissions would be as per guidelines and regulations of Government of India. For details, candidates are advised to contact Directorate of International Affairs, Tezpur University.
- All communication with candidates will be made through their registered e-mail ID/ mobile number or notification in TU admission portal.
- No separate letter will be issued for acceptance/ rejection of application form, appearing in entrance examinations (admit card), entrance examination schedule, selection for admission, etc.
- Communication for any doubt/query may be made on asktuee@tezu.ernet.in. For queries related to BTech programmes, email must be sent to bssc2021@tezu.ac.in.

Mandatory Documents to be Uploaded.

Following documents (digital/scanned copy) to be uploaded as documentary evidence in original against each provided by the candidate in his/her TUEE Application Form:

- A passport size photograph.
- Scanned copy of the signature.
- For programmes under CUET (UG/PG): admit card issued by NTA in phase-1 and NTA score card in phase-2 of application process.
- Relevant certificate issued by the competent authority, if applied for admission under any reserved category mentioned in the reservation policy.

- For BTech programmes: JEE Main admit card and Permanent Residence Certificate (PRC) issued by the competent authority of any state of northeastern India for the northeastern India quota.
- MSc programme in Molecular Biology and Biotechnology: GAT-B score card and PRC under the northeastern India quota.
- Certificates and mark-sheets/grade cards of all the previous degree/diploma/certificate examinations, including those of the 10 and 10+2 standard examinations.
- Valid GATE score card, if applied for admission to an MTech programme through GATE.
- Score cards/award letters of national level eligibility tests/ GATE, if any, while applying for PhD programmes.
- Sponsorship/No Objection Certificate with relieving order issued by the employer if the candidate is employed.
- Relevant certificate as evidence of winning medal(s) in international/national sports event(s)/ in academics.
- **While filling up the academic details, if the result is given in CGPA, the conversion of CGPA to percentage must be done by the applicant, as per the qualifying board/university formula. If the formula is not provided by the university/board, the converted CGPA in percentage must be certified by the principal/competent authority of the institute.**

5. ADMISSION PROCEDURE

Postgraduate/Undergraduate/PhD programmes

- Admission to **MA/MSc programmes** will be through two channels of admission.
 - 1) Computer Based Test (CBT) conducted by TUEE-2024 (80% of the seats)
 - 2) CUET-PG 2024 score (20% of the seats).
- Admission to Integrated programmes/undergraduate programmes **will be based only on CUET UG 2024 score.**
- Admission to BTech (Lateral Entry)/**BA LLB**/PhD programmes **will be based only on TUEE-2024 test score.**
- Admission to **BDes programme** will be based on valid UCEED, JEE (mains) or TUEE-2024 test score. Out of the total 30 seats, 16 seats will be filled through UCEED score; 10 will be filled from JEE Mains score and 04 seats will be filled based on TUEE-2024 test score. **However**, if any seat remains vacant under UCEED and JEE (mains) categories, it will be filled based on TUEE-2024 test score. So, aspirants may also appear for TUEE-2024 test on top of UCEED and/or JEE (mains).
- Admission to **MDes programme** will be based on valid CEED-2024 or GATE or DAT-2024 or TUEE-2024 test score. First preference will be given to candidates with valid CEED/GATE/DAT-2024. If seats remain vacant, the same will be filled based on TUEE-2024 test Score. So, aspirants may also appear for TUEE-2024 test on top of CEED and/or JEE (mains) and /or GATE. Merit list will be prepared based on score, portfolio and Personal Interview (PI).
- Admission to **MTech programmes** will be based on valid GATE score or CUET-PG or TUEE-2024 test. First preference will be given to GATE qualified candidates. If seats remain vacant, the same will be filled based on CUET-PG-2024 or TUEE-2024 test Score.
- For admission to **PhD programmes**, candidates with valid UGC NET-JRF/ UGC CSIR NET-JRF, UGC CSIR NET (LS)/ SLET (LS), GATE, CEED or similar examinations are directly qualified for Personal Interview (PI). Candidates without any of the above mentioned national or state level eligibility test score must appear the TUEE-2024 test and merit list for Personal Interview will be prepared based on TUEE-2024 test score.

Procedure for applying for admission through TUEE-2024 Test

- Candidates must **FIRST** satisfy all the admission criteria and department specific eligibility before applying for admission.
- **All candidates must register and fill in the Admission cum Counselling Form (ACF) in online mode (<https://www.tezuadmissions.in>)**
- While filling the online application form candidates must select test centre as per their choice and must appear the CBT conducted by TUEE-2024 at their chosen test centre.
- Merit list of candidates will be prepared based on the marks obtained in TUEE-2024 test and will be called for admission cum counselling.

Programmes for which admission through TUEE-2024 test is available:

1. BTech (Lateral Entry) Programmes
2. BDes Programme

3. MTech/MA/MSc/MCA/LLM/MEd Programmes
4. PhD Programmes

Procedure for applying for admission through CUET(PG/UG) Channel

- Register for the CUET (PG/UG)-2024 at NTA web portal available at [<https://nta.ac.in>] [<https://cuet.samarth.ac.in>] by following the guidelines provided there.
- Select Tezpur University from the list of universities and then select the desired programme(s) under Tezpur University.
- Select the correct test paper (General and domain subject) for the selected programme offered by Tezpur University and your preference for examination centres.
- Appear in the CUET (PG/UG)-2024 examination in the selected test paper as per the schedule published by the NTA.
- **All candidates must have to register and fill the Admission-cum-Counselling Form (ACF) in online mode (<https://www.tezuadmissions.in>) in the following phases:**

Registration Phase: Candidates must register to obtain login ID and Password and fill the form with their CUET(PG/UG) admit card details and upload all other required documents.

NTA score uploading Phase: After the declaration of CUET(UG/PG) results, candidates must revisit the admission portal (<https://www.tezuadmissions.in>) with their login ID and Password to upload the NTA score obtained in specific domain/subject as specified by Tezpur University.

- Merit list of candidates will be prepared based on the marks obtained in CUET(PG/UG) score and will be called for admission cum counselling.

Programmes for which admission through CUET(PG/UG) Channel is available:

1. Integrated Programmes
2. MTech/MSc/MA Programmes

BTech Programmes through JEE (Mains)

- i) Candidates seeking admission to the B.Tech. programmes are required to appear in the JEE (Main)-2024 to be conducted by NTA, New Delhi. All admission shall be on the basis of JEE (Main)-2024 All India Rank/CRL.
- ii) Admission to the B.Tech. programmes is through two channels:
 - a) **All India seats through Central Counselling:** 40% of the total seats shall be made available through the central counselling i.e., Central Seat Allocation Board (CSAB) on the basis of JEE (Main)-2024. The candidates from any

place of India can participate in the central counselling conducted by CSAB/JoSSA (online choice filling process), to get admission in Tezpur University against these 40% seats.

- b) **Northeastern (NE) States Quota Seats through BSSC-TU Counselling:** 60% of the total seats shall be made available through the counselling by the B.Tech. Screening cum Selection Cell at Tezpur University (BSSC-TU). These seats are reserved for the permanent residents of northeastern (NE) states. The candidates need to register and fill in the ACF at TU admission portal in addition to JEE (Main)-2024 application. While filling in the ACF form, candidates must produce the PRC (Permanent Residence Certificate) issued by the competent authority and JEE-Main-2024 admit card. The prescribed format of PRC is available in Annexure-1. Category-wise merit list on the basis of JEE-main score and schedule of counselling will be notified on TU admission portal.

Important Note: Candidates who are permanent residents of NE states are also eligible to get admitted to the All India seats through central counselling procedure mentioned in (a).

Master of Business Administration (MBA):

- Candidates who aspire for the MBA programme at Tezpur University may seek for admission based on CAT/ MAT/ XAT/ ATMA/ GMAT/ CMAT score.
- The score of the test should be valid till the day of Personal Interaction.
- Merit list of candidates based on the above-mentioned score will be prepared and only the candidates short listed in the merit list will be called for Group Discussion and Personal Interview.
- The application and admission process for this programme is done separately during the months of November and December of the year. Please check for notification on the university website.

MSc in Molecular Biology and Biotechnology (MBBT):

- Candidates will be selected on the basis of the GAT-B score.
- The examination of GAT-B is conducted by NTA on behalf of Regional Centre for Biotechnology, Faridabad under the Department of Biotechnology (DBT), Govt. of India.
- GAT-B qualified candidates will have to register and fill in the ACF online at the TU admission portal with GAT-B score on or before the last date specified for the purpose.
- Total seat is 30 and 10 seats are reserved for candidates of North East state domiciles with valid GAT-B score.
- PRC is mandatory for the 10 (ten) seats of the NE states. The prescribed format of PRC is provided in Annexure-1.
- Merit and wait list candidates will be published at TU admission portal.

5. SYLLABUS FOR TUEE-2024 AND PROGRAMME CODE

Undergraduate programme

Sl. No.	Name of the Programme	Syllabus	TUEE code
1.	BDes (Bachelor Degree in Design)	<p>Visualization and spatial reasoning: Ability to visualise and transform 2D shapes and 3D objects and their spatial relationships.</p> <p>Practical and scientific knowledge: Know-how of scientific principles and everyday objects.</p> <p>Observation and design sensitivity: The capacity to detect concealed properties in daily life and think critically about them. Attention to detail, classification, analysis, inference and prediction.</p> <p>Environment and society: General awareness of environmental, social and cultural connections with design.</p> <p>Analytical and logical reasoning: Ability to analyse qualitative and quantitative information.</p> <p>Language: Proficiency in reading and comprehending Standard English.</p> <p>Creativity: Grasp of verbal and non-verbal analogies, metaphors, signs and symbols.</p>	201

Lateral Entry to the 2nd year of B.Tech. Programmes

Sl. No.	Branch	Syllabus	TUEE Code
1.	Civil Engineering	<p>Mathematics Complex Numbers, Partial fractions, Permutation and combination, Binomial Theorem, Series, Trigonometric Ratios, Properties of Triangle, Volume and Surface Area, Co-ordinate Geometry, Functions, Differentiation, Integration, General aptitude and reasoning.</p> <p>Civil Engineering Building Construction & Materials, Civil Engineering Drawing, Surveying, Structural Mechanics, Hydraulics, Concrete Technology, Transportation Engineering,</p>	203

		Design of RCC Structure, Geotechnical Engineering, Design of Steel Structure, Environmental Engineering & Pollution Control, Water Resources Engineering.	
2.	Computer Science and Engineering	<ol style="list-style-type: none"> 10+2 level Physics and Mathematics C/C++ programming Algorithms and Data Structures Array, stack, queue, linked list, sorting, selection, searching. Basic Electronics and Digital Logic Digital circuits and signals, Logic Families, Logic Gates and Boolean algebra, Number Systems. Computer Networks Basic concepts, Network Classifications, Network topology, OSI model, Basics of TCP/IP. Database Management Systems Basic concepts, ER model, Relational model, Query languages. Communicative English 	204
3.	Electrical Engineering	<p>CORE ELECTRICAL</p> <ul style="list-style-type: none"> ■ DC Circuit Analysis: Electric Circuits Laws: Basic electric circuit terminology, Ohm's law, Kirchhoff's current law (KCL) and Kirchhoff's Voltage law (KVL), circuit parameters (resistance, Inductance and capacitance), series and parallel combinations of resistance, Inductance and capacitance, Nodal analysis. Energy Source, Ideal and Practical voltage and current sources and their transformation, Dependent voltage sources and dependent current sources, D.C. Circuit Analysis, Power and energy relations, Analysis of series and parallel DC circuits, mLoop and Nodal methods of circuit analysis, Superposition theorem, Thevenin's and Norton's theorems, maximum Power theorem, Delta - star (Y) Transformation. ■ A.C. Circuit Analysis: Basic terminology and definitions, Phasor and complex number representation, solutions of sinusoidally excited RLC circuits, Power and energy relations in A.C. circuits, Applications of network theorems to A.C. circuits, Resonance in series and parallel circuits, Concepts of active & reactive powers. ■ Steady State A.C three phases Circuits: Concept of a 3-phase voltage, wye (Y) circuits. Delta (Δ) circuits, Current and voltage relations in Y and Δ Circuits, Characteristics of a 3-phase system, Magnetically Coupled circuits, Mutual inductance. ■ Single Phase Transformers: Introduction, classification, construction, electromotive force (e. m. f.) equation, Equivalent circuit model, Phasor 	205

		<p>diagrams, Losses and efficiency, Voltage regulation, Transformer tests (polarity test, open circuit test and short circuit test), Auto-transformers</p> <ul style="list-style-type: none"> ■ Direct current Generators: General introduction, principles of operation of D.C Generators, construction of D.C Generators, Types of DC Generators, e.m.f equation, Types of windings, power stages and efficiency, commutation and armature reaction, characteristics of D.C Generators. ■ Direct current Motors: Principles of operation of D.C Motors, construction of D.C Motors, Types of DC Motors, Back e.m.f and Torque equation, torque and speed of D.C Motors, characteristics of various types of D.C motors, speed control of D.C motors. ■ Induction Motors: Construction and working principle of 3 phase Induction motors, types of rotors, rotating magnetic field, slip, effect of slip on rotor parameters, torque equation, torque-speed characteristics, effect of rotor resistance on torque-speed characteristics, Single phase induction motors, starting and applications. <p>PHYSICS: Vector Analysis, Collision of particles, Vibration and acoustics, Electromagnetic Theory, Maxwell's equations, Quantum mechanics, Solid state physics, Superconductivity, Diffraction, Special Theory of Relativity. MATHEMATICS: Differential Calculus, ordinary, linear and non-linear differential equations, Partial Differential Equations, Fourier series, Matrices.</p>	
4.	Electronics and Communication Engineering	<ol style="list-style-type: none"> 1. Materials and Components: Structure and properties of Electrical Engineering materials: Conductors, Semiconductors and Insulators, Magnetic, Ferroelectric, Piezoelectric, Ceramic, Optical and Super conducting materials. Passive components and characteristics Resistors, Capacitors and Inductors; Ferrites, Quartz crystal Ceramic resonators, Electromagnetic and Electromechanical components. 2. Physical Electronics Electron Devices and ICs: Electrons and holes in semiconductors, Carrier Statistics, Mechanism of current flow in a semiconductor, working principle and basic structure of BJTs and FETs. 3. Network Theory: Network analysis, Loop Analysis, Mesh Analysis; Network Theorems, Superposition Theorem, Thevenin's Theorem, Norton's Theorem, Reciprocity Theorem, Millman's Theorem, Star-Delta Connections, Two port networks. 4. Electronic Measurement sand Instrumentation: Basic concepts, standards and error analysis; Measurements of basic electrical quantities and parameters; Electronic measuring instruments and their principles of working; analog and digital, comparison, characteristics, application Transducers; 	206

		<p>Electronic measurements of non-electrical quantities like temperature, pressure, humidity, etc.</p> <ol style="list-style-type: none"> Analog Electronic Circuits: Transistors biasing and stabilization, small signal analysis, power amplifiers, frequency response, wide banding techniques, feedback amplifiers, Tuned amplifiers, Oscillators, Rectifiers and power supplies, Op Amp. Digital Electronic Circuits: Binary number system, Octal, Hexadecimal and BCD numbers system, Boolean algebra, simplification of Boolean functions, Karnaugh map and applications, IC logic, Combination logic circuits, Half adder, Full adder, Digital comparator, Multiplexer, De multiplexer, Flip Flops, R-S, J-K, D and T flip-flops, different types of counters and registers, A/D and D/A converters, semiconductor memories. Control Systems: Types of Control system, Open Loop and Closed Loop Control system, Effect of feedback on stability and sensitivity; Block Diagram Reduction Technique, Signal Flow Graph, Stability Analysis, Routh's Stability Criterion. Communication System: Basic Mathematical Tools like Fourier Series, Modulation and detection in analogue and digital system; Sampling and data reconstructions; Propagation of signals at HF, VHF, UHF and microwave frequency. Computer Engineering: Number system, Data representation Programming; Elements of a high level programming language PASCAL/C, use of basic data structures, Fundamentals of computer architecture, processor design, control unit design, memory organization, I/O system organization, microprocessors, architecture and instruction set of microprocessors 8085, Assembly language programming. 	
5.	Mechanical Engineering	<ol style="list-style-type: none"> Engineering Mechanics: Force systems, force, moment of a force about a point and about an axis, couple moment as a free vector, equivalent force systems; Equilibrium, free body diagram, equations of equilibrium, problems in two and three dimensions; Kinematics and Kinetics of particles, particle dynamics in rectangular coordinates and in terms of path variables, Newton's law for rectangular coordinates, Newton's law for path variables, central force motion; Energy, kinetic energy, potential Energy, conservation of energy. Solid Mechanics: Introduction, stress at a point, types of stress, strain, shear and normal strain. stress-strain diagram, true stress and true strain, Hooke's law, Poisson's ratio, material properties for isotropic materials and their relations, generalized Hooke's law, stress-strain relationship; Elastic constants, 	207

		<p>Young's modulus, shear modulus, Poisson's ratio, relationships between elastic constants.</p> <p>3. Machine Design: Static and dynamic loading, threaded joints, riveted joints, welded joints, design of gears, belt drives, brakes, bearings.</p> <p>4. Theory of Machines: Mechanism and machines, flywheel, friction, gears, kinematic analysis. Thermodynamics: Basic definitions, thermodynamic systems and properties, thermodynamic processes and cycles; Different types of work and heat transfer; First law of thermodynamics, internal energy, enthalpy, non-flow and flow processes; steady state, steady flow energy equation (SFEE); Second law of thermodynamics, Kelvin Plank and Clausius statement, irresistibility, Carnot cycle and Carnot's theorem, applications of the second law to closed and open systems, heat engine, heat pump and refrigerator, entropy, Clausius theorem, Clausius inequality, entropy principle and its application, entropy generation in closed and open system, absolute entropy; Available energy; Vapour power cycles.</p> <p>5. Heat Transfer: Steady state heat conduction, 1-D heat conduction equations in plane wall, heat generation, conduction through multilayer walls, heat conduction in cylinders and spheres, critical radius of insulation, heat transfer through extended surfaces, fin efficiency; Radiation heat transfer, radiation intensity, emissive power etc., radiation shield, shape factor; Convection heat transfer: introduction to natural and forced convection, internal and external flow, various dimensionless numbers; Heat exchangers: parallel flow, counter flow, cross flow heat exchangers, multi-pass shell and tube exchangers, phase change heat exchangers, LMTD and NTU methods; Introduction to mass transfer, Fick's law of mass diffusion.</p> <p>6. Fluid Mechanics: Concept of fluid and fluid properties, Newton's Law of viscosity; Fluid Statics, forces on fluid element, different types of pressure and measuring instruments, hydrostatic forces on plane and curved surfaces, buoyancy and stability of submerged and floating bodies; Fluid kinematics, steady, unsteady, uniform and non-uniform flow, laminar and turbulent flow, streamline, path line, streak line; Equations for conservation of mass, momentum and energy, Euler's and Bernoulli's equation, measurement of flow through pipes and different flow measuring devices; Dimensional analysis, kinematic and dynamic similarity, various dimensionless numbers; Potential flow, stream function, vorticity, velocity potential, uniform flow, major and minor losses, friction factor; Boundary layer equations, the flat plate boundary layer; Introduction to compressible flow; Impulse and reaction turbine, Pelton wheel, Francis and Kaplan turbine, Rotodynamic</p>	
--	--	--	--

		<p>and positive displacement pumps, reciprocating pump, centrifugal pump, specific speed, cavitation.</p> <ol style="list-style-type: none"> IC Engine: Construction and working principle of SI and CI engines, Construction and working principle of four stroke and two stroke engines, theoretical cycles used in IC engines, performance analysis of IC engines. Materials Science: Classification and properties of engineering materials, bonds in solids and characteristics of metallic bonding, general classifications, properties and applications of alloy steel, stainless steel, cast iron and non-ferrous materials; Crystal systems and imperfections, crystallography, Miller Indices for directions and planes, voids in crystals, packing density, crystal imperfections, point, line, surface and volume defects; Phase Diagrams and Phase Rules, principles and various types of phase diagrams, Fe-Fe₃C diagram, TTT and CCT diagrams; Heat treatment in steels, pearlitic, bainitic and martensitic transformations. Manufacturing Technology: Rolling, extrusion, sheet-metal forming, forging, welding, mechanism of metal cutting, machining processes, machinability; Modern machining processes. Industrial Engineering: Work study, method study and work measurement; Plant layout, types of production, types of layout, tools and techniques for plant layout; Project scheduling, PERT and CPM; Production control, Gantt chart; Material handling. 	
6.	Food Engineering and Technology	<p>Part-I: General Engineering: Thermodynamics, Heat & mass transfer, Fluid mechanics (weight age: 40%)</p> <ol style="list-style-type: none"> Engineering Thermodynamics: Zeroth law, first law, second law. Concepts of enthalpy, internal energy, entropy and absolute temperature. Properties of pure substances and mixtures, reversibility and irreversibility. Thermodynamics cycles. Refrigeration and air conditioning: Refrigeration cycles, heat pump. Application of refrigeration in food processing and preservation. Food freezing systems. Steam: steam generation, steam properties and application. Psychometrics: properties of air water vapor mixer; psychrometric properties, charts and relations and psychrometric calculations. Heat and Mass Transfer: Principles of heat and mass transfer to heat, different methods of heat transfer, Fourier's Law, Steady state heat transfer through plain and composite slabs, cylindrical and spherical surfaces. Natural and forced convection, concept of overall heat transfer coefficient, LMTD, heat 	208

		<p>exchangers in food processing, effectiveness of heat exchanger. Fick's Law of diffusion and basic concepts of convective mass transfer.</p> <p>3. Basic Fluid Mechanics: Physical properties of fluids, classification of fluid flow, continuity equations, Bernoulli's equation and its application, steady state flow equation, concept of viscosity, Newtonian and non-Newtonian fluids. Poiseuille's equation. Navier Stoke's equation, flow through parallel plates and circular pipes. Concept of Reynold's number and its application. Pipe and pipe flow, fittings. Pumps, types of pumps and their application and selection.</p> <p>Part-II: Food Engineering and Technology(weightage: 60%)</p> <p>1. Food Engineering Operations: Materials and introduction, energy balance for food engineering processes. Size reduction, mechanical expression, mechanical separation, mixing and agitation, emulsification, and homogenization. Filtration, membrane separation, sedimentation, centrifugation, crystallization, extraction, distillation, absorption, humidification, and dehumidification. Thermal processing of foods, Food concentration: Evaporation, equipment, their selection and calculation. Freeze concentration. Drying and dehydration methods, different kinds of dryers, their selection and design.</p> <p>2. Food Microbiology: Microbiology and reproduction of bacteria. Pure culture technique: serial dilution, pour plate, streak plate, spread plate, slant, broth and enrichment culture, lyophilization. Microbial Growth: Definition, Growth curve, account of different phases, synchronous growth, doubling/generation time. Relationship between number of generations and total number of microbes. Disinfecting agents and its dynamics. Enzymes, specificity of enzymes, co enzymes, cofactors, Enzymes inhibitors and activators. Applications of enzymes in food industry, immobilized enzymes. Definition, scope and present status of Biotechnology and its applications, Microbial propagation and production of SCP, Fermentation: Fermented and non-Fermented food, cereal fermentation.</p> <p>3. Food Chemistry: Importance of different food constituent, Carbohydrate and its classification and functions. Proteins, classification, and properties of amino acids. Lipid's structure, physical and chemical properties. Vitamins and minerals in food. Food spoilage: Types and factors, Food enzymes. Food preservation techniques: Addition of salt, sugar, oil, spices, preservative, drying, evaporation, heat treatment, irradiation, refrigeration,</p>	
--	--	---	--

		freezing, plant physiology: Transpiration, Ripening, Senescence, Post-Harvest technology and its importance, Climacteric and non-climacteric fruits. 4. Food Product technology: Parboiling, Milling of rice, wheat, malting, storage atmospheres: Quality control and quality assurance, different quality attributes: qualitative, hidden and sensory, HACCP and its application, Food adulteration: types, Estimation of moisture, crude, fat, proteins, crude fibre, ash, sampling and its types, BIS, AGMARK, FPA, PFA, FAO, FSSAI.	
--	--	--	--

- Exact number of candidates to be admitted in each discipline will be notified separately on the university webpage after facilitating internal branch sliding among continuing students.

MTech/MA/MSc Programmes

Sl. No	Department	Programme	Syllabus	TUEE code
1.	Civil Engineering	MTech in Civil Engineering – (Specialization – Geotechnical Engineering)	BE/BTech level courses in Civil Engineering	301

2.	Computer Science and Engineering	MTech in Computer Science & Engineering	<ul style="list-style-type: none"> ■ Analytical Reasoning. ■ Data Structures: Array, Stack, Queue, Linked List, Binary Tree, Heap, Graphs, AVL Tree, B-tree. ■ Graph Theory: Paths and Cycles, Connected Components, Trees, Digraphs. ■ Discrete Mathematics: Sets and Sequences Counting, Logic & Proofs, Recurrence Relations. Algebra of Matrices, Determinant, Eigenvalues and Eigenvectors of Matrices, ■ Design and Analysis of Algorithms: Asymptotic Notation, Searching, Sorting, Selection, Graph Traversal, Minimum Spanning Tree. ■ Formal Languages and Automata Theory: Finite Automata and Regular Expressions, Pushdown Automata, Context-free Grammar, Turing Machine, Elements of Undecidability. ■ Digital Logic Design: Boolean Algebra, Minimization of Boolean Functions, Combinational and Sequential Circuits - Synthesis and Design. ■ Computer Organization and Architecture: Number Representation, Computer Arithmetic, Memory Organization, I/O Organization. ■ Operating Systems: Memory Management, Processor Management, Device Management, File Systems. ■ Database Management Systems: Relational Model, Relational Algebra, Relational Calculus, Functional Dependency, Normalisation (2NF, 3NF and BCNF). ■ Principles of programming: Types of programming languages, language, processors, program linking, program memory allocation, code optimization. ■ Computer Networks: OSI, LAN Technology - Bus / Tree, Ring, Star; MAC Protocols; WAN Technology - Circuit Switching, Packet Switching; Data Communications - Data Encoding, Routing, Flow Control, Error Detection/ Correction, Inter-networking, TCP/IP Networking including IPv4. 	302
----	----------------------------------	---	--	-----

3.		MTech in Data Sciences	<ul style="list-style-type: none"> ■ Analytical Reasoning ■ Discrete Mathematics: Permutations and Combinations, Recurrence Relations. Algebra of Matrices, Determinant, Rank and Inverse of a Matrix, Functions and Relations. ■ Discrete Probability Theory: Combinatorial Probability, Conditional Probability, and Bayes Theorem. Discrete Random Variables. Expectation and Variance of Discrete Random Variables. ■ Graph Theory: Graphs, Adjacency Matrix and Adjacency List representations of Graphs, Subgraphs, Connectivity, Trees and their Properties, Vertex Coloring, Planar Graphs. ■ Algorithmic Thinking: Asymptotic Notations, Searching, Sorting, Selection, Graph Traversal, Minimum Spanning Tree. ■ Basic Programming Concepts using C/C++ ■ Data Structures: Array, Stack, Queue, Linked List, Binary Tree, Heap, AVL Tree, B-tree. ■ Computer Organization and Architecture: Number Representation, Computer Arithmetic, Instruction Set Architecture, Memory Organization, I/O Organization, ■ Operating Systems: Memory Management, Processor Management, Device Management, File Systems. ■ Database Management Systems: Relational Model, SQL, Functional Dependency, Normalisation (2NF, 3NF and BCNF). ■ Computer Networks: OSI, LAN Technology, MAC Protocols, WAN Technology - Circuit Switching, Packet Switching, Routing, Flow Control, Inter-networking, TCP/IP Networking including IPv4. 	303
----	--	------------------------	--	-----

4.		Master of Computer Application (MCA)	Logical Reasoning, Basic Mathematical Ability, Fundamentals of Computer Science, Fundamental programming concepts, English Vocabulary and composition.	304
5.	Design	Master of Design (MDes)	<p>Visualization and spatial reasoning: Ability to visualise and transform 2D shapes and 3D objects and their spatial relationships.</p> <p>Practical and scientific knowledge: Know-how of scientific principles and everyday objects.</p> <p>Observation and design sensitivity: The capacity to detect concealed properties in daily life and think critically about them. Attention to detail, classification, analysis, inference, and prediction.</p> <p>Environment and society: General awareness of environmental, social and cultural connections with design.</p> <p>Analytical and logical reasoning: Ability to analyse qualitative and quantitative information.</p> <p>Language: Proficiency in reading and comprehending Standard English.</p> <p>Creativity: Grasp of verbal and non-verbal analogies, metaphors, signs, and symbols.</p> <p>Art and Design knowledge: Awareness about art/artefact/product, artists/designers, art/design history and trends.</p> <p>Design methods and practices: Knowledge of media, materials, production processes, and ergonomics</p>	305

6.	Communication and Electronics Engineering	MTech in Bioelectronics	BE/BTech level courses in Electronics Engineering, Electrical Engineering, Instrumentation Engineering, Communication Engineering, Biomedical Engineering, Chemical Engineering, Bioengineering, Computer Science and Engineering, Biotechnology. M.Sc. level courses on Chemistry, Biophysics, Molecular Biology, Cell Biology and Molecular Biology and Biotechnology.	306
7.		MTech in Electronics Design and Technology	BE or equivalent level courses on Electronics and Communication Engineering, Electrical Engineering/ AMIE level courses in Electronics/Instrumentation Engineering.	307
8.	Energy	MTech in Energy Technology	Energy sources and Energy conservation, Graduate level courses in Science and Engineering.	308
9.	Food Engineering and Technology	MTech in Food Engineering and Technology	<p>Part-I: Mathematics and General Engineering (weightage: 20%)</p> <ul style="list-style-type: none"> • Mathematics at the level of BTech 1st and 2nd Semester • General Engineering: Thermodynamics; Fluid Mechanics; and Heat & Mass Transfer <p>Part-II: Food Engineering & Technology (weightage: 80%)</p> <p>Food Engineering; Food Chemistry & Nutrition; Food Microbiology; Food Product technology (As per the outline of GATE syllabus for Food Technology, copy attached)</p>	309

10.	Mechanical Engineering	MTech in Mechanical Engineering (Specialization: Machine Design; Thermo Fluids)	<p>Engineering Mathematics</p> <ul style="list-style-type: none"> • Linear Algebra: Matrix algebra, systems of linear equations, eigenvalues and eigenvectors • Calculus: Functions of single variable, limit, continuity and differentiability, mean value theorems, indeterminate forms; evaluation of definite and improper integrals; double and triple integrals; partial derivatives, total derivative, Taylor series (in one and two variables), maxima and minima, Fourier series; gradient, divergence and curl, vector identities, directional derivatives, line, surface and volume integrals, applications of Gauss, Stokes and Green's theorems. • Differential equations: First order equations (linear and nonlinear); higher order linear differential equations with constant coefficients; Euler- Cauchy equation; initial and boundary value problems; Laplace transforms; solutions of heat, wave and Laplace's equations. • Complex variables: Analytic functions; Cauchy- Riemann equations; Cauchy's integral theorem and integral formula; Taylor and Laurent series. • Probability and Statistics: Definitions of probability, sampling theorems, conditional probability; mean, median, mode and standard deviation; random variables, binomial, Poisson and normal distributions. • Numerical Methods: Numerical solutions of linear and non-linear algebraic equations; integration by trapezoidal and Simpson's rules; single and multi- step methods for differential equations. <p>Applied Mechanics and Design</p> <ul style="list-style-type: none"> • Engineering Mechanics: Free-body diagrams and equilibrium; friction and its applications including rolling friction, belt-pulley, brakes, clutches, screw jack, wedge, vehicles, etc.; trusses and frames; virtual work; kinematics and dynamics of rigid bodies in plane motion; impulse and momentum (linear and angular) and energy formulations; Lagrange's equation. • Mechanics of Materials: Stress and strain, elastic constants, Poisson's ratio; Mohr's circle for plane stress and plane strain; thin cylinders; shear force and bending moment diagrams; bending and shear stresses; concept of shear centre; deflection of beams; torsion of circular shafts; Euler's theory of columns; energy methods; thermal stresses; strain gauges and rosettes; testing • of materials with universal testing machine; testing of hardness and impact strength. 	310
-----	------------------------	---	--	-----

		<ul style="list-style-type: none"> • Theory of Machines: Displacement, velocity and acceleration analysis of plane mechanisms; dynamic analysis of linkages; cams; gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses; gyroscope. • Vibrations: Free and forced vibration of single degree of freedom systems, effect of damping; vibration isolation; resonance; critical speeds of shafts. • Machine Design: Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements such as bolted, riveted and welded joints; shafts, gears, rolling and sliding contact bearings, brakes and clutches, springs. <p>Fluid Mechanics and Thermal Sciences</p> <ul style="list-style-type: none"> • Fluid Mechanics: Fluid properties; fluid statics, forces on submerged bodies, stability of floating bodies; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; dimensional analysis; viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings; basics of compressible fluid flow. • Heat-Transfer: Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan- Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis • thermodynamics: Thermodynamic systems and processes; properties of pure substances, behavior of ideal and real gases; zeroth and first laws of thermodynamics, calculation of work and heat in various processes; second law of thermodynamics; • thermodynamic property charts and tables, availability and irreversibility; thermodynamic relations. <p>Applications:</p> <ul style="list-style-type: none"> • Power Engineering: Air and gas compressors; vapour and gas power cycles, concepts of regeneration and reheat. • I.C. Engines: Air-standard Otto, Diesel and dual cycles. 	
--	--	---	--

		<ul style="list-style-type: none"> Refrigeration and air-conditioning: Vapour and gas refrigeration and heat pump cycles; properties of moist air, psychrometric chart, basic psychrometric processes. Turbomachinery: Impulse and reaction principles, velocity diagrams, Pelton-wheel, Francis and Kaplan turbines; steam and gas turbines. <p>Materials, Manufacturing, and Industrial Engineering</p> <ul style="list-style-type: none"> Engineering Materials: Structure and properties of engineering materials, phase diagrams, heat treatment, stress-strain diagrams for engineering materials. Casting, Forming and Joining Processes: Different types of castings, design of patterns, moulds and cores; solidification and cooling; riser and gating design. Plastic deformation and yield criteria; fundamentals of hot and cold working processes; load estimation for bulk (forging, rolling, extrusion, drawing) and sheet (shearing, deep drawing, bending) metal forming processes; principles of powder metallurgy. Principles of welding, brazing, soldering and adhesive bonding. Machining and Machine Tool Operations: Mechanics of machining; basic machine tools; single and multi- point cutting tools, tool geometry and materials, tool life and wear; economics of machining; principles of non-traditional machining processes; principles of work holding, jigs and fixtures; abrasive machining processes; NC/CNC machines and CNC programming. Metrology and Inspection: Limits, fits and tolerances; linear and angular measurements; comparators; interferometry; form and finish measurement; alignment and testing methods; tolerance analysis in manufacturing and assembly; concepts of coordinate- measuring machine (CMM). Computer Integrated Manufacturing: Basic concepts of CAD/CAM and their integration tools; additive manufacturing. Production Planning and Control: Forecasting models, aggregate production planning, scheduling, materials requirement planning; lean manufacturing. Inventory Control: Deterministic models; safety stock inventory control systems. Operations Research: Linear programming, simplex method, transportation, assignment, network flow models, simple queuing models, PERT and CPM. 	
--	--	--	--

11.	Electrical Engineering	MTech in Electrical Engineering	Same as the GATE 2024 syllabus of Electrical Engineering (EE).	311
12.	Assamese	MA in Assamese	Assamese Literature <ul style="list-style-type: none"> • A brief history of Assamese Literature (From beginning to present times) Assamese Language and Script <ul style="list-style-type: none"> • A brief history of Assamese Language (From beginning to present times) • Evolution of Assamese Script • Dialectology and dialects of Assamese Language • Assamese Phonology and Morphology Assamese Culture <ul style="list-style-type: none"> • Assamese Folklore • Cultural History of Assam • Fairs and Festivals of Assam • Ethnic groups of Assam and their cultural contributions Critical Theory (Eastern and Western)	312
13.	Cultural Studies	MA in Cultural Studies	Issues related to Northeast India, History, Culture, Folklore, Society Performing Arts, Literature of NE India, Matters of Contemporary Importance, Film, Sports, Indian Literature, Indian Culture etc.	313

14.	Education	MA in Education	<ul style="list-style-type: none"> ■ Philosophical Perspective in Education: Philosophy and Education, Idealism, Naturalism, Pragmatism, Educational Practices – Kindergarten, Montessori, Dalton Plan, Project Method etc. ■ Sociological Perspective in Education: Education in relation to Society, Agencies of Socialization, Social Change, Social mobility and stratification etc. ■ Psychological Perspective in Education: Educational Psychology and Theories, Learning, intelligence, personality, child's growth and development etc. ■ Educational Technology: Concept and scope of Educational Technology, Educational Communication, Emerging technologies in education- ICT in Education, Technology based learning, MOOCs, SWAYAM, smart classroom etc. ■ Contemporary Issues in Education: Educational scenario of India, Inclusive Education, RTE Act 2009, Education for peace, yoga and gender, Constitutional Provisions, Environmental Education etc. 	314
15.		BEd	<ul style="list-style-type: none"> • General Awareness-Current affairs, important facts, politics, education, geography, economics etc. Teaching Aptitude-Teaching-Learning, Teacher's role, Classroom communication etc. • Contemporary Issues in Education- Educational scenario of India, Inclusive Education, RTE Act 2009, Education for peace, yoga and gender, Constitutional Provisions, Environmental Education etc. • ICT in Education- Online Learning Platforms, Massive Open and Online Courses, classroom communication, teaching learning aids, educational technology, Web 2.0 Technologies etc. • Perspectives in Education-Philosophical, Sociological and Psychological. 	315

16.		MEd	<ul style="list-style-type: none"> • Meaning, Nature, Aims, Modes of Education, Functions and Philosophies of education and their educational implications, Naturalism, Idealism, Pragmatism, Existentialism, Educational Thinkers. • Indian Society , Education and relationship with Indian Social Structure, Social Demand for Education, Democracy and culture and education • Nature, Meaning and functions of Educational Psychology, Behaviourism, Cognitivism Motivation, Learning and its theories, Trail and Error, Classical Conditioning, Operant conditioning, Gestalt, Constructivist Approach, Piaget and Vyogotsky's theories. • Intelligence and its theories, Personality and its theories, Maslow's hierarchy of needs and their educational implication. • Inclusive education, Integrated education, Concept & Functions of Educational Management, Planning, Organizing, Control, Direction and Financing, School as a unit of decentralization planning. Modern Management Techniques: Case study, Man power surveys EMIS • Guidance and Counseling, its types and its Phases, Qualities of an Effective Counsellor • Elementary Education in India, UEE, DPEP, SSA, RTE, 2009, Women Education, Education of Weaker Section, Education of CWSEN, • Teaching Process: Concept, Characteristics & Functions of teaching, Principles & Maxims of teaching, Techniques of Teacher-Preparation: Microteaching, Simulated Teaching, Teaching Role Play Programmed learning, Learning - Principles 	320
17.	English	MA in English	<ul style="list-style-type: none"> ■ BA Honours/Major level syllabi taught in Indian universities - Reading Literature (Genres, Movements, Schools, Terms), History of English Literature, English Poetry: Chaucer to Dryden, British Drama: Beginning to Shakespeare, Fiction: Early English Novels, English Poetry: The Augustans and the Romantics, Literary Theory and Criticism, Drama: Jacobean to Eighteenth Century, Fiction: Victorian and Modern, Poetry: Victorian to Modern, The English Essay, English Non-fictional Prose, Drama: Nineteenth and Twentieth Century, English for Communication, Phonetics of English and ELT, Postcolonial Literature. ■ English grammar, composition, comprehension, vocabulary, phrases and idioms, current affairs, great authors, books, prizes. 	316

