Tezpur University

(A Central University)

PROSPECTUS
AUTUMN 2022

Tezpur University - Assam

Prof. Jagdish Mukhi - Chancellor Tezpur University

MINISTRY OF EDUCATION

EM-Shri Ramesh Pokhriyal 'Nishank'

Tezpur University
(A Central University)

Prospectus
Autumn 2022

▊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.

▊ADMISSION POLICY- 2022

Tezpur University shall follow this Admission Policy for the selection of students into different programmes offered for the Academic Year 2022-23. The programmes include Ph.D., PG (M.Tech., M.Des., M.Sc., M.A., MCA, M.Com., LL.M., MTTM), Integrated programmes (M.Sc., M.A., M.Com., B.Sc.B.Ed.), UG (B.Tech., B.Ed.), PG Diploma, and Certificate programmes. The details of all programmes along with the intakes and eligibility criteria are available in the prospectus. The University shall follow the Govt. of India reservation policy for admission. It is to be noted that admission to MBA (Full Time), MBA (Executive), and M.Des. programmes are already completed.

MANDATORY REQUIREMENT

Candidates applying for admission in any of the academic programmes [except MBA (Full Time), MBA (Executive), and M.Des.] at Tezpur University must mandatorily register and fill the Admission cum Counselling Form (ACF) online at TU admission portal.

Duly signed printout of the ACF along with all the required documents submitted (uploaded) in originals must be produced at the time of admission.

Candidates applying for any programme under CUET(UG) and CUET(PG) must read the eligibility criteria and select correct domain subject/test paper code carefully by referring to the information provided in the prospectus/information bulletin of NTA.

1. Ph.D. Programmes

Candidates will be selected on the basis of (i) Performance in an OMR based Written Entrance Examination (OWEE) to be conducted by Tezpur University Entrance Examination (TUEE) Cell at centres in Guwahati and Tezpur , and (ii) Personal Interview (PI). However, candidates with UGC-(NET/JRF)/UGC-CSIR(NET/JRF)/DBT-JRF/ICMRJRF/ICAR-NET/GATE/ SLET / M.Phil. will be required to appear in PI only.

2. PG Programmes

(a) M.Tech. Programmes

(i) GATE Candidates- Candidates with valid GATE score in relevant discipline will be admitted directly on merit basis.

(ii) Non-GATE Candidates- Some seats of the M.Tech. programmes will be filled up the performance in the CUET (PG)-2022 conducted by NTA. Registration can be done at https://cuet.nta.nic.in. GATE *qualified candidates may still apply for non-GATE seats through CUET (PG)-2022.*

(b) M.A./M.Sc./LL.M./MTTM/MCA/M.Com. Programmes

Candidates will be selected on the basis of the performance in the CUET(PG)-2022 conducted by NTA for PG programmes. Registration can be done at https://cuet.nta.nic.in.

(c) M.Des. Programme

Candidates with valid CEED-2022 score will be admitted directly on merit basis. The merit list will be prepared on the basis of CEED score, portfolio and Personal Interview (PI).

(d) M.Sc. (MBBT) Programme

Admission to M.Sc. in MBBT will be on the basis of valid GAT-B score. Details can be found in the prospectus.

(e) MBA Programme

Candidates are admitted on the basis of (i) score obtained in CAT/MAT/CMAT/XAT/ATMA, (ii) Group Discussion, and (iii) Personal Interview. Details may be obtained from the prospectus/University website. *Admission process is already over for the Academic Year 2022-23.*

3. 5-years Integrated Programmes

M.Com./M.Sc./M.A./B.Sc.B.Ed.- Candidates will be selected on the basis of the performance in the CUET (UG)-2022 for UG programmes conducted by NTA. Candidate should apply for CUET (UG) at https://cuet.samarth.ac.in.

4. UG Programmes

(a) B.Tech. Programmes

Candidates will be selected for admission to various B.Tech. programmes on the basis of All India Rank (CRL) of JEE (Main)-2022 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.

(b) B.Tech. (Lateral Entry) Programmes

Depending on the availability of seats, candidates will be admitted on the basis of their performance in the OWEE to be conducted by TUEE Cell, Tezpur University.

(c) B.Ed. Programmes

Candidates will be selected on the basis of the performance in the Common University Entrance Test for PG programmes, CUET (PG)-2022 conducted by National Testing Agency (NTA). Registration can be done at https://cuet.nta.nic.in.

5. PG Diploma Programmes

Translation (Hindi)/ Women Studies- Candidates will be selected on the basis of the performance in the CUET (PG)-2022 for PG programme conducted by NTA. Registration can be done at https://cuet.nta.nic.in.

6. Certificate Programme

One Year Certificate Course in Chinese
Candidates will be selected on the basis of the performance in the CUET (UG)-2022 for UG programme conducted by NTA. Candidate should apply for CUET (UG) at https://cuet.samarth.ac.in.

Contents

Item	Pages

- Candidate can check the prospectus online for eligibility and intake of each academic programme.
- The Admission cum Counselling Form (ACF) will be available at TU admission portal.
- Candidates need to register online to get Login-id and Password.
- Candidate should feel up the Admission cum Counselling Form (ACF) and need to pay the required fee using login ID and Password.
- Candidates can apply for multiple programmes with a single application form.
- Candidates can apply for a maximum of two Ph.D. programmes at different departments.
- No candidates will receive any application form by post or courier.

Useful Contacts

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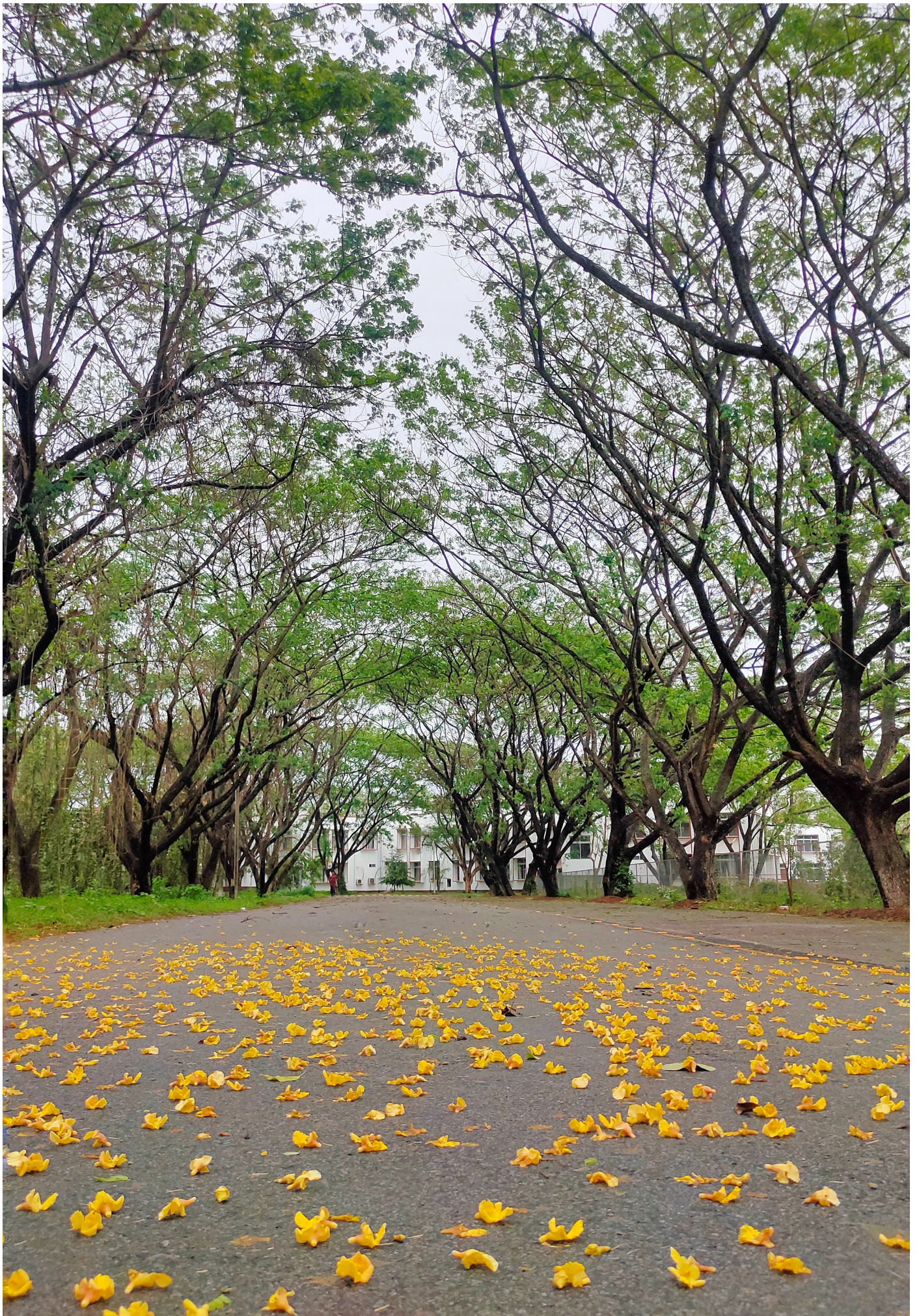
Tezpur University
(A Central University)

VC's Welcome Note

Dear students,

It is a matter of immense pleasure for me to welcome you to this prestigious institution of higher learning. Tezpur University came into existence on 21st January, 1994 by an Act of Parliament of India. It is a unitary and residential Central University. Since its inception, the University has been motivated by its vision of developing human excellence and inculcating leadership through hard work and creativity.

The University is currently offering 76 academic programmes (UG, PG, Ph.D., Certificate & Diploma programmes) through 27 departments under 4 Schools viz, Engineering, Humanities & Social Sciences, Management, and Sciences. The University also offers 7 (seven) programmes in open and distance mode under its Centre for Distance and Online Education. The academic programmes offered in the University have a distinct focus on Science, Technology, Humanities and Social Sciences, reflecting the objective of the University.

The 262-acre meticulously planned campus of the University provides an excellent ambience for pursuit of education and research. Apart from the state-of-the-art laboratories at the departments, the University has a Sophisticated & Analytical Instrumentation Centre, which currently houses a number of high-end instruments. The Central Library with its LybSys software provides a range of user services apart from being a knowledge/learning resources center with more than 1,12,888 documents comprising books, theses, journals/e-journals, conference proceedings, CDs, along with latest academic related softwares. etc. The Library is fully automated and is equipped with RFID system.

At present, 13 foreign students from different countries such as Bangladesh, Egypt, Ethiopia, Lesotho, Madagascar, Syria, Tanzania, and Thailand are pursuing their studies in the University. The presence of international scholars has enhanced the spirit of camaraderie amongst students with all the foreign scholars enthusiastically participating in academic, cultural and sports activities. Our campus has a vibrant culture, and it emanates from the healthy male female ratio, which currently stands as 53:47. The University attracts several students from Northeastern states as well as from other parts of the country, making the campus a hub of mosaic and multicultural society. 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-2022 etc. Students under various schemes of Govt. of India like Direct Admission of students Abroad (DASA), Prime Minister's Special Scholarship Scheme (PMSS), QIP and ADF (AICTE) etc. are also taken admission in the University.

The University takes special care to cultivate the minds of the students through various co-curricular activities. The talent & 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 takes good care of the students by providing hostel, sports, gymnasium, and other essential facilities. The academic curricula are designed in such a way that the students can excel in academics and compete with the global arena.
Our faculty members equipped with respective domains competencies are quite capable of providing both knowledge and skill based education. They have brought many laurels to the University. To name a few, 7 (seven) 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 2020; the prestigious Visitor's Awards in research category in 2017 and in 2018; Visitor's Award for Technology Development in 2020. Four faculty members are already Fellows of the Royal Society of Chemistry (FRSC).

The Department Food Engineering & Technology of the University is also recognized as State Level Technical Institute (SLTI) for Assam, Meghalaya and Arunachal Pradesh for implementation of the PM-FME scheme (PM Formalization of Micro food processing Enterprises Scheme) of Ministry of Food Processing Industries (MoFPI), GoI, New Delhi.

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 73 (overall) in 2021, QS Asia University Rankings 281-290 in 2022 and THE World University Ranking 1001-1200 in 2022.

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 etc.

With best wishes,

Date: May 25, 2022

(V. K. Jain)
Vice-Chancellor

1. GENERAL INFORMATION

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 Chitralekha 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 Bhalukpung (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.
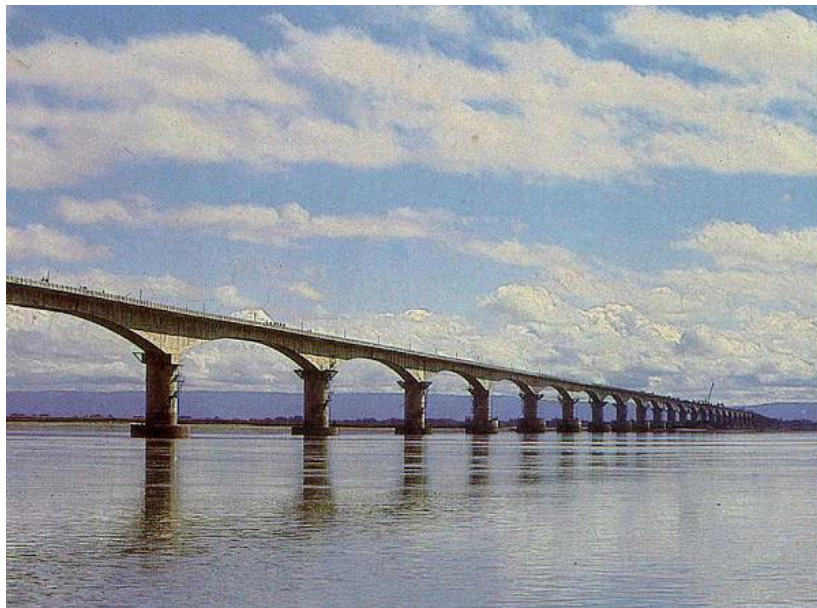
Connectivity

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 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 with Kamakhya Railway Junction by a broad-gauge line from the new Dekargaon Railway Station via Rangapara and Rangia Railway Junction.