18.	Linguistics and Language Technology	MA in Linguistics and Language Technology	Basic grammar (syntax, morphology, phonetics, semantics), language and animal communication, English grammar (+12 level), sociolinguistics, language and society, bilingualism, multilingualism, languages and linguistic situation of Northeast, scheduled languages and non-scheduled languages, language endangerment, language policies and planning.	317
19.	Hindi	MA in Hindi	Hindi Vyakaran, Hindi Bhasha, Hindi Sahitya, Bharatiya Aur Paschatya Kavya-Shastra, Hindi Patrakarita.	318
20.	Law	Master of Laws (LLM)	<p>Constitutional Law: Preamble, Salient features of the Indian Constitution, Citizenship, Fundamental Rights, Writ Jurisdiction, Directive Principles of State Policy and Fundamental Duties, Judiciary, Executive, Parliament and State Legislatures, Amending Process of the Constitution, Union State Relationship and Emergency Provisions.</p> <p>Jurisprudence: Nature and Sources of Law, Schools and Concepts of Jurisprudence.</p> <p>Law of Crimes: Fundamental elements of crime, stages of crime, general explanations and exceptions, abetment, conspiracy and attempt, punishments, offences against state, offences affecting common well-being, offences affecting the human body, offences against property, offences relating to marriage and offences affecting reputation.</p> <p>Family Law: Concepts in Family Law, Sources of Family Law in India, Marriage and Dissolution of Marriage, Adoption and Guardianship, Succession, Maintenance, Matrimonial Remedies and Uniform Civil Code</p> <p>Public International Law and Human Rights: Nature and definition of international law, Sources of International Law, Relationship between international law and municipal law, State recognition and state succession, Treaties: Formation, application, termination and reservation, UNO and its organs, Concept and Development of Human Rights, International Bill of Human Rights and Implementation of Human Rights in India.</p> <p>Current Legal Affairs.</p>	319

21.	Mass Communication and Journalism	MA in Mass Communication and Journalism	English language and grammar, Current affairs, General knowledge, a basic level of awareness about various aspects of mass media at national and international level for objective type questions. Observational, analytical, and creative writing skills for descriptive questions.	320
22.	Social Work	MA in Social Work	Current affairs, Logical Reasoning, Awareness on Social welfare schemes, Social Reform movements, Contemporary Social Issues, Rights Based Issues, Quantitative aptitude, Indian Constitution, Basic Concepts in Social Work, Social Legislations, Human Resource Management, English Language Proficiency, Basic Concepts in Social Science (Sociology, Economics, Political Science, Psychology, Research Methods in Social Sciences, Issues in Northeast India, Environmental and Ecological Issues	321
23.	Sociology	MA in Sociology	<p>Sociology - Concepts and Principles: Definition and Emergence, Basic Concepts, Basic understanding of the works of Marx, Weber, Tonnies, Durkheim, Parsons and Merton, Basic kinship terminologies.</p> <p>Indian Society: Basic Concepts: Caste, Varna, village, region, religion, Processes of Social Change: Sanskritisation, Westernisation, Modernisation, Development and Change, Nation, Nationalism, and nation Building.</p> <p>Northeast India: Basic understanding of the Region: Geography, Economy, Polity, Society, Language and Culture, Ethnicity, and Identity Politics.</p> <p>General Awareness: National and International: Current Affairs, Basic knowledge of culture, politics, geography, history and science, Basic information about the Indian Constitution.</p>	322
24.	Business Administration	Master of Tourism and Travel Management (MTTM)	<ul style="list-style-type: none"> ■ General Knowledge - Tourism destinations of Northeast India, India and the world. ■ History and mythology of Northeast India and India. ■ Current Affairs. ■ English - English Grammar; Sentence formation. ■ Reasoning. 	323

25.	Commerce	M.Com	Accounting and Financial Management, Economics, Business Mathematics and Statistics, Banking, Insurance, Taxation, Management, Business Laws, General Business Awareness.	324
26.	Chemical Sciences	MSc in Chemistry	Inorganic Chemistry, Quantum Chemistry & Chemical Bonding, Organic Chemistry, Physical Chemistry, Spectroscopy from Undergraduate level curriculum of all leading Indian Universities	325
27.	Environmental Science	MSc in Environmental Science	Botany, Zoology, Agriculture, Physics, Chemistry, Mathematics, Statistics, Earth and Environmental Science from Undergraduate level curriculum of Indian Universities.	326
28.	Mathematical Sciences	MSc in Mathematics	Classical Algebra; Calculus; Co-ordinate Geometry; Vectors; Differential Equations; Mechanics; Real Analysis;; Abstract Algebra; Numerical Methods; Linear Algebra; Linear Programming; Topology and Functional Analysis; Number Theory; Complex Analysis:	327
29.	Physics	MSc in Physics	BSc level syllabus of any Indian University (Classical Mechanics, Properties of matter, Quantum Mechanics, Atomic Physics, Solid State Physics, Nuclear Physics, Mathematical Physics, Thermodynamics and Statistical Physics, Electricity and Magnetism, Electronics)	328

Ph.D. Programmes

S. No	Department/ Centre	Syllabus for TUEE24	TUEE Code
1.	PhD in Assamese	History of Assamese Literature; History of Assamese Language and Script; Culture of Assam; Literary Theory and Criticism (Eastern and Western); Research Methodology	401
2.	PhD in Cultural Studies	Cultures in contemporary and historical perspectives; Cultural Studies as a discipline; Cultural Memory, Cultural History, Oral History; Contemporary Ethnography, Material Cultures, Media and Culture, Digital Archiving, Visual Culture, Gender Studies, Folk and Literary Cultures, Culture and Environment, Research Methods	402
3.	PhD in Education	Research Methodology in Education- Concept of Educational Research, Methods of Research, Approaches of Research, Hypothesis, Synopsis, Sample-population, Designs of Research, Descriptive and Interferential Statistics, Research Report, Bibliography Etc. Contemporary issues in Education- Educational scenario of India, Inclusive Education, RTE Act 2009, and Education for peace, yoga and gender, Constitutional Provisions, Environmental Education etc. Perspectives in Education- Philosophical, Sociological and Psychological foundation of Education.	403
4.	PhD in English	Div -I: English Language Teaching English in the global context, ELT in India in historical perspective. Principles and practice of ELT - Language acquisition, language learning- theories, principles; Languageskills; Language teaching-different approaches (methods, techniques, procedures); Teaching of literature; Evaluation, testing. Syllabus designing and material production.English for Specific/Academic Purpose. Div -II: American Literature Research Methodology, Literary Theory and Criticism, American Literature Div -III: Indian Literature Research Methodology, Literary Theory and Criticism, Indian Writing in English Div -IV: Gender and Literature Research Methodology, Literary Theory and Criticism, Gender and Literature Div V: Life Writing, Travel Writing Research Methodology, Literary Theory and Criticism, Life Writing, Travel Writing Div VI: Film Adaption, Popular Culture Research Methodology, Literary Theory and Criticism, Life Writing, Travel Writing Div VII: Anglophone South Asian Literature, Ecocriticism Research Methodology, Literary Theory and Criticism, Life Writing, Travel Writing	404

5.	PhD in Hindi	हिंदी भाषा की उत्पत्ति और विकास, हिंदी भाषा की संरचना, भाषा विज्ञान, हिंदी साहित्य का इतिहास, हिंदी आलोचना, अनुवाद विज्ञान, हिंदी पत्रकारिता, लोक साहित्य, तुलनात्मक साहित्य, भारतीय काव्यशास्त्र, पाश्चात्य काव्यशास्त्र, राजभाषा हिंदी, समकालीन हिंदी साहित्य, हिंदी सिनेमा, शोध प्रविधि और शोध दृष्टि	405
6.	PhD in Linguistics and Language Technology	Modern Linguistic theories (formal and functional, especially, Chomsky's generative theory, Cognitive Linguistics, Construction Grammar); Morphology; Phonetics and Phonology; Semantics and Pragmatics; Philosophy of Language (e.g. ordinary language philosophy; logical positivism); Sociolinguistics (e.g. bilingualism, multilingualism, politeness; Critical Discourse Analysis), Languages and linguistic situation of Northeast, Scheduled languages and non-scheduled languages, Language endangerment, Language policies and planning.	406
7.	PhD in Mass Communication and Journalism	Research methodology for social sciences, theoretical concepts of communication and media, a higher level of critical awareness about various important issues of mass media at national and international level.	407
8.	PhD in Social Work	<ul style="list-style-type: none"> ■ Social Work ■ Social work and allied social science theories ■ Social science research and statistics ■ General knowledge and aptitudes ■ Developmental issues • Civil society issues 	408
9.	PhD in Sociology	<p>Research Methodology: Philosophy, science and research, Theory and field, Social research strategies, Research designs and sample designs, Planning a research project and formulating research questions, Reviewing the literature, Ethics in social science research, Nature of quantitative research, Nature of qualitative research, Participant observation and ethnography, Triangulation: mixed methods research, Problem of objectivity and subjectivity.</p> <p>Sociological Theory: Classical sociological traditions: Marx, Durkheim, Weber, Approaches to social reality: Positivism, Hermeneutics, Post- structuralism, Post-modernism, Functionalism and its critiques, Neo- functionalism, Structuralism, Social structure as model, Structuration, Critical theory and Frankfurt School, Symbolic Interactionism, Phenomenology, Ethnomethodology, Dramaturgy.</p> <p>Indian Society: Theories of Social Change in India, Caste, Varna and Class, Kinship systems, Secularism and Communalism, Nationalism, Nation Building, Regionalism.</p>	409

10.	PhD in Women Studies	Women's history, feminist research methodology, women and development, women and health	410
11.	PhD in Business Administration	General Awareness: National and international economic environment, conceptual background and applications in economic theory. (20) General English: Basic English grammar (20) General Reasoning: Basic arithmetic and mathematics, Quantitative and alphabetic reasoning, pictorial reasoning. (20) Research Methodology: Basic statistical tools: Measures of Central Tendency, Measures of Dispersion; Correlation; Index Numbers; Time series analysis; Sources of Data: Primary and Secondary sources, Observation and Self-reported data; Basics of Sampling: Sample Vs. Census; Probabilistic Sampling Techniques, Non- Probabilistic Sampling Techniques; Scales of Measurement' Validity and reliability; Basics of Hypothesis Testing: Null and alternative hypothesis; Basic hypothesis testing tools: Chi square test, z test, t test, Analysis of Variance; Style of Referencing: American Psychological Association (APA) 7th Edition style.(40)	411
12.	PhD in Commerce	1. Research Methodology 2. Accounting (PG and NET Standard) 3. Finance (PG and NET Standard) 4. Economics (including Indian Economy)	412
13.	PhD in Chemical Sciences	Organic Chemistry, Inorganic Chemistry, Physical and Quantum Chemistry, Polymer Chemistry, Analytical Chemistry, Spectroscopy, Interdisciplinary topics from post graduate level curriculum of all leading Indian Universities.	413
14.	PhD in Environmental Science	Earth and Environmental Science, Mathematics, Statistics, Physics, Chemistry, Botany, Zoology, and Agriculture, from master's level curriculum of Indian Universities.	414
15.	PhD in Mathematical Sciences	Linear Algebra, Abstract Algebra, Real Analysis, Complex Analysis, Functional Analysis, Topology, Ordinary and Partial Differential Equations, Numerical Analysis, Measure Theory, Classical Mechanics, Probability and Statistics, Mathematical Programming, Number Theory, Special Functions, Integral Equations and Transforms, Calculus of Variation.	415
16.	PhD in Applied Mathematics		415A

17.	PhD in Molecular Biology & Biotechnology	Master (MSc/MTech)/BSc (Graduation) level Life Science (includes Botany, Zoology, Microbiology, Biochemistry, Cell Biology, Physiology, Genetics etc.), basic bioinformatics, and Higher Secondary level Physics, Chemistry and Mathematics.	416
18.	PhD in Physics	MSc Physics syllabus of any Indian University (Quantum Mechanics, Classical Mechanics, Mathematical Physics, Condensed matter Physics, Statistical Physics, Atomic and Molecular Physics, Nuclear and Particle Physics, Astrophysics, Electrodynamics, Electronics)	417
19.	PhD in Applied Physics		417A
20.	PhD in Civil Engineering	<p>Soil formation, Soil structure, Soil properties, Permeability and seepage, Stress distribution in soils, Compaction, Consolidation, Shear strength, Soil exploration & site investigation, Shallow foundations, Deep Foundations, Ground improvement techniques, Lateral earth pressure, Stability of slope, Introduction to soil dynamics & machine foundation, Liquefaction of soils, Pavement material.</p> <p>Water and Wastewater Quantity Estimation, Water Quality, Microbiology, Environmental Chemistry, Dissolved oxygen Model, Sewer Design, Type I and II suspensions, Sedimentation Tanks, Coagulation and Flocculation, Hydraulics of Filtration, Disinfection Methods, Ion exchange and Adsorption, Water Softening, Manganese and Iron Removal, Wastewater treatment, Septic tank, wastewater stabilization ponds, aerated ponds and oxidation ditches.</p> <p>Fluid properties, Application of the continuity, momentum and energy equations, Flow in pipes, Boundary Layer theory, forces on submerged bodies, hydrostatic forces on bodies, buoyancy, kinematics of flow, dynamics of fluid flow, Dimensional analysis; flow in open channel, hydraulic machines, Hydrologic cycle, precipitation and abstraction losses, hydrograph analysis, flood estimation, groundwater hydrology –well hydraulics, aquifers, Darcy's Law, irrigation systems and methods, Gravity Dams and Spillways</p> <p>Pavement materials, Pavement analysis and design, Highway construction and maintenance, Bituminous mix design</p>	418

21.	PhD in Computer Science & Engineering	<p>Discrete Mathematics, probability, statistics, algebra</p> <p>Data structures-Array, stack, queue, linked list, binary tree, heap, AVL tree, graph.</p> <p>Programming languages- C, C++.</p> <p>Design and analysis of algorithms-Asymptotic notation, sorting, selection, searching.</p> <p>Computer organization and architecture – Number representation, computer arithmetic, Logic Design, Boolean algebra, memory organization, I/O Organization.</p> <p>Operating systems - Memory management, processor management, critical section problem, deadlocks.</p> <p>Formal languages and automata theory - Finite automata and regular expressions, push down automata, context-free grammars, Turing machines, elements of undecidability.</p> <p>Database management systems - Relational model, relational algebra, relational calculus, functional dependency, normalization (up to BCNF).</p> <p>Computer networks – Physical layer, LAN technology, MAC protocols, circuit switching, packet switching, data encoding, routing, flow control, error detection/correction, Internetworking, TCP/IP networking protocols.</p> <p>Principles of Compiler Construction-Lexical analyzer, parser, syntax-directed translation, intermediate code generation.</p>	419
-----	--	---	-----

22.	PhD in Design	<p>Section I :</p> <p>Visualization and spatial ability: Pictorial and diagrammatic questions to test the understanding of transformation and/or manipulation of 2D shapes and 3D objects and their spatial relationships.</p> <p>Environmental and social awareness: General awareness of environmental factors (such as climate, population, water, vegetation, pollution, weather, natural resources) and their implications on the design of products, images, infrastructure, and environment. Awareness of design terminologies, social and cultural connection with design, history of the designed artefact, and socially responsible and environmentally sustainable design responses. History of art, sculpture, and literature.</p> <p>Analytical and logical reasoning: Ability to analyse given information logically and select the most appropriate solutions; ability to weigh opinions, arguments, or solutions against appropriate criteria; ability to use logic and structured thinking to deduce from a short passage, which of a number of statements is the most accurate response to a posed question.</p> <p>Language and creativity: Ability to understand passages in commonly used English language; ability to think creatively in terms of alternatives; ability to distinguish innovative options and think out-of-the-box.</p> <p>Design thinking and problem solving: Ability to understand the context, the users and the constraints and select the most appropriate solution for a given design problem.</p> <p>Observation and design sensitivity: Ability to detect concealed properties in day-to-day life and think critically about them. Ability to discern subtle differences in visual properties and aesthetic outcomes.</p> <p>Section II:</p> <p>Product Design: Product life cycle and stages. Design Toolkits, Design selection and concept development: intuitive and directed methods. Product architecture and its types, importance of aesthetic and usability. Prototyping - Tools, materials, and techniques.</p> <p>Ergonomics: Overview, objective, and application. MME interaction; Human Factors and its fundamentals, mutual task comfort. Anthropometry - Human body, various postures, and movements, measuring techniques; Biomechanics and its applications.</p> <p>Design Research Methodologies: Design Research Strategies, Methodologies, Techniques and Procedures. Systematic literature review; Interviews: types & techniques; Questionnaires; Observation techniques; Participatory methods; Cognitive Task Analysis; Mental model elicitation; Contextual inquiry; Needs</p>	420
-----	---------------	---	-----

		assessment; Thematic analysis; Think-aloud technique.	
23.	PhD in Electrical Engineering	<p>Verbal Aptitude: Basic English grammar: tenses, articles, adjectives, prepositions, conjunctions, verb-noun agreement, and other parts of speech. Basic vocabulary: words, idioms, and phrases in context Reading and comprehension Narrative sequencing.</p> <p>Quantitative Aptitude: Data interpretation: data graphs (bar graphs, pie charts, and other graphs representing the data), 2-and 3-dimensional plots, maps, and tables Numerical computation and estimation: ratios, percentages, powers, exponents and logarithms, permutations and combinations, and series Mensuration and geometry Elementary statistics and probability.</p> <p>Analytical Aptitude: Logic: deduction and induction, Analogy, Numerical relations, and reasoning.</p> <p>Spatial Aptitude: Transformation of shapes: translation, rotation, scaling, mirroring, assembling, and grouping Paper folding, cutting, and patterns in 2 and 3 dimensions General & Engineering Mathematics: Linear Algebra, Calculus, Differential Equations, Linear Equation, Quadratic Equations, Complex Variables, Geometry, Probability and Statistics</p> <p>Basic Electrical & Electronics Engineering: D.C. & AC Circuit Analysis: Independent and Dependent sources, Nodal and Mesh circuit analysis, Source equivalence and conversion, Superposition, Thevenin, Norton, Maximum Power Transfer and Reciprocity theorems. AC fundamentals and Circuits: A.C. generation, waveforms, R-L, R-C and R-L-C circuits, Single Phase and Three-phase circuit analysis: Star and Delta connected Systems, voltages, current and power in 3-phase circuits. Ammeter, voltmeter, Wattmeter. Semiconductor, diodes, rectifier clipper, clamper. Transistor: BJT, MOSFET. OPAMP: Differentiator, Integrator, SCR</p>	421

24.	PhD in Electronics & Communication Engineering	<p>Section 1: Engineering Mathematics: Linear Algebra: Vector space, basis, linear dependence and independence, matrix algebra, eigenvalues and eigenvectors, rank, solution of linear equations- existence and uniqueness Calculus: Mean value theorems, theorems of integral calculus, evaluation of definite and improper integrals, partial derivatives, maxima and minima, multiple integrals, line, surface and volume integrals, Taylor series. Differential Equations: First order equations (linear and nonlinear), higher order linear differential equations, Cauchy's and Euler's equations, methods of solution using variation of parameters, complementary function and particular integral, partial differential equations, variable separable method, initial and boundary value problems. Vector Analysis: Vectors in plane and space, vector operations, gradient, divergence and curl, Gauss's, Green's and Stokes' theorems. Complex Analysis: Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, sequences, series, convergence tests, Taylor and Laurent series, residue theorem Probability and Statistics: Mean, median, mode, standard deviation, combinatorial probability, probability distributions, binomial distribution, Poisson distribution, exponential distribution, normal distribution, joint and conditional probability.</p> <p>Section 2: Networks, Signals and Systems Circuit analysis: Node and mesh analysis, superposition, Thevenin's theorem, Norton's theorem, reciprocity. Sinusoidal steady state analysis: phasors, complex power, maximum power transfer. Time and frequency domain analysis of linear circuits: RL, RC and RLC circuits, solution of network equations using Laplace transform. Linear 2-port network parameters, wye-delta transformation. Continuous-time signals: Fourier series and Fourier transform, sampling theorem and applications. Discrete-time signals: DTFT, DFT, z-transform, discrete-time processing of continuous-time signals. LTI systems: definition and properties, causality, stability, impulse response, convolution, poles and zeroes, frequency response, group delay, phase delay.</p> <p>Section 3: Electronic Devices: Energy bands in intrinsic and extrinsic semiconductors, equilibrium carrier concentration, direct and indirect band-gap semiconductors. Carrier transport: diffusion current, drift current, mobility and resistivity, generation and recombination of carriers, Poisson and continuity equations. P-N junction, Zener diode, BJT, MOS capacitor, MOSFET, LED, photo diode and solar cell.</p> <p>Section 4: Analog Circuits: Diode circuits: clipping, clamping and rectifiers, BJT and MOSFET amplifiers: biasing, ac coupling, small signal analysis, frequency response. Current mirrors and differential amplifiers. Op-amp circuits: Amplifiers, summers, differentiators, integrators, active filters, Schmitt triggers and oscillators.</p> <p>Section 5: Digital Circuits and Microprocessor: Number representations: binary, integer and floating-point- numbers. Combinatorial circuits:</p>	422
-----	--	--	-----

		<p>Boolean algebra, minimization of functions using Boolean identities and Karnaugh map, logic gates and their static CMOS implementations, arithmetic circuits, code converters, multiplexers, decoders, Sequential circuits: latches and flip-flops, counters, shift-registers, finite state machines, propagation delay, setup and hold time, critical path delay. Data converters: sample and hold circuits, ADCs and DACs. Semiconductor memories: ROM, SRAM, DRAM. 8085 Microprocessor: Programmers model, register structure, addressing modes and assembly languages, Interrupts. Peripherals: Programmable interrupt controller (8259), programmable peripheral interface (8255), serial communication (8251), programmable timer and event counter (8254) and DMA controller (8257)</p> <p>Section 6: Control Systems: Basic control system components; Feedback principle; Transfer function; Block diagram representation; Signal flow graph; Transient and steady-state analysis of LTI systems; Frequency response; Routh-Hurwitz and Nyquist stability criteria; Bode and root-locus plots; Lag, lead and laglead compensation; State variable model and solution of state equation of LTI systems.</p> <p>Section 7: Communications and microwave: Random processes: autocorrelation and power spectral density, properties of white noise, filtering of random signals through LTI systems. Analog communications: amplitude modulation and demodulation, angle modulation and demodulation, spectra of AM and FM, superheterodyne receivers. Information theory: entropy, mutual information and channel capacity theorem. Digital communications: PCM, DPCM, digital modulation schemes (ASK, PSK, FSK, QAM), bandwidth, inter-symbol interference, MAP, ML detection, matched filter receiver, SNR and BER. Fundamentals of error correction, Hamming codes, CRC.</p> <p>Passive Microwave Devices and Components - Reciprocal and non-reciprocal devices and their applications. Guided and Free Space Propagation. Active Microwave Devices - Tubes and Solid State Devices, their principles and applications. Measurement Systems and Measurement Techniques. Microwave Materials and their Properties</p> <p>Section 8: Electromagnetics: Maxwell's equations: differential and integral forms and their interpretation, boundary conditions, wave equation, Poynting vector. Plane waves and properties: reflection and refraction, polarization, phase and group velocity, propagation through various media, skin depth. Transmission lines: equations, characteristic impedance, impedance matching, impedance transformation, S-parameters, Smith chart. Rectangular and circular waveguides, light propagation in optical fibres, dipole and monopole antennas, linear antenna arrays.</p> <p>Section 9: Electrical Machines: Single phase transformer: equivalent circuit, phasor diagram, open circuit and short circuit tests, regulation and efficiency; Three-phase transformers: connections, vector groups, parallel operation; Auto-transformer, Electromechanical energy conversion principles; DC machines: separately excited, series and shunt, motoring and generating mode of operation and their characteristics, speed control of dc motors; Three-phase induction machines: principle of</p>	
--	--	--	--

		<p>operation, types, performance, torque-speed characteristics, no-load and blocked-rotor tests, equivalent circuit, starting and speed control; Operating principle of single-phase induction motors; Synchronous machines: cylindrical and salient pole machines, performance and characteristics, regulation and parallel operation of generators, starting of synchronous motors; Types of losses and efficiency calculations of electric machines</p> <p>Section 10: Power Electronics</p> <p>Static V-I characteristics and firing/gating circuits for Thyristor, MOSFET, IGBT; DC to DC conversion: Buck, Boost and Buck-Boost Converters; Single and three-phase configuration of uncontrolled rectifiers; Voltage and Current commutated Thyristor based converters; Bidirectional ac to dc voltage source converters; Magnitude and Phase of line current harmonics for uncontrolled and thyristor based converters; Power factor and Distortion Factor of ac to dc converters; Single-phase and three-phase voltage and current source inverters, sinusoidal pulse width modulation.</p> <p>11. Sensors and Bioinstrumentation:</p> <p>Sensors – resistive, capacitive, inductive, piezoelectric, Hall effect, electrochemical, optical; Sensor signal conditioning circuits; application of LASER in sensing and therapy. Origin of biopotentials and their measurement techniques– ECG, EEG, EMG, ERG, EOG, GSR, PCG, Principles of measuring blood pressure, body temperature, volume and flow in arteries, veins and tissues, respiratory measurements and cardiac output measurement. Operating principle of medical equipment -sphygmomanometer, ventilator, cardiac pacemaker, defibrillator, pulse oximeter, hemodialyzer; Electrical Isolation (optical and electrical) and Safety of Biomedical Instruments.</p>	
25.	PhD in Energy	Energy conversion and Energy Systems, Energy-Environment interaction, Instrumentation and control, Electrical energy systems	423
26.	PhD in Food Engineering & Technology	Food Engineering; Food Chemistry & Nutrition; Food Microbiology; Food Product technology (As per the outline of GATE syllabus for Food Technology)	424

27.	PhD Mechanical Engineering	in	<p>Mathematics: Linear Algebra: Matrix algebra, systems of linear equations, eigenvalues and eigenvectors.</p> <p>Calculus: Functions of single variable, limit, continuity and differentiability, mean value theorems, indeterminate forms; Fourier series; gradient, divergence and curl, directional derivatives, applications of Gauss, Stokes and Green's theorems.</p> <p>Differential equations: First order equations (linear and nonlinear); higher order linear differential equations with constant coefficients; initial and boundary value problems.</p> <p>Applied Mechanics and Design:</p> <p>Engineering Mechanics: Free-body diagrams and equilibrium; friction and its applications including rolling friction, kinematics and dynamics of rigid bodies in plane motion; impulse and momentum (linear and angular) and energy formulations.</p> <p>Mechanics of Materials: Stress and strain, elastic constants, Poisson's ratio; thin cylinders; shear force and bending moment diagrams; bending and shear stresses; deflection of beams; torsion of circular shafts.</p> <p>Theory of Machines: Displacement, velocity and acceleration analysis of plane mechanisms; cams; gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses.</p> <p>Vibrations: Free and forced vibration of single degree of freedom systems, effect of damping; vibration isolation; resonance.</p> <p>Machine Design: Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements such as bolted, riveted and welded joints; shafts, gears, rolling and sliding contact bearings.</p> <p>Fluid Mechanics and Thermal Sciences:</p> <p>Fluid Mechanics: Fluid properties; fluid statics, forces on submerged bodies, stability of floating bodies; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; dimensional analysis; viscous flow of incompressible fluids, boundary layer, flow through pipes.</p> <p>Heat-Transfer: Modes of heat transfer; one dimensional heat conduction, resistance heat transfer through fins; lumped parameter system, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan-Boltzmann law.</p> <p>Thermodynamics: Thermodynamic systems and processes; properties of pure substances, behavior of ideal and real gases; Zeroth and first laws of</p>	425
-----	----------------------------------	----	---	-----

		<p>thermodynamics, calculation of work and heat in various processes; second law of thermodynamics; thermodynamic property charts and tables, availability and irreversibility; thermodynamic relations.</p> <p>Applications:</p> <p>Power Engineering: Air and gas compressors; vapour and gas power cycles, concepts of regeneration and reheat. I.C. Engines: Refrigeration and air-conditioning.</p> <p>Turbomachinery: Impulse and reaction principles, Pelton-wheel, Francis and Kaplan turbines; steam and gas turbines.</p> <p>Materials and Manufacturing Engineering</p> <p>Engineering Materials: Structure and properties of engineering materials, phase diagrams, heat treatment, stress-strain diagrams for engineering materials.</p> <p>Casting, Forming and Joining Processes: Different types of castings, solidification and cooling; plastic deformation and yield criteria; fundamentals of hot and cold working processes; Principles of welding, brazing, soldering and adhesive bonding.</p> <p>Machining and Machine Tool Operations: Mechanics of machining; basic machine tools; tool life and wear; Metrology and Inspection: Limits, fits and tolerances.</p>	
28.	PhD in Multi-Disciplinary Research	<p>General aptitude in research as evidenced by comprehensive knowledge on issues related to scientific thinking, research ethics (Good Academic Research Practices), sustainability, development, economy, technology, environment, peace, conflict, and harmony.</p> <p>Comprehensive understanding of programmes and policies of Government of India related to welfare and development, food security, access to education including provisions of NEP2020.</p> <p>Basic understanding of major challenges faced by mankind including global, national, and regional initiatives to combat such challenge (for example, not limited to, modern lifestyle vis-à-vis mental health, exploitation of natural resources vis-à-vis climate change) including SDG and Net Zero targeting.</p> <p>Fundamental knowledge in mathematics, science, statistics, history, creative arts subjects and geography. Working knowledge on ethical use of ICT, and of Language and communication, basic understanding on education as a mean of attaining higher order thinking skills and a driver of self-directed learning.</p>	426

29.	PhD in Law	Research Methodology Jurisprudence Constitutional Law Criminal Law Public International Law Human Rights Law Family Law Current Legal Affairs	427
-----	------------	--	-----

CUET-PG Programmes and QP code

Sl. No.	Name of Programmes	Syllabus	QP Code	Subject	Eligibility
1.	MCA (Master of Computer Application)	As per CUET-PG	SCQP09	Computer Science, Information Technology, Computer Application, Big Data Analytics, Cyber Security, Artificial Intelligence and Machine Learning, Operational Research etc.	Passed any graduation degree (e.g.: BE / BTech/ BSc / BCom / BA/ B Voc/ BCA etc.,) preferably with Mathematics at 10+2 level or at Graduation level. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
2.	MTech in Data Sciences	As per CUET-PG	MTQP04	Data Science, Artificial Intelligence, Cyber Security & Computer Science, Computer Sciences & Engineering/Technology, Information Technology etc.	BE/BTech or equivalent Bachelor's degree in Computer Science and Engineering/ Information Technology/ Electronics and Communication Engineering/any other allied Discipline, or MCA or its equivalent degree, or MSc in Computer Science/ Information Technology/ Electronics/ Mathematics/ Statistics. Minimum 50% aggregate marks or equivalent grade point in the above qualifying exams. Candidates selected under GATE should have a valid GATE score in Computer Science.
3.	MTech in Computer	As per CUET-PG	MTQP04		BE/BTech or equivalent Bachelor's degree in Computer Science and Engineering or

	Science & Engineering				MCA with minimum 50% aggregate marks or equivalent grade point.
4.	MTech in Civil Engineering	As per CUET-PG	MTQP02	Civil Engineering	BE/BTech in Civil Engineering with minimum 50% aggregate marks or equivalent grade point, where applicable.
5.	Master of Design (M Des)	As per CUET-PG	SCQP04, HUQP23/ HUQP07	Architecture and Planning, Sustainable Architecture, Architecture and Design, Urban & Regional Planning/ Textile Design, Folk and Performing Arts and Culture etc./Fine Arts, Painting, Printmaking, Sculpture, Art History & Visual Studies, Mural etc.	Bachelor's Degree in Design/Engineering/Architecture/Planning/ Interior Design (10+2+4) years /4 Years Diploma in Design/4 Years BFA/Any recognized (AICTE/UGC) degree in Design related field (10+2+4) years/Master Degree in Art/Science/MCA/MSc Computer Sciences/Electronics) with minimum 50% marks in graduation/ and Post-graduation/Equivalent CGPA/CPI/Qualifying degree
6.	MTech in Bioelectronics	As per CUET-PG	MTQP05	Electronics, Communication and Information Engineering, Digital Communication, Micro Electronics Engineering, VLSI Design, Microwave Electronics,	BE/BTech or equivalent Bachelor's degree in Electronics and Communication Engineering/ Instrumentation/ Chemical Engineering/ Computer Science and Engineering/ Electrical Engineering/ Biomedical Engineering/ Bioengineering/ Neuroengineering/ Genetic Engineering/ Biotechnology or MSc in Biotechnology/ Biochemistry/ Chemistry/ Polymer Science/ Physics/ Electronics/ Nano Science and Technology/ Instrumentation or MBBS with minimum 50% aggregate marks or equivalent grade point
7.	MTech in Electronics Design and Technology	As per CUET-PG	MTQP05	Electronics, Communication and Information Engineering, Digital Communication,	BE/BTech or equivalent Bachelor's degree in Electronics/ Electrical/ Instrumentation Engineering or MSc in Electronics/ Instrumentation/ Physics (Electronics as specialization) with minimum 50%

				Micro Electronics Engineering, VLSI Design, Microwave Electronics,	aggregate marks or equivalent grade point.
8.	MTech in Energy Technology	As per CUET-PG	SCQP08/ SCQP24/ SCQP18/ MTQP01/ MTQP02/ MTQP05/ MTQP07/ MTQP09/ MTQP10/ MTQP11/	Chemistry/ Physics/ Material Science/ Chemical/ Engineering/ Civil Engineering/ Electronics/ Engineering/ Mechanical Engineering/ Nanoelectronics/ Material Sciences/ Electrical, Power, Energy Engineering, Green Energy Technology etc. Agricultural Engineering	BE/BTech or equivalent Bachelor's degree in Mechanical/ Electrical/ Electronics/ Instrumentation/ Chemical/ Agricultural/ Energy Engineering / Civil/ Petroleum/ Material Science/ Engineering Physics/ Renewable Energy. Or MSc in Physics/ Chemistry/ Material Science/ Engineering Physics/ Engineering Science/ Polymer Science/ Renewable Energy/ Energy/ Nanoscience/ MVoc in Renewable Energy with minimum 50% aggregate marks or equivalent grade point.
9.	MTech in Food Engineering and Technology	As per CUET-PG	MTQP06	Food Engineering and Technology	BE/BTech /MSc in Food Engineering and/or Technology/ Agricultural Engineering/ Chemical Engineering and/or Technology/ Dairy Engineering and/or Technology with minimum 50% aggregate marks or equivalent grade point. Also, candidates must have Mathematics at 10+2 standard with minimum 50% marks or equivalent grade point or as a subsidiary subject in the specified degree programmes.
10.	MTech Mechanical Engineering in	As per CUET-PG	MTQP07	Mechanical Engineering	BE/BTech or equivalent Bachelor's degree in Mechanical/ Aerospace/ Automobile Engineering or in any other relevant engineering discipline with minimum 50% aggregate marks or equivalent grade point.

11.	MTech in Electrical Engineering	As per CUET-PG	MTQP10	Electrical Engineering	BE/BTech or equivalent bachelor's degree in Electrical/ Electronics /Electrical & Electronics / Electronics and Communication Engineering/ Mechanical/Instrumentation/ Power Engineering/Energy Engineering/ Engineering Physics/ Renewable Energy/others relevant to Electrical Engineering. Or MSc in applied and Basic Sciences/ Renewable Energy/ Energy/ Nanoscience with minimum 50% aggregate marks or equivalent grade point.
12.	MA in Cultural Studies	As per CUET-PG	LAQP01	Cultural Studies	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point in the major/ honours subject, or 50% aggregate marks or equivalent grade point, if not having any major/ honours subject.
13.	MA in Education	As per CUET-PG	COQP16	Education	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point in the major/ honours subject, or 50% aggregate marks or equivalent grade point, if not having any major/ honours subject.
14.	MEd	As per CUET-PG	COQP15	MEd	Bachelor's degree in B.Ed/ BA. B.Ed. BSc BEd/B.El.Ed with 50% marks or equivalent grade. Any graduate with D.El.Ed with 50% marks in each.
15.	BEd	As per CUET-PG	COPQ04/ COPQ06	BEd Humanities and Social Science/BEd Science	Bachelor's degree in any discipline (BA/BSc/BTech/BE) with minimum 55% marks or equivalent grade point
16.	MA in English	As per CUET-PG	LAQP01	English, Comparative Literature, English & Cultural Studies, English, Modern European etc.	Bachelor's degree with Major/ Honours in English with at least 45% marks or equivalent grade point in the major/ honours subject.

17.	MA in Linguistics and Language Technology	As per CUET-PG	LAQP04	Linguistics, Applied Linguistics, Linguistics and Language Technology, Linguistics and Tribal languages, Computational Linguistics	Bachelor's degree with minimum 45% marks or equivalent grade point, where applicable in major/ honours in Linguistics/English/any other allied subject, or 50% marks or equivalent grade point. in any of the specified subjects as well as in aggregate if not having major/ honours in any of the specified Subjects.
18.	MA in Hindi	As per CUET-PG	LAQP02	Hindi	Bachelor's degree with minimum 45% marks or equivalent Grade Point, where applicable in Major/Honours in Hindi, or 50% marks or equivalent grade point in Hindi as well as in aggregate if not having major/ honours in Hindi.
19.	Master of Laws (LL.M)	As per CUET-PG	COQP14	LL.M.	Bachelor's degree in Law with minimum 50% aggregate marks or equivalent grade point.
20.	MA in Mass Communication and Journalism	As per CUET-PG	COQP17	Mass Communication and Journalism	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point, in the major/ honours subject, or 50% aggregate marks or equivalent grade point, if not having any major/ honours subject.
21.	MA in Social Work	As per CUET-PG	HUQP21	Social Work	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point in the major/ honours subject, or 50% aggregate marks or equivalent grade point if not having any major/ honours subject.
22.	MA in Sociology	As per CUET-PG	HUQP22	Sociology	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point in the major/ honours subject, or 50% aggregate marks or equivalent grade point if not having any major/ honours subject.
23.	MA in Assamese	As per CUET-PG	LAQP06	Assamese	Bachelor's degree with at least 45% in major/ honours in Assamese or Bachelor's degree with Assamese (MIL) having at least 50% in aggregate.