By Air
Guwahati is well connected by air with all major places in India. Direct Air India flights to Tezpur from Kolkata via Guwahati are available on Tuesday, Thursday, and Saturday. But daily flights are available from/to Guwahati to/from all other major cities of the country.

Reaching Tezpur University

To reach Tezpur University, University Bus Services are available from Tezpur ASTC Bus Station, Tezpur via Porua Tiniali to the University Campus in scheduled time. Besides University Bus Service, Taxis/Auto rickshaws are available from Tezpur Town (Near ASTC Bus Station) or Mission Chariali and Private Bus from Tezpur Town (Near Idgah Maidan) to reach the University

Jan 8, 2018

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 Anirudha blossomed. Usha was confined inside the palace which was surrounded by a wall of fire. The palace gives a panaromic view of the mighty Brahmaputra river and Tezpur.

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.

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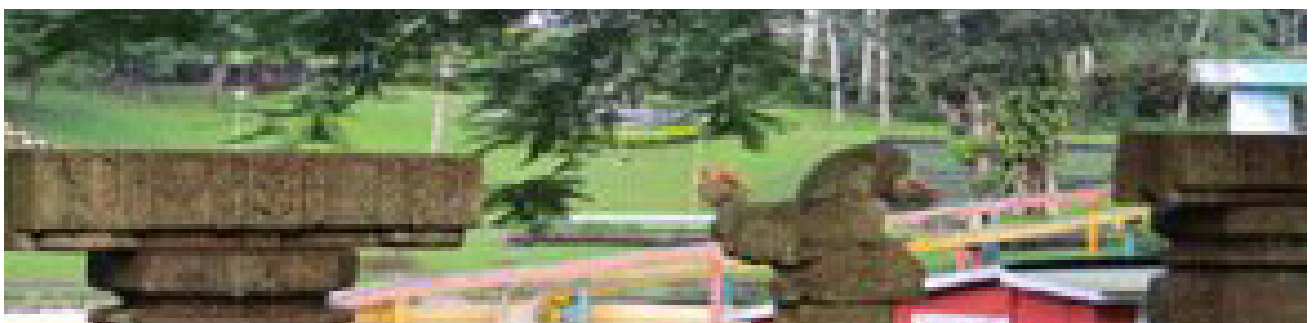
The large tank preserves the name of Hazara Varman in Tezpur. It was excavated in the early part of the 19th century. This is the third largest tank in the area sprawled over 70 acres.

Shopping Centers

One of the most popular shopping destinations is Chowk Bazaar and KeyBees Store on MC Road in the heart of Tezpur town. There are several showrooms and dealers - Vishal Megha Mart, Reliance Trends, Reliance Digitals, Westsides, M Bzaar, Style Bazaar, Peter England, and Pantaloon – providing a wide range of clothings and other essentials. Shops for traditional handloom and handicrafts, traditional handwoven Assamese silks and gifting material, cane and bamboo household articles and musical instruments, bellmetal utensils like the xorai traditionally used for offering betelnut and paan to distinguished guests are also available in the town. Other traditional crafts include clay, pith, wooden, bamboo and cloth toys, pottery, woodcraft, masks, and gold jewellery. It also has a traditional fish and vegetable market where fresh vegetables and delicious fishes are marketed.

Fast Food

There are many pockets friendly fast-food chain and cafeteria in and around Tezpur town to grab a quick bite. These joints and cafes offer a wide range of food and specializes in bakery products, Indian sweets, and beverages. One can enjoy freshly brewed coffee and beverages along with freshly baked cookies, patties, pastries, muffins, brownies, breads Buns. Some of the popular places are Spring Valley, Veggie Foods, Delight bakery, Café Woodbox, the Chocholate room, Dominos, Pizza Hut, and KFC.

Restaurants

Tezpur has a wide range of restaurants and small eating outlets to satiate the appetites for the food lover in you. Any cuisine, Indian or international, you name it, you will find it in and around the Tezpur town. And it's not just cuisines, but also quirky and innovative ambience, that gives them a unique and memorable dining experience. Some of them are KRC palace, Dhaba End Dee's Samaroh, Krishna Foods, Saffron Restaurant and Banquet, Gardenia, and the Fern Residency

Cinema

There are several good cinemas in and around Tezpur town which has become the hub for cinemagoers, Anwar VRS Cinema and Imp Cinemas at Mahatma Gandhi Road, Gold Cinema near LGBRIMH New Gate and Gold Digital Cinema, Mahabhairab. These three places are the best options available to enjoy a stellar cinematic experience at an affordable price.

Parks and Sanctuary

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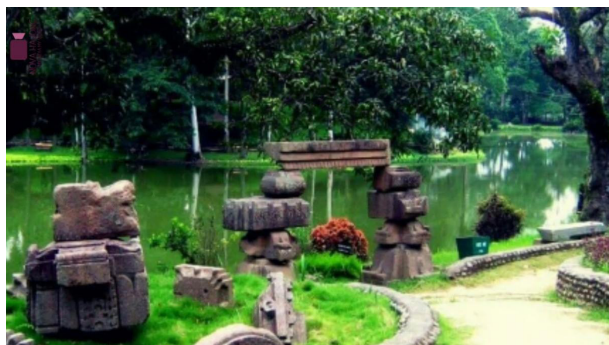
It is, undoubtedly, one of the most beautiful places in Tezpur. Established by a British Deputy Commissioner, Mr. Cole, the park has two massive ornamented stone pillars, and the sculptural remnants of the famous Bamuni Hills.

Bhalukpong

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

Eco Camp

About 50 kms from Tezpur, off the road to Arunachal Pradesh, near the Jia Bhoroli River is the Eco Camp, a unique experiment by the Assam Anglers' Association and the state's Forest Department. The Camp organises exciting white river rafting, against the divine backdrop of lush forests and snow-capped mountains. Tourists can try their hand at casting for the elusive and endangered golden Mahseer fish, a denizen of the waters. This is part of an ecological campaign to save the mahseer - so part of the river is protected, and the fish are caught and then released in a bid to stabilise their dwindling numbers.

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 the mithun or Indian bison and the rare white winged wood duck, among the most endangered avian spe- cies in the world.

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.

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.

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 under-graduate degree/diploma/certificate, integrated programmes, post-graduate degree/diploma 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 kWp rooftop grid-connected solar photovoltaic power plant on its campus.

The University on an average generates ~22% of its electricity requirement by the solar power plant. 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 the energy efficient LED lights starting with the Guest House and the Humanities and Social Sciences Complex. 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.

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Major Awards/Accolades for Tezpur University

- 🏆 THE Asia University Rankings 2021: 301–350.
- 🏆 Visitor's Award for Technology Development 2020.
- 🏆 QS India University Rankings 2020: 35.
- 🏆 THE Asia University Rankings 2020: 251–300.
- 🏆 The QS BRICS University Rankings 2019: 146.
- 🏆 THE World's top 20 Best Small Universities 2018: 20.
- 🏆 Visitor's Award in —Research category: 2017, 2018.
- 🏆 Ministry of Education (Formerly MHRD) NIRF Ranking 2016: 5, 2017: 48 (Overall), 30 (Amongst Universities), 2018: 46 (Overall), 2 9(Amongst Universities), 2019: 48 (Overall), 29 (Amongst Universities), 2020: 65 (Overall), 39 (Amongst Universities).
- 🏆 THE World Young University Rankings 2020: 251–300.
- 🏆 Visitor's Best University in 2016.
- 🏆 NAAC Accreditation : A+ Grade.
- 🏆 THE Asia University Rankings 2018: TU ranked 4th in India in "Research" category.
- 🏆 Fellow of the Royal Society of Chemistry (FRSC): 4
- 🏆 INSA Teachers Award: 2017, 2018 & 2019.
- 🏆 THE World Young University Rankings 2017: 34th in the list of top 50 universities under — "Generation Y" (universities established between 1986 and 1999).
- 🏆 7 faculty members of Tezpur University have featured in the Stanford University list of the world's top 2% scientists in 2020.

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 12 hostels (5 for boys and 7 for girls). The rooms are large enough for two people, and come equipped with attached wardrobes, shelves, tables 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 married research scholar's hostel with a capacity of accommodating 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. All hostels are equipped with modern facilities like-

- Network connectivity through WiFi
- Television with DTH
- Newspapers & Magazines
- Photocopy facility in some hostels
- Indoor and outdoor games
- Intercom facility
- Guest room
- Canteen
- Pantry system
- Music system

- Washing machine
- 24 hours water supply
- Common rooms
- Modern kitchen equipment & dining hall
- Cycle stand
- Filters and coolers for drinking water
- Solar
- Water heating system
- Mini canteen
- Bio-gas plant

The seats are allotted at the time of admission as per the hostel and University rules. *The University ensured that all foreign nationals get hostel facilities inside the University. Separate single seater rooms are provided for foreign students.*

Hostel Admission

● *Admission to 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 mess are run by the students at the University. Regular maintenance work of the hostels is done periodically 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.

Staff Quarters

The University provides residential facilities to its teaching and non-teaching employees in the campus. The residential quarters are RCC multistoried 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 airconditioned), 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.

Contact Person @ Guest House
Caretaker-cum-Liason officer
Mobile: 9957191532
E-mail: ghouse@tezu.ernet.in
For online booking: http://www.tezu.ernet.in/guesthouse/guesth.html

The University also has a Transit Office cum Guest House at Maligaon, Guwahati with 01 conference room and 04 other rooms for the convenience of the employees and invited guests.

Library

The University has a Central Library with a rapidly increasing collection of books, periodicals, journals, and e-resources. The library is fully modernized with RFID enable integrated KOHA library management software (open source software) which is an integrated multiuser library management system that supports all its inhouse operations and modern facilitates smart card, checkin, checkout, and renewal of books. It has CCTV surveillance system for the safety of the library materials. Central Library has a diverse collection of more than one lakh documents including books, periodicals, theses, dissertations, braille collection etc. The collection of the library covers the latest information resources on all areas of engineering, science, management, social science, humanities. Central Library is providing access to e-resources & databases through the e-Shodh Sindhu Consortia of INFLIBNET Centre and Del-Con Consortium. The library subscribes an institutional membership of Developing Library Network (DELNET) and American Library.

Library users can access books, journal database, ETDs and other e-resources from any terminal within the University campus. Apart from the resources, Central Library also contains more than 2000 publications in TU Knowledge Repository and more than 700 Theses stored in ETD Repository. Total 600+ seating capacity is there in the reading halls of Central Library and it remains open throughout the year from 09.00 am to 01.00 am midnight. The Central Library also has a Digital Resource Centre with 42 PCs for the users for e-resources browsing and ETD Lab with latest technology scanner with 8 PCs for research scholars.

Table: Resources available in Library

Sl. No.	Items		Qty.
1.	Books		112888
2.	Journals	Print	216
		Online	10360
3.	Online databases		20
4.	E-Books		1218
5.	Back volumes of journals		10280
6.	Theses		832
7.	Dissertatiosn		1721
8.	CDs/DVDs		2887
9.	Govt. publications/conference proceedings		1025
10.	VHS cassettes		36
11.	Braille		211
12.	Newspapers		10
13.	Manuscripts		32

Computing Facilities

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 equipments, 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.

Museum

The Department of Cultural Studies is building up a museum of ethnographic materials collected from different parts of the state of Assam, and also 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.

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 also some seasonal flowers for the use of the University.

The Teaching Learning Centre (TLC)

The Teaching Learning Centre (TLC), Tezpur University was formally inaugurated on January 28, 2016 as a Centre of Excellence for Curriculum and Pedagogy under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMN-MTT) scheme. 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 reflective research based practice and the optimal use of technology.

The centre has conducted 13 programs in this financial year and trained 465 teachers and prospective teachers. Through these programs, TLC 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, learning through second language, generating resources in specific fields of pedagogy and professional development through various skills.

In 2018-2019, TLC has conducted 6 weeklong outreach programs in different colleges of Assam and Arunachal Pradesh. It has also completed few action research projects, developed approximately 254 minutes of video contents and developed references for e-resources on 38 micro topics through teacher training programs.

Lecture Recording System

Special lectures or expert lectures organized by various departments and schools of the University are recorded and even uploaded over the intranet services for students and other academic purposes. The Lecture Recording System of the University is vital to teach, share knowledge, and get global exposure.

The Centre for Open Distance and Learning Mode has recorded classroom lectures for students enrolled in different courses run by the centre. The lectures are delivered by experts from the University and outside on a wide range of topics and discipline. The system to record lectures shall create repositories of video for training of students and newly joined faculty members

Digital Language Laboratory

The Department of Foreign Languages has a digital multimedia, multipurpose language laboratory with 15 booths. Students can improve their pronunciation of English and foreign languages (Chinese, French, and German are taught at present) and develop interactive language skills by utilizing the software and other facilities available in the laboratory.

Tezpur University Media Cell

The University has a full functioning Media Cell to look after publicity of the University. The Media Cell is headed by a chairperson and a Public Relations Officer of the University. The achievements, news of the University is disseminated through traditional (print, electronic & radio) as well as through news and media. The University has Facebook, Twitter & YouTube channel and actively engages with the netizens through these social media platforms.

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:

- Department of Energy with the Department of Chemical Engineering, Abu Akademi University, Finland in Platform Biofuel.
- Department of Energy with the European Union under FP7 (Seventh Framework Programme for Research) in Biomass Research and Biowaste conversion to value added products.
- Departments of Energy, Mass Communication & Journalism with the University of Nottingham, UK.
- Departement of Cultural Studies with Department of Dance Studies, University of Auckland,New Zealand.
- Department of Chemical Sciences with the University College of London.
- Department of English and Foreign Languages with International Institute of Social History, Amsterdam, Netherlands.
- Collaboration with Yunnan University of Finance and Economics, China.
- Department of Physics with University of Southampton under the UK-India Education and Research Initiative (UKIERI)

International Students' Office

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 self-financing or on time-bound fellowships). While students from countries abroad visit for short periods for research purposes, most 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, postgraduate, and doctoral programmes.

Category of International /NRI Students

- Sponsored by the Govt. of India (through ICCR) on cultural exchange programme.
- Sponsored by the home country of the concerned international /NRI 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 this application form photocopies of the statement of marks of the last qualifying examinations duly attested by:
  - a) Indian Embassy in the country of the student, or
  - b) High Commissioner of the country of the student in India, or
  - c) 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 Ph. D. programmes).