24.	MA in Women Studies	As per CUET-PG	COQP11	Women Studies	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point, in the major/ honours subject, or 50% aggregate marks or equivalent grade point, if not having any major/ honours subject.
25.	Master of Tourism and Travel Management (MTM)	As per CUET-PG	COQP12	Tourism, Travel & Hotel Management	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point, where applicable in major/ honours subject or in aggregate.
26.	MCom	As per CUET-PG	COQP08	Commerce	B.Com. with minimum 50% marks or equivalent grade point in major/ honours. Mathematics at degree level is desirable.
27.	MSc in Chemistry	As per CUET-PG	SCQP08	Chemistry	Bachelor's degree with minimum 55% marks or equivalent grade point in major/ honours in Chemistry, or 60% marks or equivalent grade point in Chemistry as well as in aggregate if not having major/ honours in Chemistry. Also, candidates should have Physics or Mathematics as subsidiary subjects in Bachelor's degree.
28.	MSc in Environmental Science	As per CUET-PG	SCQP11	Environmental Science/ Studies	Bachelor's degree with minimum 45% marks or equivalent grade point, where applicable in major/ honours in Physical/ Biological/ Earth/ Environmental Sciences, or 50% marks or equivalent grade point in any of the specified subjects as well as in aggregate if not having major/ honours in any of the specified subjects, or Bachelor's degree in Agriculture with minimum 50% aggregate marks or equivalent grade point.
29.	MSc in Mathematics	As per CUET-PG	SCQP19	Mathematics	Bachelor's degree with minimum 45% marks or equivalent grade point in major/ honours in Mathematics/Statistics, or 50% marks or equivalent grade point, where applicable in Mathematics as well as in aggregate if

					not having major/ honours in Mathematics/ Statistics. Also, candidates with major/ honours in Statistics should have Mathematics as a subsidiary subject in Bachelor's degree with minimum 50% marks or equivalent grade point.
30.	MSc in Physics	As per CUET-PG	SCQP24	Physics	Bachelor's degree with minimum 45% marks or equivalent grade point in major/ honours in Physics, or 50% marks or equivalent grade point in Physics as well as in aggregate if not having major/ honours in Physics. Also, candidates should have Mathematics as a subsidiary subject in Bachelor's degree.

CUET-UG Programmes and Subject code

Sl. No.	Name of Programmes	Syllabus	Optional Languages / Domain/ General Paper Mapped to the Programmes for CUET (UG)- 2024	Subject Code	Eligibility
1.	Integrated MSc in Chemistry (4+1 Years as per NEP 2020)	As per CUET-UG	Section IA: English	101	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Chemistry, Physics and Mathematics.
			Section II: Chemistry	306	
2.	Integrated MSc in Life Sciences (4+1 Years as per NEP 2020)	As per CUET-UG	Section IA: English	101	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Biology, Chemistry, Physics and/or Mathematics.
			Section II: Biology	304	
3.	Integrated MSc in Mathematics (4+1 Years as per NEP 2020)	As per CUET-UG	Section IA: English	101	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Chemistry, Physics and Mathematics
			Section II: Mathematics	319	
4.		As per CUET-UG	Section IA: English	101	10+2 standard pass with minimum 60% aggregate

	Integrated MSc in Physics (4+1 Years as per NEP 2020)		Section II: Physics	322	marks or equivalent grade point in Chemistry, Physics and Mathematics.
5.	Integrated M Com (4+1 Years as per NEP 2020)	As per CUET-UG	Section IA: English	101	10+2 standard pass in Science/Commerce Stream with minimum 60% aggregate marks or equivalent grade point, where applicable.
			Section II: Any one subject Accountancy/ Economics/ Business Studies/ Mathematics	301/309/305/319	
6.	Integrated MA in English (4+1 Years as per NEP 2020)	As per CUET-UG	Section IA: English	101	10+2 standard pass in any stream with minimum 60% aggregate marks or equivalent grade point with General English as one of the compulsory subjects.
			Section II: General Test	501	
7.	Integrated BSc BEd	As per CUET-UG	Section IA: English	101	10+2 standard pass in any stream with minimum 60% aggregate marks or equivalent grade point with General English as one of the compulsory subjects.
			Section II: Physics/Chemistry/Mathematics	322/306/319	
			Section II: Legal Studies/General Studies	501	
8.	BA in Chinese	As per CUET-UG	Section IA: English	101	10+2 standard pass in any stream with minimum 45% aggregate marks or equivalent grade point in any stream (Humanities, Commerce and Science) from any recognized State or Central Board of Education.
			Section II: General Test	501	

Note: A candidate must attempt English as one Language from Section A for taking admission in any programme of Tezpur University

FEE STRUCTURE

Indian Students Fee for various Programs

Level	Programmes	Only once at the time of admission		Fees To Be Paid Per Semester	Grand Total
		Non-Refundable	Refundable Caution Deposit		
		₹	₹	₹	₹
Undergraduate	BTech*/ BTech (Lateral Entry) *	2300.00	5000.00	27143.00	34443.00
	BA in Chinese	2300.00	5000.00	13143.00	20443.00
	BDes	2300.00	5000.00	29643.00	36943.00
Integrated Programme	MCom /MA	2300.00	5000.00	13143.00	20443.00
	MSc/BSc BEd	2300.00	5000.00	15643.00	22943.00
Postgraduate	BEd (2 year)	2300.00	5000.00	14643.00	21943.00
	MEd (To be updated)				
	MSc*	2300.00	5000.00	13843.00	21143.00
	MA/MCom	2300.00	5000.00	13143.00	20443.00
	MCA	2300.00	5000.00	18643.00	25943.00
	MA in MCJ	3300.00	5000.00	22643.00	30943.00
	MTech*/ MDes*	2300.00	5000.00	22643.00	29943.00
	LLM	2300.00	5000.00	17793.00	25093.00
	MTTM	2300.00	5000.00	17643.00	24943.00
	MSc in MBBT	2300.00	5000.00	15625.00	22925.00
	Full Time (Hosteller)#	2300.00	5000.00	16743.00	24043.00
PhD*	Full Time (Non-hosteller)#	2300.00	2000.00	12243.00	16543.00
	Part Time	2300.00	2000.00	13600.00	17900.00
	TU Employee	2300.00	2000.00	11900.00	16200.00

*NOTE: Candidates of the following programmes will be required to pay an additional fee of Rs. 2000.00 (for PhD) and Rs. 1200.00 (for other programmes) per semester on account of consumables.

1. Integrated MSc/BSc BEd programmes.
2. MSc in Molecular Biology and Biotechnology/ Chemistry / Environmental Science.
3. BTech and MTech in Food Engineering and Technology.
4. MTech in Energy Technology.
5. Master of Design
6. PhD in Chemical Sciences / Molecular Biology and Biotechnology/ Food Engineering and Technology/Environmental Science.

*SC/ST students are exempted from paying the hostel seat rent of Rs. 675/- per semester.
Candidates up to the age of 30 years are required to pay an additional fee of Rs. 143.00 per semester on account of health insurance.*

International Students' Fee for various Programs (in USD \$).

Level	Programmes	Only once at the time of admission		Fees To Be Paid Per Semester	Grand Total	Fees to be paid 2nd Sem Onwards
		Non-Refundable	Refundable Caution Deposit			
		USD \$	USD \$	USD \$	USD \$	USD \$
Undergraduate	BTech*/BTech (Lateral Entry) *	120	270	1386.9	1776.9	1406.9
	BA in Chinese	120	210	691.9	1021.9	711.9
	B.Des	120	270	1536.9	1926.9	1556.9
Integrated Programme	MSc*	120	300	961.9	1381.9	981.9
	MCom	120	210	691.9	1021.9	711.9
	MA	120	210	691.9	1021.9	711.9
	BSc BEd	120	300	961.9	1381.9	981.9
Postgraduate	BEd (2 year)	120	210	841.9	1171.9	861.9
	Med (To be updated)					
	MSc*	120	210	741.9	1071.9	761.9
	MA	120	210	961.9	1291.9	711.9
	MCom	120	210	691.9	1021.9	711.9
	MCA	120	210	821.9	1151.9	841.9
	M.A. in MCJ	180	210	1696.9	2086.9	1716.9
	MDes*	120	210	941.9	1271.9	961.9
	MTech*	120	210	821.9	1151.9	841.9
	MTTM	120	210	891.9	1221.9	911.9
	LLM	120	210	1096.9	1426.9	1116.9
	MBA	390	210	3599.7	4199.7	3619.7

Ph.D.	Full Time*	90	270	1075	1435	1095
	Part Time*	90	270	1225	1585	1245

*NOTE: Candidates of the following programmes will be required to pay an additional fee of \$200 (for PhD) and \$120 (for other programmes) per semester on account of consumables:

1. Integrated MSc /BSc BEd programmes.
2. MSc in Molecular Biology and Biotechnology/ Chemistry / Environmental Science.
3. BTech and MTech in Food Engineering and Technology.
4. MTech in Energy Technology.
5. Master of Design.

Financial Help from the Government

Students of Tezpur University can avail various scholarships offered by Govt. Organizations/ Agencies, such as:

- Institutional fellowship for meritorious PhD students.
- AICTE Doctoral Fellowship.
- UGC Research Fellowship.
- UGC Merit Scholarship for SC/ST students pursuing PG level professional courses.
- PG Indira Gandhi Scholarship for single girl child.
- UGC Merit scholarship for University rank holders.
- Ishan Uday scholarship for the students (from NE States) of UG courses.
- Inspire Scholarship.
- Post Matric Scholarship for SC, ST and OBC students under different schemes of the Govt.
- Merit-cum-Means Based scholarship for professional and technical courses (from Ministry of Minority Affairs).
- Post-Matric Scholarship from the Directorate of Tea Tribes and Adivasi Welfare.
- AICTE scholarship for the GATE qualified students of MTech
- DBT scholarship.
- NEC scholarship from Director of Technical Education.
- Post-Matric scholarship for students belonging to Minority communities.
- Scholarship for differently-abled students from National Handicapped Finance and Development Corporation and many more.
- Free studentship for selected students belonging to BPL / AAY Category.

Students admitted to MSc in Molecular Biology and Biotechnology through GAT-B are eligible for studentship of Rs. 5000.00 per month from DBT Govt. of India

Students admitted on the basis of GATE score to the MTech programme in (i) Bioelectronics, (ii) Electronics Design and Technology, (iii) Energy Technology, (iv) Food Engineering and Technology, (v) Information Technology, (vi) Mechanical Engineering, and (vii) Civil Engineering are eligible to avail the AICTE's PG Scholarship for GATE Score holders directly from the AICTE as per norms.

RESERVATION POLICY

Rank Holders

Eligible position-holder candidates in the Higher Secondary (10+2) examinations 2024 conducted by the Boards / Councils of the North Eastern States may be selected for direct admission to the (i) BTech and (ii) Integrated programmes for the academic session 2024-25 on fulfilment of the following eligibility criteria:

Eligibility Criteria:

1. BTech programme:

At least 85% of marks in aggregate with any of the top 5 (Five) positions in the Higher Secondary (10 +2) examinations. However, counselling and admission will be made on the basis of CRL rank of the JEE (Main) of the candidate and not on the basis of the rank in 10+2 examination.

2. Name of the BTech Programmes

BTech in Computer Science and Engineering /Electronics and Communication Engineering / Mechanical Engineering /Civil Engineering / Food Engineering and Technology / Electrical Engineering.

3. Integrated Programme:

At least 85% marks in aggregate with any of the top 5 (Five) positions in the Higher Secondary (10+2) examinations for the following programmes

1. Integrated BSc BEd
2. Integrated MSc in Physics/Chemistry/Mathematics/Life Science (4+1 Years as per NEP2020)
3. Integrated MA in English (4+1 Years as per NEP2020)
4. Integrated MCom (4+1 Years as per NEP2020)

Reservation for SC/ST/OBC(NCL)/EWS/Differently-Abled candidates

Seats are reserved for SC/ST/OBC(NCL)/EWS and differently-abled persons as per the Government of India rules. In the case of differently-abled persons, a minimum of 40% permanent disabilities will only be considered. Relaxation of 5% marks or equivalent grade point will be allowed for reserved category candidates as per rules.

PM CARES for Children Scheme

One seat on supernumerary basis is reserved for any of the programs of the university who lost their parents during COVID pandemic.

Sports quota

Eligibility Criteria for Sports Quota Candidates

Under Tezpur University Sports quota, candidates can secure admission at Tezpur University in two ways:

- Direct Admission without Sports Trials
- Admission with Sports Trials

Criteria 1: Direct Admission without Sports Trials

All candidates who have represented India in any of the following competitions are eligible to secure admission at TU without taking the Sports Trials:

- Olympic Games by International Olympic Committee (IOC)
- World Championship/ World Cup by International Sports Federations (ISF)
- Asian Games by Olympic Council of Asia
- Asian Championships by International Sports Federations (ISF)
- South Asian Games (SAG) by South Asian Sports Council (SASC)
- Commonwealth Games by Commonwealth Games Federations (CGF)
- Paralympics Games by International Paralympics Committee (IPC)

Criteria 2: Admission with Sports Trials

All candidates who have not participated in any of the competitions listed above will have to take Sports Trials for TU admissions 2024.

Similar to the TU admission procedure for other candidates, applicants under Sports quota also need to register on the official website of TU. At the time of filling the application form for TU admissions 2024, candidates also need to upload their Sport Certificates on the TU portal. Out of 100 marks, 40 marks will be considered for Certificates and 60 marks for sports trials.

The eligibility criteria for TU admissions 2024 for Sports quota candidates are such that maximum 40 marks will be considered for the Sport Certificate. Besides, candidates need to appear for sports trial for their game/ sport. Sports trial includes Game / Sport Specific Fitness, Fundamental Skills, and Overall Playing Ability.

TU Sports Office will conduct trials for a specific sport or game. The dates for trials will be notified by the Tezpur University on website.

Out of 60 marks (maximum) in sports trials candidates need to secure at least 30 marks (50% marks) to be eligible for

TU admissions 2024 under Sports quota. Besides, candidates should not be employed (part-time/ full-time) anywhere while pursuing a UG/PG course at TU.

Note: Preference for admission will be given to sports/ games in which Tezpur University inter-university competitions are held.

After the sports trials are conducted, a merit list of candidates will be prepared and displayed on TU official website.

Admission Process Sports quota: Certificate Marking Criteria

			Certificate Marking Criteria 40 Marks (maximum)				Marks For Sports Trials 60 Marks (Max)
Category	Competition / Tournament Level	Certificate from	Position				
			1st	2nd	3rd	Participation	
A1	Represented India in Olympic Games/ World Championship/ World Cup/ Commonwealth Games/ Asian Games / Asian Championship/ South Asian Games/Paralympics Games	IOC/ ISFs/ CGF/ OCA/ SASC/ IPC/ IOA/ NSF recognised and/or funded by Ministry of Youth Affairs & Sports (MYAS)	Direct Admission				
A2	Position and/ or Participation in World / Asian School Games/ International Competition	International School Sport Federation (ISF)/ NSF recognised and/or funded by Ministry of Youth Affairs & Sports (MYAS)	40	38	36	34	At least 50%
B1	Position and participation in National Games / Federation Cup/ Senior National/ Inter-Zonal National Competition/AIU tournament/ Khelo India /university games	IOA/ NSF/ State Olympic Association recognised and/or funded by Ministry of Youth Affairs & Sports (MYAS)/AIU	33	31	29	Not Eligible	At least 50%

B2	Position in National School Games, National Competition Under 19, Youth/ Junior National Competition/Khelo India school games	School Games Federation of India (SGFI)/ NSF recognized and/or funded by Ministry of Youth Affairs & Sports (MYAS)	25	23	21	Not Eligible	At least 50%
B3	Position in National School Games, National Competition Under 17, All India Rural Games / National Sports Festival for Women/ Sub- Junior / Cadet National Competition	School Games Federation of India (SGFI)/ SAI/ NSF recognized and/or funded by Ministry of Youth Affairs & Sports (MYAS)	16	14	12	Not Eligible	At least 50%
B4	Position in State Competition/ State Women Sports Competition / Inter Zonal/ Inter-District/ CBSE National/ KVS National/ IPSC National/ ICSE National/ DAV National/ NVS National/ Vidya Bharti National Competition	State Sports Association, State Directorate of Education/ School Boards	08	06	04	Not Eligible	At least 50%

Note

1. Sports Certificate of Invitational / Memorial / Open / Prize Money League / Ranking competitions will not be considered.
2. Only the highest Sports Certificate will be considered for Marking.
3. Sports Certificate of only preceding three years will be considered. (from May 01, 2021, to April 30, 2024)
4. Applicant should upload Self-Attested copy of Sports Certificate.

Criteria for General Fitness Test, Skill & Game Performance Test for Admission under Reserved Category of Sports Quota.

General Fitness Test

It is essential for the candidates to qualify **any two** of the following General Fitness Test items for considerations of admission in **Archery, Chess, Shooting**. Selection under sports and fitness test will be considered as per the norms adopted by majority of the Indian University with international/national standard (SAI)

1.	Strength	Standing broad jump 1.65 mts for Men 1.15 mts. for Women	Two attempts allowed
2.	Endurance	1000 mts. Run/Walk 5.00 minutes for Men 6.00 minutes for Women	One attempt allowed
3.	Speed	50 mts. Dash 8.00 seconds for Men 9.00 seconds for Women	One attempt allowed

Note: It is essential to qualify the General Fitness Test for appearing in the Skill & Game Performance test

1. There will be no Physical Fitness Test for specially challenged candidates/players.
2. All the candidates are to appear in the General Fitness Test in proper sports kit.
3. Any injury/casualty caused to the applicant during sports trials shall be the sole responsibility of the applicant.

Skill and Game Performance Test:

It is essential for the candidate to qualify the Skill and Game Performance Test for consideration of admission.

1. Fundamental Skills in the concerned game.
2. Game Performance in Trials.

Name of the Sports considered under sports quota for Academic Session 2024-25

- | | | |
|------------------|------------------|----------------|
| 1. Archery | 7. Cricket | 13. Swimming |
| 2. Badminton | 8. Football | 14. Volleyball |
| 3. Basketball | 9. Kabaddi | 15. Hockey |
| 4. Weightlifting | 10. Lawn Tennis | 16. Yoga |
| 5. Boxing | 11. Taekwondo | |
| 6. Chess | 12. Table Tennis | |

Defence Quota

As per the policy of the University and Directives of the Govt. of India, supernumerary seats are available in the following categories:

1. Employee Wards' Quota.
2. Preference under sports quota will be considered as per university rules.
3. Prime Minister's special scholarship scheme for candidates from Jammu and Kashmir.
4. Up to 5% of the approved seats are reserved for the widows/wards/wives of Armed Forces personnel and Ex-Servicemen (Army, Navy and Air Force) as per the priorities set by Govt. of India. However, the reservation for MSc in MBBT programme is subject to approval by the DBT, Govt. of India.
5. No reservation under defence quota in BTech (Lateral Entry) programmes.
6. The wards/widows/wives of Armed Forces personnel strictly in accordance with following priorities laid down by Ministry of Defence:
 - Priority I: Widows/wards of defence personnel killed in action.
 - Priority II: Wards of disabled in action and boarded out from service.
 - Priority III: Widows/wards of defence personnel who died in service with death attributable to military service.
 - Priority IV: Wards of defence personnel disabled in service and boarded out with disability attributable to military service.
 - Priority V: Wards of ex-servicemen and serving personnel who are in receipt of Gallantry Awards.
 - i) Param Vir Chakra
 - ii) Ashok Chakra
 - iii) Maha Vir Chakra
 - iv) Kirti Chakra
 - v) Vir Chakra
 - vi) Shaurya Chakra
 - vii) Sena, Nau Sena, Vayu Sena Medal
 - viii) Mention-in-Despatches
 - Priority VI: Wards of ex-servicemen.
 - Priority VII: Wives of:
 - i) defence personals disabled in action and boarded out of service.
 - ii) defence personal disabled in service and boarded out with disability attributable to military service.
 - iii) Ex-servicemen and serving personal who are in receipt of Gallantry Awards
 - Priority VIII: Wards of serving personnel.
 - Priority IX: Wives of Serving Personal.

Mandatory Conditions for Securing Admission

Admission of a candidate to a programme is subject to the following conditions:

- Fulfilment of the eligibility criteria as specified in eligibility criteria for admission.
- Production of all the relevant documents such as pass certificates and marksheets of all earlier examinations with requisite percentage of marks in original and original copies of documents uploaded at the time of submission of the application form.
- Submission of a set of self-attested copy of all pass certificate, mark sheets and other relevant documents.
- Submission of the character certificate from the head of the institution and migration certificate (in original) from the board/university last attended.
- Submission of a self-attested printout of the filled in application form.
- Receipt of payment of admission fee in full.

Provisional Admission

- If the result of the qualifying examination of a student is awaited at the time of admission, he/she must produce/submit pass certificate/marksheet with requisite percentage of marks within 31/10/2024. Such a candidate must submit a proof of taking all the examinations including practical/lab/project/backlog courses of the qualifying degree/diploma/certificate at the time of admission duly certified by the head of the institution last attended. If any backlog course or other component remains incomplete after admission, then the candidate will be treated as not qualified for continuation and will be asked to leave the programme.
- If a candidate fails to produce/submit any document (such as the completion certificates and marksheets/transcripts of the qualifying examinations, migration certificate from the board/university last attended, etc.) at the time of admission, the same must be produced as early as possible but not later than 31/10/2024. Candidates failing to produce marksheet or pass certificate with requisite percentage of marks within the specified period will not be allowed to continue her/his study.
- All admissions are provisional in nature. The admission of a student in a programme may be cancelled under the following circumstances:
 - Production/submission of any false/tempered information/ document.
 - Failing to produce/submit any required pending document within 31/10/2024.
 - If the required percentage of marks of the qualifying examination is not fulfilled or does not meet the requirement of the eligibility criterion.

Studying at Tezpur University

The University prepares a detailed academic calendar at the beginning of every academic year and all activities are carried out by strictly adhering to academic guidelines and academic calendar.

The medium of instruction and examination at all the levels in the University is English, except for courses on languages such as Hindi, Assamese, Chinese, German, etc. In framing the courses, care is taken so that students are NOT burdened with formal lectures only. There is adequate provision for seminars, tutorials, case studies, guided field work, etc., whatever

necessary, to promote the habit of independent thinking and to relate theoretical knowledge to the practical field. Group Discussion is also used as a teaching pedagogy to increase the analytical capability and creativity of the students.

Important Academic Rules

Evaluation System

Students are evaluated through a relative grading system. The University follows a continuous comprehensive evaluation system, under which a student is evaluated through several tests and assignments spread over the entire semester. As a rule, in a semester there are two major tests (Mid-Semester and End-Semester) apart from two sessional tests held at regular interval of teaching-learning process. Finally, a Letter Grade is awarded against each course on the basis of these assessment components.

A Letter Grade signifies the level of standard of qualitative/ quantitative academic achievement, which a student attains in a particular course/research work. Each of the Letter Grades represents a Grade Point as given in Table 1

Table 1: Letter Grades and Grade Points

Letter Grade	Grade point	Description
O	10	Outstanding
A+	9	Excellent
A	8	Very Good
B+	7	Good
B	6	Above Average
C	5	Average
P	4	Pass
F	0	Fail

The letter Grades 'O' to 'P' are qualifying Grades, while 'F' and 'W' are disqualifying Grades. The students awarded with the 'F' or 'W' Grade in a course are required to re-register the course.

Additionally, there are some other Grades being followed in university as stated in Table 2

Table 2 Additional Letter Grades and their meaning

Letter Grade	Status	Remarks/Context
I	Incomplete	Some evaluation components remain incomplete due to an extraordinary situation faced by the student. This Grade should be converted to any of the regular Grades mentioned above by completing the left-out component. (s) within the first month of the next semester

X	Extended Project	A project work remains incomplete, and it is extended to the next semester
S	Satisfactory	Successful completion of a Foundation/ Audit Course.
U	Unsatisfactory	Unsuccessful in completing a Foundation/ Audit Course
W	Withdrawn	The student withdraws the course after the last date for withdrawal of courses. Deficit in attendance shall also be awarded with W.

If a provisionally selected candidate fails to produce the marksheet of the qualifying examination at the time of admission, the seat will be offered to the next eligible candidate from the merit list.

Course Registration

A student needs to register for courses/ research work(s) in each semester. The course adviser appointed by the Head of a Department/Centre assists the students in selecting courses for a semester.

Attendance Policy

All students must attend every lecture, tutorial and practical classes of each course registered by them. To account for late registration, sickness or such other contingencies, the minimum attendance requirement will be 75% of the classes. Students with shortage in attendance in a course will not be allowed to appear in the semester end examination and they will be awarded 'W' (withdrawn) grade in the course.

Renewal of Admission

Every student will renew his/her admission in all the successive semesters on the notified dates. On specific reasons, students may be allowed to take admission within one week of the notified date with a late fee.

Requirement for the Award of Degree/Diploma/ Certificate

A student shall be required to satisfy the following conditions for the award of Degree/ Diploma/Certificate:

- To obtain a qualifying Grade in each of the registered courses.
- To earn the minimum credit required for the award of Degree/Diploma/Certificate within the prescribed maximum duration of the programme.
- To secure a minimum CGPA of 4.5.

Termination of Candidature or Withdrawal of Awarded Degree/ Diploma/ Certificate

The candidature of a student in a programme may be terminated at any stage. Even an already awarded Degree/Diploma/Certificate may be withdrawn, under various circumstances, such as:

- Failing to complete successfully all the components of the programme within the maximum period of completion specified for the programme.
- Establishment of deliberate suppression of any previous fact in the application form or at the time of admission, which may determine the eligibility for admission.
- Production/submission of any false/tempered document at the time of application/ admission.

- Serious violation of any clause of the Regulations on Maintenance of Discipline and Hostel Rules prescribed by the University.
- Indulging in ragging inside or outside the University campus is strictly prohibited and students found indulged in ragging may lead to rustication from the University. Students are advised to visit www.ugc.ac.in or www.tezu.ernet.in for UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009.
- During the study period in the University, involvement in any criminal/offensive activity, that may be punishable according to the law of country.

Section-IV: DEPARTMENT PROFILES
SCHOOL OF ENGINEERING
APPLIED SCIENCES

The Department of Applied Sciences, one of the newest departments of Tezpur University, was established in 2019. It aims to provide high quality teaching of basic science subjects to engineering students. The teachers provide individual attention to the students with the goal to develop a strong foundation for their respective future careers by nurturing their analytical abilities and critical thinking.

The department provides well equipped laboratory facilities to the students as a part of their curriculum. At the same time, the department aspires to establish its name in research with world class and high-impact outputs in the frontiers of applied sciences in interdisciplinary areas. Particularly, the department possesses some highly motivated young faculty members with research experience from various premier institutes of India and abroad. Their research interests encompass diverse areas of applied as well as fundamental sciences, spanning fields like astrophysics, condensed matter physics, materials chemistry, pure and applied mathematics. The faculty members are currently focused on establishing their own research groups to pursue research on their respective thrust areas.

Vision

To be a leader in higher education recognized for excellence in teaching, research, innovation and service.

Mission

To strive hard to build supremacy in teaching, research and service so as to become one of the most sought-after institutions of higher learning in the country.

1. To create infrastructure and provide challenging environment conducive to enriched learning opportunities for the students and aim at generating leaders of the future in their domain.
2. To imbibe virtues among students, staff and faculty that resonates through its work culture, teamwork and output.
3. To enthuse the students to aim for highest level of learning for personal and professional growth.
4. To foster innovation and nurture critical and creative thinking.
5. To impart high quality teaching to students in career-oriented programmes in science, engineering, management and humanities that ensure employability.
6. To involve in public service and outreach activities with stakeholders for the benefit of the region, state, country and the world.
7. To promote multidisciplinary and collaborative research with other institutes and industries that visibly impacts society.
8. To facilitate co-curricular and extra-curricular pursuits of students, staff and faculty

Mathematics

Programmes Offered

1. Ph.D. in Applied Mathematics

Research Activities

1. No. of papers published in the year 2022-2023: 05
2. No. of current Ph.D. scholars: 07

Faculty and Areas of Interest

Professor

Rajib Haloi*, Ph.D. (IITK), HoD
Differential Equations, Harmonic Analysis.

Somnath Paul*, Ph.D. (TU)
Spectral Graph Theory: Application of Linear Algebra in Graph Theory, Graphs and Matrices

Assistant Professor

Bijoy Krishna Debnath*, Ph.D. (NITA) *Operations Research, Inventory Modelling, Fuzzy Mathematics and Applications, Multi Criteria Decision Making Problems.*

Selected Publications

- D. Chutia, R. Haloi, Weighted integral inequalities for modified integral Hardy operators, Bulletin of Korean Mathematical Society 59(3), 757 (2022)
- S. Paul, Distance Laplacian spectra of joined union of graphs, Asian- European Journal of Mathematics, Vol. 15 (2022), 2250039.
- S. Mahata, B. K. Debnath A profit maximization single item inventory problem considering deterioration during carrying for price dependent demand and preservation technology investment, RAIRO-Operations Research 56(3), 1841 (2022).

Chemistry

Programmes Offered

1. Ph.D. in Applied Chemistry.

Faculty and Areas of Interest

Associate Professor

Dhrubajyoti Haloi*, Ph.D. (IIT KGP)
Polymer Chemistry

Assistant Professor

Saona Seth*, Ph.D. (IITK)
Functional Organic and Metal-organic Polymers, Energetic Materials, Materials for Energy and Environmental Applications

Research Activities

1. No. of papers published in the year 2022-2023: 02
2. No. of ongoing research projects: 02
3. No. of current Ph.D. scholars: 04

Selected Publications

- Medhi, A., Dhar, A., Sarmah, K., Dutta, P., Haloi, D.J. Copolymers of Poly(butyl acrylate): Synthesis, Characterization and Compositional Analysis, *Asian Journal of Chemistry*, 2022, 34(4), pp. 912–916.
- Dhar, A., Haloi, D.J Polyethylene glycol-based RAFT agent cum ATRP macroinitiator initiated block copolymerization of methyl methacrylate *Indian Journal of Chemical Technology*, 2022, 29(5), pp. 533–539.

Physics

Programmes Offered

1. Ph.D. in Applied Physics

Faculty and Areas of Interest

Assistant Professor

Pranjal Kumar Gogoi*, Ph.D. (NUS)

Low-dimensional Material Physics, Transition Metal Dichalcogenides, Spectroscopic Ellipsometry, Electron Energy Loss Spectroscopy, Scanning Transmission Electron Microscopy.

Biplob Sarkar*, Ph.D. (IITG)

Theoretical Modelling of Astrophysical Flows, Study of X-ray Binaries, X-ray Data Analysis and Interpretation

*** Recognized Ph.D. Supervisor**

Selected Publications

- B. Mondal, P. K. Gogoi, Nanoscale hetero-structured materials based on metal oxides for chemiresistive gas sensor, *ACS Applied Electronic Materials* 4(1), 59 (2022).
- A. Nath, B. Sarkar, J. Roy, R. Misra, AstroSat observation of rapid Type-I thermonuclear burst from the low mass X-ray binary GX 3+1, *Journal of Astrophysics and Astronomy*, 43:93,(2022)

ACRONYMS

IITK- Indian Institute of Technology, Kanpur; **NITA**- National Institute of Technology, Agartala; **TU**-Tezpur University, **IIT KGP**- Indian Institute of Technology, Kharagpur; **NUS**-National University of Singapore, **IITG**-Indian Institute of Technology, Guwahati; **HoD**-Head of the Department.

Facilities

- Physics Laboratory for UG and PG students.
- Chemistry Laboratory for UG and PG students

Research Activities

1. No. of papers published in the year 2022- 2023: 02
2. No. of ongoing research projects: 02
3. No. of current Ph.D. scholars: 05

For more information, please visit the departmental website <http://www.tezu.ernet.in/appsc>

CIVIL ENGINEERING

The Department of Civil Engineering of Tezpur University was established in the year 2009 under the School of Engineering for offering B. Tech. degree. Ph.D. programme was initiated in spring, 2011 and the M. Tech. programme of the department was started from Autumn, 2018. The Department aims to provide quality education, research and professional experiences that enable its graduates to become leaders in their professional careers, to pursue excellence in research and to serve the profession, community, and nation, and to be competitive in the international scene.

Programmes Offered

1. Ph.D.
2. M. Tech. in Civil Engineering (Specialization in Geotechnical Engineering)
3. B. Tech. in Civil Engineering

Faculty Members and Areas of Interest

Professor

Kamal Uddin Ahamad*, Ph.D. (IITG), HoD
Environmental Engineering

Utpal Kumar Das*, Ph.D. (GU)
Geotechnical Engineering

Assistant Professor

Ankurjyoti Saikia*, Ph.D. (TU)
Geotechnical Engineering

Binanda Khungur Narzary*, Ph.D. (TU)
Transportation Engineering

Debaraj Bailung Sonowal, M.Tech. (IITR)
Structural Engineering

*** Recognized Ph.D. Supervisor**

Shailen Deka*, Ph.D. (IITG)

Geotechnical Engineering

Jayanta Deori Bharali, M.Tech. (IITG)
Transportation Engineering

Rituraj Buragohain, M.Tech. (IITG)
Water Resources Engineering

Karabi Bharadwaj, M.Tech. (NITS)
Structural Engineering

Arunav Chakraborty*, Ph.D. (GU)
Geotechnical Engineering

Hemanta Medhi, Ph.D.*. (IITK)
Geotechnical Engineering

ACRONYMS:

GU-Gauhati University, **IITG**-Indian Institute of Technology, Guwahati; **TU**-Tezpur University, **IITR**-Indian Institute of Technology, Roorkee; **NITS**- National Institute of Technology, Silchar; **IITK** – Indian Institute of Technology, Kanpur; **HoD**- Head of the Department.

Facilities

Computational Laboratory Facilities

- SAAP 2000
- Plaxis 2D

Core Departmental Laboratories

- Geotechnical Engineering Laboratory
- Structural Engineering & NDT Laboratory
- Environmental Engineering Laboratory
- Transportation Engineering Laboratory
- Hydraulics Laboratory
- Surveying Laboratory
- Computational Laboratory

Research Activities

1. No. of papers published in the year 2022- 2023: 05
2. No. of ongoing research projects: 03
3. No. of current Ph.D. scholars: 10

Selected Publications

- Boruah P.P., Chakraborty A., Deterministic and Probabilistic Approach of Seismic Slope Stability Analysis-A State-of-the-Art Review, Geotechnical Engineering, 53(3); pp. 31-39,2022.
- Chakraborty A, Goswami A Mathematical Model for Estimation of Shear Parameters of Alluvial Soils of Kamrup Metro District (Assam, India) from Index Properties, Australian Journal of Civil Engineering,2022
- Doley C., Das U.K., Shukla S.K, Development of a Multiple Regression Equation for Prediction of Bearing Capacity of Geocell-reinforced Sand Beds Based on Experimental Study, Arabian Journal of Geosciences, 15: 1408, 2022.
- Soni P., Medhi H., Sagar A., Garg P., Singh A., Karna U., Runoff estimation using digital image processing for residential areas, Journal of Water Supply: Research and Technology-Aqua, 71 (8); pp. 938–948, 2022.
- Tripathy D., Ahamad K.U., Ríos-Pérez D., Tiwari D.K., Téllez A.V.C., Estimation of Elemental Pollution in Freshwater Sediment of Lerma River Using EDS and FRX Techniques (Assessment of Lerma River Bed Sediments Using EDS and FRX Techniques), Microscopy and Microanalysis, 28 (S1), pp. 1578-1582.

For more information one can visit the departmental website <http://www.tezu.ernet.in/dcivil>

COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science and Engineering was established in 1994 and it is one of the oldest departments of the University. The department has been recently recognized as a Centre of Excellence in Machine Learning and Big Data Analytics by MHRD, Government of India under FAST. The Department is also recognized by UGC under Special Assistance Programme (SAP DRS Phase II). During 2005-2009 and 2018-2022, the department received support from the Department of Science and Technology (DST), Govt. of India under its FIST programme. The department has also been recognized as ISEA member, MeitY, Gol and BRICS-NU Member. The department has been carrying out active research in the fields of computational theory, computer networks, network security, mobile computing, soft computing and data mining, natural language processing, workflow management, qualitative spatial reasoning, web services, rehabilitation robotics, pattern recognition, computational biology and bioinformatics, image processing algorithms, speech processing, computational geometry, machine learning and remote sensing image analysis.

Programmes offered.

1. Ph.D.
2. Master of Computer Application (MCA)
3. M. Tech. in Data Sciences
4. M. Tech. in Information Technology#
5. M. Tech. in Computer Science and Engineering
6. B. Tech. in Computer Science and Engineering

Proposed to be discontinued from Academic Year 2024
Faculty and Areas of Interest

Professor

Dilip Kumar Saikia*, Ph.D. (IITKgp)
Networks, Mobile Computing

Dhruba Kumar Bhattacharyya*, Ph.D. (TU)
Data Mining, Network Security, Bioinformatics

Utpal Sharma*, Ph.D. (TU)- Dean, Planning & Development
Natural Language Processing

Nityananda Sarma*, Ph.D. (IITG), Director, CC Wireless
Networks and Mobile Computing

Bhogeswar Borah*, Ph.D. (TU)
Data Mining, Image Processing

Sarat Saharia*, Ph.D. (TU), HoD
Pattern Recognition

Bhabesh Nath*, Ph.D. (TU)
Data Mining

Associate Professor

Siddhartha Sankar Satapathy*, Ph.D. (TU)

Computational Biology and Bioinformatics, Wireless Sensor Network

Sanjib Kumar Deka, * Ph.D. (TU)
Cognitive Radio Network, Operating System

Debojit Boro*, Ph.D. (TU)
Network Security

Rosy Sarmah*, Ph.D. (TU)
Data Mining, Bioinformatics, Image Processing

Assistant Professor

Sarangthem Ibotombi Singh*, Ph.D. (TU)
Machine Learning, Service Oriented Systems, Trust and Reputation

L. Basantakumar Singh, M.Tech. (TU)
Object Recognition, Trust and Reputation

Arindam Karmakar*, Ph.D. (ISI)
Algorithms, Computational Geometry,

Sanghamitra Nath*, Ph.D. (TU)
Speech Processing, NLP

Swarnajyoti Patra*, Ph.D. (JU)
Pattern Recognition, Machine Learning, Remote Sensing, Image Analysis

Shobhanjana Kalita*, Ph.D. (TU)
Knowledge Representation and Reasoning

Nabajyoti Medhi*, Ph.D. (NITM)
Software Defined Networking, Wireless Networks, Network Security, Cloud Computing, Web Technologies

Jyotisma Talukdar*, Ph.D. (GU)
Data Mining, Machine Learning

Tribikram Pradhan*, Ph.D. (IIT BHU)
Recommender System, Information Retrieval, Knowledge Graph, Data Mining, NLP
***Recognized Ph.D. Supervisor**

ACRONYMS

IITKgp-Indian Institute of Technology, Kharagpur; **TU**-Tezpur University; **IITG**-Indian Institute of Technology, Guwahati; **ISI**-Indian Statistical Institute, Kolkata; **JU**-Jadavpur University, Kolkata; **NITM**- National Institute of Technology, Meghalaya; **GU**- Gauhati University, **IIT- BHU**- Indian Institute Technology- Banaras Hindu University Uttar Pradesh; **NITS**- National Institute of Technology, Silchar; **HoD**-Head of the Department

Facilities

State-of-the-art computer laboratories

- Basic Programming Laboratory
- Software Engineering Laboratory
- Hardware Laboratory
- Mobile Computing Laboratory
- ISEA Laboratory

Research / Special Computing Facilities

- High Performance Computing Centre (23 TFlops speed and 50 TB storage)
- Network/Information Security Laboratory
- Biomimetic and Cognitive Robotics Laboratory
- Natural Language Processing Laboratory
- Cognitive Radio Network Research Laboratory
- Malware / SDN Research Laboratory
- AR/VR Laboratory
- IoT Laboratory
- Data Science Laboratory

Departmental Library

The Department has a library with a collection of more than 2238 book volumes in the field of computer science and information technology.