> **For more details:**
> http://www.tezu.ernet.in/io/notice/Rules%20for%20International-NRI%20students-revised-1.pdf
> For information related to International Students Office: http://www.tezu.ernet.in/io/

In case of Ph.D. course, 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 on the basis of 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 Requirements

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.

2. 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 particulary from the northeastern states, Bihar, Maharashtra, J&K, Jharkhand, Uttar Pradesh, Uttaranchal, 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 northeastern states.

The University also attracts students from different countries such as Sri Lanka, Thailand, Ethiopia, Palestine, Botswana, and Sierra Leone amongst others.

Different students from diversified social and cultural backgrounds make the 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 intoxicated 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 competitions:

- Tezpur University has been awarded the prestigious Gandhian Young Technological Innovation (GYTI) Award for four times, consecutive in 2017-2019 and then again in 2021, for our students' innovative ideas.
- Tezpur University has been awarded the following positions in the 35th Inter University East Zone Youth Festival christened as "KARMOTSAV 2019" organized by The Assam Royal Global University, Guwahati under the aegis of Association of Indian Universities (AIU), New Delhi during 11-15th November, 2019.
- First position in Quiz and Western Vocal Solo,
- Second position in Classical Vocal Solo – Folk Orchestra – Western Group Song,
- Third position in One act Play and Mehendi competition.
- Best Team in music.
- Tezpur University won first position in Quiz and Folk Orchestra respectively in the 34th Inter University East Zone Youth Festival held at Lalit Narayan Mithila University in January, 2019.
- Tezpur The Folk Orchestra team of the University was invited to participate in the 12th South Asian Universities Festival held at Pt. Ravi Shankar Shukla University, Raipur, Chhattisgarh during March 2019.

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, 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 category. Our students also begged 29 medals in the 36th Annual Meet, 2019 organized by Sonitpur District Bodybuilding Association.

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 centers 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.
● Students' Disciplinary Committee: two student members.
● Library Committee: one student member.
● Grievance Redressel 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 students themselves through secret ballots.

Society of Automative 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 Soociety (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' Acitivities

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 Core (NCC)

Tezpur University has its own NCC unit under 5 Assam Bn. Five National Integration Camps were organized in the campus during 2013-17. Several students take active part in the NCC CATC Camps and ATC camps.

National Service Scheme (NSS)

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 organised 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.

UNIFEST

The University participates in the inter-University competitions and has won many prizes in cultural and literary events and quizzes.

Students' Support System

Prearrival 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. A weeklong 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 ice-breaking 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. Psychiatrist from LGBRIMH also visits the University regularly for offering counselling on stress related problems.

Financial Support

The University provides financial support to the needy students. 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 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 Decrimination 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, nonteaching 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

Annual magazine (Srijan: An annual multi-lingual magazine) with articles written in English, Assamese, Hindi etc. is brought out.

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

After You Leave [Alumni Association]

TUAA was formed in the year 2000 to create a network of the alumni of the University. The association aims to build an active pool of resources for the student community in coordination with the well-placed alumni.

Common Facilities

Health Centre

Health Centre of Tezpur University has been functioning since1995.   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.

Current Staff Positions

Sl No.	Name of the Medical Staff	Number
01.	Chief Medical Officer	1
02.	Medical Officer	1
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 was 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.
- Covid -19 screening was done as per direction of the district authority for the Tezpur University community as well as for guests who visited Tezpur University.
- Covid 19 vaccination programmes were done at Health Centre time to time for the Tezpur University community

OPD services

The OPD timings are as follows:

Session	Morning	Evening
April to September	8.30 AM to 12.30 PM	4 PM to 6 PM
October to March	8.30 AM to 12.30 PM	3 PM to 6 PM
Saturdays and Sundays- From 10 AM to 12 NOON		

One Medical Officer is always available for 24 hrs emergency duty. The cases requiring hospitalization are referred to the referral hospitals at Tezpur. Ambulance service is also available round the clock and is provided free of cost for students. There are two ambulances available at present and one ambulance is specifically for the PWD candidates to attend to their classes with a payment of nominal charge. A stock of common medicines including lifesaving drugs are maintained and are supplied free of cost. Routine laboratory investigations are also done. An Autoanalyser (fully automatic) and a Hormone Analyser (Mini-Vidas) is available for doing the investigations. ECG and X-ray facilities are also made available at the Health Centre   for the benefit of the University community. A set of appliances for person with disability are kept.

Visit by Specialists

The University has engaged specialists of different disciplines (paediatrics, obstetrics and gynaecology) who visits 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 major route of Tezpur town to the University. 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

In order 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 and is part of 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 three banks and a number of ATMs inside and within close proximity to the campus. State Bank of India Tezpur University Branch is located inside the University campus. There are three ATM points, two of which are located near the main entrance of the University, whereas the third one is placed close to the Samaroh Restaurant' in School of Engineering.

Punjab National Bank (PNB) and United Bank of India (UBI) have their branches inside the University campus. But their ATM's are kept outside the main gate of the University.

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.

Auditourium

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
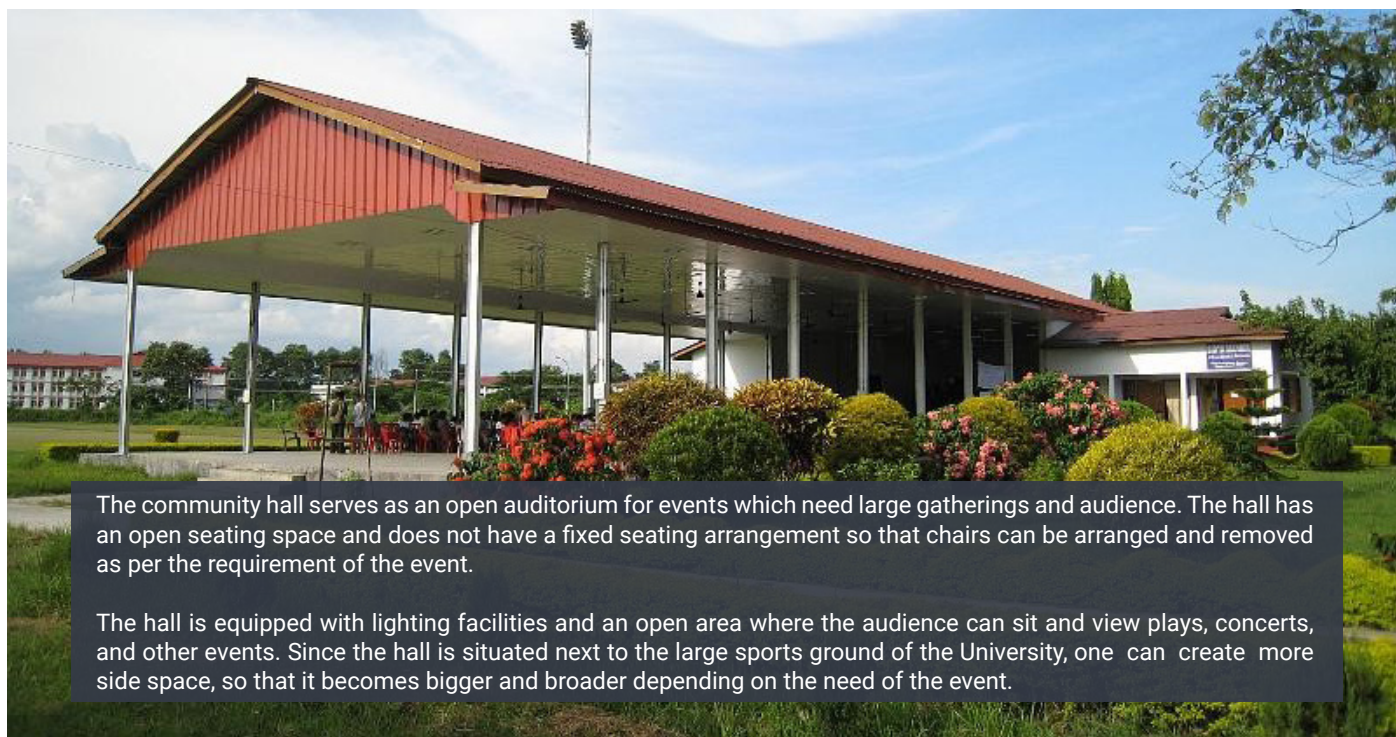
The community hall serves as an open auditorium for events which need large gatherings and audience. The hall has an open seating space and does not have a fixed seating arrangement so that chairs can be arranged and removed as per the requirement of the event.

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 has seminar rooms and multi-purpose halls to host seminars, symposia, and workshops.

Gardens

All the departments, hostels and administrative building has a well-maintained garden. The University has a collection of trees that are planted all over the University. 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.

3. Admission at Tezpur University

Tezpur University offers several programmes on underaraduate degree/diploma/certificate, postgraduate degree/diploma, and Ph.D. degree in various disciplines. Application process for the session 2022-2023 will be in online mode.

General Information

Important Dates About TU portal

SN	Programme	Opening Date	Closing Date
01.	B.Tech.	09.06.2022	15.07.2022
02.	B.Tech. (Lateral Entry)	09.06.2022	07.07.2022
03.	M.Tech. (Direct entry with valid GATE score)	09.06.2022	07.07.2022
04.	Ph.D.	09.06.2022	07.07.2022
05.	All programmes admitted through score of CUET (UG) and CUET (PG)	To be Announced	

Online Application cum Counselling Fee

The payment of the application fee is to be made online using credit card/debit card/net banking. 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 and international students are given in the table below.

Student Type	Category	Programmes through CUET(UG/PG)	B. Tech./ B. Tech. (Lateral Entry)/ M. Tech. (GATE)/ Ph.D.
Indian Student	General/ OBC/ OBC-NCL	₹ 600.00	₹ 800.00
	SC/ST/ EWS/ PwD	₹ 300.00	₹ 400.00
International Student	Not Applicable	US $ 20.00	US $ 30.00

Admission and Semester Fee Structure: 2022-2023

Indian Students

Level	Programmes	Only once at the time of admission		Fees To Be Paid Per Semester	Grand Total
		Non-Refundable	Refundable Caution Deposit		
		₹	₹	₹	₹
Undergraduate	B.Tech.*/ B.Tech. (Lateral Entry) *	2300.00	5000.00	26943.00	34243.00
Integrated Programme	M.Sc.*/M.Com./ M.A.	2300.00	5000.00	12943.00	20243.00
	B.Sc. B.Ed.	2300.00	5000.00	15443.00	22743.00
Postgraduate	B.Ed. (2 year)	2300.00	5000.00	14443.00	21743.00
	M.Sc.*	2300.00	5000.00	15443.00	22743.00
	M.A./ M.Com.	2300.00	5000.00	12943.00	20243.00
	MCA	2300.00	5000.00	18443.00	25743.00
	M.A. in MCJ	2300.00	5000.00	22443.00	30743.00
	M.Tech.*/ M.Des.*	2300.00	5000.00	22443.00	29743.00
	LL.M.	2300.00	5000.00	17593.00	24893.00
	MTTM	2300.00	5000.00	17443.00	24743.00
PG Diploma	P.G. Diploma in Women Studies	2300.00	5000.00	17443.00	24743.00
	P.G. Diploma in Translation (Hindi)	1800.00	5000.00	10943.00	17743.00
Certificate	Chinese	1300.00	5000.00	11693.00	17993.00
Ph.D.*	Full Time (Hosteller)#	2300.00	5000.00	16543.00	23843.00
	Full Time (Non-hosteller)#	2300.00	2000.00	12043.00	16343.00
	Part Time	2300.00	2000.00	13400.00	17700.00
	TU Employee	2300.00	2000.00	11700.00	16000.00

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

1. Integrated M.Sc./B.Sc.B.Ed. in Chemistry and Integrated M.Sc. in Life Sciences programmes.
2. M.Sc. in Molecular Biology and Biotechnology/ Chemistry / Environmental Science.
3. B.Tech. and M.Tech. in Food Engineering and Technology.
4. M.Tech. in Energy Technology.
5. Master of Design.

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.

SC/ST students are exempted from paying the hostel seat rent of Rs. 675/- per semester.

International Students (In US Dollar)

Level	Programmes	Only once at the time of admission		Fees To Be Paid Per Semester	Grand Total
		Non-Refundable	Refundable Caution Deposit		
		US $	US $	US $	US $
Undergraduate	B.Tech.*/ B.Tech.(Lateral Entry) *	210.00	180.00	1386.90	1776.90
Integrated Programme	M.Sc.*	210.00	210.00	961.90	1381.90
	M.Com.	210.00	120.00	691.90	1021.90
	M.A.	210.00	120.00	691.90	1021.90
	B.Sc.B.Ed.	210.00	210.00	961.90	1381.90
Postgraduate	B.Ed. (2 year)				
	M.Sc.*	210.00	120.00	741.90	1071.90
	M.A.	210.00	120.00	691.90	1021.90
	M.Com.		120.00	691.90	1021.90
	MCA	210.00	120.00	821.90	1151.90
	M.A. in MCJ	210.00	120.00	1696.90	2086.90
	M.Tech.*/ M.Des.*	210.00	120.00	821.90	1151.90
	LL.M.	Updated soon			
	MTTM				
	MBA	480.00	120.00		4199.70
PG Diploma	P.G. Diploma in Women Studies	Updated soon			
	P.G. Diploma in Translation (Hindi)				
Certificate	Chinese	90.00	60.00	421.90	571.90
Ph.D.*	Full Time*	180.00	180.00	1095.00	1455.00
	Part Time*	180.00	180.00	1245.00	1605.00

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

1. Integrated M.Sc. /B.Sc.B.Ed. in Chemistry and Integrated M.Sc. in Life Sciences programmes.
2. M.Sc. in Molecular Biology and Biotechnology/ Chemistry / Environmental Science.
3. B.Tech. and M.Tech. in Food Engineering and Technology.
4. M.Tech. in Energy Technology.
5. Master of Design.