The library also receives 8 international and 3 national journals in the field of computer science. The digital libraries of ACM, IEEE, are accessible to the Department.

Research Activities

1. No. of papers published in the year 2022-2023: 37
2. No. of ongoing research projects: 07

3. No. of current Ph.D. scholars: 62

Selected Publications

- Chowdhury H. A., Bhattacharyya D. K. and Kalita J. K., UIPBC: An effective clustering for scRNA-seq data analysis without user input, Knowledge-Based Systems, 248(1), ISSN: 0950-7051. DOI: <https://doi.org/10.1016/j.knosys.2022.108767>
- Devi M., Sarma N. and Deka S. K., A single-channel single-winner auction model for homogeneous channel allocation in CRNs, Physical Communication, 55(1), ISSN: 1874-4907. DOI: <https://doi.org/10.1016/j.phycom.2022.101890>
- Bhowmick A., Saharia S. and Hazarika S. M. Non-parametric scene parsing: Label transfer methods and datasets, Computer Vision and Image Understanding, 219(1), ISSN: 1077-3142, DOI: <https://doi.org/10.1016/j.cviu.2022.103418>
- Sen P., Kurmi A., Ray S. K. and Satapathy S. S. Machine learning approach identifies prominent codons from different degenerate groups influencing gene expression in bacteria, Genes to Cells, 27(10), ISSN:1365-2443, DOI: <https://doi.org/10.1111/gtc.12977>
- Neog H., Dutta P. E. and Medhi N. Health condition prediction and covid risk detection using healthcare 4.0 techniques, Smart Health, Vol: 26, ISSN: 2352-6483, DOI: <https://doi.org/10.1016/j.smhl.2022.100322>
- Kharkongor C. and Nath B. Set Representation for Rule Generation Algorithms, Computer Science, 23(2), ISSN: 1508-2806, DOI: <https://doi.org/10.7494/csci.2022.23.2.4071>

For more information one can visit the departmental web site at <http://www.tezu.ernet.in/dcompssc>

DESIGN

Tezpur University started the 'Department of Design' in the year 2019 under the School of Engineering considering the importance of design education in the successful development of useful products. India represents a huge market and an "Atmanirbhar Bharat" needs an enormous range of well-designed products for its population as well as the rest of the world. That needs training and preparing future generations of technocrats with the right design perspective.

The department started its M.Des programme in 2021 with students from different educational backgrounds like B.Des, Engineering (BE/BTech), and Architecture through CEED scores and TUEE followed by portfolio and interview. The department is starting its Ph.D. programme in Design from Spring 2024. The department is also starting its B.Des and B.Des+M.Des dual degree programmes from academic year 2024-2025 as per NEP:2020/ UGC/AICTE. We also envisage the need for catering to students/project-specific requirements through a Human-Centred Design approach.

Vision of the Department

A centre of excellence in Design and Innovation for creating competent professionals capable of integrating traditional and modern knowledge, concepts and styles for eco-friendly products and for addressing the challenges of India becoming a manufacturing hub.

Mission of the Department

1. To offer UG/ PG and Research programmes in the domain of design.
2. To engage in design and consultancy activities for environmentally sustainable products.

3. To achieve regional, national, and international recognitions through need-based quality academic, research and consultancy activities.

Programmes offered

1. PhD in Design
2. Master of Design (M. Des.)
3. Bachelor of Design (B. Des) [As Per NEP:2020/AICTE]

Faculty Members and Areas of Interest

Professor

***Partha Pratim Dutta**, Ph.D. (TU), HoD
Renewable Energy, Thermal Engineering, Biomass Gasification, Solar Thermal Energy, Drying Technology, Automobile Engineering, Rural Technology/ Innovation

Assistant Professor

Shiv Kumar Verma, Ph.D. (IITG)
Design Methods, Design Research, Form Studies, Design Science, Design Education and Pedagogy, Healthcare, Educational games, and designing for communities.

Srinivasan G, Ph.D. (IIITDM)*
Product and Industrial Design, Physical and cognitive ergonomics, Design for occupational health and disabled.

Assistant Professor (Guest)

Dr. Kankana Narayan Dev, M. Arch. (MAHE), PhD (IITG)

ACRONYMS

TU- Tezpur University; **IITG**- Indian Institute of Technology, Guwahati; **IIITDM**- Indian Institute of Information Technology, Design and Manufacturing Kancheepuram Chennai; **MAHE**-Manipal Academy of Higher Education Puducherry, **CIT** - Central Institute of Technology, **NIFT** (Delhi/Kolkata)- National Institute of Fashion Technology Delhi/ Kolkata **HoD**- Head of the Department.

Facilities

Digital Prototyping Studio: The studio has the following equipment

- 18 numbers of High-End Computers (HP Z2 G4 Intel Core i7-9700/ 16GB/ 1TB)
- 2 numbers of Workstation (Dell Precision 3640)
- Software Packages (Solidworks)
- Cintiq Pro for product styling, illustrations, and visual design

Architectural Design, Interior Design, Humanitarian Aid Design, Urban Studies, Co-Design Consultant, Social Housing, Bamboo Expert, Visual Communication Design, Product Packaging Design.

Mr. Hari Brat Saikia, M.Des. (CIT, Kokrajhar), PhD (Pursuing CIT, Kokrajhar)
Low-cost Sustainable Design, Product Design, Transportation Design, Healthcare & Design Research

Ms. Pratyusha Barua, B.Des (Knitwear Design), NIFT, Kolkata
M. Des, NIFT, Delhi,
Design for Society, Human Centred Design, Textile Design, Human Centred Design in the context of Public Health and Gender

Mr. Jintu Mahanta, M.Des (CIT, Kokrajhar)
Multimedia Communication and Design, Architectural Visualization and Product Visualization, 3D Animation, Virtual Reality, Augmented Reality, UI UX Design, Graphic Design.

- Wacom Cintiq Pro 32 inch
- Wacom Cintiq Pro 24 inch

Physical Prototyping Studio: The studio has the following equipment

- 3D Clay and Plastic Printer
- 3D Printer with Nylon, PLA, ABS, CPE and PVA Printing

Communication Studio: The studio has the following equipment

- DSLR Camera
- Tripods

Central Workshop facilities (Under Mechanical Engineering)

- Woodwork / Carpentry, Metal work, Welding
- Facility planned in near future:
- Product Development Workshop -Three divisions for Woodwork, Metal work, and Paint work for large scale prototype development.

Research Activities

- No. of papers published in the year 2022-2023: 05
- No. of papers presented at international conferences: 03
- No. of ongoing research projects/Consultancy Project: 01

Selected Publications Journals (2022-2023)

- Verma S.K., Puneekar R.M. (2022) Gaining Insights into the Creative Process of Designing Nature Inspired Product Forms. International Journal of Technology and Design Education. Springer.
- Jeyapradhap, T., Srinivasan, G., and Raja, B. Endpoint estimation using a measurement sensor for freeze-drying process control. Thermal Science and Engineering Progress, 41, 101848, 2023.
- Gouda, R. K., Srinivasan, G., Umesh, V., and Raja, B. Surface enhancement for boiling heat transfer through micro holes for electronic cooling applications. Sadhana, 48(4), 1-8, 2023.
- Dutta, P., Dutta, P.P., Kalita, P. (2023) Thermal performance study of a PV-driven innovative solar dryer with and without sensible heat storage for drying of Garcinia Pedunculata. Environmental Science and Pollution Research 30(10), <https://doi.org/10.1007/s11356-023-27041>
- Dutta, P., Dutta, P.P., Kalita, P. (2023) Energy and exergy study of a novel multi-mode solar dryer without and with sensible heat storage for Garcinia pedunculata. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 45(3), 9266-9282 (2023).

Placements and Internships

Student in the final semester internship: TSC, IITB, IITG, Medblue Innovations Pvt Ltd at SGPGI, Lucknow, UP etc.

For more information one can visit the departmental web site at <http://www.tezu.ernet.in/design/>

ELECTRICAL ENGINEERING

The Electrical Engineering department started in 2014 under the School of Engineering with the B.Tech program. The prime motive of the department is to impart quality education, training and research at the undergraduate level in the forefront areas of Electrical Engineering and its allied technologies. The Department currently offers B.Tech. , M.Tech and Ph.D programmes. The Department aims at producing engineers with sound basic and applied knowledge in electrical engineering.

Department is working to expand its teaching and research infrastructure, enhance its industrial and research collaboration, and implement modern techniques for training to realize the above goal. The key areas of faculty expertise of the department include Power System Engineering, Power Electronics, Nonlinear Analysis-Theory, Methods & Applications, Control Systems, Fractional Order Chaotic Systems, Converter and Inverter Topologies, Sensor Technologies, Smart Grid Technologies and Policy Design, Distributed Generation Based System Optimization, Renewable Energy Management, Bio- electronics and Neuro Engineering.

Vision

To emerge as a centre of academic excellence by imparting quality technical knowledge and executing research activities in frontier areas of electrical engineering to produce engineers that are competent to take key roles in Industry and Academia.

Mission

1. To produce electrical engineers that have a strong theoretical foundation, good practical experience and exposure to research and development.
2. To impart quality education, training and research at the undergraduate level in all the areas of Electrical Engineering.
3. To create a nurturing environment for young minds by involving the students in individual and team projects for solving innovative problems in the applied fronts of Electrical engineering.
4. To inculcate Team Spirit, ethical conduct, and strong practical base among its students to equip them with the professional knowhow for succeeding to challenges of changing global environment.
5. To be a centre for innovation and technological Research & Development in frontier areas of electrical engineering.
6. To update our technological knowledge base and curriculum as per the changing trends in the industry and research innovations.

Programme offered

1. Ph.D.
2. B.Tech. in Electrical Engineering

3. M.Tech. in Electrical Engineering (with specialization in Power and Energy Systems from 2024 Autumn semester onwards)

Faculty and Areas of Interest

Professor

Asim Datta*, Ph.D. (IIST), HoD
Renewable Energy Integration, Electric Drives, Electric Vehicle, Power System

Assistant Professor

Md. Rahat Mahboob*, Ph.D. (JMI)

Sensors and Sensing Technology; Electronics Instrumentation; Wireless Sensor & Health Monitoring, IoT, signal conditioning circuit, Food Sensor & Technology, Green technology, Microcontroller based Control Strategy.

Manashita Borah*, Ph.D. (NITS), Fulbright fellow (University of California, Berkeley, USA)
Control Systems, Intelligent Electric vehicles and energy storage, nonlinear dynamics

Barnam Jyoti Saharia, M.Tech. (NITA)

Power Electronic Converters for Renewable Energy Applications, Hybrid PV-Wind Energy System Modeling and Optimization, Fuzzy and Neural Network Applications in Power Point Tracking of PV Systems, Optimization in Power Electronic Converters Design, Artificial Intelligence in Renewable Energy Applications

Anish Ahmad*, PhD (IIT-BHU)

Power Electronics and Drives, Renewable Energy Integration, Control techniques in Power Electronics and Drives, Electric Vehicle/Hybrid Electric Vehicle and Microgrid

Soumya Samanta*, Ph.D. (NITS)

Power and Energy Systems Engineering, Renewable Energy Integration, Microgrid Control, Electric Vehicle and Drives.

***Recognized Ph.D. Supervisor**

ACRONYMS

IIST- Indian Institute of Engineering Science & Technology, Shibpur; **JMI**- Jamia Milia Islamia, New Delhi; **NITS**- National Institute of Technology, Silchar; **NITA**- National Institute of Technology, Agartala; **IIT-BHU** - Indian Institute of Technology (BHU), Varanasi; **HoD**- Head of the Department

Facilities

The Department has the following Laboratory facilities.

- Basic Electrical Engineering Laboratory
- Measurement and Instrumentation Laboratory
- Power Electronics Laboratory
- Digital Electronics Laboratory
- Electronics Design Laboratory

- Analog Electronic Circuits Laboratory
- Microprocessors Laboratory
- Electrical Machine Laboratory
- Power Systems Laboratory
- Thod-Phod-Jod Laboratory
- Control System Design Laboratory

Research Activities

1. No. of papers published in the year 2022-2023: 20
2. No. of ongoing research projects: 02
3. No. of current Ph.D. scholars: 05

Selected Publications

- S. A. Ali, Md. Rahat Mahboob, and T. Islam, "An Intelligent Food Salt Tester Using Cross-Conductive Sensor", IEEE Open Journal of Instrumentation and Measurement" Vol. 2, pp. 8000213, 2023
- P. P. Singh, M. Borah, A. Datta, S. Jafari, and B. K. Roy. "Integer cum fractional ordered active-adaptive synchronization to control vasospasm in chaotic blood vessels to reduce risk of COVID-19 infections." *International Journal of Computer Mathematics* .pp.1-15. 2023
- B. J. Saharia and N. Sarmah. "A comparative assessment of popular tracking algorithms used in standalone photovoltaic systems." *International Journal of Power Electronics and Drive Systems (IJPEDS)*. Vol. 14, no. 3, pp. 1834-1843. 2023.
- B., Roy, S. Adhikari, S. Datta, S. Lalngaihawma, and S. Samanta "Real-Time Simulation of a Wind-Solar-Battery Based Microgrid System." *Journal of Electrical Engineering & Technology*, Vol. 18. No. (3), pp .2087-2102. 2023.
- R. Sarker, A. Datta, and S. Debnath, "An Improved Multicarrier PWM (MCPWM) Technique with a New Harmonic Mitigation Strategy for Cascaded H-Bridge Multilevel Inverter Applications," IEEE Transactions on Industrial Informatics, vol.18, no.3, pp.1500-1510, 2022.
- M. Borah, D. Das, A. Gayan, F. Fenton, and E. Cherry. "Control and anticontrol of chaos in fractional-order models of Diabetes, HIV, Dengue, Migraine, Parkinson's and Ebola virus diseases." *Chaos, Solitons & Fractals*. Vol. 153. No. 1. pp.111419. 2021.

For more information, please visit the departmental website <http://www.tezu.ernet.in/dee>

ELECTRONICS & COMMUNICATION ENGINEERING

Established in 1997, the Department of Electronics and Communication Engineering is one of the oldest departments in the University. Starting with an M.Tech. Programme in Electronics Design and Technology in 1997, the department subsequently introduced another M.Tech. programme in Bioelectronics under the "Teaching and Research in Interdisciplinary and Emerging Areas" scheme of the University Grants Commission. The department expanded its academic activities to undergraduate programmes, first with a B.Tech. programme in Electronics and Communication Engineering in 2006 followed by another B.Tech. programme in Electrical Engineering in 2014 (currently under the department of Electrical Engineering since October 2016). The department also carried out implementation of a three-year diploma programme in Advanced Diploma in Healthcare Informatics and Management under the career-oriented scheme of the University Grants Commission (2012-2017). In addition, the department offers Ph.D. programme in different areas including Signal and Image Processing, Vehicular Electronics, Bioelectronics, Biosensors, Microwave Engineering, Neurobioengineering, Communication Engineering and Microelectronics. The department is supported by DST-FIST, DeitY – MIT, UGC-SAP (DRS-I), AICTE, RPS, AICTE NEQIP, and Visvesvaraya Ph.D. Scheme under Meity, Gol.

Faculties of the department have several international research collaborations including Queen's University Belfast (QUB), UK; University of Technology Malaysia, Malaysia; Airlangga University, Indonesia, University of Maryland, USA and University of Rio de Janeiro, Brazil.

Vision

To develop as a centre of excellence in Electronics and Communication Engineering through creative and innovative practices in teaching, learning and research.

Mission

1. To impart quality education, training, and research at the undergraduate, post graduate and doctoral levels in all the areas of Electronics and Communication Engineering.
2. To inculcate a perceptive alacrity to observe, identify real life problems, formulate strategies for solution and evolve contextually effective solutions.
3. To deliver theoretical base, advanced technological concepts, teamwork spirit, ethics, human values, practical base, research and development to the students, extension activities to other organizations through creation of advanced facilities and providing platforms for synergy.

Programmes offered

1. Ph.D.
2. M.Tech. in Electronics Design and Technology
3. M.Tech. in Bioelectronics
4. B.Tech. in Electronics and Communication Engineering

Faculty and Areas of Interest

Professor

Partha Pratim Sahu*, Ph.D. (JU), Dean, SoE
Optical Networks and its Components, Clinical Instrumentation, Micro- fabrication, Quantum Technology

Jiten Chandra Dutta*, Ph.D. (JU)
Biosensors and Bioelectronics, Neurobioengineering

Satyajib Bhattacharyya*, Ph.D. (DU)
Microwave Antennas, Absorbing Materials

Santanu Sharma*, Ph.D. (TU)-HoD
Semiconductor Devices, Bioelectronic Devices, Vehicular Electronics, Power Electronics

Soumik Roy*, Ph.D. (TU),
Neuroengineering, Healthcare system, Hydroponics, Digital System Design, Intelligent Instrumentation

Bhabesh Deka*, Ph.D. (IITG)
Signal/Image Processing, Computer Vision, Deep Learning for signal and image analysis, Precision Agriculture, Microwave/Millimeter-Wave and Optical Biosensors for smart Healthcare, Embedded Machine Learning on FPGA & SoC.

Vijay Kumar Nath*, Ph.D. (IITG)
Image Processing, Computer Vision, Pattern Recognition, Deep Learning

Nayan Moni Kakoty *, Ph.D. (TU)
Robotics, Biomedical Signal Processing

*** Recognized Ph.D. Supervisor**

ACRONYMS

Associate Professor

Deepika Hazarika*, Ph.D. (TU)
Medical Image Processing using Deep Learning, Machine Learning, Computer Vision, Image Processing

Ratul Kumar Baruah *, Ph.D. (IITG)
Semiconductor Devices, Biosensors, Flexible Electronics.

Biplob Mondal*, Ph.D. (JU)
Nano Devices and Sensors, Nanoscale engineering for Sensing, Biosensor, MEMS/NEMS.

Assistant Professor

Riku Chutia, Ph.D. (TU)
E-nose, Instrumentation and Signal Processing, Embedded System

Durlav Sonowal*, Ph.D. (TU)
Sensor Intelligence Robotics

Ananya Bonjyotsna, Ph.D. (TU)
Audio Processing

Priyanka Kakoty *, Ph.D. (TU)
Sensor and Nanotechnology

Rupam Goswami *, Ph.D. (NITS)
Micro/Nano-electronics and VLSI, Bio/ Memristive Sensors, Charcoal Electronics

Rewrewa Narzary, Ph.D. (TU)
Heterojunction Photovoltaic, Semiconductor Material Processing/Characterization
SoE- School of Engineering; **JU-**Jadavpur University, Jadavpur; **DU-** University of Delhi ; **TU-**Tezpur University; **IITG-** Indian Institute of Technology, Guwahati; **NITS-**National

Institute of Technology, Silchar; HoD-Head of the Department.

Facilities

Laboratory facilities:

- Basic Electrical Engineering Laboratory
- Basic Electronics Laboratory
- Design and Prototyping Laboratory
- M.Tech. Project Laboratory
- Software Simulation Laboratory
- Communication Laboratory
- Microwave Laboratory
- DSP Laboratory
- Intelligent Imaging and Vision Research Laboratory
- Instrumentation Laboratory (Supported by AICTE under MODROB)
- Bioelectronics Laboratory
- Neuro engineering Laboratory
- Optical Fiber Laboratory
- Micro fabrication/MEMS Facility
- Characterization Lab for electrical devices/Bio-electrical signal
- VLSI Lab
- Embedded Machine Learning on FPGA (EMLF) Lab (Shared with CSE)

Research Laboratories

- Technology in Semiconductor Device Laboratory
- Statistical Visual Computing Lab
- E-Mobility Research laboratory

- Automation Research Laboratory
- Intelligent Imaging and Vision Research Laboratory
- Bioelectronics Research Laboratory
- Embedded Systems and Robotics Laboratory
- Micro fabrication Laboratory
- Neuro Engineering Laboratory
- SenSE : Sensor & Systems Engineering Laboratory
- Sophisticated Semiconductor Device Characterization Laboratory
- Microwave Engineering Laboratory
- Visual Computing and Image Processing Laboratory
- Sensors and Nanotechnology Laboratory
- Laboratory for Electronic Devices and flexible electronics (EDFlex)
- Biomedical Electronics Laboratory
- Sensor Intelligence and Robotics Laboratory
- Hydrogen fuel Lab.

Major Equipment

- RIE (Reactive Ion Etching)
- PECVD (Plasma Enhanced Chemical Vapour Deposition)
- PVD
- Auto Lab
- Photolithography
- Vacuum coating unit (Thermal evaporation and E-Beam Technology)
- Oxidation Furnace
- Probe Station
- Laminar Air Flow Unit
- Spin coating unit
- Prism Coupler Water De-ionizer
- Thickness measurement instrument
- Stereo-microscope
- GP-GPU-based High-Performance Computing server

- IV-QE measurement set up
- Bio-signal measurement system - FPGA kit and FPGA board, Cadence EDA tool, Sentaurus TCAD, Mentor Graphics, Xilinx and COMSOL Multiphysics

Research Activities

1. No. of papers published in the year 2022-2023: 29
2. No of ongoing research projects:08
3. No. of current Ph.D. scholars: 56

Selected Publications

- P. S. Das, D. Deb, **R. Goswami**, S. Sharma, and R. Saha, "Fin core dimensionality and corner effect in dual core gate-all-around FinFET," *Microelectron. J.*, vol. 143, p. 105985, Jan. 2024.
- T. Barman and **B. Deka**, "A Deep Learning-based Joint Image Super-resolution and Deblurring Framework", IEEE Transactions on Artificial Intelligence, 2024.
- T Das, L Gohain, **N M Kakoty**, M B Malarvili, P Widiyanti, G Kumar. "Hierarchical Approach for Fusion of Electroencephalography and Electromyography for Predicting Finger Movements and Kinematics using Deep Learning," *Neurocomputing*, Elsevier, 2023.
- K. Das , **P Kakoty** , A. Khan , P. Phanjom , M. Das , A. Khakhlari , S. Baruah & I. Dakua "Investigation of bacterial pigment from *Serratia nematodiphila* as a sensitizer for a nanostructured solar cell" *Indian Journal of Chemical Technology* Vol. 30, September 2023, pp. 681-688, DOI: 10.56042/ijct.v30i5.5201.
- S. Routh, **R. K. Baruah**, "A comprehensive analysis of LDMOS transistors for analog Applications under γ -Radiation", *Microelectronics Reliability*, DOI: 10.1016/j.microrel.2023.115159, Aug. 2023.
- **R. Narzary**, R Chetia, P P Sahu. "A low-temperature efficient approach for the fabrication of ZnO-rGO heterostructures for applications in optoelectronic applications". *IEEE Access*. 2023 Jul 31.

Patents:

- S. Sarma, B. Sarma, R Chutia & P. P. Dutta; Patent Number 357468 "System for measuring and correction of alignment parameters camber and toe of wheel of a vehicle".
- M. Bhuyan Patent Number; Patent, No.: 203816 "A Three level temperature Indicator System for tea drier".
- M. Bhuyan & A. Choudhury, Patent Number 216876 "Microwave Tea Drier".P. P. Sahu, Patent, No: 0522/ KOL/2008, "A Reduced Size Linearly Tapered 3dB (Half Power Splitter) Multimode Interference (MMI) Coupler".
- R. K. Baruah, A. Kumar, S. Dutta and S. Paul, Patent, No.: 362974, "Intelligent Helmet System".
- P. P. Sahu, Patent No. 201831009528 (Granted) "A portable Optical fiber instrument for instant petrol purity detection".
- P. P Sahu *Patent*, No: 390482 (Granted), A Reduced Size Linearly Tapered 3dB (Half Power Splitter) Multimode Interference (MMI) Coupler.

Filed Patents

- A. Sharma, S Chakraborty, S Sharma Patent Application No. 202331012154"Detection of egg in bakery products".

- P. P. Sahu, Patent Application No. . 201831009528“A portable optical fiber instrument for instant petrol purity detection”.
- N. M. Kakoty and L. Gohain, Patent Application No. 202131022730 “An EMG based prosthetic hand controller for real time grasping realizing neuromuscular constraint”.
- A. Das, B Muchahary, A.Raj, M Kumar, F Ahmed, C Adhikary, S Roy, Patent Application No.202131045925, 'IOT based Portable Ventilator'.
- P. P. Sahu, Patent Application No. 201931020800 (published) , “A system and apparatus for measuring and monitoring transformer oil breakdown voltage using optical fiber sensor”.
- P. P. Sahu, Application no : 202131020238 (published), “A prototype optical fiber device for onsite repaid testing of Aircraft Jet fuel”.
- P. P. Sahu, G Sarma, B Borkakaty, Application no: 202231009453 (Published), “Paper capacitive sensor bassd Novel corona virus detection kit”.
- P. P. Sahu and J Das, Application no: 202131044011 (Published), “An oxygen generation equipment based on water splitting for chronic/acute respiratory syndrome patients”.
- P. P. Sahu and B. Roy, Application no: 202331006389, “ A prototype paper capacitive sensor for onsite rapid detection of cysteine content In blood plasma”.
- P. P. Sahu, S. Verma, S. Das, B. Saha, S Karmakar and P Chattopadhyay, Application no: 202331007131, “Black fungus kit based on inter digital planer paper capacitance.”

Design Registration

- S. Das, N. M. Kakoty and L. Gohain. “Prosthetic Hand, Class: 24-00-Medical and laboratory Equipment”.
- V. Kumar, R.Goswami and M.K Parida “Hydwaulic Arrangement Based ohmic contact Thin Flim Aluminium Foil Based Sensing System”.
- A. J. Kalita, M. P. Chanu, P. Boruah, Z. Kalita, N. M. Kakoty and S. Borah. Name of Design: EMG CONTROLLED PROSTHETIC HAND (ENRICH), Class: 24-03, Application no. 363884-001, Journal No. 20/2023, May 19, 2023.

For more information one can visit the departmental website <http://www.tezu.ernet.in/delect/>

ENERGY

The University's Department of Energy is dedicated to producing skilled professionals in the field of energy technology and conducting research and extension activities on various energy-related topics. The department offers an AICTE-approved MTech program in Energy Technology and a PhD program in energy-related fields. Its research is focused on three main areas: renewable energy resources, energy conservation, and new energy systems. Specifically, the department concentrates the research on biomass energy, solar energy, energy-environment interface, energy conservation and management, energy efficiency, climate-responsive buildings, hydrogen energy, fuel cells, instrumentation and control systems, and hybrid energy systems. In addition to teaching and research, the department conducts training programs, workshops, and seminars on energy-related topics. The faculty has successfully completed several international collaborative research projects. Currently, the department is working on six research projects. The Department has been instrumental in the installation of a 1000 kW grid-connected rooftop solar power plant and a 50 m³ kitchen waste-based biogas plant on the campus.

Vision

To emerge as a centre of excellence in education, research and innovation for the changing world.

Mission

1. To promote academic growth through adoption need based curriculum, state-of-the-art R&D facilities, and extension activities in the areas of energy
2. To foster cutting-edge research activities in conjunction with industry and academic institution to address the energy challenges
3. To serve the society by technological intervention, innovation and entrepreneurship development through renewable energy

Programmes Offered

1. Ph.D.
2. M.Tech. in Energy Technology

Faculty Members and Areas of Interest

Professor

Debendra Chandra Baruah*, Ph.D. (PAU), Director IQAC & CMDR
Renewable Energy and Energy Management.

Dhanapati Deka*, Ph.D. (TU), Dean R&D

Biofuels, Catalytic transformation of biomass to biofuel and chemical, Bioenergy and Environment.

Rupam Kataki*, Ph.D. (TU)
Biomass and Bioenergy, Biofuels, Energy Environment Interaction.

Sadhan Mahapatra*, Ph.D. (IISc) - HoD

Biomass Gasification, Climate Responsive Buildings, Decentralized Energy, Options, Photovoltaic systems.

Assistant Professor

Pradyumna Kumar Choudhury*, Ph.D. (TU)
Energy Conservation and Management, Integration of Renewable Energy Systems.

Biraj Kumar Kakati*, Ph.D. (IITG)

***Recognized Ph.D. Supervisor**

ACRONYMS

PAU-Punjab Agriculture University; **CMDR**-Centre for Multidisciplinary Research; **TU**-Tezpur University; **R&D**- Research & Development; **IISc.** – Indian Institute of Science, Bengaluru; **IITG**- Indian Institute of Technology, Guwahati; **IQAC**- Internal Quality Assurance Cell; **HWU**- Heriot Watt University, United Kingdom; **IITR**-Indian Institute of Technology, Roorkee; **HoD**- Head of the Department.

Laboratory

The department is well-equipped with an array of equipment, such as a Gas Chromatograph, Oxidation Stability Apparatus, Auto Bomb Calorimeter, Gas Analyser, UV VIS (Spectrophotometer), Computerized Diesel Engine Test Rig, Micro Hydel Power Generating Equipment, Dual Fuel Engine, Biomass gasification systems, Biodiesel pilot plant, Grid Tied SPV training system, Fuel Cell stack for Unmanned Aerial Vehicle, Galvanostat with integrated impedance analyser, Wind Energy Training System, Solar Water Heating System, and various renewable energy systems. Additionally, the department has a computation laboratory that includes simulation software, along with an AdaptNET E-Lab facility that consists of a 2TB server and 18 computers.

Scholarship

MHRD and MNRE fellowships are available for GATE qualified candidates.

Research Activities

- Number of Journal papers published in the year 2022-23: 32
- Number of ongoing research projects: 06
- Number of current Ph.D. Students: 32

Fuel Cell, Hydrogen Technology and Redox Flow Battery, Graphene, Nanocatalyst.

Nabin Sarmah*, Ph.D. (HWU)
Solar Energy, Photovoltaic, Energy Systems.

Vikas Verma*, Ph.D. (IITR)
Thermal Engineering, Solar Thermal Energy, Heat Transfer.

Selected Publications

- Brahma B., Shukla A.K., Baruah D.C. Design and performance analysis of solar air heater with phase change materials. *Journal of Energy Storage*, 61, 106809, 2023.
- Brahma H., Sarmah N. Performance Analysis of Spectrum-Dependent Integrated Thermal-Electrical Model of a PV Module. *IEEE Journal of Photovoltaics*, 13(3), 467-475, 2023.
- Bhuyan N., Choudhury N.D., Dutta B.K., Upadhyaya K., Saikia N., Kataki R. Assessment of kinetic parameters, mechanisms and thermodynamics of *Tithonia diversifolia* pyrolysis. *Biomass Conversion and Biorefinery*, 13(4), 2703-2718, 2023.
- Borah D., Eldiehy K.S.H., Hatiboruah D., Mandal M., Deka D. An integrated approach for simultaneous monitoring and data acquisition on the culture of green Microalga *Chlorella homosphaera* using different LED illumination. *Bioenergy Research*, 16(1), 601-610, 2023.
- Das D., Saikia S., Saharia S. J., Mahapatra S. Performance analysis of MW-scale grid connected rooftop and ground-mounted solar power plants installed in Assam, India. *Energy for Sustainable Development* 76, 101309, 2023.
- Sarmah S., Lakhanlal, Kakati B.K., Deka D. Recent advancement in rechargeable battery technologies. *Wiley Interdisciplinary Reviews: Energy and Environment*, 12(2), e461, 2023.
- Verma V., Nath R., Tarodiya R. Heat transfer prediction for radiant floor heating/ cooling systems using artificial neural network (ANN). *Heat Transfer*, 52(4), 3135-3152, 2023.

For more information one can visit the departmental website <http://www.tezu.ernet.in/dener/>

FOOD ENGINEERING AND TECHNOLOGY

The department of Food Engineering and Technology was established in the year 2006 with the aim of creating skilled human resources in the engineering aspect of food processing to cater the needs of the rapidly growing food processing sector. Since its inception the department has been imparting Post Graduate education in food processing and technology. The department is currently offering B. Tech., M. Tech. and Ph. D. programmes. The B. Tech. programme in Food Engineering and Technology (FET) is approved by the All-India Council for Technical Education (AICTE) and has the accreditation of the National Board of Accreditation (NBA) as a Tier-I programme. The M. Tech. in Food Engineering and Technology (FET) is also approved by the AICTE. AICTE offers PG Scholarship to GATE qualified students joining the M.Tech. programme of the Department. The Department also offers Ph. D. in Food Engineering and Technology, and students may take admission through AICTE Doctoral Fellowship (ADF), NET/JRF, and GATE etc. The department has well-developed laboratories for teaching and research created from grants received from various schemes of government agencies viz., MoFPI-HRD, DST-FIST, UGC-SAP and AICTE- NEQIP. The department is running NABL accredited Food Quality Control Laboratory with support from the MoFPI. The Department has been recognized as the State Level Technical Institute (SLTI) for Assam, Meghalaya and Arunachal Pradesh under the PM-FME scheme of the Ministry of Food Processing Industries (MoFPI), GoI, New Delhi. Research activities at the Department are supported by sponsoring agencies like UGC, MoFPI, DST, DBT, DRDO, ICAR, AICTE, MSME, ASTEC, etc. Various projects carried out at the department aims at developing effective and low-cost technologies for the society. Some developed food products and processes have also been patented by the faculties. Workshops, conferences, and seminars are organized regularly in the department for knowledge sharing among peers as well as for motivating youths.

To create trained and skilled human resources well versed in engineering aspects of food processing to cater the needs of the rapidly growing food processing sector.

Mission

1. To establish itself as the leader in human resource development for supporting the food processing sector.
2. To provide knowledge and skills for better preservation, processing and value addition to agro-products, with the aim of supporting the producers.
3. To promote research and development for product and process and assurance of high level of hygiene and safety of processed food.
4. To promote food safety laws and regulations for supporting a competitive, modern and safe food market for the consumers.

Programmes offered

1. Ph.D.

2. M. Tech. in Food Engineering and Technology.
3. B. Tech. in Food Engineering and Technology.

Faculty and Areas of Interest

Professor

Charu Lata Mahanta*, Ph.D. (CFTRI)
Rice Science and Technology, Product Development and Food Quality

Sankar Chandra Deka*, Ph.D. (HAU)- CoE
Food Biochemistry and Food Quality, Fermented Foods

Manuj Kumar Hazarika*, Ph.D. (IITKgp)
Food Materials Engineering, Food Industrial Engineering, Food Design.

Brijesh Srivastava*, Ph.D. (IITKgp)
Emerging non-thermal processing, Fruits & Vegetable Processing and Machineries, Food Rheology, Hurdle Technology

Nandan Sit*, Ph.D. (TU)
Food Engineering, Biochemical Engineering, Food Biotechnology

Poonam Mishra*, Ph.D. (TU)
Nano Composite, Fruits, and Vegetable Technology, Function Food, Biosensors.

*** Recognized Ph.D. Supervisor**

ACRONYMS

CFTRI - Central Food Technological Research Institute, Mysore; **HAU** - Haryana Agricultural University, Hisar; **CoE** - Controller of Examinations; **IITKgp** - Indian Institute of Technology, Kharagpu; **TU** - Tezpur University; **IITG** - Indian Institute of Technology, Guwahati; **ICAR** - IARI-Indian Council of Agricultural Research - Indian Agricultural Research Institute, New Delhi. **HoD** - Head of the Department.

Facilities

The Department is well equipped with processing and analytical equipment and is in the process of strengthening it with the state-of-the-art facilities. Great emphasis is laid on the practical aspects for processing of foods and quality assurance. List of some major equipment available with department are as follows: HPLC, Atomic Absorption Spectrometer (AAS), GC-MS, Supercritical fluid extractor, Texture Analyser, Dynamic Rheometer, Rapid Visco Analyser, Hunter Lab Color Spectrophotometer, UV-Vis Spectrophotometer, Water activity meter, Freeze Dryer, Lyophilizer, Lab. Scale Spray Drier, Tray

Laxmikant S. Badwaik*, Ph.D. (TU)- HoD
Food Packaging, Food Safety and Laws, Food Processing Waste Utilization

Assistant Professor

Nishant Rachayya Swami Hulle*, Ph.D. (IITKgp)
Food Process Technology, Non-Thermal Processing, Product Development.

Tabli Ghosh, Ph.D. (IITG)
Food Processing, Nanotechnology in Edible Food Packaging, Bionanostructured Materials, Functionalized Coating

Nikhil C, Ph.D. (ICAR-IARI)
Food Process Engineering, Grain Storage and Structures, Fruits and Vegetable Processing and Machineries

Soumya Ranjan Purohit, Ph.D. (IITKgp)
Food Bioprocessing, Rice Chemistry and Technology, Value Addition of Local Crops

Drier, Drum Drier, Fluidized Bed Drier, Laboratory Pasteurizer, Canning Unit, Baking Oven, Basic Engineering Equipment in heat transfer and fluid mechanics, Hammer Mill, Ball mill, Paddy Huller, Paddy Sheller, Binocular Microscope, BOD Incubator, Rotary Vacuum Evaporator, Photoflurometer, Biohazard Safety Cabinet, Packaging Equipment, Laminar Flow, Fruit Crusher, etc.

Research Activities

1. Number of papers published in the year 2022-23: 70
2. Number of ongoing research projects: 12
3. Number of current Ph.D. scholars: 51

Selected Publications

- Gautam, G., Talukdar, D., & Mahanta, C. L. (2023). Sonochemical effect on the degree of substitution of octenylsuccinic anhydride into waxy rice starch nanoparticles and study of gastro-intestinal hydrolysis using INFOGEST in vitro digestion method. *Food Research International*, 112348.
- Maibam, B. D., Chakraborty, S., Nickhil, C., & Deka, S. C. (2023). Effect of Euryale ferox seed shell extract addition on the in vitro starch digestibility and predicted glycemic index of wheat-based bread. *International Journal of Biological Macromolecules*, 226, 1066-1078.
- Begum, A., Kalita, D., Bhattacharya, S., & Srivastava, B. (2023). Time- dependent rheological behavior of pineapple pulp foam and its relationship with foaming properties and quality attributes of dried powder. *Journal of Food Engineering*, 336, 111208.
- Thakur, R., Gupta, V., Ghosh, T., & Das, A. B. (2022). Effect of anthocyanin-natural deep eutectic solvent (lactic acid/fructose) on mechanical, thermal, barrier, and pH-sensitive properties of polyvinyl alcohol based edible films. *Food Packaging and Shelf Life*, 33, 100914.
- Singla, M., Singh, A., & Sit, N. (2022). Effect of microwave and enzymatic pretreatment and type of solvent on kinetics of ultrasound assisted extraction of bioactive compounds from ripe papaya peel. *Journal of Food Process Engineering*, e14119.
- Gupta, A. K., Das, S., Sahu, P. P., & Mishra, P. (2022). Design and development of IDE sensor for naringin quantification in pomelo juice: An indicator of citrus maturity. *Food Chemistry*, 377, 131947.