Important Notes

● Interested eligible candidates may **apply Online** through the link: **http://www.tezuadmissionportal.in** for the B. Tech.; B. Tech. (Lateral Entry); M. Tech. (with valid GATE score); M. Sc. (with valid GAT-B score) and Ph. D. programmes

● A candidate can apply for multiple programmes 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 Ph.D. 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 avaiable. 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 International Student Office, 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 B.Tech. 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)/CUET (PG): admit card issued by NTA.
- Relevant certificate issued by the competent authority, if applied for admission under any reserved category mentioned in the reservation policy.
- For B.Tech. 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.
- M.Sc. 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 M.Tech. programme through GATE.
- Score cards/award letters of national level eligibility tests/ GATE, if any, while applying for Ph.D. 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.**

Reservation Policy

- 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.
- As per the Directives of the Govt. of India, supernumerary seats are available in the following categories:
  - Employee Wards' Quota.
  - Preference under sports quota will be considered as per University rules.
  - Prime Minister's special scholarship scheme for candidates from Jammu and Kashmir.
  - Up to 5% of the approved seats are reserved for the widows/wards/wives of Armed Forces personnel and Ex-Servicemen as per the priorities set by Govt. of India. However, the reservation for M.Sc. in MBBT programme is subject to approval by the DBT, Govt. of India.
  - No reservation under defence quota in B.Tech. (Lateral Entry) programmes.
  - 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.
    - Priority VI: Wards of ex-servicemen.
    - Priority VII: Wards of serving personnel.

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.
- Selection for admission to the programme.
- 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.

Conditions for 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 31/10/2022. 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 31/12/2022. 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 31/10/2022.
■ If the required percentage of marks of the qualifying examination is not fulfilled or does not meet the requirement of the eligibility criterion.

List of Academic Programmes

UG Degree/Integrated/Diploma/Certificate Programmes

Sl. No.	Programme Names	Department/Centre	School
01.	B.Tech. in Civil Engineering	Civil Engineering	Engineering
02.	B.Tech. in Computer Science and Engineering #	Computer Science and Engineering	
03.	B.Tech. in Electrical Engineering	Electrical Engineering	
04.	B.Tech. in Electronics and Communication Engineering#	Electronics and Communication Engineering	
05.	B.Tech. in Food Engineering and Technology #	Food Engineering and Technology	
06.	B.Tech. in Mechanical Engineering #	Mechanical Engineering	
07.	Lateral Entry to 2nd year of B.Tech.	All Engineering Departments	
08.	B.Ed.	Education	Humanities and Social Sciences
09.	Certificate in Chinese	Foreign Languages	
10.	Integrated M.A. in English	English	
11.	Integrated M.Com. (With provision in Lateral exit after B.Com. module & Lateral entry in the M.Com. module)	Commerce	Management Sciences
12.	Integrated B.Sc.B.Ed. (Chemistry Major)	Chemical Sciences	Sciences
13.	Integrated M.Sc. in Chemistry		
14.	Integrated B.Sc.B.Ed. (Mathematics Major)	Mathematical Sciences	
15.	Integrated M.Sc. in Mathematics		
16.	Integrated M.Sc. in Life Sciences	Molecular Biology and Biotechnology	
17.	Integrated B.Sc.B.Ed. (Physics Major)	Physics	
18.	Integrated M.Sc. in Physics		

 # NBA accredited as Tier-I programme and AICTE approved

PG Degree/Diploma Programmes

Sl. No.	Programme Names	Department/Centre	School
01.	Master of Computer Application (MCA)	Computer Science and Engineering	Engineering
02.	M.Tech. in Information Technology		
03.	M.Tech. in Computer Science & Engineering		
04.	M.Tech. in Civil Engineering	Civil Engineering	
05.	Master of Design (M.Des.)	Design	
06.	M.Tech. in Bioelectronics	Electronics and Communication Engineering	
07.	M.Tech. in Electronics Design and Technology		
08.	M.Tech. in Energy Technology	Energy	
09.	M.Tech. in Food Engineering and Technology	Food Engineering and Technology	
10.	M.Tech. in Mechanical Engineering	Mechanical Engineering	
11.	M.A. in Cultural Studies	Cultural Studies	Humanities and Social Sciences
12.	M.A. in Education	Education	
13.	M.A. in English	English	
14.	M.A. in Linguistics and Language Technology		
15.	M.A. in Hindi	Hindi	
16.	Post Graduate Diploma in Translation (Hindi)		
17.	Master of Laws (LL.M)	Law	
18.	M.A. in Mass Communication and Journalism	Mass Communication and Journalism	
19.	M.A. in Communication for Development		
20.	M.A. in Social Work	Social Work	
21.	M.A. in Sociology	Sociology	
22.	M.A. in Assamese	Assamese	
23.	P.G. Diploma in Child Rights and Governance	Centre for Inclusive Development	
24.	P.G. Diploma in Women Studies	Chandraprabha Saikiani Centre for Women Studies	
25.	M.B.A.*	Business Administration	Management Sciences
26.	Master of Tourism and Travel Management (MTTM)		
27.	Certificate in NCCMP# (Part Time) (Not Through TUEE)		
28.	M.Com.	Commerce	
29.	M.Sc. in Chemistry	Chemical Sciences	Sciences
30.	M.Sc. in Environmental Science	Environmental Science	
31.	M.Sc. in Mathematics	Mathematical Sciences	
32.	M.Sc. in Molecular Biology and Biotechnology	Molecular Biology and Biotechnology	
33.	M.Sc. in Physics	Physics	

*Admission is made on the basis of CAT/MAT/XAT/ATMA/GMAT/CMAT score.
All M.Tech. programmes are AICTE approved
Admission is not through TUEE

Ph.D. Programmes

Sl. No.	Programme Names	Department/Centre	School
01.	Ph.D. in Physics	Applied Sciences	Engineering
02.	Ph.D. in Chemical Sciences		
03.	Ph.D. in Mathematical Sciences		
04.	Ph.D. in Civil Engineering	Civil Engineering	
05.	Ph.D. in Computer Science and Engineering	Computer Science and Engineering	
06.	Ph.D. in Electronics and Communication Engineering	Electronics and Communication Engineering	
07.	Ph.D. in Energy	Energy	
08.	Ph.D. in Food Engineering and Technology	Food Engineering and Technology	
09.	Ph.D. in Mechanical Engineering	Mechanical Engineering	
10.	Ph.D. in Electrical Engineering	Electrical Engineering	
11.	Ph.D. in Assamese	Assamese	Humanities and Social Sciences
12.	Ph.D. in Cultural Studies	Cultural Studies	
13.	Ph.D. in Education	Education	
14.	Ph.D. in English	English	
15.	Ph.D. in Hindi	Hindi	
16.	Ph.D. in Mass Communication and Journalism	Mass Communication and Journalism	
17.	Ph.D. in Sociology	Sociology	
18.	Ph.D. in Social Work	Social Work	
19.	Ph.D. in Business Administration	Business Administration	Management Sciences
20.	Ph.D. in Commerce	Commerce	
21.	Ph.D. in Chemical Sciences	Chemical Sciences	Sciences
22.	Ph.D. in Environmental Science	Environmental Science	
23.	Ph.D. in Mathematical Sciences	Mathematical Sciences	
24.	Ph.D. in Molecular Biology and Biotechnology	Molecular Biology and Biotechnology	
25.	Ph.D. in Physics	Physics	

Admission Procedure for Academic Programmes

Important Note

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 board/University, the converted CGPA in percentage must be certified by the principal/competent authority of the institute.