Achievement/output of the department

- The department has awarded Certificate of Excellence under Eat Right Research Institute Award by the Food Safety & Standards Authority of India (FSSAI) in 2023.
- The B. Tech. and M Tech program (Food Engineering and Technology) are approved by AICTE.
- The department is recognized as minor centre for Quality Improvement Program (QIP) of AICTE.
- The department received NBA accreditation (as Washington Accord) for B. Tech program for the year 2016-2023.
- The Food Quality Control Laboratory of the department is NABL accredited since 2017.
- The Department has been recognized as the State Level Technical Institute (SLTI) for Assam, Meghalaya, and Arunachal Pradesh under the PM-FME scheme (PM Formalisation of Micro food processing Enterprises Scheme) of Ministry of Food Processing Industries (MoFPI), GoI, New Delhi.
- The department has received grant from AICTE-NEQIP, DST-FIST and Ph. D. students of department are recipient of different prestigious fellowships to carry out part of the work abroad like Fulbright-Nehru Doctoral Research Fellowship,

Commonwealth Split-Site Ph.D. Programme, Newton Bhabha Ph.D. Placement Programme, Chinese Government Scholarship, UNESCO / Peoples republic of China (The Great Wall) Scholarship, Indo-US Fellowship for Women in STEMM etc.

For more information one can visit departmental website [www://tezu.ernet.in/dfpt](http://tezu.ernet.in/dfpt)

MECHANICAL ENGINEERING

The Department of Mechanical Engineering was established in the year 2006 under the School of Engineering for offering B.Tech. programme in Mechanical Engineering. Subsequently, M.Tech. and Ph.D. programmes were started in the year 2013. Both B.Tech. and M.Tech. programmes are approved by the All India Council for Technical Education (AICTE). The B.Tech. programme is also accredited by the National Board of Accreditation (NBA) with effect from 01/01/2016.

Vision

To emerge as a Centre of Excellence producing quality engineers and conducting cutting-edge research.

Mission

- To educate youths with a strong foundation in Mechanical Engineering.
- To imbibe human values, self-confidence and independent thinking in students.
- To train scholars in handling mechanical engineering as well as interdisciplinary problems exploiting their domain knowledge and using latest technologies.
- To carry out research addressing critical issues, arising from the dual problem of limited natural resources and environmental hazards, leading to the development of alternative resources, energy management and sustainable systems design.
- To produce human resource for heavy engineering and manufacturing industries.
- To create quality mechanical engineering professionals to serve the country and the society at large.

Programmes offered

1. Ph.D. in Mechanical Engineering
2. M.Tech. in Mechanical Engineering under the following two specializations:
 - a. Thermal and Fluid Engineering
 - b. Machine Design
3. B.Tech. in Mechanical Engineering

Faculty and Areas of Interest

Professor

Dilip Datta, * Ph.D. (IITK)

Design, Optimization and Operational Research

Tapan Kumar Gogoi, * Ph.D. (TU)

Thermodynamic Modeling, Simulation and Analysis of Multi-generation and Solar Hybrid Systems

Partha Pratim Dutta, *Ph.D. (TU), HoD- Design
Renewable Energy and Drying Technology

Associate Professor

Paragmoni Kalita, * Ph.D. (IITG) -HoD

Computational Fluid Dynamics, High Speed Flows, Solar Thermal Technology

Polash Pratim Dutta, *Ph.D. (IITG)

CAD, Laser Forming, Mechatronics, Soft Computing

Sushen Kirtania, * Ph.D. (IITG)

Graphene and CNT-reinforced nanocomposites, Natural fiber-reinforced composites, Hybrid composites, Fracture mechanics, Finite element method.

Assistant Professor

Prabin Haloi, Ph.D. (TU)

Fluid and Thermal Engineering, Magnetohydrodynamics (MHD)

Sanjib Banerjee, * Ph.D. (IITG)

***Recognized Ph.D. Supervisor**

Materials and Manufacturing

Satadru Kashyap,* Ph.D. (TU)

Manufacturing and Materials Science

Zahnupriya Kalita*, Ph.D. (TU)

Mechatronics, Rehabilitation Robotics, Optimization-Single objective and Multi-objective Optimization using Evolutionary Algorithms.

Rakesh Bhadra, ME (IIST) (On study leave)

Manufacturing, Production Engineering

Barnali Chowdhury, Ph.D. (AEC)

Data Analysis and Statistical Optimization, Six Sigma, Thermal Engineering

Seikh Mustafa Kamal, * Ph.D. (IITG)

Machine Design

Vivek Kumar Mehta, Ph.D. (IITK)

Robotics, Optimization: Classical and Evolutionary Algorithms, Multi-objective Optimization, Multi-modal Optimization

Shikha Bhuyan, M. Tech. (NITS)

Thermal Engineering

ACRONYMS

IITK-Indian Institute of Technology, Kanpur; **TU**-Tezpur University; **IITG**-Indian Institute of Technology, Guwahati; **GU**-Gauhati University; **IIST**- Indian Institute of Engineering Science & Technology West Bengal; **AEC**- Assam Engineering College, Guwahati; **NITS** - National Institute of Technology, Silchar ; **HoD**- Head of the Department.

Facilities

The Department has the following Laboratory facilities.

- CAD Laboratories
- Fluid Mechanics Laboratory
- Theory of Machine Laboratory
- Engineering Mechanics Laboratory
- Strength of Materials Laboratory
- Thermal Science Laboratory (Refrigeration and Air Conditioning/ Heat Transfer)
- Material Science Laboratory
- IC Engine/Automobile Laboratory
- Kinematics Laboratory
- Turbo-Machinery Laboratory
- Vibration Laboratory
- Metrology laboratory
- Renewable Energy Laboratory

Central Workshop

This is a central facility well equipped with CNC lathe machine, CNC milling machine, high speed precision lathe machine, conventional lathe machines, shaping machine, vertical milling machine, horizontal milling machine, universal milling machine, high precision surface grinding machine, universal tool and cutter grinder, radial drilling machine, pillar drilling machine, double ended pedestal grinding machine, slotting machine, arc welding machine, oxyacetylene gas welding setup, TIG welding and MIG welding machine, power hacksaw, sheet bending roller machines, plate bending machine, manual shearing machine, cutting force dynamometer, etc.

Research Activities

1. Number of papers published in the year 2022-2023: 20
2. Number of ongoing research projects: 01
3. Number of current Ph.D. scholars: 18

Selected Publications

- Borah PP, Kashyap S, Banerjee S and Kirtania S. Modeling the buckling characteristics of pineapple leaf fibre reinforced laminated epoxy composites. *Mechanics of Advanced Composite Structures*, 10, 233-246, 2023.

- Chetry A., Kamal S.M. and Mehta V.K., A numerical model for rotational autofrettage of disks based on von Mises yield criterion and its application in strengthening flanged disks used for joining high pressure pipelines, International Journal of Applied Mechanics, 2023, DOI: 10.1142/S1758825123500229.
- Joardar SD, Neog A, Parvez S, Kirtania S, Kashyap S and Banerjee S. Micromechanics based finite element analysis of effective elastic properties of natural fiber reinforced composites. Journal of Natural Fibers, 19(17), 15790-15807, 2022.
- Nondy, J., Gogoi, T.K., Tri-objective optimization of two recuperative gas turbine-based CCHP systems and 4E analyses at optimal conditions , Applied Energy , 323, 119582, 2022.
- Gogoi, S, Banerjee, S., and Bhowmick, S., Modelling Precipitation Kinetics and Investigating Age-Hardening Behaviour of 2219Al Alloys Microalloyed with Cd , Journal of Thermal Analysis and Calorimetry, DOI: 10.1007/s10973-022-11449-7 , 2022.
- Kumar H, Chowdhury B, An application of design of experiments approach to statistically model and optimize performance parameters of a single cylinder four-stroke diesel engine ,ADBU-Journal of Engineering Technology (UGC CARE), , 11 (2), 0110203505(8PP), 2022.

For more information, please visit the departmental website [http:// www.tezu.ernet.in/dmech](http://www.tezu.ernet.in/dmech)

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES ASSAMESE

The Department of Assamese, established in 2019 is a new department. However, it may be said to have begun life as the Centre for Assamese Studies which was established in 2011. The primary aim of the Centre was to undertake and foster research in Assamese language and culture and one of its achievements was the creation of an extensive digital archive of Assamese manuscripts, books, and important documents from the medieval period to the modern. The present department incorporates such existing facilities.

In view of the paucity of standard texts of the classical and canonical works of Assamese literature (for example, the works of Madhava Kandali and Sankaradeva, Madhavadeva, Rama Saraswati and others) including concordances to the major works of Assamese literature, the department's first programme, the postgraduate degree programme in Assamese, will incorporate courses in textual criticism/text-critical studies and digital humanities. Textual criticism/text critical studies and digital humanities have also been identified as the thrust areas in research.

Programme offered

1. Ph.D.
2. M.A. in Assamese

Faculty and Areas of Interest

Associate Professor

Subrat Jyoti Neog,* Ph.D. (GU)

*Assamese Literature, Film Studies, Theatre Studies, Stylistics,
Creative Writing (Play and Screenwriting)*

Assistant Professor

Juri Dutta,* Ph.D. (RGU) HoD

*Regional Literatures of India, Translation Studies and
Comparative Literature, Creative Writing*

Sanjib Deka,* Ph.D. (GU)

*Study of Assamese Language, Medieval Assamese
Language, Assamese Morphology, Nineteenth Century
Assam, Printing History, Women's Writing in Assamese,
Creative Writing.*

Jyotishman Das, M.Phil. (DU)

*Modern Assamese Literature, Life Writing, Travel Writing,
Creative Writing*

***Recognized Ph.D. Supervisor**

ACRONYMS

GU- Gauhati University; **RGU-**Rajiv Gandhi University, Arunachal Pradesh; **DU-** Dibrugarh University; **HoD-** Head of the Department

Facilities:

- Digital Library
- Departmental Library

Research Activities

- No. of papers published in the year 2023- 24: 05

Selected Publications:

- Dutta, J. (July 2023). Kori Khelar Sadhu: Ek Uttar Adhunik Pathan (Kori Khelar Sadhu: A Post-Modern Reading), Satsari, Vol No 18, Issue No 12, Pp. 105-108.
- Neog, S.J. (June, 2023) " Ekabinsa Satikar Asamiya Natakata Mahabharatar Kathabastur Punarnirman". Satsari, P.52-55.
- Dutta, J. (2023). Sirar Babe Ejopa Haladhiya Sonaru (Trans. of English Short Story Book Laburnum for My Head by Temsula Ao). Purbayon Publication, Guwahati, ISBN. 978-81-19001-08-8. 2023.
- Deka, S. and Bhuyan, R. (2023). Print Modernity in Colonial Assam, Lexington Books, USA.
- Neog, S. Ed. (2023) Asamar Natya Parampara (Vol-I), Assam Book Trust, Guwahati.

For more information, please visit the departmental website <http://www.tezu.ernet.in/das>

CULTURAL STUDIES

The Department of Cultural Studies at Tezpur University was one of the first of its kind in India. With faculty members drawn from the country and abroad (two adjunct faculties from New Zealand), the Department of Cultural Studies undertakes analysis of society, culture, film, and expressive cultural forms and practices from a wide range of disciplinary perspectives. The academic curriculum of the department looks at emergent and topical socio-cultural issues such as memory, ethnicity, migration, nationalism, gender, media, heritage, aesthetics, cyber cultures, environment, and the daily life of people in contemporary times. The department mediates global concerns and theoretical approaches of the discipline with issues that are of local importance in order to document and study the rich cultural heritage, including the folk and oral inheritances of the region. The department has been able to build up an effective network with prominent institutions (of India and abroad) and communities of the region through its extensive research and outreach programmes.

Programmes offered

1. Ph.D.
2. M.A. in Cultural Studies

Faculty and Areas of Interest

Professor

Debarshi Prasad Nath*, Ph.D. (RGU) -
Cultural Theory and Contemporary Culture, Comparative Literature and Translation, Cultural Memory

Associate Professor

Madhurima Goswami*, Ph.D. (TU)
Sanskrit Poetics, Indian Classical Performing Arts

Parasmoni Dutta*, Ph.D. (TU)
Heritage Studies, Popular culture, Digital humanities

Juri Gogoi Konwar*, Ph.D. (DU), HoD
Medical Anthropology, Anthropology of Food and Costume

Assistant Professor

Jayanta Vishnu Das*, Ph.D. (TU)
Cultural Communication, Development Communication, Epistemology of Communication Studies

Mandakini Baruah*, Ph.D. (TU)
Gender Studies, Folklore Studies, Paremiology

Hashik, N.K*, Ph.D. (UoH)
Performance Studies, Community Studies, Research Methodology

Moushumi Kandali*, Ph.D. (MSUB)
Contemporary Visual Culture, Literary Cultures of India, Gender Studies, Translation and Creative Writing

Adjunct Faculty

Alison East, MPhEd (UO), (School of Physical Education, Sports & Exercise Sciences)

Dance Ethnography, Somatic Education & Movement Philosophies

Barbara Helen Snook, Ph.D.(UA), (Department of Dance Studies)

***Recognized Ph.D. Supervisor**

ACRONYMS:

RGU: Rajiv Gandhi University, Arunachal Pradesh; **TU:** Tezpur University; **DU:** Dibrugarh University; **UoH:** University of Hyderabad; **MSUB:** MS University of Baroda; **UO:** University of Otago; **UA:** University of Auckland ; **HoD:** Head of the Department

Facilities

The department has well-equipped seminar-cum-conference hall, smart classrooms and classrooms with projection facilities and audio-visual teaching aids, and an archival centre-cum-edit suite. The student support infrastructure also includes the Pratibha Kath Hazarika Memorial Library and a Cultural Interpretation Centre and a dedicated space for visual memorization under the name and style of "Wall of Heroes". Besides, the department has recently set up the Neelpawan Baruah Museum of Modern Art which is a permanent gallery of select paintings of noted artist Neelpawan Baruah.

Research Activities

1. No. of papers published in the year 2023-24: 15
2. No. of ongoing research projects: 02
3. No. of current Ph.D. scholars: 35

Selected Publications:

- Nayak, Barsha and Mandakini Baruah. "Pregnant Bodies in Transit: Maternity, Migration, and the 1962 Sino-Indian War in Rita Chowdhury's Chinatown Days". South Asian Review, Taylor and Francis. Published Online: 6th Nov 2023. DOI:10.1080/02759527.2023.2278835
- Hashik Nadukkandiyil & S.S. Sumesh (2023) Geographies of otherness: Films and Interstate Migrants of Kerala, Asian Ethnicity, Taylor and Francis. Published Online: 5th December 2023.
- Rajkumari, Munmi and Debarshi Prasad Nath.'The role of Goddess Kesaikhaiti in shaping and constructing the identity of the Deoris'. Asian Ethnicity, Taylor and Francis. Published Online: 9th August 2023.

- Nath, Debarshi Prasad and Swikrita Dowerah. 'The Icons of Unadulterated Evil: Bollywood Villains of the 1980s'. Quarterly Review of Film and Video, Routledge. Published online: 27th February 2023.

For more information one can visit the departmental website <http://www.tezu.ernet.in/dtcaf>

EDUCATION

The Department of Education was established in the year 2014 under the School of Humanities and Social Sciences. The department aims at producing prospective teachers with sound knowledge of the content, pedagogy and skills needed for the society. The department has started postgraduate and doctoral programmes in Education from autumn semester, 2015.

Programmes offered

1. Ph.D.
2. M.A. in Education
3. M.Ed.
4. B.Ed.
5. BSc. B.Ed

Faculty and Areas of Interest

Professor

Nil Ratan Roy*, Ph.D. (AU)-HoD

Measurement and Evaluation in Education, Research Methodology, Educational Planning and Management, Curriculum Development.

Sashapra Chakrawarty*, Ph.D. (BHU) *Biological Science, Educational Psychology, Teacher Education, Elementary Education, Special Education, Guidance and Counselling*

Dr. Akhilesh Kumar, Ph.D. (RKMVU).
Education and Special Education, Guidance and Counselling, Distance Education

Assistant Professor

Yeasmin Sultana*, Ph.D. (AU)

Language Education and Research Methodology

R.D. Padmavathy, Ph.D. (PU)

Mathematics Education, Educational Psychology, Educational Technology, e-content Development, Research Methodology and Statistics in Education, Guidance and Counselling, Environmental Education

Hitesh Sharma*, Ph.D. (DAV)

Method of Teaching Physical Science and Biological Science, Educational Psychology, ICT in Education, Educational Administration, Guidance and Counselling, Early Childhood Education

Pratima Pallai*, Ph.D. (LU)

Social Science Teaching, ICT in Education, Guidance and Counselling, Measurement and Evaluation, Educational Psychology

Mohammad Asif, M.Ed. (JMI)

Contemporary Indian Education, Teacher Education, Educational Technology, Pedagogy of Social Science, History of Education

Sradhanjali Pradhan, Ph.D. (UU)

Pedagogy of Physical Science, Educational Technology and ICT in Education, Measurement and Evaluation

Rajinder Singh*, Ph.D. (PU)

Educational Technology, Educational Research, Special Education, ICT in Education, Language Education, Environment Education, Educational Guidance and Counselling

Sanghamitra Das, Ph.D. (NUEPA)

Gender and Education Sociology of Education, Pedagogy of Social Sciences, Teacher Education, Community Participation in School Education

Gopal Singh, Ph.D. (MDSU)

Science Education, Learning & Teaching, Constructivism and Thinking Skills, Measurement & Evaluation

***Recognized Ph.D. Supervisor**

ACRONYMS:

AU-Assam University; **PU**-Pondicherry University; **DAV**-Devi Ahilya Vishwavidyalaya, Indore; **BHU**-Banaras Hindu University, Varanasi; **LU**- Lucknow University; **JMI**- Jamia Millia Islamia, New Delhi; **UU**- Utkal University, Odisha; **PUA** - Panjab University; **MJPRU**- MJP Rohilkhand University, Bareilly; **NUEPA**- National University of Education Planning and Administration New Delhi; **MDSU**- Maharshi Dayanand Saraswati University Rajasthan; **HoD**- Head of the Department

Facilities

The teaching support infrastructure includes a Psychological Laboratory, Art, and Craft Resource Centre, Curriculum Laboratory, Departmental Library, and ICT Resource Centre equipped with 25 nos. computer systems.

Research Activities

1. No. of paper published in the year 2022-23: 09
2. No. of ongoing research projects: 02
3. No. of current Ph.D. scholars: 32

Selected Publications

- Das, P & Roy, N.R (2021). Artificial Intelligence: A way towards Effective Activity Based Classroom, in *Palarch's Journal of Archaeology of Egypt/Egyptology* 18(4), PP.7111-7117 ISSN 1567-214x.
- Devi, T & Roy, N.R (2021). Educational Aspiration Level of Scheduled Caste and Non- Scheduled Caste Students of Assam: A Comparative Study, in *Education India: A Quarterly Refereed Journal of Dialogues on Education*, ISSN: 2278-2435, Vol-10, Issue -1, February 2021, PP-55-70

- Singh, A & Pallai, P. (2021). Preparing teachers for Inclusive classroom: Reconceptualizing Elementary Teacher Education program in Assam, *Education India Journal: A Quarterly Refereed Journal of Dialogues on Education*, 10 (1), 290-306.
- Mushahari, M. & Sharma, H. (2020) Awareness towards Environmental Education among Students of Tezpur University, *Education India Journal: A Quarterly Refereed Journal of Dialogues on Education*, vol. 9, Issue-4, November 2020, pp 69-81. (ISSN 2278-2435)
- Rai, Kathryn & Singh, Rajinder (2020). "Doctoral Attrition: An emerging issue of concern for Research in Higher Education", *Shodh Sarita*, 'Vol- 7 (28). 106-113, Oct. - Dec 2020, ISSN: 2348-2397
- Rai Kathryn & Singh, Rajinder (2020). "Management of Hospital waste: A conscious Step towards Safeguarding Life and the Environment", *Shodh Sanchar Bulletin*, Vol-10 (40), 50-58, Oct.-Dec. 2020, ISSN: 2229- 3620

For more information one can visit the departmental website <http://www.tezu.ernet.in/dedu>

ENGLISH

The Department of English was established in 1994. The department provides instruction and carries out research in American Literature, Critical Theory, English Literature, English Language Teaching, Indian Literature in English, Translation Studies, New Literatures in English and Gender and Literature. The Department of English is supported by the UGC under the Special Assistance Programme-Departmental Research Support (Phase II).

Programmes offered

1. Ph.D.
2. M.A. in English
3. Integrated M.A. in English

Faculty and Areas of Interest

Professor

Bijay Kumar Danta,* Ph.D. (UU)
American Literature, Critical Theory, Fiction Studies

Farheena Danta,* Ph.D. (DU) , Dean HSS
American Literature, Postcolonial Studies, Modernist Poetics

Prasanta Kumar Das,* Ph.D. (GU)
Indian Writing in English, British Literature, Book History

Sravani Biswas,* Ph.D. (NEHU)
Indian Writing in English, Postcolonial Studies, British Romantic Poetry

Associate Professor

Debasish Mohapatra,* Ph.D. (EFLU, Hyderabad)-HoD
Curriculum Development, Materials Production, Language Policy

Sanjib Sahoo,* Ph.D. (TU)
Life Writing, Translation Studies, Travel Writing, Contemporary British Literature

Hemjyoti Medhi,* Ph.D. (DU)
Gender and Literature, New Literatures in English, Indian Vernacular Literature

Sarat Kr. Doley,* Ph.D. (EFLU, Shillong)
English Language Education, Language Testing, SLA
Assistant Professor

Reetamoni Narzari, Ph.D. (TU)
Women's Writing, Indian Writing in English, Postcolonial Literature

Pallavi Jha, Ph.D. (UoH)
Children's Literature, Popular Culture and Literature, Postcolonial Writing

Bashabi Gogoi*, Ph.D. (GU)
Critical Theory, Adaptation Studies, Indian Writing in English & Film Studies

Esther Daimari*, Ph.D. (GU)
South Asian English Literature

Raktima Bhuyan, M.A. (TU)
American Literature, Modernity Studi

****Recognized Ph.D. Supervisor***

ACRONYMS

UU-Utkal University, Odisha; **DU**-Dibrugarh University; **HSS**- Humanities and Social Sciences; **GU**-Gauhati University; **NEHU**- North Eastern Hill University, Shillong; **EFLU**- English and Foreign Language University; **TU**-Tezpur University, **DU**-Delhi University; **UoH**-University of Hyderabad ; **HoD**- Head of the Department.

Facility

Department Library

Select books relating to literature, Linguistic and ELT are available in the Departmental Library. The department also has a collection of audio cassettes of English Pronunciation and spoken English and number of Video CDs on library texts.

Research Activities

1. No. of papers published in the year 2022- 2023: 06
2. No. of ongoing research projects: 01
3. No. of current Ph.D. scholars: 47

Selected Publications

- Das, Prasanta. (2020), "A Nineteenth Century "Act East" Policy: The Shan Mission of the American Baptist Missionaries" *Aitihya: The Heritage*, Vol XI, Issue 2, ISSN 2229-5399, p 7-16.
- Daimari, Esther. (2020), "The City of Colombo in Carl Muller's *Colombo* and Shyam Selvadurai's *The Hungry Ghosts*" *DUJES* Vol.29, ISSN 2581-7833, p. 300-312.
- Kashyap, Damini., Hemjyoti Medhi (2021) "Between the Peechil-kamra and the Dabusa: Mapping Worldbuilding and Heterotopic Space on Board the Ibis in Amitav Ghosh's *Sea of Poppies*" *Southeast Asian Review of English*, ISSN No. 0127-046X, p. 32-45.
- Danta, Farheena. (2021), "Protocols of Colonial Hunting: Surveillance, Transgression and the Allegory of Empire in F. T. Pollok's *Wild Sports of Burma and Assam*" *"Narrative Cultures of North-East India: Traditions, Texts and Representations"* Pencraft International, ISBN 978-93-8278-30-9.

For more information one can visit the departmental website <http://www.tezu.ernet.in/deng>

FOREIGN LANGUAGES

The Department of Foreign Languages was established in 2019. Prior to this, it was part of the erstwhile Department of English and Foreign Languages and, in that capacity, its faculty offered certificate-level and introductory-level language courses in German (introduced in 2001), Chinese (introduced in 2003), and French (introduced in 2007). The new Department of Foreign Languages offers open elective courses in German, Chinese, and French to meet the specific requirements of varying categories of students. In addition, it has used its expertise and the experience gathered over the years to introduce customized courses in Chinese for the Indian Army to help create a pool of Chinese-language proficient personnel for national security purposes.

The Department is committed to fostering professionals with proficiency skills in languages, intercultural communication, international affairs, and cultural understanding from various nuanced perspectives. The Department envisages promoting intensive language courses in Chinese, German, and French at various levels. It also envisions offering a wide choice of modules and scholarly engagements, across literature, translation, history, contemporary politics, culture, and comparative studies.

Programmes offered

1. B.A. in Chinese (Four Year Undergraduate Programme in Chinese as per NEP 2020 Model, available with Multiple Entry and Multiple Exit facility for Certificate, Diploma, Degree, Honors and Research Programme).
 2. One Year Certificate Course in Chinese#
- # Proposed to be discontinued from Academic Year 2024

Faculty and Areas of Interest

Associate Professor

Dr. Hemjyoti Medhi, Ph.D (DU), HoD
Gender and Literature, Vernacular Public Sphere, Digital Humanities

Chinese Language and literature

Daveirou Lanamai, M.A. (Chinese Studies) (JNU)
Chinese Language, Literature & Culture, Intercultural Studies

Assistant Professor

Rathijit Chakraborty, M.Phil. (Chinese Studies), (JNU)

Pallavi, Ph.D. (German Studies), (JNU)
German Literature, Partition Literature, Literature, Gender and Emotions, Comparative Studies

ACRONYMS

GU-Gauhati University; **JNU**- Jawaharlal Nehru University, New Delhi; **HoD**- Head of the Department

Facilities

The department is in the process of creating Information and Communication Technology facilities. It has a small language laboratory, audio-visual teaching aids, and a small library of foreign-language books.

Selected Publications

- Pallavi: "Gaining Visibility Through Emotions in Partition-Narrative: Jealousy, Fear and Shock of Male Character in 'Lajwanti'", in: Arzuman Ara (ed.): Revisiting Partition: Identity, History and Memory. Pencraft International (Delhi 2022), pages 189-201.
- Pallavi: "The Role of Emotions in Identity Formations of Female Literary Characters in Partition-Narratives", Shodh Sarita, (ISSN 2348-2397), Volume 7, Issue 28, October to December 2020.
- Kedilezo Kikhi and Daveirou Lanamai: "Contested Borders and Borderlands in Northeast India: (IL) Legitimate Claims of Naga Identity Assertion". Sociological Bulletin, August 2020, 69 (2), 141-157.
- Daveirou Lanamai: "Parallels and Contrasts in the Popular Folklore of the Chinese and the Nagas". Journal of Northeast Indian Cultures, 4(2), 44 - 56, 2019. Assam Don Bosco University. ISSN 2322-0988.
- Pallavi: "Fictional Representation of Rape and Sexual Violence in Battle of Berlin, 1945", in Rao, Vijaya et. al. (ed.): Displacement and Citizenship. Histories and Memories of Exclusion. Tulika Books (December 2019), page 241-260.

For more information one can visit the departmental website <http://www.tezu.ernet.in/dfl>

HINDI

The Department of Hindi was established in January 2010. The department aims to provide instruction in Hindi Literature, Language, and various aspects of Functional Hindi. It also envisages carrying out meaningful and relevant research in Hindi Literature, Language, Folk Lore, Comparative Literature, Translation Studies, etc. The department is running a Certificate Course in Official Hindi, Level-1 for the employees to help them to develop self-confidence and skill in writing and communicating in Hindi. The department has also started M.A. Programme, Ph.D. programme and Post Graduate Diploma in Translation. The department of Hindi is committed to developing human resources in Hindi teaching. It always tries to develop the methodology of Hindi teaching in higher education. The department of Hindi has developed with many objectives, out of which the department is making continuous efforts to make it one of the best Hindi departments in the field of Hindi Teaching-Learning, the department has developed quality research in various areas of Hindi Literature, Hindi Language, Comparative Studies, and Folklore. Emphasizes on promoting more publications in Hindi as well as developing a Hindi teaching-learning department for foreign students was also another objective.

Programmes offered

1. Ph.D.
2. M.A. in Hindi
3. PG Diploma in Translation (Hindi)#

Proposed to be discontinued from Academic Year 2024

Faculty and Areas of Interest

Professor

सूर्यकांत त्रिपाठी

Suryakant Tripathi*, Ph.D. (BHU)

Anuprayukt Bhashavigyan, Bharatiya Kavyashastra, Lok-Sahitya

प्रमोद मीणा

Promod Meena, Ph.D. (IGNOU)- HoD

Dalit-Tribal Studies, Hindi Cinema Studies

Associate Professor

अंजु लता

Anju Lata*, Ph.D. (TU)

Hindi Katha Sahitya, Vimarshmulak Adhyayan, Adhunik Kavita

Assistant Professor

अनुशब्द

Anushabda*, Ph.D. (DU)

Kavita Kavyashastra, Media Bhaashaavigyaan

प्रमोद कुमार शर्मा

Pramod Kumar Sharma, Ph.D. (UoH)

Madhyakaaleen Kavita

शिप्रा शुक्ला

Shipra Shukla, M.Phil. (DU)

Adhunik Hindi Sahitya, Hindi Sahitya Ka Itihas

***Recognized Ph.D. Supervisor**

ACRONYMS

BHU-Bhanarash Hindu University Uttar Pradesh; **IGNOU**- Indira Gandhi National Open University New Delhi; **TU**-Tezpur University; **DU**-Delhi University; **UoH**- University of Hydrabad; **JMI**- Jimia Millia Islamia New Delhi ; **HoD**- Head of the Department

Facilities

- Seminar
- Meeting Room
- ICT Enabled Classroom
- Girls' Common Room
- Computer cum Study Room
- Conference Hall

Research Activities

1. Number of papers published in the year 2023-24:14
2. Number of current Ph.D. scholars: 17

Publications

Research Paper:

- Meena, Pramod, 'Brahmanwadi Punjiwad Ko Chinhit Karta Naxlwadi Hinsa-Pratihinsa Ka dalit Pariprekshya' published by 'Satrachee', Patna; ISSN 2348-8425, April-June 2023 (Year 11, Issue 39), Page No. 7-12
- Meena, Pramod, 'Dalit Vimarsh Ke Pariprekshya Mein Parasai' by Dr. Pramod Meena, published by Banas Jan, New Delhi, ISSN : 2231-6558, Special issue on Harishankar Parasai, Year 15, Issue 62, June, 2023, Page No. 360-370
- Meena, Pramod, 'Stree Aur Aadivasi Stree Ka Paksha Rakhati Jasinta Kerketta Kee Kavitaye' published by 'Satrachee', Patna; ISSN 2348-8425, January-March 2023 (Year 11, Issue 38), Page No. 9-15
- Anushabda, 'Bhakt hue uth gaye Raam se bhi yon upar' published by 'Dwibhashi Rashtrasewak', Guwahati, Assam , ISSN 2321-4945, June 2023 (Year 73, Issue 3), Page No. 05-11
- Shukla, Shipra, 'Viklang Kendrit Hindi Upanyason Main Viklaangon Ki Arthik Dasha' published by 'Padchinha', Varanasi, ISSN 2231-1351, July-September, 2023 (year 12, issue 2), page no. 166-70

For more information one can visit the departmental website <http://www.tezu.ernet.in/dhindi>

LAW

The Department of Law was established in the year 2017 under the School of Humanities and Social Sciences with a vision to produce legal luminaries to add value in the field of teaching, judiciary, law making, law enforcement agencies and most importantly, work for the society as good citizens.

The Department is steadily progressing with the existing five permanent faculties along with Guest faculties who are giving meaning to the designed curriculum not only from theoretical but pragmatic aspects emphasizing on teaching inter-disciplinary facets. The faculty members have a wide range of interests and expertise in areas such as Constitutional Law, Judicial Process, Jurisprudence, Human Rights Law, International Law, Migration Law, Family Law, Environmental Law, Criminal Law, Child Laws, Gender and Law, Customary Laws etc. The Department tries to expose the students to the prevailing social realities and legal developments through activities such as outreach programmes, Seminars, Workshops, Panel Discussions etc. Moreover, it is the department's priority to inculcate among student's teaching methods and ethics, promote inter-disciplinary research, provide free legal assistance for persons in need and inspire students for competitive examinations.

Presently, the Department is offering two-year Master of Laws (LL.M.) programme with specializations in Human Rights Law and Criminology & Criminal Law. Four batches of the department have successfully graduated in the years 2020, 2021, 2022, and 2023 respectively. The Department is gearing to offer Ph.D. (Law) and B.A. LL.B. (Hons.) Five-year Integrated in the academic year 2024-25. The B.A. LL.B. (Hons.) Five-year Integrated Programme is spread across ten semesters wherein humanities and social science courses are integrated with law courses. The programme comprises 24 compulsory law courses, 4 compulsory clinical course, 8 specialization courses, 6 optional courses and 15 humanities and social science courses.

The objective of the programmes is to make the department a vibrant centre of legal education and research and to provide an opportunity to all aspirants to excel in the legal field.

Programmes offered

1. Ph.D. (Law)
2. Master of Laws (LL.M.) Two-Year with the following specializations:
 - (a) Criminology and Criminal Law
 - (b) Human Rights Law

Faculty and Areas of Interest

Associate Professor

Priya Ranjan Kumar, Ph.D. (GU)

Constitutional Law, Administrative Law, Judicial Process, Jurisprudence, Law of Contract, and Socio-Economic Offences

Gitanjali Ghosh*, Ph.D. (NLSIU)

International Law, Human Rights Law, Family Law, Laws relating to Women and Children, and Customary Laws

Assistant Professor

Angel Habamon Syiem, LL.M.(SIU)

Human rights, International Law, and Tribal issues

Madhumita Acharjee*, Ph.D. (AU)-HoD(i/c)

Criminal Law, Criminology, Juvenile Justice, and Rights of elderly persons

Debajit Kumar Sarmah, LL.M. (IP)

Criminology and Criminal Law

ACRONYMS

AU- Assam University; **GU**- Gauhati University; **HoD**- Head of the Department; **IP**- Guru Gobind Singh Indraprastha University, Delhi; **NLSIU**- National Law School of India University, Bengaluru; **SIU**- Symbiosis International (Deemed) University, Pune.

Facilities

- ICT enabled Classrooms
- Computer Lab
- Subscription of Legal E-resources such as SCC Online, Manupatra etc.

Research Activities

- Number of papers published in the year 2023-24: 04

Selected Publications

- S. Chakraborty and S. Acharjee, "Comprehending the Concept of Evolving Capacity of Children", Rabindra Bharati Patrika, vol. XXVI, no. 11, 2023.
- G. Ghosh and S. Tiwari, "Deciphering Women's Right to Inheritance under Customary Laws within Constitutional Contours", MNLU Nagpur Contemporary Law Review, vol. 6, no. 1, 2023.

- C. K. Sharma and A. H. Syiem, "COVID-19 Pandemic and its impact on the Indian Education System" in *Coronasphere: Narratives on COVID-19 from India and its neighbours* (Chandan Kumar Sharma and Reshmi Banerjee eds., Routledge, 2023).
- A. H. Syiem and P. R. Kumar, "Trans Rights Are Human Rights: An Evaluation of Law on the Protection of Transgender Rights in India", *Indian Journal of Law and Justice*, vol. 13, no. 01, 2022.
- D. K. Sarmah, "Investigation under the Code of Criminal Procedure", *Kashmir Journal of Legal Studies*, vol. IX, 2021-22.

For more information one can visit the departmental website <http://www.tezu.ernet.in/dlaw>

LINGUISTICS AND LANGUAGE TECHNOLOGY

Established in March 2022 as an independent department, the Department of Linguistics and Language Technology, which was part of the Dept. of English before, offers a two-year Master's in Linguistics and Language Technology and guides Ph.D. research in the discipline. The department has expertise in Syntax, Cognitive Linguistics, Philosophy of Language, Language Documentation, Field Linguistics, Phonetics, Phonology, Experimental Phonology, Sociolinguistics, and Computational Linguistics. The department, in collaboration with the Centre for Endangered Languages, which was established 2014 at the university and is now attached to it, carries out research in linguistics with a special focus on the languages of the Northeast, perhaps linguistically the richest yet most diverse area in India with its majority of lesser-known or under-studied languages.

Programmes offered

1. Ph.D.
2. M.A. in Linguistics and Language Technology

Faculty and Areas of Interest

Professor

Madhumita Barbora*, Ph.D. (TU) (retired, on extension till March 2024)
Linguistics (Syntax, Psycholinguistics), Field Linguistics, Documentation

Gautam K. Borah*, Ph.D. (NTNU) -HoD
Linguistics (Syntax: Construction Grammar, Semantics), Cognitive Linguistics, Philosophy of Language, Cognitive Poetics, Literary Theory

Assistant Professor

Arup Kumar Nath*, Ph.D. (JNU)

Language Typology, Morphology, Sociolinguistics, Language Documentation, Field Linguistics

Bipasha Patgiri, Ph.D. (TU)
Phonology, Historical Linguistics, Semantics

Amalesh Gope*, Ph.D. (IITG)

Acoustic Phonetics, Experimental Phonology, Computational Linguistics, and Language Documentation

***Recognized Ph.D. Supervisor**

ACRONYMS

TU-Tezpur University; **NTNU**: Norwegian University of Science and Technology, Norway; **JNU**: Jawaharlal Nehru University, New Delhi; **IITG**: Indian Institute of Technology, Guwahati; **HoD**: Head of the Department

Facilities

Departmental Library

The department houses the Centre for Endangered Languages so that the students, the research scholars, the faculty and the staff of the department have easy access to the Library of the Centre which is well-stocked with books on all important areas of linguistics, language endangerment, and language documentation. The department has also easy access to the Centre's state-of-the-art Linguistic and the Documentation-Archiving-cum-Recording Laboratories, and to its two advanced multipurpose Seminar-cum Conference Halls. Furthermore, the classrooms of the department have most facilities of a smart classroom.

Research Activities

1. No. of papers published in the year 2023-24: 14
2. No. of ongoing research projects: 3
3. No. of current Ph.D. scholars: 16

Selected Publications

- Das, G. and Barbora, M. 2023. Tense and Aspect in Banai. Vaak Manthan. Vol.8, Issue- I, Page 1- 16
- Shil, P. and Borah, Gautam, K. 2023. Mental Spaces in Mood and Modality in Sylheti: Some Observations. Jadavpur Journal of Languages and Linguistics, Vol 5 No 2, pp 70-78. ISSN 2581-494-x
- Pal, A., Gope, A. and Sengupta A. 2022. Drying of Bio-colloidal Sessile Droplets: Advances, Applications, and Perspectives. Advances in Colloids and Interface Science, Pre-proof. <https://doi.org/10.1016/j.cis.2023.102870>
- Phukan, K., and Nath, A.K. 2023. Locating a cultural identity in the use of metaphorical proverbs among the Tai Ahoms of Assam: a study through oral literature. Journal of the Royal Asiatic Society, Cambridge University Press. Vol-33, Issue 2, pp 477–487 <https://doi.org/10.1017/S1356186322000293>. (Scopus indexed)
- Patgiri, B. 2023. Phonological Processes affecting Consonantal Segments in Nalbaria Assamese. Aitihya. Heritage. Vol. XIV (I). pp. 40 – 53. ISSN 2229 – 5399

For more information one can visit the departmental website <http://www.tezu.ernet.in/llt>

MASS COMMUNICATION AND JOURNALISM

The Department of Mass Communication and Journalism offers an energetic learning environment driven by a passion for Media and Communication Studies. The department is dedicated to the interdisciplinary examination of communication in an increasingly networked society. Just as the technological advancement yield a social environment that is constantly changing and evolving; our M.A. Mass Communication and Journalism (MCJ) and M.A. Communication for Development (C4D) programmes equip the students with the most recent developments in theory and practice while remaining true to our mission of emphasizing professional excellence along with social commitment.

Over the years the department has evolved as a nodal centre for teaching-learning, training and research in communication studies with national and international collaborations. This is epitomized in the numerous accolades it is reckoned with. It has been placed at the top position among Indian universities in the Times Higher Education Asia University Ranking 2018 in the Communication & Media Studies category. Moreover, our students are well placed in some of the reputed academic institutions, national & international media houses and government and non-government organizations engaged in the development sector.

The department is committed to exploring ways in which media and communications connect us with the world and how these relationships help shape the societies in which we live. Our faculty, with variety of specializations and wide-ranging experience, not only stimulate the students with intellectual curiosity but also facilitate professional competency that is much demanded in an ever-changing communication environment.

Programme offered

1. Ph.D.
2. M.A. in Mass Communication and Journalism
3. M.A. in Communication for Development#

Proposed to be discontinued from Academic Year 2024

Faculty and Areas of Interest

Professor

Abhijit Bora*, Ph.D. (GU)-HoD

*Print Journalism, Community Radio, Specialized Reporting,
Science Communication, Media Literacy*

Joya Chakraborty*, Ph.D. (UoH)

*ICT for Development, Communication for Social Change,
Gender and Media, Alternative and Community Media*

Assistant Professor

Anjuman Borah*, Ph.D. (TU)

*Development Communication, Television and Traditional
Media*

Perosh Jimmy Daimari*, Ph.D. (TU)

*Television Production, Photography,
Visual Communications, Film Studies*

Kapou Malakar*, Ph.D. (TU)

*New Media for Development, Multimedia Journalism,
Political Communication, Online Journalism, Media
Studies,*

Manoj Deori *, Ph.D. (BU)

*Online Journalism, Multimedia Productions, Media and
Disaster Management*

Junali Deka*, Ph.D. (AU)

*Cultural Studies, Visual Communication, New Media and
Soci*

***Recognized Ph.D. Supervisor**

ACRONYMS

GU- Gauhati University; **UoH-**University of Hyderabad, Telangana **JMI-**Jamia Millia Islamia, New Delhi; **TU-**Tezpur University, **BU-** Berhampur University, Odisha; **AU-** Assam University, Silchar; **HoD-**Head of the Department.

Facilities

The department has a spacious exclusive three-story building and is endowed with specialized equipment for Print, Television, Radio and web journalism. These include industry grade HD digital video cameras, linear and non-linear editing all in broadcast quality. Students get hands-on experience in multi-camera production in the well-equipped studios. An exclusive multimedia lab with latest software enables students to gather expertise in the nuances of different media productions. A very good screening room with a 100+ seat capacity is available for screening and discussion.

Research Activities

1. Number of papers published in the year 2022-23: 9
2. Number of ongoing research projects: 01
3. Number of current Ph.D. scholars: 27

Selected Publications

- Bora A. Assamese Print Media and freedom struggle – an insight. Communicator. Indian Institute of Mass Communication (IIMC), Delhi, Vol. LVII (1), January-March 2022. ISSN 0588-8093.
- Deori, M. Activism in a Digital Age: Measuring Social Media Activism in Relation to Offline Activism in the Mizo Context. GUINEIS Journal, IX, pp.185-195,2022, ISSN: 2347-2669.
- Hazarika M, Chakraborty J. Reaching Child Audience through Folktale-based Assamese VCD Films: A Textual Analysis. Global Media Journal-Indian Edition, Volume 14 (1), June 2022, ISSN: 2249-5835.
- Chattopadhyay, R, Chakraborty, J. Rethinking Folk Media in Digital Era: A Study on Bhaona Performances of Assam, India. Global Media Journal-Indian Edition, Volume 14 (1), June 2022, ISSN: 2249- 5835
- Daimari, P. J., Bhowmick, A. Objectification of Women in Mirzapur Web Series. Journal of Media and Communication, Volume: 6 Issue: 2, December 2022.

For more information one can visit the departmental website://www.tezu.ernet.in/dmass

SOCIAL WORK

The Department of Social Work was started in 2014 with the objective to create a just and equal society that ensures freedom from all forms of oppression and exploitation. It aims to develop human resources for competent and effective professional social work practice, teaching, and research with diverse range of individuals, groups and communities by using a framework of social justice and human rights focused on sustainable and participatory development. The department also envisages providing human resources in the fields of social welfare, development, and allied areas through imparting education and training in Professional Social Work. This will enable the students to develop knowledge, skills, attitudes, and values appropriate to the practices of social work profession, besides developing critical thinking and the ability to apply theory to field experience. This will help to evolve an interdisciplinary perspective and enhance the understanding of social problems and development issues with greater efficiency.

Programme offered

1. Ph.D.
2. M.A. in Social Work

Faculty and Areas of Interest

Assistant Professor

Apurba Saha*, Ph.D. (NIMHANS), HoD

Social Work and Mental Health, Psychosocial Care in Disaster Management, Street Children and Application of Social Work Methods

Rajesh Kalarivayil*, Ph.D. (JNU)

Biomedical Governance, Innovation Studies, Science and Technology in Rural Development

Namami Sharma, Ph.D. (DU)

***Recognized Ph.D. Supervisor**

Environment and Ecology, Tribal Studies, Community development

Prerana Banik, M.Phil. (TISS Mumbai)

Gender and livelihood, Community Organisation & Social Development, Development Administration and Governance.

Samhita Barooah, Ph.D. (TISS Guwahati)

Gender Queer Movements, Social Work Education and Practice, Feminist Research Methodologies, Participatory Communication.
Social Pedagogy, Care, Traditional Child Care, Children and Youth

ACRONYMS

DU-University of Delhi; **NIMHANS**-National Institute of Mental Health and Neurosciences, Bangalore; **JNU**-Jawaharlal Nehru University, New Delhi; **TISS**-Tata Institute of Social Sciences, Mumbai; **HoD**-Head of the Department.

Research Activities

- Number of papers published in the year 2023-24: 03
- Number of ongoing research projects: 01
- Number of current Ph.D. scholars: 08

Selected Publications

- Saha A & Kerketta E. (2023). Sustainable Development Goals and Small Tea Growers of North-east Assam. *Economic & Political Weekly*, February 4, 2023 vol. LVIII no 5: 24-27
- Sharma N. (2023). Traditional Knowledge in Modern Classrooms. *Learning Curve*, August 2022. 33-35
- Nair S. S., & Kalarivayil R. (2023) Mothering and Radical Selfcare: An Autoethnography of Participating in a Facebook Parenting Group. *Feminist Encounters: A Journal of Critical Studies in Culture and Politics*, 7 (1). <https://doi.org/10.20897/femenc/12890>
- Baroah, S., Sharma, N., Swargiary, B. (2003) "Situating SDGs in Social Work Practice: Special Focus on Community Engagement Projects, Classrooms and Research", (forthcoming).
- Kalarivayil, R. (2023) "Dubai Letter Songs: Emotions and Migration in Kerala India (1970s-1990sP), *Contributions to Indian Sociology* 57 (12-2), pp. 98-121

For more information, please visit the departmental website <http://www.tezu.ernet.in/dsw>

SOCIOLOGY

The Department of Sociology was established in 2006 with a Master's programme. Subsequently, the Ph.D. programme was launched in 2008. The Department is dedicated towards nurturing competent and socially sensitive graduates through rigorous teaching and research activities. Faculty members in the department have diverse interests and expertise. Their current research focuses on Development, Education, Environment, Ethnic Conflicts, Governance, Health, Migration, Social Movements, Science Studies and so on. The curriculum lays emphasis on teaching and learning of general concerns of sociology as well as issues of sociological significance in Northeastern India. The students pursuing their masters in the department not only have to learn theoretical approaches and perspectives in the classroom, but also have to conduct fieldwork as part of their mandatory research projects. The Department also exposes the students to the prevailing social realities through outreach programmes, regular film screening, seminars and other activities in collaboration with different social organizations. The department was awarded the UGC-SAP (DRS-I) of University Grants Commission in 2016.

Programmes Offered

1. Ph.D.
2. M.A. in Sociology

Faculty and Areas of Interest

Professor

Chandan Kumar Sharma*, Ph.D. (DU)

Development, Environment, Migration, Agrarian Studies, Identity Politics, Social Movements, Urbanisation

Rabin Deka*, Ph.D. (DU)

Sociological Theories, Sociology of Movement, Agrarian Sociology

Kedilezo Kikhi*, Ph.D. (NEHU) (On lien)

Research Methodology, Gender and Society, Sociology of Northeast India, Tribal Studies

Associate Professor

Amiya Kumar Das*, Ph.D. (TU) -HoD

Sociology of Governance, Sociology of Development, Sociology of Health and Illness

Assistant Professor

Sumesh, S. S.*, Ph.D. (UK)

Social Stigma and Exclusion, Sociology of Body, Sexuality

Nirmali Goswami*, Ph.D. (IITK)

Sociology of Education, Identity Politics, Multiculturalism

Sarmistha Das*, Ph.D. (TU)

Gender Studies, Sociology of Northeast India, Land and Livelihood

Subhadeepta Ray*, Ph.D. (DU^)

Sociology of Science, Sociology of India

A.S. Shimreiwung*, Ph.D. (JNU)

Sociology of Religion, Northeast India Studies, Sociology of Mass Media

Pamidi Hagjer*, Ph.D. (GU)
Ritual Studies, Kinship, Sociological Theories

*** Recognized Ph.D. Supervisor**

ACRONYMS

DU-Delhi University; **DU**-Dibrugarh University; **NEHU**-North Eastern Hill University, Shillong; **TU**-Tezpur University; **UK**-University of Kerala; **IITK**- Indian Institute of Technology, Kanpur; **JNU**-Jawaharlal Nehru University, New Delhi; **GU**- Gauhati University; **HoD**- Head of the Department.

Facilities

- Departmental library with selected books especially in Northeast India.
- A smart classroom with all modern ICT facilities.
- A state-of-the-art seminar hall
- ICT enabled classrooms.
- Dedicated room for research scholars with individual cubicles.

Research Activities

- No. of papers published in the year 2023-2024: 15
- No. of ongoing research projects: 02
- No. of current Ph.D. scholars: 40

Selected Publications

- Borkataki, D & Sharma, C.K. (2023) Social network, trust, and rural informalities: transfer of tribal land ownership in protected areas of Assam, Northeast India, *Asian Ethnicity*, DOI: [10.1080/14631369.2023.2165034](https://doi.org/10.1080/14631369.2023.2165034)
- Choudhury, Ahana & Das, Amiya Kumar (2023). Care as work: ayahs and eldercare practices in India, *International Journal of Care and Caring* <https://doi.org/10.1332/239788221X16704462186238>
- Das, S, Hazarika, B. Obja & Pathak S. (2023). Everyday sexism in higher education: narratives of women in Indian academia, in *Journal of Gender Studies*, Vol. 32 (6), pp.588-599
- Gogoi N, Sumesh SS. (2023) We Are Just Mazdoors! A Decolonial Ethnographic Account of Health Inequalities, and Inequities Among Tea Garden Laborers in Assam, India. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*. doi:10.1177/10482911231152445

- Sharma, C. K. (2023). Indigenisation and Vernacularisation of Social Science in India: Revisiting the Debate, in Postcolonial Studies, Published online: 05 April 2023. Taylor & Francis.
<https://www.tandfonline.com/doi/full/10.1080/13688790.2023.2196147> (with Bhaswati Borgohain)

For more information one can visit the departmental website <http://www.tezu.ernet.in/dsoc>

SCHOOL OF MANAGEMENT SCIENCES

BUSINESS ADMINISTRATION

The Department of Business Administration came into existence in 1995 with the objectives of producing quality management professionals and carrying out research in the areas of Finance, Human Resources, Marketing, Production, System Management and Tourism. The department has been conducting PG Diploma in Tourism Management since 2002, which has been upgraded to Master of Tourism and Travel Management with the first batch of students admitted in the Academic Year 2016-17. The department is awarded 3rd Asia's Best B-school award for its innovation in teaching methodology in 2012, rated A+ by Business India, rated "A" by Discovery Education Media for 2012-13. It is also the recipient of "Best Business School Award" in the category of placement (NE Region) awarded by Bureaucracy Today. The department was conferred with "A" category by Business Chronicle B-School Survey and placed among the top 10 B-School in the Eastern Region. It was ranked 39th among all institutions offering Management Education in India by NIRF (Ministry of HRD, Govt. of India). The department has successfully completed a research on "Microfinance and Livelihood Development" under the UGC- SAP (DRS-I) research grant and presently conducting research on livelihood through tourism under UGC SAP DRS II research grant.

Programmes offered

1. Ph.D.
2. Master of Business Administration (M.B.A.).
3. Master in Tourism and Travel Management (M.T.T.M.).
4. Post Graduate Diploma in Human Resource Management (Distance Mode)
5. M.B.A. (Executive) (**Admission is in the month of March-April every Year**)

Apart from these the Department also conducts a short-term certificate course on National Stock Exchange Certified Capital Market Professional (NCCMP) Programme.

Faculty and Areas of Interest

Professor

Mrinmoy Kumar Sarma*, Ph.D. (TU)
Services Marketing, Tourism Marketing

Subhrangshu Sekhar Sarkar*, Ph.D. (TU),
Accounting, Taxation, Social Development Issues

Debabrata Das*, Ph.D. (RGU), (On lien)
Financial Management, Financial Markets and Development Finance

Chandan Goswami*, Ph.D. (TU) –Dean, SoMS
Marketing and Promotional Strategies, Consumer Behaviour, Tourism

Papori Baruah*, Ph.D. (TU), Chief Proctor
Human Resource Management, Organization Behaviour, Change Management, Rural Development, NGOs

Associate Professor

Tridib Ranjan Sarma*, Ph.D. (TU) -HoD

*Operations Management, Project Management,
Tourism*

Anjan Bhuyan*, Ph.D. (TU)
Economics

Arup Roy*, Ph.D. (TU)
*Microfinance, Stock Market, Development Finance, Social
Entrepreneurship*

Runumi Das*, Ph.D. (GU)
*Marketing, Rural Marketing, Human Resource
Management*

Assistant Professor

Heera Barpujary*, Ph.D. (TU)
Knowledge Management, Web Technology

Kakali Mahanta*, Ph.D. (DU)
*Human Resource Management,
Organization Behaviour*

Mridul Dutta*, Ph.D. (GU)
*Community Based Tourism, Intellectual
Property Rights*

Prayash Baruah, M.B.A. (SIU)
*Supply Chain Management, Logistics,
Transportation*

***Recognized Ph.D. Supervisor**

ACRONYMS

TU-Tezpur University; **CDOE**-Centre for Distance and Online Education; **RGU**-Rajiv Gandhi University, Itanagar; **SoMS**-School of Management Sciences; **DU**-Dibrugarh University; **GU**- Gauhati University; **SIU**- Symbiosis International University, Pune; **HoD**- Head of the Department

Facilities

The department is well equipped with modern educational facilities like state-of-the-art computer laboratory and instructional audio-visual aids including video conferencing facility. The department has an air-conditioned board room for facilitating case study, group discussion etc. and air conditioned student lounge.

Research Activities

1. No. of papers published in the year 2022-2023: 22
2. No. of current Ph.D. scholars: 52

Selected Publications

- Bhatia, R & Baruah, P. (2020). Exclusive talent management and its consequences: a review literature. *Asian Journal of Business Ethics*, 193-209.
- Dutta, D. & Sarma, M. K. (2020). Service Innovation Typologies and Applications in India: A Literature Review. *International Journal of Business Innovation and Research*. 22(3), IJBIR.2020.10019243.
- Dutta, D. & Sarma, M. K. (2020). Apps vs. Websites: End Users' Preference in a Continuously Innovating Digital World. *Pacific Business Review. International*, 13-23.

For more information one can visit the departmental website <http://www.tezu.ernet.in/dba/new/>

COMMERCE

The Department of Commerce was established in the year 2014 under the School of Management Sciences. The department offers the Integrated M. Com. Programme. The programme is designed to provide the basis for developing the skills necessary to face the challenges of the dynamic business environment.

Programme Offered

1. Ph.D.
 2. M. Com
 3. Integrated M.Com.
- Faculty and Areas of Interest

Associate Professor

Santi Gopal Maji *, Ph.D. (UB)
Finance and Accounting

Assistant Professor

Reshma Tiwari, Ph.D. (GU) -HoD
Accounting and Auditing

Farah Hussain, Ph.D. (DU)
Econometrics, Mathematical Economics

***Recognized Ph.D. Supervisor**

Dhritabrata Jyoti Bharadwaz,

M.Phil. (DU) *Accounting and Finance, Micro Finance and Risk Management*

Biswajit Ghose, Ph.D. (NEHU)

Accounting and Finance.

Prasenjit Roy, Ph.D. (NEHU)

Finance and Banking.

Manish Kumar, Ph.D. (DU^)

Corporate Finance and Accounting

ACRONMS

UB: University of Burdwan; **GU:** Gauhati University; **DU:** Dibrugarh University; **DUA:** University of Delhi; **NEHU**—North Eastern Hill University, Shillong; **NFCG**- National Foundation for Corporate Governance, New Delhi; **HoD**- Head of the Department

Facilities

ICT equipped classrooms and E-Coaching facility to enable students to pursue Professional Courses, Personalized attention due to small batch size, Project based, immersion-oriented classroom teaching pedagogy. ACE Equity corporate database for conducting research.

Research Activities

1. No. of paper published in the year 2022-23: 13
2. No of current Ph.D. scholars: 15

Selected Publications

- Maji, S.G. & Saha, R. (2021). Gender Diversity and Financial Performance in an Emerging Economy: Empirical Evidence from India. *Management Research Review*, 44 (12), 1660-1683. <https://doi.org/10.1108/MRR-08-2020-0525>
- Hussein, S.S., Maji, S.G., & Panda, N.M. (2021). The Impact of Budget Participation on Managerial Performance: Evidence from Manufacturing Firms of Iraq. *SCMS Journal of Indian Management*, XVIII (3), 28-38.
- Tiwari, R.K. & Debnath, J. (2022). Forensic Accounting and Non-Audit Services: Indian Context. *Finance India*, 36 (1), 281-295.
- Maji, S. G. & Goswami, M. (2022). The association between human capital efficiency and credit risk of Indian banks: a change point analysis. *International Journal of Learning and Intellectual Capital*, 19 (3), 194-216. <https://doi.org/10.1504/IJLIC.2021.10039336>
- Maji, S.G. & Kalita, N. (2022). Climate change financial disclosure and firm performance: empirical evidence from Indian energy sector based on TCFD recommendations. *Society and Business Review*. <https://doi.org/10.1108/SBR-10-2021-0208>

For more information one can visit the departmental website <http://www.tezu.ernet.in/dcom>

SCHOOL OF SCIENCE CHEMICAL SCIENCES

The department was established in the year 1997 with the objectives of providing a broad-based training to the students in various disciplines related to Chemical Sciences and reach out to the society. The faculty members are actively involved in advanced research programmes in the areas of catalysis, polymers, nanocomposites, drug delivery, bioinorganic chemistry, surfactant systems, water purification technique, synthetic organic chemistry, supramolecular chemistry, theoretical chemistry, and green chemistry. Apart from externally funded projects, consultancy projects are also run by faculty members of the department. The department has received financial assistance under UGC-SAP (DRS II) and DST-FIST (Level II) special grants for strengthening teaching, research, and training.

Programmes Offered

1. Ph.D.
2. M.Sc. in Chemistry
4. Integrated M.Sc. in Chemistry

Faculty and Areas of Interest

Professor

Nashreen Islam*, Ph.D. (NEHU)

Synthetic Inorganic Chemistry and Biomimetic Chemistry of Transition Metals, Catalysis

Tarun Kumar Maji*, Ph.D. (CU)

Polymer composite, Drug Delivery

Robin Kumar Dutta*, Ph.D. (NEHU),) Dean, School of Sciences

Drinking water and traditional manuscripts writing and paintings

Ramesh Chandra Deka*, Ph.D. (NCL),

Theoretical Chemistry, Catalysis and Drug Design

Ashim Jyoti Thakur*, Ph.D. (NEIST)

Heterocyclic Chemistry, Organic Synthesis and Molecular Container Chemistry

Ashwini Kumar Phukan*, Ph.D. (UoH)

Theoretical Inorganic and Organometallic Chemistry

Ruli Borah*, Ph.D. (NEIST)

Ionic liquids and Catalysis, Greener Organic Synthesis

Panchanan Puzari*, Ph.D. (IITG) -HoD

Biosensors, Chemical Sensors & Molecular Dynamics

Utpal Bora*, Ph.D. (NEIST)

Synthetic Organic Chemistry

Kusum Kumar Bania*, Ph.D. (TU)

Heterogeneous Catalysis, Fuel Cell and Photocatalysis

Assistant Professor

Pankaj Bharali*, Ph.D. (IICT)

Inorganic Materials, Heterogeneous Catalysis, Electrocatalysis

Nayanmoni Gogoi*, Ph.D. (IITB)

Molecular Magnet, Functional Metal Organic Framework

Bipul Sarma*, Ph.D. (UoH)

Pharmaceutical crystallization, Porous Materials

Sajal Kumar Das*, Ph.D. (CDRI & JNU)

Synthetic Organic Chemistry

Sanjeev Pran Mahanta*, Ph.D. (UoH)

*Physical Chemistry, Molecular
Engineering and Molecular
Recognition*

Mohini Mohan Konai, Ph.D. (JNCASR)

Medicinal Chemistry

***Recognized Ph.D. Supervisor**

ACRONYMS

NEHU- North Eastern Hill University ; **CU** -Calcutta University, **IITKgp**- Indian Institute of Technology Kharagpur, **NCL**- National Chemical Laboratory Pune, **NEIST**-North East Institute of Science and Technology Jorhat , **UoH**-University of Hyderabad, **IITG**- Indian Institute of Technology Guwahati, **TU**-Tezpur University, **IICT**-Indian Institute of Chemical Technology Hyderabad, **IITB**- Indian Institute of Technology Bombay, **CDRI**-Central Drug Research Institute Lucknow, **JNU**-Jawaharlal Nehru University New Delhi, **JNCASR**- Jawaharlal Nehru Centre for Advance Scientific Research Karnataka, **HoD**-Head of the Department.

Facilities

In addition to the laboratory facilities required for undergraduate and postgraduate level studies in Chemical Sciences, the department is equipped with sophisticated instrumentation facilities, like FT-IR spectrophotometer, CHN Analyzer, Thermal analyzer, UV-Visible spectrophotometer, Universal testing machine (UTM), Atomic absorption spectrophotometer, Polarizing microscope, Computational facilities etc. Besides these, the University has central instrumentation facilities of Scanning electron microscope, 400 MHz Nuclear Magnetic Resonance spectrophotometer, TEM, SEM, Raman spectrophotometer, Single crystal X-ray instrument, ICP-AES, GPC, HPLC, etc.

Research Activities

1. No. of papers published in the year 2022-23: 72
2. No. of ongoing research projects: 19
3. No. of current Ph.D. scholars: 95

Selected Publications

4. Devi, A., Bharali, M.M., Biswas, S., Bora, T.J., Nath, J.K., Lee, S., Park, Y.B., Saikia, L., Baruah, M.J., and Bania, K.K. (2023). Utilization of methanol and ethanol for 3, 3'-bis (indolyl) methane synthesis through activation of peroxy monosulfate over a copper catalyst. *Green Chemistry*, 25 (9), 3443-3448.

5. Talukdar, H., Rani Gogoi, S.R., Sultana, S.Y., Begum, R., Dowerah, D., Sarma, B., and Islam, N.S. (2023). Oxido- and mixed-ligand peroxido complexes of niobium(V) as potent phosphatase inhibitors and efficient catalysts for eco-friendly styrene epoxidation. *Dalton Trans.*, 52,10165-10182.
6. Deffo, G., Hazarika, R., Ngaha, N. D. C., Basumatary, M., Kalita, S., Hussain, N., Njanja, E, Puzari P. and Ngameni, E. (2023). An ultra-sensitive uric acid second generation biosensor based on chemical immobilization of uricase on functionalized multiwall carbon nanotube grafted palm oil fibre in the presence of a ferrocene mediator, *Anal Methods*, 15, 2456.
7. Saikia, R. A., Dutta, A., Sarma, B. and Thakur, A. J. (2022). Metal-free regioselective N₂-arylation of 1H-tetrazoles with diaryliodonium salts. *The Journal of Organic Chemistry*, 87 (15), 9782–9796.
8. Ghosh, B. and Phukan, A. K. (2022). Unravelling the potential of ylides in stabilizing low-valent group 13 compounds: theoretical predictions of stable, five-membered group 13 (aluminium and gallium) carbenoids capable of small-molecule activation. *Inorg. Chem.*, 61, 14606-14615.

Current International Collaboration

Name of Faculty	Collaborating Institute	Supported by
Prof. K.K. Bania	Imam Mohammad Ibn Saud Islamic University, Riyadh, Kingdom of Saudi Arabia.	Ministry of Education, Kingdom of Saudi Arabia.
Prof. A. K. Phukan	Laboratoire Hétérochimie Fondamentale et Appliquée, UNIVERSITE PAUL SABATIER, France	Indo-French Centre for the Promotion of Advanced Research (IFCPAR/CEFIPRA) 2023-25
Dr. N. Gogoi	Friedrich-Schiller-Universität Jena, Germany	DST/INT/DAAD 2023-2025
Dr. P. Bharali & Prof. U Bora	M/S SHELL Ltd.	M/S SHELL Ltd. 2023-2024

For more information, one can visit the departmental website <http://www.tezu.ernet.in//dcs/>

ENVIRONMENTAL SCIENCE

Initially established as a Centre for Environmental Science in 2003, the Centre was converted to the Department of Environmental Science in 2004, with the objective of imparting education on regional and global environmental issues. The curriculum for the M. Sc. programme focuses on all important aspects of Environmental Science covering contemporary problems of natural resource conservation and environmental quality. Areas of research include Environmental Pollution, Greenhouse Gas Emission, Riverine Hazards, Geomorphology, Climate Atmospheric Processes, Ecohydrology, Vulnerability and Adaption, Hydro geochemistry, Vermicomposting, Pollution Remediation, Biodiversity Conservation and Atmospheric System Modelling. The department is a recipient of grant under UGC-SAP and DST-FIST.

Programme offered

1. Ph.D.
2. M.Sc. in Environmental Science

Faculty and Areas of Interest

Professor

Raza Rafiqul Hoque*, Ph.D. (JNU)

Atmospheric chemistry, Air Pollution Source Apportionment and Transport, Environmental PAHs

Apurba Kumar Das*, Ph.D. (JNU)

Hydro-Geomorphology, Riverine Hazards, Application of RS-GIS to environmental aspects, coupling study between Hydro-geomology and Ecology, Socio-environmental studies

Ashalata Devi*, Ph.D. (NEHU)

Forest Ecology, Ecosystem Dynamics, & Wildlife and Biodiversity Conservation

Kashi Marimuthu*, Ph.D. (MSUT) -HoD

Aquatic Biology, Aquatic Toxicology, Aquatic Biodiversity and Conservation

Associate Professor

Nirmali Gogoi*, Ph.D. (DU)

Stress Physiology & Biochemistry

Satya Sundar Bhattacharya*, Ph.D. (VB)

Vermiculture, Plant Nutrition and Soil Fertility Management, Soil C Management, Plant Products & Nano Fertilizers

Assistant Professor

Sumi Handique*, Ph.D. (TU)

Geochemistry of River Basins & Hydrogeochemistry

Amit Prakash*, Ph.D. (JNU)

Air pollution Meteorology, Noise Pollution Monitoring and Modelling, Environmental System Modelling & Urban Climate

Nayanmoni Gogoi*, Ph.D. (IITG)

Ecohydrology, Ecosystem Functions, Nanotechnology in Environmental Research

Santa Kalita*, Ph.D. (GU)

***Recognized Ph.D. Supervisor**

Entomology & Environmental Physiology

Pratibha Deka*, Ph.D. (TU)

Environmental Pollution, Air, Water & Soil; Human Environment Interactions

ACRONYMS

JNU-Jawaharlal Nehru University, **NEHU** -North Eastern Hill University; **MUST**-Manonmaniam Sundaranar University Tamil Nadu, **DU**-Dibrugarh University; **VB**-Visva Bharati Santiniketan; **TU**- Tezpur University; **IITG**-Indian Institute of Technology, Guwahati; **GU**- Gauhati University; **HoD**- Head of the Department.

Facilities

The department has a sophisticated instrumentation laboratory to facilitate research and other academic activities. The laboratory has equipment, like ICP-OES, ICP-MS, HPLC, CHNS, Laser Leaf Area Meter with Root Measurement Attachment, Light Meter, Portable Photosynthesis Systems, Gas Chromatographs, Ion Chromatograph, TOC Analyzer, Continuous Air Pollution Monitoring Station, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler and Flame Photometer. The department also has GIS laboratory and Plant experimental site/shed.

Research Activities

1. No. of papers published in the year 2022-2023: 49
2. No. of ongoing research projects: 06
3. No of current Ph.D. scholars: 53

Selected Publications

- Borah S.B., Das A.K., Hazarika N., and Basumatary, H. (2022). Monitoring and assessment of glaciers and glacial lakes: climate change impact on the Mago Chu Basin, Eastern Himalayas. *Regional Environmental Change.*, 22, 124. <https://doi.org/10.1007/s10113-022-01984-2>
- Devi J., Mondal H., Das S., Gogoi NM., Chattopadhyay P., and Bhattacharya S.S. (2023). Polycyclic aromatic hydrocarbon (PAH) remediation during vermicomposting and composting: Mechanistic insights through PAH-budgeting. *Environmental Science and Pollution Research (Springer).*, <https://doi.org/10.1007/s11356-023-29705-0>
- Kamaraj C., Vimal S., Ragavendran C., Priyadharsan A., Marimuthu K., and Malafaia G. (2023). Traditionally used medicinal plants mediate the biosynthesis of silver nanoparticles: Methodological, larvicidal, and ecotoxicological approach. *Science of the Total Environment.*, 873, 162402-162402.

- Pegu R., Paul S., Bhattacharyya P., Prakash A., Bhattacharya S.S. (2023). Exorbitant signatures of pesticides and pharmaceuticals in municipal solid wastes (MSWs): Novel insights through risk analysis, dissolution dynamics, and model-based source identification. *Science of the Total Environment* (Elsevier), 900: 165855 DOI: <https://doi.org/10.1016/j.scitotenv.2023.165855>.
- Paul B., Mishra M.K., and Das A.K. (2022). Spatial heterogeneity and estimation of PM10 concentration over Brahmaputra Valley using geographic weighted regression model assimilating surface, MODIS, and ERA-interim reanalysis data. *Air Quality, Atmosphere & Health*, 15, 425–435. <https://doi.org/10.1007/s11869-022-01160-9>

For more information one can visit the departmental webpage: <http://www.tezu.ernet.in/denvsc>

MATHEMATICAL SCIENCES

The department was started in July 1994 with the objective of producing trained manpower for undertaking research and teaching in mathematics and allied branches of basic or applied sciences. It is one the three oldest departments with which the Tezpur University started its journey. So far 26 batches of students have successfully completed their M.Sc. in Mathematics, 8 batches of students have successfully completed their Integrated M. Sc. in Mathematics and 3 batches of students have successfully completed their Integrated B. Sc. B.Ed. (Major in Mathematics) from the department. Besides this, 63 scholars have done their Ph.D. in Mathematics from the department. The department carries out research in the areas of Number Theory, Operator Theory, Fuzzy Topology, Finite Element Method, Algebraic Graph Theory, Algebra (Group Theory, Ring Theory), Computational Fluid Dynamics, Probability Distributions, Coding Theory etc. The department got supported by the UGC-SAP and DST-FIST grant.

Programmes Offered

1. Ph.D.
2. M.Sc. in Mathematics
3. Integrated M.Sc. in Mathematics

Faculty and Areas of Interest

Professor

Nayandeep Deka Baruah*, Ph.D. (TU)
Number Theory, Ramanujan's Mathematics

Debajit Hazarika*, Ph.D. (JMI)
General Topology, Fuzzy Sets and Applications

Munmun Hazarika*, Ph.D. (TU)
Functional Analysis, Operator Theory

Milan Nath*, Ph.D. (IITG)-HoD
Ordinary Graph Spectra, Inverse Eigen Value Problem

Santanu Dutta*, Ph.D. (TU)
Statistics (Non-parametric)

Dhiren Kumar Basnet*, Ph.D. (DU)
Algebra

Shuvam Sen*, Ph.D. (IITG)
Computational Fluid Dynamics

Associate Professor

Bhim Prasad Sarmah*, Ph.D. (GU)
High Energy Astrophysics, Relativity

Pankaj Kumar Das*, Ph.D. (DU[^])
Coding Theory

Yengkhom Satyendra Singh, PhD (JMI)
Specialization: Associative and non-associative algebra and its applications
Pradip Debnath*, PhD (NITS)
Specialization: Functional Analysis, Fixed Point Theory, Soft Computing

Assistant Professor

Bipul Kumar Sarmah*, Ph.D. (TU)
Theory of Partition, Ramanujan's Mathematics

Rajat Kanti Nath*, Ph.D. (NEHU)
Theory of Finite Groups

Debajit Kalita*, Ph.D. (IITG)
Algebraic Graph Theory

Deepjyoti Goswami*, Ph.D. (IITB)
Finite Element Method

Jayanta Borah*, Ph.D. (IITG)
Abstract Fractional Differential Equations, Mathematical Control theory

Biswajit Das, Ph.D. (IITG)
Numerical Linear Algebra, Matrix Analysis

*** Recognized Ph.D. Supervisors**

ACRONYMS:

TU-Tezpur University, **JMI**-Jamia Millia Islamia New Delhi, **IITG**-Indian Institute of Technology Guwahati, **GU**- Gauhati University, **DU**- Dibrugarh University, **IITK**-Indian Institute of Technology Kanpur, **NEHU**- North Eastern Hill University Shillong, **IITB**-Indian Institute of Technology Bombay, **DU**-Delhi University, **NIT S**-National Institute of Technology Silchar, **HoD**-Head of the Department

Facilities

The department has a computer laboratory established with financial assistance from the DST and UGC. Diverse software relating to mathematics and computing is available in the laboratory. The laboratory is fully networked, and it is linked with the Central Computer Centre via LAN with access to the INTERNET. One Systems Analyst and one Technical Assistant look after the computational and networking facilities of the department.

Research Activities

1. No. of papers published in the year 2022-23: 33
2. No. of ongoing research projects: 02
3. No of current Ph.D. scholars: 33

Selected Publications

- N.D. Baruah and H. Das, Matching coefficients in the series expansions of certain q-products and their reciprocals, The Ramanujan Journal, 2022. DOI: <https://doi.org/10.1007/s11139-021-00534-4>.
- H. Hazarika, D. K. Basnet and S. D. Cohen, The existence of primitive normal elements of quadratic forms over finite fields, *Journal of Algebra and its Applications*, DOI:2022. <https://doi.org/10.1142/S0219498822500682>.
- D. Kalita and K. Sarma, On the inverse of unicyclic 3-coloured digraphs, *Linear and Multilinear Algebra*, 2021. DOI: <https://doi.org/10.1080/03081087.2021.1948956>.
- D.Deka and S.Sen, A new transformation free generalized(5,5)HOC discretization of transient Navier-Stokes/Boussinesq equations on nonuniform grids, *International Journal of Heat and Mass Transfer*, 2021. DOI: <https://doi.org/10.1016/j.ijheatmasstransfer.2020.120821>.

- A.Bose and S. Dutta, Kernel based estimation of the distribution function for length biased data, *Metrika*, 2022. DOI: 10.1007/s00184-021-00824.

For more information, one can visit the departmental website <http://www.tezu.ernet.in/dmath>

MOLECULAR BIOLOGY AND BIOTECHNOLOGY

The department of Molecular Biology and Biotechnology (MBBT) was established in the year 1997 with the objectives to create quality human resource and to engage in quality research work in the challenging and frontier areas of modern biotechnology. The department has strong collaboration with various industries and academic institutes of the country and abroad. Department of MBBT is supported by UGC-SAP (DRS-II) and DST- FIST program. The department also houses the ONGC-Centre for Petroleum Biotechnology (ONGC-CPBT), which is an example of successful industry-academia collaboration. The department has ongoing research activities in diverse areas of modern biotechnology and molecular biology. Some of the key research areas are - microbial and petroleum biotechnology, plant biotechnology, snake venom biochemistry, enzymology, protein chemistry, immunology, immune genetics and evolutionary genetics, computational biology, system biology, nano-biotechnology, plant microbe interactions, cancer genetics and chemoprevention, and molecular virology.

Programmes Offered

1. Ph. D.
2. M. Sc. in Molecular Biology and Biotechnology
(Supported by the department of Biotechnology of the Ministry of Science and Technology, Government of India)
3. Integrated M. Sc. in Life Sciences

Faculty and Areas of Interest

Professor

Bolin Kumar Konwar*, Ph.D. (IC) (Retired, on extension till June 2024)
Petroleum Biotechnology, Plant Biotechnology, Genetic Engineering and Metagenomics, Bioenergy

Ashis Kumar Mukherjee*, Ph.D. (BU), D.Sc. (CU) (On deputation)
Snake Venom Biochemistry and Microbial Biotechnology

Anand Ramteke*, Ph.D. (JNU)
Cancer Genetics and Chemoprevention

Suvendra Kumar Ray*, Ph. D. (CCMB-JNU)
Molecular Plant -Microbe Interactions, Molecular Evolution, Food and Activities on Human Health

Manabendra Mandal*, Ph.D. (IGIB), DSW
Probiotics and Nutrition, Microbial Biofilm, Bioenergy

Robin Doley*, Ph.D. (TU)
Snake Venomics and Antivenomics

Associate Professor

Rupak Mukhopadhyay*, Ph.D. (IACS-JU) -HoD
Inflammation, Cancer Biology

Thiyam Ramsing Singh*, Ph.D. (CDRI)

Genomic Instability and
Cancer Biology

Assistant Professor

Surya Prakash G. Ponnamp*, Ph.D. (LVPEI-UoH)
Molecular Genetics and Synthetic biology

Anupam Nath Jha*, Ph.D. (IISc)
Computational Biophysics, Bioinformatics, Systems
Biology

Nima D. Namsa*, Ph.D. (IISc)
Molecular Biology of Rotavirus

Suman Dasgupta*, Ph.D. (VB)
Insulin Resistance and Type 2 Diabetes

Mattaparthi V. Satish Kumar*, Ph.D. (IITG)
Computational Biotechnology and
Bioinformatics

Jyoti Prasad Saikia*, Ph. D (TU)
Plant Biotechnology

Aditya Kumar*, Ph.D. (IISc)
Computational Biophysics, Genomics and Bioinformatics

Pankaj Barah*, Ph.D. (NTNU)
Geonomics, System Biology, Big Data
in Biology, Molecular Evolution

Sunita Kushwah, Ph.D. (NIPGR)
Plant Biotechnology

*** Recognized Ph.D. Supervisor**

ACRONYMS

IC-Imperial College London, **DU**- Dibrugarh University, **BU**-Burdwan University West Bengal, **CU**-Calcutta University, **PGIMER**-Post Graduate Institute of Medical Education and Research Chandigarh, **CCMB**- Centre for Cellular and Molecular Biology Hyderabad, **CDRI**-Central Drug Research Institute Uttar Pradesh; **IGIB**-Institute of Genomics and Integrated Biology Delhi, **DSW**- Dean Students Welfare ; **JNU**-Jawaharlal Nehru University New Delhi, **TU**-Tezpur University, **IITKgp**-Indian Institute of Technology Kharagpur, **GU** -Gauhati University, **LVPEI**-L.V.Prasad Eye Institute Hyderabad, **UoH**-University of Hyderabad, **IISc** -Indian Institute of Science Bangalore , **IACS**- Indian Association for the Cultivation of Science Kolkata, **JU** - Jadavpur University Kolkata, **VB**-Visva Bharati Santiniketan Kolkata, **IITG**-Indian Institute of Technology Guwahati, **NTNU**-Norwegian University of Science and Technology Norway, **NIPGR**-National Institute of Plant Genome Research, **HoD**-Head of the Department.

Facilities

The department has several sophisticated instruments like, Automated DNA sequencer, UHPLC, FPLC, HPLC systems, Real Time PCR, FACS Bioanalyzer, Spectrofluorimeter, Immunofluorescence Microscope, GC-MS and Fermenter. Department is

equipped with a cold room, animal and plant cell culture facilities, animal experimentation laboratory and Bioinformatics facility. Apart from these individual, faculty research laboratories are well equipped to carry out advance research.

Research Activities

1. No. of papers published in the year 2022-2023: 82
2. No. of ongoing research projects: 21
3. No of current Ph.D. Scholars: 85

Selected Publications

- Kabyashree K, Kumar R, Sen P, Satapathy SS and Ray SK., *Ralstonia solanacearum* preferential colonization in the shoot apical meristem explains its pathogenicity pattern in tomato seedlings, **Plant Pathology**, 69:1347-1356, 2020, 69:1347-1356.
- S. Sarkar, U. Dey, T.B. Khohliwe, V.R. Yella, A. Kumar, Analysis of nucleoid-associated protein-binding regions reveal DNA structural features influencing genome organisation in *Mycobacterium tuberculosis*, **FEBS Letters**, 19(1-18), 2021, 3.288.
- Basu A, Das AS, Borah PK, Duary RK & Mukhopadhyay R*, Biochanin A impedes STAT3 activation by upregulating p38 δ MAPK phosphorylation in IL-6-stimulated macrophages, **Inflammation Research**, 69, 1143, 2020, 4.57.

Book Published

- P. Barah, D.K. Bhattacharyya, J.K Kalita. *Gene Expression Data Analysis A Statistical and Machine Learning Perspective* CRC Press 2021.

For more information one can visit departmental website [www://tezu.ernet.in/dmbbt](http://tezu.ernet.in/dmbbt)

PHYSICS

Department of Physics was established in 1998. It offers studies in various fields of physics leading to postgraduate and doctoral degree. The faculty members of the department are engaged in various areas of physics such as condensed matter physics, photonics, high energy physics, microwaves, plasma physics, astrophysics, neutrino physics and nanoscience & technology. The department has collaboration with institutes like IUCAA Pune, CMACs Bangalore, IIT Guwahati, IASST, Guwahati, CAT Indore, VECC Kolkata, SAMEER Mumbai, India based Neutrino observatory, University of Southampton UK, Queen's University Belfast, University of Tokyo Japan, Max Planck Institute Germany, Hyper-Kamiokande, Japan and others. The department of Physics is also supported by UGC-SAP, DST-FIST and ISRO. The department provides a conducive and rigorous research environment.

Programmes Offered

1. Ph.D.
2. M. Sc. in Physics
3. Integrated M. Sc. in Physics

Faculty and Areas of Interest

Professor

Jayanta Kumar Sarma,* Ph.D. (GU)
Theoretical High Energy Physics, Particle Physics

Nidhi Saxena Bhattacharyya,* Ph.D. (DU[^])-HoD
Microwave Devices, Antennas and EMI Materials

Gazi Ameen Ahmed,* Ph.D. (GU)
Laser Physics, Optoelectronics

Nilakshi Das,* Ph.D. (GU)
Dusty Plasma Physics, Laser-Plasma Interaction

Dambarudhar Mohanta,* Ph.D. (TU)
Condensed Matter Physics, Nanoscience
Pritam Deb,* Ph.D. (JU)
Nanoscience and Nano Technology, Physics of Materials

Pralay Kumar Karmakar,* Ph.D. (GU)
Plasma Physics, Astrophysics, Nonlinear Dynamics

Mrinal Kumar Das,* Ph.D. (GU)
Theoretical High Energy Physics: Physics Beyond Standard Model, Neutrino Physics, BAU, Dark Matter

Pabitra Nath,* Ph.D. (GU)
Photonics

Associate Professor

Ng K. Francis,* Ph.D. (GU)
Particle Physics Phenomenology and Particle Cosmology

Rajib Biswas,* Ph.D. (DU)
Fiber Optic Instrumentation, PCFs, Geophysical Instrumentation

Assistant Professor

Rupjyoti Gogoi,* Ph.D. (GU)
Astrophysics

Shyamal Kumar Das,* Ph.D. (IISc)
Material Science

Ritupan Sarmah,* Ph.D. (IISc)
Computational Material Science

Moon Moon Devi,* Ph.D. (TIFR)
*Experimental High Energy and Astro-particle Physics,
Neutrino Physics, UHE Cosmic Rays and Extensive Air
Showers, Detector Instrumentation and Data Acquisition*

*** Recognized Ph.D. Supervisor**

ACRONYMS

GU-Gauhati University; **DU**-Delhi University; **JU**-Jadavpur University, West Bengal; **TU**-Tezpur University; **DU**-Dibrugarh University;
IISc-Indian Institute of Science, Bangalore; **TIFR**-Tata Institute of Fundamental Research, Mumbai; **NEHU**-North Eastern Hill
University Shillong; **HoD**-Head of the Department.

Facilities

The department has a rich collection of setups and instruments related to Photonics, Electronics, Condensed Matter Physics and Nanoscience at research level in addition to general laboratory instruments for postgraduate teaching in Physics. The department has a 25 MW pulsed NdYAG laser, high vacuum coating unit, X-band Microwave Bench, Electrochemical Workstation, LCR HiTester Meter, AFM, PPMS, SEM, FESEM, TRPL, XRD, Double Distilled water treatment plant, hot air oven, material developing facilities, semiconductor characterization set-up, UV-VIS spectrophotometer, Millipore water purification system, LB film deposition unit, spectrophotometer, vector network analyzer, spin wave instability characterization system, antenna parameter measurement facility, hydraulic press, CNC Milling Machine and other systems. The department also has high end computational facility to carry out theoretical and astrophysics research work. The department also offers its facilities to the students of other institutes and other departments within the University.

The research activity in the department is supported by University's Sophisticated Instrument and Analytical Centre (SAIC) and the University Library.

Research Activities

1. No. of papers published in the year 2022-2023: 45
2. No. of ongoing research projects: 12
3. No. of current Ph.D. scholars: 84

Selected Publications

- Pritam Das, Mrinal Kumar Das, Najimuddin Khan (2021). FIMP-DM in the extended hypercharge Higgs triplet model; Phys. Rev. D 104(2021) 9, 095026.

Jugal Lahkar, Ph.D. (GU)
Cosmology & High Energy Physics

Diana Thongjaomayum, Ph.D. (NEHU)
Condensed Matter Physics (Theory)

Inspire Faculty

Sorokhaibam Nilakash Singh, Ph.D. (TIFR) *String Theory,
Black Hole Physics*

- Mayuri Bora and Pritam Deb. (2021). Magnetic proximity effect in two-dimensional van der Waals heterostructure; Journal of Physics: Materials, 2515-7639 (2021).
- Z Pu, ZC Xie, R. Sarmah, Y Chen, C. Lu, G. Ananthakrishna, L. H. Dai (2021), Spatio-temporal dynamics of jerky flow in high-entropy alloy at extremely low temperature; Philosophical Magazine, 1478-6435 1478-6443 (2021).

For more information one can visit departmental website [www://tezu.ernet.in/dphy](http://tezu.ernet.in/dphy)

Section-V: CENTRES

Centre for Endangered Languages (CFEL)

Tezpur University was awarded with the Centre for Endangered Languages under the UGC scheme: "Establishment of Centres for Endangered Languages in Central Universities". This Centre is the Nodal Centre for the consortium of Northeast India comprising of Tezpur University, Rajiv Gandhi University and Sikkim University. The Centre is attached to the Department of Linguistics and Language Technology.

Courses offered

Two CBCS courses are offered in each semester (Academic session):

1. LE223: Language Society and Endangerment
2. LE224: Language Policy, Education and Language Revitalization

Faculty and Areas of Interest

Professor

Madhumita Barbora *, Ph.D. (TU) -(Retired, on extension till March 2024)
Linguistics (Syntax, Psycholinguistics), Field Linguistics, Documentation

Gautam K. Borah*, Ph.D. (NTNU)-HoD
Linguistics (Syntax: Construction Grammar, Semantics), Cognitive, Linguistics, Philosophy of Language, Cognitive Poetics, Literary Theory

*** Recognized Ph.D. Supervisor**

ACRONYMS

TU– Tezpur University; **NTNU**: Norwegian University of Science and Technology Norway; **JNU**: Jawaharlal Nehru University New Delhi; **IITG**: Indian Institute of Technology Guwahati;; **MU**- Manipur University

Assistant Professor

Arup Kumar Nath*, Ph.D. (JNU)
Language Typology, Morphology, Sociolinguistics, Language Documentation, Field Linguistics

Bipasha Patgiri, Ph.D. (TU)
Phonology, Historical Linguistics, Semantics

Amalesh Gope, Ph.D. (IITG)
Acoustic Phonetics, Experimental Phonology, Computational Linguistics, and Language

Facilities

1. The Centre has the following equipment available with them to be used for the research work:
 - Apple iMac Workstation for Recording & Editing; YAMAHA 12XU 12 Channel Professional Mixing Console; Denon DN -4SOR Professional Grade Installed Recording Device; Presonus Audio box i2 Soundcard; PresonusHP4 Head-phone Amplifier; Video Camera full HD recording (MODEL: HTC- MDH2M); Video Camera (MODEL: HC- X1000); Camera (MODEL: COOLPIX P900); Recorder - Olympus LS-100
2. The Centre has two laboratories for various purposes.
 - Phonetic Lab (With 20 seat capacity)
 - Documentation Lab (Recording and Editing Suite)
3. The Centre has three smart classrooms and a Multipurpose Hall, well equipped for Workshops, Seminars and Conferences etc.
4. The Centre has newly set up an Audio-Video Conference Room and a Archival-Cum Library Room.
5. The Centre has number of books available for use for the Master's and Ph.D. students for references.

Research Activities

1. No. of papers published in the year 2022-2023: 14
2. No. of ongoing research projects: 03
3. No. of current Ph.D. scholars: 16

Selected Publications

- Barbora, M. and Borah, G. K. (eds). 2021. The Syntax of Biate, Hrangkhoh, Khelma, Onaeme, Purum, Liangmai and Yimchunger. Lesser Studies Language Series, Vol III. Guwahati: S.S. Graphics. ISBN:978- 93 91902-14-8.
- Nath, A. K., Longmailai M. and Shrougrakpam D. (eds). 2021. The Morphology of Biate, Hrangkhoh, Khelma, Onaeme, Purum, Liangmai and Yimchunger. Lesser Studies Language Series, Vol II. Guwahati: S.S. Graphics. ISBN: 978-93-91902-12-4.
- Patgiri, B., Gope, A. and S, Bobita (eds). 2021. The Phonology of Biate, Hrangkhoh, Khelma, Onaeme, Purum, Liangmai and Yimchunger. Lesser Studies Language Series, Vol I. Guwahati: S.S. Graphics. ISBN: 978-93-91902-13-4.
- Gope, A. 2021. «The Phonetics of Tone and Voice Quality Interactions in Sylheti.» Languages 6, no. 4: 154. <https://doi.org/10.3390/languages6040154>.
- Mahanta, S., Gope, A. and Raychoudhury, P. 2021.«Pitch Range and voice Quality in Dimasa Focus Intonation» Languages 6, no. 4: 185. <https://doi.org/10.3390/languages6040185>.

Outreach Activities of the Centre as Research Work

The faculty, research associates and field assistants of the Centre are divided into six (7) groups for collection of data from some of the endangered languages of the Northeast Region. Till date five (5) field works have been conducted by the 7 groups. An Awareness Programme for Documentation and Revitalization of the endangered Language was organized by the CFEL staff with the community members at their respective fields.

The staff went for field work to Manipur, Nagaland and Dima Hasao Area and Tinsukia District of Assam for collection of data. The table below shows the details:

Areas, Language of Research

Sl. No.	State	Groups	Chosen Endangered Language
1	Assam	Dima Hasao Areas	Biate
2		Dima Hasao Areas	Khelma
3		Dima Hasao Areas	Hrangkhoh
4	Manipur	Senapati District	Onaeme
5		Kangpokpi District	Purum
6	Nagaland	Tening Peren District	Liangmai
7		Tuensang District	Yimchunger

Centre's Publications

- Seven Learner 's Book written on the seven endangered languages are published and handed over to the endangered language community. The books are:
 - A Learner's Book of the Biate Language
 - A Learner's Book of the Khelma Language
 - A Learner's Book of the Hrangkhoh Language
 - A Learner's Book of the Onaeme Language
 - A Learner's Book of the Purum Language
 - A Learner's Book of the Liangmai Language
 - A Learner's Book of the Yimchunger Language
- The Phonetics and Phonology of Biate, Khelma, Hrangkhoh, Onaeme, Purum, Liangmai and Yimchunger
- The Morphology of Biate, Khelma, Hrangkhoh, Onaeme, Purum, Liangmai and Yimchunger
- The Syntax of Biate, Khelma, Hrangkhoh, Onaeme, Purum, Liangmai and Yimchunger

For more information, one can visit the centre website <http://www.tezu.ernet.in/wmcfel/>

Centre for Inclusive Development (CID)

As enshrined in the Tezpur University Act, 1993, one of the objectives of the University is to educate and train manpower in an equal learning space. In line with the spirit of this objective, the Centre for Inclusive Development was established in 2013. The prime objective of the Centre is to play a catalytic role in uplifting the needy and underprivileged students at the university, particularly, in the academia and intellectual sphere, through education, training & engagement and counselling. In pursuance of this, the centre proactively makes all out efforts to identify areas requiring intervention and takes appropriate measures for improvement through special remedial programmes such as need-based training, remedial classes, coaching, etc.

Following a Memorandum of Understanding between Tezpur University and the Dr. Ambedkar Foundation, Ministry of Social Justice & Empowerment, Government of India, signed on April 22, 2022, at Banaras Hindu University, a year-long coaching programme for civil services examination of the Union Public Service Commission/State Public Service Commissions under the *Dr. Ambedkar Centre of Excellence* scheme of the Ministry, was started at the Centre. Under the programme, 48 students belonging to the Scheduled Caste (SC) category enrolled for the coaching programme for the batch 2022 – 2023. Necessary infrastructure and manpower were put in place for carrying out the programme and the classes began on October 17, 2022.

Programmes Offered:

1. Diploma (PG) in Child Rights and Governance (ODL Mode)
2. Year-long Coaching Programme for Civil Services (under *Dr. Ambedkar Centre of Excellence* scheme of the Ministry of Social Justice & Empowerment, Govt of India).

Faculty and Areas of Interest

Director

Rajeev K. Doley, Ph.D. (IITG)
English, Sociolinguistics

ACRONYMS

IITG– Indian Institute of Technology Guwahati, **VB**-Visva Bharati Santiniketan , **DU**-Dibrugarh University,

Facilities

The Centre has well-equipped classrooms and a computer laboratory with internet connectivity and instructional audio-video aids. The Centre also has an air-conditioned presentation room and a seminar hall to facilitate student activities such as seminars, workshops, group discussions, etc. To meet other requirements, the central facilities of the University and those of other Departments are used as and when required.

For more information one can visit the Centre website http://www.tezu.ernet.in/About_CID.pdf

Centre For Innovation Incubation and Entrepreneurship (CIIE)

The Centre for Innovation Incubation and Entrepreneurship (CIIE) has been established with the objective for promoting specialized knowledge in the field of entrepreneurship development, innovation, and creative ideas. In view of the worldwide shortage of jobs (both government and private sectors) leading to unemployment problems and lack of proper utilization of human resources, the CIIE strives to identify talented youth and motivate them to entrepreneurial and innovation works. The centre plans to develop various innovative ideas with the students and local youth.

TUNOVATION

There is an active Innovation Club in the University. The Centre for Innovation, Incubation and Entrepreneurship encourage the students in innovation and creative works. There is an Exhibition Hall (TUNOVATION) which displays the innovations developed by the students and faculty of the University. The several innovations in the field of energy saving, food processing etc. can be seen in the display hall.

For more information one can visit the centre website <http://www.tezu.ernet.in/ciie>

Chandrababha Saikiani Centre For Women Studies (CWS)

Chandrababha Saikiani Centre for Women Studies (CSCWS), Tezpur University was established in the year 2009. The University Grants Commission (UGC), New Delhi approved the proposal no. F. No7-1/2012(Ws) dated 6th of March 2012 for continuation of Women Study Centre (WSC) at Tezpur University. The UGC has also revised the pattern of positions and financial assistance for WSC, Tezpur University. The centre supports redistribution of women power and control of resources in favour of women. The vision of Chandrababha Saikiani Centre for Women Studies, Tezpur University is to provide a platform and promote studies on women belonging to the diverse socio-cultural milieu of Northeast India. The priority of CSCWS is to build a body of information and knowledge resource pool regarding women of this region. The centre is running CBCT Courses from 2012. The Post Graduate Programme in Women Studies is an interdisciplinary programme. The syllabus is framed according to NEP 2020 in a modular mode. The duration of the PG programme is 2 years or 4 semesters.

Programme Offered

1. Ph.D.
2. M.A. in Women Studies
3. P.G Diploma in Women Studies[#]

Proposed to be discontinued from Academic Year 2024

Faculty and Areas of Interest

Associate Professor

Madhurima Goswami *, Ph.D. (TU)- HoD

Gender Studies, Critical Theory, Performance Studies

Assistant Professor

Mousumi Mahanta., Ph.D. (TU)

Women Studies, Women and Mental Health, Feminist Research Methodology

*** Recognized Ph.D. Supervisor**

ACRONYMS

TU- Tezpur University, HoD - Head of the Department

Research Activities

1. No. of papers published in the year 2022-2023: 07
2. No. of ongoing research projects: 03
3. No. of current Ph.D. scholars: 04

Selected Publications

- Mahanta M. Axomia Sristixil Xahityat Mohila Manaxik Rogi. *Satsari*, 18(2), pp.62-64, 2022.
- Goswami M. Women Trafficking: Subtle lying challenge towards building equity. In: *Comprehending Equity*. (Eds. Kikhi K, Gautam D R), Routledge: London & New York, pp.137-147, 2022, ISBN:978-1-032-23411-3.
- Daimary E, Daimary I. Ecofeminism and Bodo Folktales and Folk Songs. In: *Indian Feminist Ecocriticism*. (Eds. Douglas A V, Anae N), Lexington Books: London, 2022, ISBN-978-166690-871-8.
- Mahanta M. Mahapurush Sankardeva Nari Charitrar Kritiswa. In: *Satriya Sanskritir Prabandha Sambhar*. (Ed. Goswami BP), pp.196-199. 2022.
- Mahanta Mousumi (2023). "Identity Revivalism through Folk Dances amongst the Tribal Communities of Assam". *Reflections of Dance among the Brahmaputra: Celebrating Dance in North East India*. Ed. Nath Debarshi Prasad, Buck Ralph, Snook Barbara, Routledge: London & New York.
- Goswami, Madhurima (2023). "Identity Revivalism through Folk Dances amongst the Tribal Communities of Assam". *Reflections of Dance among the Brahmaputra: Celebrating Dance in North East India*. Ed. Nath Debarshi Prasad, Buck

Ralph, Snook Barbara, Routledge: London & NewYork.

For more information one can visit the centre website <http://www.tezu.ernet.in/wsc>

Malaviya Mission Teacher Training Centre

The Malaviya Mission Teacher Training Centre (MMTTC), Tezpur University was inaugurated in January 2016 as a Centre of Excellence for Curriculum and Pedagogy under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) scheme. The scheme was launched by Department of Higher Education, Ministry of Education (erstwhile MHRD), Gol. TLC envisages developing and promoting a responsive and relevant teaching learning system for higher education communities and contributing to excellence in teaching and learning as an innovative and resourceful centre through the optimal use of technology.

Major objectives

- To organize workshops and seminars to facilitate capacity building.
- and professional development of teachers.
- To aid and support for promoting best practices in teaching learning environment through research and dissemination of already generated knowledge.
- To generate and maintain learning materials and resources for easy access to learners and teachers.
- To develop discipline specific (pedagogy, language, and social sciences) curricular framework for professional development Programme
- To prepare an outline of different pedagogy and scheme of assessment and evaluation method of different disciplines.

Target group

- College and University Level Teachers
- Researchers and PG Students.

Faculty and Areas of Interest

Director

Subhrangshu Sekhar Sarkar, Ph.D. (TU)

Accounting, Taxation, Social Development Issues.

Deputy Director

Bipul Kr. Sarmah, Ph.D. (TU)

Theory of Partitions, Ramanujan Mathematics
Assistant Professors

Swapnarani Bora, Ph.D. (DU)

Folklore, Sociolinguistics, Assamese Studies

Ikbal Hussain Ahmed, M.Phil. (DU[^]) B.Ed(G.U)

Philosophy , Applied Ethics, Philosophy of Education.

ACRONYMS

TU–Tezpur University, DU–Dibrugarh University, DU[^]- Delhi University, GU - Gauhati University

Major facility

- One ICT Lab.
- Lecture Recording and Resource generation.
- Teachers trained: 6000

Major Achievements

MMTTC, TU has conducted till now more than 90 programs and trained more than 6000 teachers and prospective teachers. Through these programs MMTTC has been providing assistance and support for promoting best practices in teaching learning environment among higher education communities.

Focus areas of the conducted activities are teaching learning pedagogy, generating resources in specific fields of pedagogy and professional development through various skills. During this period two books on pedagogy are published.

Number of e-content (video) developed: 93. These videos are freely available in the YouTube channel of MMTTC, Tezpur University for teachers and researchers.

For more information, one can visit the centre website <http://www.tezu.ernet.in>

Centre for University and Industry Interface (CUII)

The Centre for University-Industry Interface (CUII), Tezpur University was set up in the year 2017. The centre intends to act as a bridge providing an elegant connection between the Industry and the University. This connection is expected to harness and accelerate interactions between the Industry and the University to contribute towards delivering quality education and R&D outputs.

Technology Enabling Centre (TEC)

DST-TEC is a DST funded centre established at Tezpur University in the Year 2019 with the objective to create an Ecosystem for Technology Development in the Universities and academic institutions in Assam and nearby NE states, and to provide a platform to network researchers with other institutes, National laboratories, and Industry.

Centre for Multidisciplinary Research (CMDR)

Multidisciplinary has been a unique feature of educational programmes offered by Tezpur University since its inception in 2020. This is further strengthened with the introduction of open electives/ CBCS (Choice based credit system) in its academic curriculum. The courses of discipline-specific programmes are designed integrating courses of several other disciplines covering Science,

Technology, Engineering, Management, Humanities, and Social Sciences. Similarly, the research carried out as per academic requirements (viz., PhD, PG and UG) also collaborate with disciplines other than parent disciplines. Some of the externally funded research projects are also multidisciplinary in nature, with the involvement of more than one Department. The Centres and Chairs of Tezpur University are functioning with multidisciplinary set-up. There are several research publications having authors belonging to different Departments.

With such a proven background as mentioned, Tezpur University formally instituted the Centre for Multidisciplinary Research (CMDR) in the year 2020 to widen up and formalise multidisciplinary education further.

Vision of CMDR is to contribute development of human resource catalyzing multidisciplinary research and education through the provision of an integrated and holistic platform.

The missions are (i) promotion of multidisciplinary research and education required to handle 21st century issues and challenges, with special reference to regional context, through meaningful integration of Arts, Languages, Humanities & Social Sciences, Management Sciences, Sciences, Engineering and Vocational fields and (ii) to facilitate multidisciplinary activities covering key thematic areas, viz., ethics of social engagement, sustainability, and soft skills for learners engaged in rigorous specialization in a chosen field or fields.

Indian Knowledge Systems Division of Ministry of Education (MoE) has awarded a Multidisciplinary IKS Centre titled 'Exploring Knowledge on Medieval Assam' to Centre for Multidisciplinary Research (CMDR) in 2023.

Focus areas of research of the centre:

- 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
- Naamghar and other traditional places of worship: modernity, cultural vibrancy
- Sustainable garbage management: multidisciplinary approach
- Road safety: multidisciplinary approach handling technology advancement and human behaviour
- Innovation in tackling environmental issues.
- Pharmaceutical Research
- Renewable and Sustainable Energy System
- History of Science
- Technology and Learning
- New applications of mechatronics

Programs Offered

1. Ph.D. in Multidisciplinary Research

Facilities

The Centre has access to well-equipped classrooms, computer facilities with internet connection and Software as required to carry research in Multidisciplinary areas. The research laboratories and other facilities of the University are availed by the Research Scholars of the Centre.

Faculty and Areas of Interest

Director

Debendra Ch. Baruah, PhD (PAU) Professor, Department of Energy

Centre Advisory Committee (CAC)

- Director, Centre for Multi-Disciplinary Research, T.U.
- Prof. Debendra Chandra Baruah, Dept. of Energy, T.U.
- Prof. Gautam Kumar Borah, Dept. of LLT, T.U.
- Prof. Nayandeep Deka Baruah, Dept. of Math. Sc, T.U.
- Prof. Robin Dutta, Dept. of Chem. Sc, T.U.
- Prof. Papori Baruah, Dept. of BA, T.U.
- Prof. Utpal Sharma, Dept. of CSE, T.U.
- Prof. Ruli Borah, Dept. of Chem. Sc, T.U.
- Prof. Joya Chakraborty, Dept. of MCJ, T.U.
- Prof. Suvendra Kumar Ray, Dept. of MBBT, T.U.
- Prof. Pritam Deb, Dept of Physics, T.U.
- Prof. Rabin Deka, Dept. of Sociology, T.U.
- Prof. D.P. Nath, Dept. of Cultural Studies, T.U.
- Prof. Manuj Kumar Hazarika, Dept. of FET, T.U.
- Dr. Siddharta S. Satapathy, Dept. of CSE, T.U.
- Dr. Paragmoni Kalita, Dept. of ME, T.U.
- Dr. Rupak Mukhopadhyay, Dept. of MBBT, T.U.
- Dr. Akhilesh Kumar, Dept. of Education, T.U.
- Dr. Sanjib Deka, Dept. of Assamese, T.U.
- Prof. Ramesh Chandra Deka, Vice-Chancellor, Cotton University (External members)
- Prof. Vimal Katiyar, Dean (R&D), IIT Guwahati (External members)

For more information one can visit the centre website <http://www.tezu.ernet.in/cmdr/>

Centre for Disaster Management

The Centre for Disaster Management was established in 1997 under the Central Sector Scheme of NDM Division, Ministry of Agriculture and Cooperation, Government of India. The scheme has subsequently been transferred to the Ministry of Home Affairs, Government of India during 2002. At present the centre is functioning under Tezpur University. The centre is involved in conducting training, workshops, and conferences on different aspects of disaster management for different target groups. Centre is also offering open elective courses on disaster management at UG and PG levels. One Diploma Programme on Environment and Disaster Management is being offered by the centre in association with Department of Environmental Sciences under CDOE of Tezpur University.

Programme Offered

1. Diploma Programme in Environment and Disaster Management under CDOE.

Faculty and Areas of Interest

Assistant Professor

Dipak Nath, Ph.D. (GU), HoD(i/c)

Disaster Risk Assessment and Risk Mitigation Approaches

ACRONYM

GU-Gauhati University

Selected Publications

- Nath, D. & Nath, R. D. (2023). Scopes and barriers for effective management of biological hazard induced pandemic: Lessons from 1918 Spanish flu and 2020 COVID19. *International Journal of Health Sciences*, 6(S2), 10840–10850. (<https://doi.org/10.53730/ijhs.v6nS2.7902>).
- Deb Nath, R. & Nath, D. (2018) Status of Tribal Women: A Case Study on Barman Women of Dhanipur Village, Cachar, Assam, *Intellection: A biannual interdisciplinary research journal*, Vol.VI,No.I (ISSN: 2319-8192).
- Nath, R. D. & Nath, D. (2016) Comprehensive model for Health Risk Assessment with a case study on Three Rural Communities of Chachar District, Assam, India, *Journal of International Academic Research for Multidisciplinary*, 4(2),224-239.

For more information one can visit centre website [www://tezu.ernet.in/cdm](http://tezu.ernet.in/cdm)

ONGC Centre for Petroleum Biotechnology (ONGC-CPBT)

Established at the Department of Molecular Biology and Biotechnology (MBBT) in the year 1999 with financial support from the Oil and Natural Gas Co-operation by signing an MOU. Finally, on 30th April 2010, shaped into a permanent centre with the to conduct research in the field of petroleum biotechnology and develop skilled human resource.

Dr. Ambedkar Centre of Excellence

The Centre is also taking care of the activities under Dr. Ambedkar Centre of Excellence established by Dr. Ambedkar Foundation, Ministry of Social Justice & Empowerment, Govt. of India, under a Memorandum of Understanding (MoU) with Tezpur University. Currently, 48 students belonging to the Scheduled Caste (SC) category are undergoing a year-long training/coaching programme for the UPSC Civil Services Examination which also encompasses other similar examinations.

Faculty and Areas of Interest

Director

Rajeev K. Doley, Ph.D. (IITG)

English, Sociolinguistics

ACRONYMS

IITG– *Indian Institute of Technology Guwahati*

Computer Centre

The Computer Centre (CC) serves the whole university with ICT services. It is the main ICT resource centre for the whole University. Computer centre maintains and offers two well-equipped Computer Laboratories with modern computational capabilities. Computer laboratories maintained by Computer Centre are used by students and university employees for the purposes like classes, assignments, workshops, online interviews, computational needs, etc.

ICT services across the whole campus of the university are served by the Computer Centre through its dedicated team. The Computer Centre team comprises technical staff of various levels and directions of skills. Computer Centre also serves as the support system for the University Community in the terms of Computing Hardware, Software and Network related activities and there is a constant endeavour to envisage better services under its umbrella.

The campus-wide Local Area Network (LAN) is equipped with 10 Gigabit backbone and high-speed Switching Network Devices. Most of the components in its Local Area Network (LAN) are Internet Protocol (IP) based and therefore has its manageability mostly centralized. All academic departments, offices, hostels, facilities and residential apartments are connected over LAN and WiFi network. There are a number of medium to high range of servers and storages which run on a 24x7 basis on a dedicated air-conditioned server room. Also, a High-Performance Cloud (HPC) Server is introduced into the pool of servers in the Computer Centre.

The Website, Email and Internet services are fully hosted in-house with its own set of servers and storages and run on a 24x7 basis. A number of applications developed in-house by the Computer Centre Staff are used extensively in the automation process of administration, academic departments and other user departments. Most of such applications are also self-hosted in-campus.

The Computer Centre has a multifunctional 70-seater state-of-the-art Video Conferencing facility for Online Meetings, Interviews, conferences and Virtual Classes etc. Furthermore, a recording studio cum virtual classroom is also established to aid in recording and preparation of audio/video lectures and conducting online classes of University.

Other important services rendered by the Computer Centre are the Campus Telephony System and the Video Surveillance System which runs over the Campus's LAN. The Internet facility is being provided through the high performance 1Gbps link of National Knowledge Network (NKN) and an additional leased line of capacity 100Mbps.

The Campus Connect WiFi Scheme of the MHRD has been operational since 2017 which mostly covers academic complexes, administration, student hostels and student activity areas with a user base of 4300. The WiFi services under this scheme are fully maintained and managed by resident company engineers.

Services Provided by the Computer Centre

The primary goal of the Computer Centre is to provide quality ICT services including computational and internet facilities to the University community. In addition to maintenance of computational infrastructure, the following services are supported by the Computer Centre:

- Email & Internet Services
- Credit/audit practical courses of different Departments
- Organizing practical sessions for various workshops and refresher courses of various Academic Departments.
- Organizing training programmes for the University Employees.
- Assist Administration in selection and procurement of computing resources.
- Providing maintenance services for computers/ peripherals to the Faculty/Staff /Departments
- Maintaining and monitoring the Campus LAN.
- Maintaining and monitoring various Internet Links
- System Administration, Network Administration and monitoring of various servers - Email, Web, Application, Database, Proxy, Firewall, etc.
- Maintaining University Website and intranet portal.
- Develop, procure, and maintain software for administration and other sections of the University.
- Software maintenance Services.
- Providing presentation assistance in the auditorium and conference halls.
- EPABX system administration and maintenance.
- IP CCTV Surveillance Management

Academic Programmes and Student intake

Programme	Student Intake
DOEACC 'O' Level Diploma	30
DOEACC 'A' Level Diploma	20

Major Facilities and Equipment Available

SL	Particulars	Hardware (Make/Model)	Qty
1	Video Conferencing System	Polycom 8000 Series	1
2	VoIP Telephony Server with 1200 Extension capacity	Avaya S8500 with Avaya Media Gateways G650 (2Nos), G450(2Nos), G700(5Nos), G430(2Nos)	1
3	Core Switch with 64 10G Ports	Cisco C6807-XL	1
4	Distribution Switch with 32 10G Ports	Cisco WS-C3850-24XS	1

			6
5	Access Switches	Cisco WS-C2960X-24TD-L	80
		Extreme X350 48T	56
		Extreme X350 24T	19
		Allied Telesis AT-x510L-28GT	11
		Allied Telesis AT-x510L-52GT	3
		HP 2520G	9
06	Firewall	Huawei Eudemon 200E-X7	1
07	Router (NKN)	Cisco ASR 1000	1

Servers

SL	Server Particulars	Hardware (Make/Model)	Operating System and Application Platform
1	Secondary Storage Server	HP StoreEasy 1650	Windows Storage Server 2012
2	Email cum DNS Server	Dell PowerEdge R730xd	CentOS 6.4/ Sendmail, Bind
3	Proxy/NAT/Firewall Server	Dell PowerEdge R730xd	CentOS 6.4/ Squid Proxy 4.0
4	Email Storage Server	Dell NX 3230	Windows Storage Server 2012 R2
5	Proxy Storage Server	Dell NX 3230	Windows Storage Server 2012 R2
6	Application Server	Dell PowerEdge 540	Windows 2019 Server/ xampp
7	Database Server	Dell PowerEdge R740xd	Windows 2019 Server/ MySql
8	Oracle 10g Database	IBM/X3560	Windows 2008 R2 Server/ Oracle 10g DB
9	Application Server	IBM/X3560	Windows 2008 R2 Server/ MySql-XAMPP
10	Video Streaming Server	IBM/X3650 + IBM/DS3524	Windows 2008 R2 Server/

	with Storage		Adobe Media Server 5
11	Web Server	IBM/X3560	RHEL 6/Apache

Computer Terminals & Peripherals Available

Unit No	Unit Name/Location	Terminals & Peripherals
Unit-0	Central Computer Centre (Academic Building -2)	Terminals = 60 (Core i5 / Windows 7 Pro./Windows 10 Pro. Desktops)Scanner = 2 Projector =1
Unit-1	Computer Centre-Cluster-1(SoE Complex)	Terminals = 100 (Core i5 / Windows 10 Pro. Desktops)Laser Printer =1 Scanner = 1 Projector = 1

Software Subscriptions

Sl. No.	Packages	Renewal Period
1	Microsoft Campus Agreement	Yearly
2	Kaspersky Total Space Security	Yearly

Other Important Activities of the Centre

- Setting up and Use of G-Suite for Education account of Tezpur University to cater the need of an LMS (mainly Google classroom, Google meet) for online teaching-learning activities from academic session Autumn 2020. More than 5000 user accounts have been created already.
- To cope with the pandemic and growing need to work from home, Computer Centre has started rolling out WiFi services to quarters of teaching staff and other officials.
- Computer Centre has also stepped into world of cloud computing with ongoing installation of infrastructure.
- A total of 25 smart classrooms have been established in the University across 25 different departments under 4 schools.
- A recording studio cum virtual classroom is also being built to aid Tezpur University in Audio/Video lectures recording and editing activities and conducting online classes.

Director

Nityananda Sarma, Ph.D. (IIT Guwahati)
Professor, Department of Computer Science &
Engineering Specialization
Ad Hoc Networks, Mobile Computing E-mail:
nitya@tezu.ernet.in

Technical Staff

Engineer

Dhiraj Kumar Sarma, BE(DU), MS (Tezpur)
Specialization/Areas of Interest: Computer
Networks and Security E-mail: dhiraj@tezu.ernet.in

Junior Programmer

Dipak Chandra Choudhury, MCA (Tezpur)
E-mail: dcc@tezu.ernet.in

Jamil Ahmed, MTech(CSE) (NIT, Meghalaya)
E-mail: jamil@tezu.ernet.in

Senior Technical Assistant

Abani Kumar Das, Diploma in Engg. (CSE)
E-mail: abani@tezu.ernet.in

Nirnanjan Kumar Deka, Diploma in Engg.
(Electronics & Telecommunication)
E-mail: nirnanjan@tezu.ernet.in

Technical Assistants

Manjul Baruah, Diploma in Engg (CSE)
E-mail: manjul@tezu.ernet.in
Prandeep Borah, DOEACC-A Level, MS(IT)
E-mail: prandeep@tezu.ernet.in
Raghvendra Choudhary, Diploma in Engg (CSE),
CCNA
E-mail: raghav@tezu.ernet.in
Milan Jyoti Deka, BTech(GUIST)
E-mail: milan16@tezu.ernet.in

Other Support Staff

1. Multi Tasking Staff: 03
2. EPABX Technicians: 01 (Contractual)

For more information, one can visit the centre website <http://www.tezu.ernet.in/compcentre>

Centre for Distance and Online Education (CDOE)

The Centre for Open and Distance Learning (CODL) was established in 2011 and renamed as **Centre for Distance and Online Education (CDOE)** in 2020 with the aim of disseminating knowledge and imparting quality education through open and distance learning mode. The centre offers various postgraduate, diploma and certificate programmes in emerging areas of science, social sciences, management, and humanities with flexible system to cater to the needs of the learners who otherwise cannot avail the regular mode of education. The basic focus of the centre is to prepare human resources of the region and the country by making them skilled and employable.

Director

Dr. Akhilesh Kumar, Ph.D. (RKMVU).
Education and Special Education, Guidance and Counselling, Distance Education
Faculty and Areas of Interest

Assistant Professor

Suchibrata Goswami, Ph.D. (DU)
English (American Literature, Post-Colonial Writing)

Madhusmita Boruah, Ph.D. (TU)
Mass Communication (Advertising and Public Relation)

Akumsenla Kichu, M.A (UNOM).
Sociology (Sociology of Health)

Programme Coordinators

Kapou Malakar, Ph.D. (TU)
Programme: M.A. in Mass Communication

Pamidi Hagjer, Ph.D. (GU)
Programme: M.A. Sociology

Esther Daimari, M.A. (GU), Ph.D. (GU), M. Phil. (GU)
Programme: M.A. English

Runumi Das, Ph.D. (GU)
Programme: Diploma in Human Resource Management

Dipak Nath, Ph.D. (GU)
Programme: Diploma in Environmental and Disaster Management

Nirmali Gogoi, Ph.D. (DU)
Programme: Diploma in Environmental and Disaster Management

ACRONYMS

TU-Tezpur University, **DU**-Dibrugarh University, **JNU**-Jawaharlal Nehru University New Delhi, **GU**-Gauhati University, **RKMVU**-Ramakrishna Mission Vivekananda Educational and Research Institute, **UNOM**-University of Madras.

Academic Session

The academic Session for the programmes under Distance Education commence twice a year usually in January and July, respectively.

Admission

- a) Admission notice: Notice for admission into the different academic programmes of the open and distance learning programmes of the University shall be issued by the Director, Centre for Distance and Online Education separately. The same shall also be put in the official website: http://www.tezu.ernet.in./tu_codl
- b) Fees: The fees and other charges payable by the candidates shall be decided by the Academic Council from time to time.

Learner Support Centres of CDOE Tezpur University:

1. Moridhal College, Moridhal, Assam
2. Barpeta Law College, Barpeta, Assam
3. Jengraimukh College, Majuli, Assam
4. Silapathar Town College, Silapathar, Assam
5. Mazbat College, Udalguri, Assam
6. Rangachahi College, Majuli, Assam
7. Goalpara College, Goalpara, Assam
8. Jorhat Kendriya Mahavidyalaya, Jorhat, Assam
9. Tezpur University, Tezpur, Assam

Degree and Diploma programmes offered by CDOE

Sl. No.	Programme	Eligibility	Department and School	Fees in Rupees (Under revision)	Duration (No. of semesters)	
					Min	Max
1	M.A. in Mass Communication and Journalism	Bachelor's degree in any discipline	Mass Communication and Journalism (School of Humanities and Social Sciences)	16,950/-	4	8
2	M.A. in English	Bachelor's degree in any discipline	English (School of Humanities and Social Sciences)	16,300/-	4	8

3	M.A. in Sociology	Bachelor's degree in any discipline	Sociology (School of Humanities and Social Sciences)	16,300/-	4	8
4	Diploma in Human Resource Management	Bachelor's degree in any discipline	Business Administration (School of Management Sciences)	10,450/-	2	4
5	Diploma in Environmental and Disaster Management	Bachelor's degree in any discipline	Environment Science (School of Sciences) and Business Administration (School of Management Sciences)	11,800/-	2	4
6	Diploma in Child Rights and	Bachelor's degree in any discipline	Centre for Inclusive Development	11,800/-	2	4

All the programmes offered by CDOE are permitted and recognized by University Grants Commission, New Delhi. For more information one can visit the Centre website at http://www.tezu.ernet.in/tu_codl

Section-VI: FACILITIES

Sophisticated Analytical Instrumentation Centre (SAIC)

Instrumental methods of analysis form an indispensable aspect of Research and Development. Tezpur University has several Departments and Centres working on areas which require sophisticated analytical equipment. Sophisticated Analytical Instrumentation Centre (SAIC) at Tezpur University has been set up to cater to these needs. The centre also extends these facilities to other educational institutions and industries within the northeastern region and beyond, as many of them do not have the resources to procure and maintain sophisticated analytical instruments. The Centre also provides demonstration of instruments and their utility in different fields of research to the UG/PG students at colleges.

The SAIC was established in 2010 with two equipment, namely, High-performance liquid chromatography (HPLC) and Gel permeation chromatography (GPC). Now thirty equipment including Transmission electron Microscope (TEM), Scanning Electron microscope (SEM), Single crystal XRD, Powder XRD, BET (Surface and Pore size) analyzer, Raman Spectrometer, Atomic absorption spectrometer (AAS), Nuclear magnetic resonance spectroscopy (NMR), Inductively Couple plasma optical Emission Spectrophotometer (ICP- OES) are under the umbrella of SAIC. The centre also focuses to install many sophisticated equipment like XPS, HR-MS, Confocal Microscope etc. in future.

High Performance Computing Facility

The facility in collaboration with C-DAC Pune consists of 12 TF HPC system having 50TB of storage capacity along with three numbers of C-DAC's indigenously built PARAM Shavak having compute power of around 3TF each for high performance computing in Big Data Analysis. It is expected to meet the high-performance computing needs of researchers from all over Northeastern India.

Food Quality Control Laboratory (FQCL)

Food Quality Control Laboratory (FQCL) is established with the support of grant-in-aid from Ministry of Food Processing Industry (MoFPI), GoI, with a financial assistance of Rs.202.7 lakhs in the year 2010. It is located at the Department of Food Engineering and Technology, Tezpur University. It started functioning on a commercial basis from December 2015, and secured NABL accreditation in July, 2017. Food Quality Control Laboratory (FQCL) at Tezpur University is set up to cater to the requirements of testing nutritional parameters of various food items by food industries and other organizations. The Laboratory also extends these facilities to other educational institutions and industries of the northeast region and beyond.

Quality Policy

The FQCL is committed to provide high quality testing service that consistently meets the expectations of customers and the requirements of ISO/IEC 17025 in the areas of its activities. The Quality Policy stipulates that:

- The management shall work to maintain good professional practice and quality of testing.
- The management system shall continuously strive to improve its effectiveness in fulfilling the requirement of ISO:17025.
- The laboratory shall meet requirements of customer as well as statutory and regulatory bodies.
- The quality manual shall maintain the structure of document needed for functioning the management and technical activities.
- The responsibility of Technical Manager and Quality Manager is defined for ensuring compliance with the International standard.
- Technical Manager and Quality Manager shall ensure compliance with the International standard.

The management is committed to maintain the integrity of the management system when changes in the management system are planned and implemented.

DBT Funded-Bioinformatics Infrastructure Facility (BIF)

Established at the Department of Molecular Biology and Biotechnology (MBBT), Tezpur University, in the year 2007 under the Biotechnology Information System Network (BTISnet) scheme of the Department of Biotechnology, Govt of India to promote

innovation in biology with the aid of Bioinformatics. Since its inception, BIF is imparting training in the field of bioinformatics to M.Sc. Molecular Biology and Biotechnology students, which is a mandate of the Department of Biotechnology, Govt. of India. To augment this, BIF has also started an e-Learning Management System (e-LMS) and a quarterly e-newsletter entitled "Tezubioin". BIF has been relentlessly making efforts to enhance the bioinformatics skills of students by providing state of the art computing facilities with the world's premier Bioinformatics software packages.

Section-VII: CELLS

Internal Quality Assurance Cell (IQAC)

As mandated by NAAC (National Assessment and Accreditation Council), Tezpur University Internal Quality Assurance Cell (TU IQAC) is engaged in a series of activities required to foster the spirit of quality among the individuals and Departments/Centres/Sections of the University. Besides, working for assured quality assessment for the career advancement of Faculty members, IQAC also carries out capacity building activities to support quality teaching-learning and assist feedback and mentoring exercises. IQAC meetings are organized at regular interval for deliberations on major issues concerning quality with appropriate monitoring of the follow-up actions. University's annual activities are appropriately accounted in the Annual Quality Assurance Report (AQAR) prepared by IQAC.

Notable Activities

Some of the notable activities conducted during the period 2022-2023 are highlighted as below:

1. Academic & Administrative Audit (AAA) for Barbhag College, Nalbari-Director, IQAC was invited for conducting Academic & Administrative Audit (AAA) held on 06 May 2022.
2. Weeklong Blended FDP on "Effective Teaching in Blended Learning Era"-Director, IQAC, Tezpur University addressed the event as Chief Guest organized by Teaching Learning Centre (TLC), Tezpur University in collaboration with Jhanji HNS College, Sivasagar, Assam during 09-15 June, 2022.
3. Attended as a member of the Centre for Internal Quality Assurance (CIQA) for Directorate of Open and Distance Learning (DODL), Dibrugarh University held on 15 June 2022.
4. Faculty Induction Programme for newly recruited Faculty members of Tezpur University was organized on September 28, 2022.
5. IQAC Committee meeting was held on December 26, 2022. Several important issues are deliberated in the meeting.
6. A session on Women in Development Paradigm: An Entrepreneurial Initiative jointly organized by Chandraprabha Saikiani Centre for Women Studies & IQAC, Tezpur University held on 13 March 2023.
7. Online Weeklong Short Term Training Program on "Enhancing Administrative Skills" (for teaching and non-teaching staff)- Director, IQAC, Tezpur University addressed in the event as Resource Person organized by TLC, Tezpur University during 24-30 May 2023.
8. Orientation Meeting for Data requirement on Ranking and Accreditation was organized during 03 to 10 November, 2023.

9. Constituting the Departmental Students Grievance Redressal Committee (DSGRC).
10. Prepared the framework/policy document for implementing the Policy on granting Seed Money for newly recruited Faculty members of the University.
11. Streamlining of previous year's Annual Self-Assessment for the Performance Based Appraisal System (PBAS) of the faculty members of the University.

Research and Development Cell (R&D)

The office of the Dean, R&D facilitates the implementation and smooth execution of extramural research projects funded by the various Government and non-Government funding Agencies like UGC, MHRD, DST, DBT, MeitY, AICTE, ASTEC, MOEF&CC, CPRI RSOP, DAE, DRDO, DRL, ISRO, ICMR, ICAR, ICHR, DHR, NEC, ICSSR, IUAC, CSIR, INSA, UNICEF, MoFPI, MNRE, ONGC and others. In addition, Dean R&D office manages the Departmental and institutional research project such as UGC-SAP and DST-FIST. The Dean R&D office also oversees the functioning of Tezpur University Ethical Committee, Tezpur University Animal Ethical Committee and Tezpur University Biosafety Committee. To create healthy environment for enhanced research potency, this office takes the responsibility for forwarding the research proposals submitted by faculty members to various funding agencies. It also governs the project implementation through advertisement and appointment of project staff; permission of field trips/visits to the project staff and investigators; permission to attend workshops/seminars/symposiums/ conferences as well as to visit different research laboratories by using the project grant and creates trained manpower.

The office also facilitates consultancy projects of faculty as per TU guidelines. In addition, the office also deals with various fellowship matters such as UGC-NET JRF, NFOBC, NFST, NFSC, ICSSR, RGNFST, MANF, DS Kothari, SVSGC, CSIR-JRF/SRF, DST-INSPIRE, DBT-JRF, SJPSGC etc.

For more information, one can visit the cell website <http://www.tezu.ernet.in/rnd>

Intellectual Property Rights Cell (TUIPR)

Tezpur University Intellectual Property Rights Cell (TUIPR Cell) was established in 2009 with a vision to develop human resource in the management of Intellectual Property Rights as an integral part of the innovation process and the innovation value chain in the University. Large number of patent, copyright and industrial design applications have been filed and granted for the innovations from Tezpur University. The Cell has organised several IPR awareness and faculty development programmes in the University Campus and across the entire Northeast region. The Cell is gradually building IPR consciousness in the region among different strata in the society. In 2020, the Department of Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industries, Govt. of India has awarded the prestigious IPR Chair to Tezpur University.

The DPIIT IPR Chair instituted at Tezpur University integrates Intellectual Property Rights (IPR) with the education process to enhance the quality of thinking, propagate a culture of regard and respect for IPR and ensure speedy and accurate identification and protection of innovations arising out of the research work carried out in the University. Also, it has focused on bridging the gaps between the industry and the academia for technology sharing and mutual research. The cell has been

constantly providing technical supports to the grassroot workers associated with different GI products in the region. Facilitation of GI authorized user status to large number Muga silk farmers of Assam is one of the major achievements of the Cell. As the Cell gains experience, it is also acting as a think tank on policy matters related to IPR in India with special emphasis on issues relevant to the North-East Region.

It's a matter of pride that young researchers from our university have received the Gandhian Young Technological Innovation (GYTI) Awards for the fourth time. In the year 2021, this prestigious award has been conferred for the innovative work on Battery less Electrochemical Sensor for Quantification, Removal of Naringin and Determination of Maturity of Citrus Fruits. Similarly in 2019 "Integrated and automated set up for preparation and vending of panipuri" was awarded this prestigious award. In 2018 "Novel Soil Conditioners" was awarded. In 2017 "Smartphone based system for detection and measurement of chemical and biological species in liquids" was awarded. In recognition to significant contribution in innovation and technology development, IPR Chair Professor, IPR Cell, Tezpur University has been adjudged for the prestigious Visitor's Award conferred by the President of India for Technology Development for the year 2020 for developing two-dimensional heterostructure based biodegradable film for food packaging.

The IPR Cell also conducts numerous skill development, faculty development, and IP awareness programmes. As part of the Silver Jubilee Celebration of Tezpur University and Decadal existence of the IPR Cell, a special IPR workshop was conducted for school children in Tezpur University campus on 1st October 2018. The Cell organizes Patent search and drafting workshops annually in the campus for the benefit of students and researchers. On 21st March 2022, the Cell organized an advanced training programme for senior police officials of Assam Police in Police Training Centre, Dergaon. In recent times, the Cell has conducted a day long Entrepreneurs' Meet on Considering GIs of Assam for better Agri-Business Opportunities on 4th March 2023. In collaboration with Loka Ushadhi Chikitsa Sewa Ashram, Telijan, Dhemaji, Assam, the Cell has organized a workshop on Folk Medicine, Traditional Knowledge and IPR on 22nd September 2023.

It has conducted many brainstorming and industry-academia conclaves to provide solutions to technological demands. During recent years, the Cell has been concerned on low number of "Authorized Users" for GIs of Assam. With the continuous support from the University, the Cell has been providing technical support and facilitated the registration process of more than 400 registered GI users from the state. The IPR Cell has also taken the initiative for filing new GI applications for the state and one has been filed recently for *Moran Ginger*. The IPR Cell has also published a booklet on "IPR and Entrepreneurship" to aid young entrepreneurs with IPR tools to progress their business.

The IPR Cell currently offers two open elective courses for UG and PhD students. The courses offer fundamentals of IPRs at undergraduate level and has been familiarizing research students with the nuances of IPR to help them integrate the IPR process in their research activities.

Profile of Tezpur University Intellectual Property Rights Cell

Item Type	Status	Total Number
Patents	Applied	55

	Published	53
	Granted	28
Designs	Applied	6
	Granted	4
Copyrights	Granted	3
Trademarks	Granted	2
Technology Transfer	Transferred	12

Courses Offered

The IPR Cell currently offers two open elective courses for UG and PhD students. The courses offer fundamentals of IPRs at undergraduate level and familiarizing research students with the nuances of IPR to help them integrate the IPR process in their research activities.

Training and Placement cell (T&P)

Graduate in Demand

Organization like Oil India, NRL, BCPL, BEL, Hexaware, Hitachi Vantara, Pmanifold, CodeYoung, Indigi Consulting, Aakash Byju's, Capri AI, Zsee smart Solutions, Vignan University, T.I.M.E, IB(G.o.I), Saint Gobain, Power Grid Corporation of India Ltd, Indradhanush Gas Grid Limited (IGGL), NEDFI , Amazon, Deloitte USI Consulting, Tata Consultancy Services , ITC Infotech, Infosys, Alstom, Wipro, Accenture, Capgemini, Cognizant Technologies, Tech Variable, Spectrum Eduservices, Bharti Airtel Ltd, Hindustan Unilever, Tata Consumer Products, Reliance Consumer Brands, Reliance Retail, Colgate Palmolive Ltd, Velocity, Siemens Technology and Services, Landmark Group, MRF Limited, Perfetti Van Melle India, UDAAN, Adfactors PR, Cactus Communications, Software AG, KEC International, FlexDay Solutions, Nav Prayukti Pvt Ltd. , Imeg, Aurigene Discovery Technologies, Accolite Digital, Synopsys, Netenrich Technologies, Antares Tech, WazirX, Tech Variable, Allegion, C-DAC, Dr. Reddy's Laboratories, Havells, IDBI Bank, BYJU'S, Aurigene Pharmaceutical Services, ITC, Intel, Asian Paints, Berger Paints, Pantaloons, SBI Life , AMUL , DHL , HDFC Bank, Dalmia Cement, L&T ECC, L&T Technology Services, Betsol, Zaloni Technologies, PRADAN, ICICI Bank, Marico, Mahindra Finance, Axis Bank ,Bandhan Bank, Vivekananda Kendra Vidyalayas, Loadshare, UTI AMC Ltd, Gandhi Fellowship-Piramal Foundation, Svatantra Microfin Pvt. Ltd., Federal Bank, Apollo Tyres, GlaxoSmithKline, Crompton Greave Electrical Pvt Ltd, Azim Premji Foundation, Ramoji Film City, Sesta, ASOMI Finance, Montex Glass Fibre Industries , HDFC AMC ,UNICEF, Teach for India, ETV , Vodafone idea Limited, Edelweiss Wealth Management, MSL India, PaperTrue, and many more conducted recruitment process for our University students. 94 UG & 141 PG students have been placed in various organizations for the academic year 2022-23. Placement for the 2023-24 batch is already going on.

Organised Sessions

- Sessions on Personality development, Resume building, Presentation Skills, Mock GD and Interviews.
- Corporate Orientation programmes like Corporate expectation about fresher, Corporate culture & etiquette, New career options available in Market etc.
- Webinars on creating impressive Professional profiles in digital platforms and Career Awareness programmes by alumni working in various firms.
- Organised various career counselling programmes through guest lectures, awareness programmes, seminars etc
- Technical Trainings on Data Science, IOT, Python, CATIA , STAADPRO, SAP2000, MATLAB, AutoCAD, 'C', JAVA, ETabs and Verilog etc.
- Scientific officers from BARC Mumbai delivered awareness session on OICP and opportunities in the Department of Atomic Energy.
- Awareness programme on various fellowships like Fulbright Fellowships for Indian Nationals, Graduate fellowships in the United States conducted by USIEF and DAAD fellowship for Study & research in Germany by German Academic Exchange Services etc.
- Workshops on how to crack UPSC/APSC/SSB/Bank POs etc.

Working with Employers

The Placement Cell works closely with students and recruiters to ensure that the students get connected with the right Organisations. The cell creates and builds trust among the organization which we are working with, and they become regular recruiters of our university. To make this tie-up more effective we use to send our students for internship in those organisations, promote industry visits and help them to fill their experienced human resource requirements through our alumni.

Alumni Network

The alumni network of our university serves as one of the valuable sources for internship and final placement opportunities for our students. Some alumni actively bring their respective organizations for campus placements, share off-campus opportunities, and provide guidance to help students secure lucrative jobs and develop successful careers. The Alumni Association and the Alumni Cell regularly organize career guidance programs to groom our current batch of students.

For more information, one can visit the website http://www.tezu.ernet.in/TP_ENGG (for engineering) and <http://www.tezu.ernet.in/tp> (for non-engineering)

Section-VII: IMPORTANT ANNEXURES
Annexure I: Prescribe Formats of Important Documents

Prescribed Format of OBC (NCL) Certificate/As per Govt. format

**FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES APPLYING FOR APPOINTMENT TO POSTS/
ADMISSION TO CENTRAL EDUCATIONAL INSTITUTIONS (CEIs), UNDER THE GOVERNMENT OF INDIA**

This is to certify that Shri/Smt./Kumari.....son/
daughter of Shri/Smt of village/town.....
District/Division..... in
the.....Community which is recognized as a backward class
under:

- i) Resolution No. 12012 / 68 / 93BCC(C) dated 10 / 09 / 93 published in the Gazette of India Extra Ordinary Part I Section I No.186 dated 13 / 09 / 93.
- ii) Resolution No. 12012 / 9 / 94BCC dated 19 / 10 / 94 published in the Gazette of India Extra Ordinary Part I Section I No. 163 dated 20 / 10 / 94.
- iii) Resolution No. 12012 / 7 / 95 BCC dated 24 / 05 / 95 published in the Gazette of India Extra Ordinary Part I Section- I No.88dated25/05/95.
- iv) Resolution No. 12012 / 96 / 94BCC dated 9 / 03 / 96.
- v) Resolution No. 12012 / 44 / 96 BCC dated 6 / 12 / 96 published in the Gazette of India Extra Ordinary Part I Section I No. 210 dated 11 / 12 / 96.
- vi) vi) Resolution No. 12012 / 13 / 97BCC dated 03 / 12 / 97. (vii)Resolution No. 12012 / 99 / 94BCC dated 11 / 12 / 97.
- vii) Resolution No. 12012 / 68 / 98BCC dated 27 / 10 / 99.

- viii) Resolution No. 12012 / 88 / 98BCC dated 06 / 12 / 99 published in the Gazette of India Extraordinary Part-I Section-I No. 270 dated 06 / 12 / 99.
- ix) Resolution No. 12012 / 36 / 99BCC dated 04 / 04 / 2000 published in the Gazette of India Extraordinary Part-I Section-I No. 71 dated 04 / 04 / 2000.
- x) Resolution No. 12012 / 44 / 99BCC dated 21 / 09 / 2000 published in the Gazette of India Extraordinary Part-I Section-I No. 210 dated 21/09 /2000.
- xi) Resolution No. 1201 5 / 9 / 2000BCC dated 06 / 09 / 2001.
- xii) Resolution No. 12012 / 1 / 2001BCC dated 19 / 06 / 2003.
- xiii) Resolution No. 12012 / 4 / 2002BCC dated 13 / 01 / 2004.
- xiv) Resolution No. 12012 / 9 / 2004-BCC dated 16 / 01 / 2006 published in the Gazette of India Extra Ordinary Part I Section I No. 210 dated 16/01 /2006.

Shri/Smt./.....and/or his family ordinarily reside(s) in the.

.....District/Division ofstate. This is also to certify that he/ she does not belong to the persons/section (Creamy Layer) mentioned in Column 3 of the Schedules of the Government of India. Department of Personnel & Training O.M.No.36012/22/93 Estt.(SCT) dated 08/09/93 which is modified vide OMNo.36033/3/2004Estt.(Res.) dated09/03/2004.

Dated:.....
Commissioner/Competent Authority

District Magistrate/Deputy

Seal

NOTE:

- a) The term ordinarily used here will have the same meaning as in Section 20 of Representation of the People Act. 1950.
- b) The authorities competent to issue Caste Certificates are indicated below:

- i) District Magistrate/Additional Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/ Deputy Collector/1stClass Stipendiary Magistrate/Sub Divisional Magistrate/Taluka Magistrate/Executive Magistrate/Extra Assistant Commissioner (not below the rank of 1st Class Stipendiary Magistrate)
- ii) Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate.
- iv) Revenue Officer not below the rank of Tehsildar and
- v) iv) Sub Divisional Officer of the area where the candidate and/or his family resides.

Prescribed Format of Sponsorship/ No Objection Certificate for Ph. D. programme
(Format for Sponsorship / No Objection Certificate)
(The letter should be typed on the official Letter-Head of the Sponsoring Organization/ Employer/ Principal Investigator and signed by the Head of the Institution/Principal Investigator)

To
The Controller of Examinations
Tezpur University

Sub: Sponsorship/No objection Certification of Mr./Ms.....for Ph.D. programme at Tezpur University.

Dear Sir/Madam,

Mr./Ms.....has been working in this organization/ Project as.....since

This organization has no objection to his/her being admitted to the Ph. D. programme at Tezpur University from the session starting fromas a part time/full time candidate.

The employee will be relieved of his/her duties in the organization to join in the Ph.D. programme if he/she is selected as part time/full time candidate (not applicable to project fellow). The part time candidate will be allowed to stay on the campus for pursuing the course work (only for part time candidate)

Date:
Place:

Signature_____

Name_____

Official Seal of the employer

1. Verified by:

- Signature.....Date..... Name:.....Designation.....
- 2 Recommended/Not Recommended
Signature: Name:
- 3 Chairperson, Selection Committee/Head, Department of
Date.....

Format for No Objection Certificate (for other than Ph.D. programme)

(In letter head of the employer)

This is to certify that Shri /
Smt..... (Name
and Address)..... is an employee
of..... (Organization and Department) and he/she is presently holding the post
of.....as regular/temporary employee.
He / She has been working in this Department since.....till date.

This is to certify that we have no objection to Shri/Smt.....applying for the programme
.....in Tezpur University as a full time candidate. In the event of his/her selection for the said
programme Shri/Smt shall be relieved from his/her duties.

Place

Date

Signature of Officer

Office:

Office Seal

PREScribed FORMAT FOR EWS CERTIFICATE

Government of.....

(Name & Address of the authority issuing the certificate)

INCOME & ASSET CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS

Certificate No.____ Date:____

VALID FOR THE YEAR_____

This is to certify that Shri/Smt./Kumari.....son / daughter / wife ofpermanent resident ofVillage/StreetPost OfficeDistrictin the State/Union Territory.....Pin Code.....whose photograph is attested below belongs to Economically Weaker Sections, since the gross annual income* of his/her "family"*** is below Rs. 8 lakh (Rupees Eight Lakh only) for the financially year

His/Her family does not own or possess any of the following assets***:

- i. 5 acres of agricultural land and above;
- ii. Residential flat of 1000sq. ft. and above;
- iii. Residential plot of 100 sq. yards and above in notified municipalities;
- iv. Residential plot of 200 sq. yards and above in areas other than the notified municipalities.

Shri/Smt./Kumari_____belongs to the_____caste which is not recognized as a Scheduled Caste, Scheduled Tribe and Other Backward Classes (Central List)

Recent Passport size
attested photograph
of the applicant

Signature with Seal of Office _____

Name_____

Designation _____

*Note 1: Income covered all sources i.e. salary, agriculture, business, profession, etc.

**Note 2: The term "Family" for this purpose include the person, who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years

***Note 3: The property held by a "Family" in different locations or different places/cities have been clubbed while applying the land or property holding test to determine EWS status.

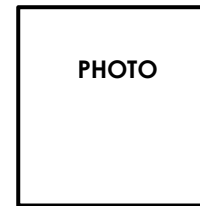
PRESCRIBED FORMAT OF PRC/AS PER GOVERNMENT FORMAT

**GOVT. OF ASSAM
OFFICE OF THE DEPUTY COMMISSIONER**

Seal of the issuing office

Date.

Ref Petition No.



PERMANENT RESIDENCE CERTIFICATE

Certified
son/daughter of and.....of Village/Path/Street..... under
Mauza/Circle.....,under.....Police station is the permanent resident of district in the state of
Assam (India).

Seal

Deputy Commissioner

UNDERTAKING BY THE STUDENT ADMITTED IN SPORTS QUOTA

TEZPUR UNIVERSITY

(2024-25)

I, _____ (Name of the Student), S/o-D/o _____, Roll No: _____; I hereby Undertake that I shall abide by all the rules, regulations and conditions imposed by the University as amended from time to time. I hereby undertake and affirm:

1. I understand that my admission is under sports quota, and I will be participating in the different sports competitions for the university and if selected will represent the University in sports competitions as determined by university during the entire period of the study in the University.
2. I hereby declare that I will keep myself fit to participate in the sports activities and I will take necessary steps (at my own cost and initiative) in consultation with sports office of Tezpur University for the treatment of my injury (if any) as soon as possible.
3. I shall make myself available for regular practice sessions (along with my academic activities) as called for by the University Sports office during her/ his entire period of study.
4. I undertake to have no objection whatsoever disciplinary action imposed by the University Authority in accordance with rules & regulation for not complying with the terms of my admission.

(Signature of the Student with Full Name)

Name:

Roll No:

Date:

Place:

NO OBJECTION CERTIFICATE FOR PHD FOR INDUSTRY PERSONNEL AND PROFESSIONAL

(Following format is to be printed on the **letter head of the Organization** where the candidate is currently working)

To:
The Registrar
Tezpur University

NO OBJECTION CERTIFICATE

This is to certify that Mr./Ms._____ is currently employed with our organization as _____ since _____. He/She has experience of _____ years and months in our organization.

We have no objection if Mr./Ms._____ is admitted to the Ph.D. programme in the Department of _____/Centre _____ at Tezpur University as a part-time/full-time research scholar in the Academic Session_____.

It is certified that he/she will be allowed to use facilities for research work at our organization.

It is agreed by our organization to share the ownership of any generated IPs from the doctoral research work with Tezpur University, while the Copyright authorship of developed thesis will be governed by the Tezpur University IPR policy.

(Signature & Name of the competent authority with seal)

Date

Undertaking for PhD for Industry Personnel and Professional

To:

The Registrar

Tezpur University

UNDERTAKING

I, Mr./Ms. _____ do hereby declare that I have been carrying out my professional practice as a _____ for the past _____ year.

I undertake to devote the time and effort required for completion of the programme within the stipulated time and I shall make myself physically available in the University for any academic requirements including semester enrolment and course registration, examinations, progress seminar, plans of research seminar, pre-thesis seminar and my Ph.D. viva-voce examination.

(Signature & Name of the competent authority with seal)

Date

Appendix C

(Following format is to be printed on the **letter head of the Organization** where the candidate is currently working)

Study Leave grant certificate for PhD for Industry Personnel and Professional

CERTIFICATE FOR GRANT OF STUDY LEAVE

To:

The Registrar

Tezpur University

This is to certify that we have no objection to Mr./Ms. _____, who is working in our organization to carry out his/her Ph.D. as a full time research scholar in the Department of _____/Centre _____ at Tezpur University.

We grant him/her study leave for a period of _____year starting from the Academic Session_____.

(Signature & Name of the competent authority with seal)

Date

ENDORSEMENT BY THE GUARDIAN

To:

The Registrar

Tezpur University

I, father/mother/guardian of, Roll No: admitted in Tezpur University under sport quota hereby endorse that the above undertaking declared by my son/daughter is in my knowledge and I will make my son/daughter abide by the declaration he/she has made above. I will make sure that that my daughter/ son shall make themselves available for regular practice sessions (along with their academic activities) and take part in sport activities as assigned/selected by the University authority.

(Signature of the Guardian with Full Name)

Date:

Name:

Place:

Father/Mother/Guardian of:.....

Name of the Sports considering under sports quota for academic Session 2024-25

1. Archery
2. Badminton
3. Basketball
4. Weightlifting
5. Boxing
6. Chess
7. Cricket
8. Football

9. Kabaddi
10. Lawn Tennis
11. Taekwondo
12. Table Tennis
13. Swimming
14. Volleyball
15. Hockey
16. Yoga

Annexure II: Important Contacts for any Query related to Admission.

For any query related to the admission to an Academic Programme in 2024, the concerned Department/Centre may be contacted on the following contact number/E-mail ID:

Department/Centre	Mobile Number** (HoD)	E-mail ID
Applied Sciences	88765-31540	hod_aps@tezu.ernet.in
Assamese	98540-62476	hod_assamese@tezu.ernet.in
Business Administration	94350-80075	hod_ba@tezu.ernet.in
Centre for Inclusive Development	99544-49475	rkdooley@tezu.ernet.in
Centre for Distance and Online Education		cdoedirector@tezu.ernet.in
Centre for Multidisciplinary Research	94355-08563	cmdr@tezu.ernet.in
Chandraprabha Saikiani Centre for Women Studies	98542-64780	hodwsc@tezu.ernet.in
Chemical Sciences	84868-72235	hod_chem@tezu.ernet.in
Civil Engineering	9678071266	hodcivil@tezu.ernet.in
Commerce	98646-61406	hod_com@tezu.ernet.in
Computer Science and Engineering	94354-90352	hod_cse@tezu.ernet.in
Cultural Studies	94353-80139	hod_cul@tezu.ernet.in
Design	96784-91587	hod_design@tezu.ernet.in
Education	93347-11504	hod_edu@tezu.ernet.in
Electrical Engineering	81318-80802	hod_ee@tezu.ernet.in

Electronics and Communication Engineering	88763-42920	hod_ece@tezu.ernet.in
Energy	94350-82881	hod_ene@tezu.ernet.in
English	94350-06803	hod_eng@tezu.ernet.in
Foreign Languages	94353-80629	hod_fl@tezu.ernet.in
Linguistics and Language Technology	94354-90935	hod_llt@tezu.ernet.in
Environmental Science	99445-98233	hod_env@tezu.ernet.in
Food Engineering and Technology	97063-68117	hod_fet@tezu.ernet.in
Hindi	73209-20958	hod_hin@tezu.ernet.in
Law	95310-47064	hod_law@tezu.ernet.in
Mass Communication and Journalism	98640-72390	hod_mcj@tezu.ernet.in
Mathematical Sciences	94351-99096	hod_ms@tezu.ernet.in
Mechanical Engineering	94355-48685	hod_mech@tezu.ernet.in
Molecular Biology and Biotechnology	99544-71591	hod_mbbt@tezu.ernet.in
Physics	94350-84076	hod_phy@tezu.ernet.in
Social Work	84029-40967	hod_sw@tezu.ernet.in
Sociology	98645-65376	hod_soc@tezu.ernet.in
Malaviya Mission Teacher Training Centre	94350-81446	tlc@tezu.ernet.in

** Contact must be made during Office hours only.*

*** Mobile Number should be used during Office hours and in case of emergency only.*

Annexure III: Frequently asked questions related to Admission.

1. Which marksheet should I upload for seeking admission in Integrated programmes?

Ans: Upload your class X and class XII/equivalent examinations marks/marks sheet in .pdf format.

2. What is the marksheet to be uploaded if I am applying for postgraduate (PG) programmes?

Ans: Upload your marksheets of class X and XII/equivalent examinations and semester wise and/or year wise and/or consolidated marksheets as separate files (in pdf. format) for qualifying examinations. Several options (fields) have been provided in the web-portal for uploading of your documents.

3. Despite uploading the documents, the software is not accepting the file.

Ans: Please check the file size of the attachment and follow the instructions.

4. What documents should I upload if I am applying for lateral entry to B. Tech.?

Ans: You are required to upload the marksheets of the qualifying examination besides the marksheets of class X and XII/equivalent examinations.

5. What should I do if my university does not have a formula to convert CGPA to percentage? In this case, what should I upload?

Ans: Conversion of CGPA to percentage must be done by the applicant, as per the qualifying board/university formula. If the formula is not provided by the university/ board, the converted CGPA in percentage must be certified by the principal/competent authority of your Institute. The certified document must be uploaded in the TU portal.

6. How do I know my eligibility criteria for a program?

Ans: You may carefully read the prospectus TUEE 2024 and confirm the same, while filling in the online ACF form.

7. What should I do if Tezpur University is not taking students through TUEE for the Department of MBBT?

Ans: Admission to the M.Sc. programme in the Department of MBBT is done through "Graduate Aptitude Test-Biotechnology" (GAT-B) conducted by Regional Centre for Biotechnology (RCB), Faridabad. You must upload the valid GAT-B score card during the online application. In addition, permanent residence certificate (PRC) should also be uploaded, if you want to apply for the 10 seats reserved for the permanent residents of any of the Northeastern states.

8. What should I do if I have made a mistake, while uploading my marksheets and/or other documents?

Ans: You may contact asktuee@tezu.ernet.in with a copy to tuee2024@gmail.com

9. What shall I do when there is a payment failure/unsuccessful payment?

Ans: In case of payment failure and/or deduction of money from bank account, kindly send an email to tuee2024@tezu.ernet.in and a copy to asktuee@tezu.ernet.in with a screenshot.

10. Can I upload my caste or EWS certificate later as I do not have the updated version now?

Ans: Yes, you are required to submit the latest certificate prior to the specified deadline.

11. How do I know if have been shortlisted in any program applied for?

Ans: This information will be uploaded in the Tezpur University website. If your name does not appear in the list of candidates, you may have not met the evaluation cut-off marks. You will also receive SMS/e-mail if you are shortlisted.

12. What is the duration of process of application till final selection of candidates for any program?

Ans: Selection and admission process will be updated on regular basis in the Tezpur University website.

TUEE Team 2024

Dr. Sankar Chandra Deka

Controller of Examinations
Tezpur University

Dr. Robin Doley

Director
Tezpur University Entrance Examinations
Tezpur University

Dr. S. Iboṭombi Singh

Deputy Director
Department of Computer Sc. & Engineering
Tezpur University

Members

Dr. Shailen Deka

Assistant Professor
Department of Civil Engineering
Tezpur University

Dr. A. S. Shimreiwung

Assistant Professor
Department of Sociology
Tezpur University

Dr. Ritupan Sarmah

Assistant Professor
Department of Physics
Tezpur University

Dr. Arup Roy

Associate Professor
Department of Business Administration
Tezpur University

Dr. Prasenjit Roy

Assistant Professor
Department of Commerce
Tezpur University

Dr. Biraj Kr. Kakati

Assistant Professor Department of Energy
Tezpur University

Dr. Perosh Jimmy Daimari

Assistant Professor
Department of Mass Comm. & Journalism
Tezpur University

Dr. Sanjeev Pran Mahanta

Assistant Professor
Department of Chemical Sciences
Tezpur University

DISCLAIMER

With utmost care, the prospectus is prepared by compilation of inputs collected from various Faculties, Departments, Centres, Cells at Tezpur University, and other sources. However, it should, in no case, be construed as a warranty, expressed, or implied, regarding the completeness and accuracy of the information so far provided as a ready reference. Any error, if found, in the prospectus may be due to inadvertent omissions, clerical mistakes, or any other reason. Moreover, this document does not create a binding contract between the University and the student/scholar. The information in this prospectus is subject to change.