1. B.Tech. Programmes

i) Candidates seeking admission to the B.Tech. programmes are required to appear in the JEE (Main) – 2022 to be conducted by NTA, New Delhi. All admission shall be on the basis of JEE (Main) - 2022 All India Ranking/CRL.

ii) The candidates who appear in the JEE (Main) – 2022 can seek for admission to the B.Tech. programmes through two channels:

    a) **Open 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)-2022. The candidates of 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)-2022 application.

While filling in the ACF form, candidates must produce the PRC (Permanent Residence Certificate) issued by the competent authority and JEE-Main-2022 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.

c) **Important Note :** Candidates who are permanent residents of NE states shall still be eligible to get admitted to the open seats through central counselling procedure mentioned in (a).

Table 1.1: Duration, Intake, and Eligibility of B.Tech. Programmes

Sl.No	Branch	Intake	Duration (No. of Semesters)	
			Minimum	Maximum
01.	Civil Engineering	68	08	12
02.	Computer Science and Engineering	68	08	12
03.	Electrical Engineering	38	08	12
04.	Electronics and Communication Engineering	68	08	12
05.	Food Engineering and Technology	56	08	12
06.	Mechanical Engineering	68	08	12

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

a) As per the provisions of AICTE, diploma holders may apply for admission to the 2nd year of existing B.Tech. programmes of the University. The duration of the Lateral Entry programme in all branches is available in the Table 2.1 below.

Table 2.1 Duration of B.Tech. Lateral Entry Programmes

Sl.No	Branch	Intake	Duration (No. of Semesters)	
			Minimum	Maximum
01.	Civil Engineering	03	06	10
02.	Computer Science and Engineering	03	06	10
03.	Electrical Engineering	06	06	10
04.	Electronics and Communication Engineering	03	06	10
05.	Food Engineering and Technology	12	06	10
06.	Mechanical Engineering	03	06	10

Note: 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 Desirous candidates must satisfy the eligibility criteria before applying for B.Tech. (Lateral Entry) programmes. The eligibility criteria of the programme in all branches are given in the Table 2.2.

c) 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.

Table 2.2: Eligibility of B.Tech. (Lateral Entry) Programme Across Disciplines

Sl. No.	Branch	Eligibility
01.	Civil Engineering	10th standard examination with minimum 60% marks or equivalent grade point in aggregate as well as separately in Mathematics, and minimum 70% aggregate marks or equivalent grade point in AICTE approved diploma programme in the respective or allied discipline. The duration of the diploma programme must be:
02.	Computer Science and Engineering	
03.	Electrical Engineering	
04.	Electronics and Communication Engineering	
05.	Mechanical Engineering	02 years diploma after 10+2 OR 03 years after 10th (Matriculation) in conventional system OR 04 Year after 10th (Matriculation) in modular system.
06.	Food Engineering and Technology	10th standard examination with minimum 60% marks or equivalent grade point in aggregate as well as separately in Mathematics, and minimum 60% aggregate marks or equivalent grade point in AICTE approved diploma programme in the respective or allied discipline. The duration of the diploma programme must be: 02 years diploma after 10+2 OR 03 years after 10th (Matriculation) in conventional system OR 04 Year after 10th (Matriculation) in modular system.

d) Admission Procedure

i) Candidates will be selected on the basis of performance in an OMR based Written Entrance Exmination (OWEE) to be conducted by Tezpur University Entrance Examination (TUEE) Cell at centres in Guwahati and Tezpur and past academic performance.

ii) They must register and fill in the ACF at TU admission portal to appear in the OWEE at their preferred center on or before the last date specified for the purpose.

3. Integrated/Certificate Programmes
(M.A./M.Com./M.Sc./B.Sc.B.Ed./Certificate in Chinese)

a) Candidates will be selected based on the performance in the CUET (UG)-2022 for UG programmes conducted by NTA. Registration for CUET (UG)-2022 can be done at https://cuet.samarth.ac.in

b) The intake and duration of all integrated programmes at Tezpur University is given in Table 3.1.

c) Before applying, candidates must satisfy the eligibility criteria for the desired programme(s) of study. Table 3.2 can be referred to check the eligibility criteria as well as the components of the subject domain of an integrated programme in CUET (UG)-2022.

Table 3.1: Intake and Duration of Integrated/Certificate Programmes

| Sl.No | Programmes | Intake | Duration (No. of Semesters) | |
			Minimum	Maximum
01.	Integrated M.Sc. in Chemistry	25	10	14
02.	Integrated M.Sc. in Life Sciences	25	10	14
03.	Integrated M.Sc. in Mathematics	25	10	14
04.	Integrated M.Sc. in Physics	25	10	14
05.	Integrated M.Com.	33*	10	14
06.	Integrated M.A. in English	25	10	14
07.	Integrated B.Sc.B.Ed. with major in Chemistry	13	08	12
08.	Integrated B.Sc.B.Ed. with major in Mathematics	13	08	12
09.	Integrated B.Sc.B.Ed. with major in Physics	13	08	12
10.	Certificate in Chinese	49	02	04

Actual intake may vary.

Table 3.2: Eligibility & CUET (UG) Test Paper of Integrated/Certificate Programmes

Sl. No.	Name of Programmes	Optional Languages / Domain/ General Paper Mapped to the Programmes for CUET (UG)-2022	Eligibility for the Programme
01.	Integrated M.Sc. in Chemistry	Section IA: English	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Chemistry, Physics and Mathematics.
		Section II: Chemistry	
02.	Integrated M.Sc. in Life Sciences	Section IA: English	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Biology, Chemistry, Physics and/or Mathematics.
		Section II: Any one subject Biology/ Chemistry/ Physics	
03.	Integrated M.Sc. in Mathematics	Section IA: English	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Chemistry/Statistics, Physics and Mathematics.
		Section II: Mathematics	
04.	Integrated M.Sc. in Physics	Section IA: English	10+2 standard pass with minimum 60% aggregate marks or equivalent grade point in Chemistry, Physics and Mathematics.
		Section II: Physics	
05.	Integrated M. Com.	Section IA: English	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	

06.	Integrated M.A. in English	Section IA: English	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.
		General Test (Section III)	
07.	Integrated B.Sc.B.Ed. (Chemistry major)	Section IA: English	10+2 standard pass in science stream with minimum 60% aggregate marks or equivalent grade point in Chemistry, Physics, English, Mathematics, Biology.
		Section II: Chemistry	
08.	Integrated B.Sc.B.Ed. (Mathematics major)	Section IA: English	10+2 standard pass in science stream with minimum 60% aggregate marks or equivalent grade point.
		Section II: Mathematics	
09.	Integrated B.Sc.B.Ed. (Physics major)	Section IA: English	
		Section II: Physics	
10.	Certificate in Chinese	Section IA: English	10+2 Standard pass in any stream with minimum 45% aggregate marks or equivalent grade point.
		General Test (Section III)	

d) Admission Procedure

🔵 **At NTA Portal**

🔲 Register for the CUET (UG)-2022 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 your desired integrated programme(s) under Tezpur University.

🔲 Select the correct test paper for the selected programme and your preference for examination centres. Please refer to the Table 3.2 above.

🔲 Appear in the CUET (UG)-2022 examination in the selected test paper as per the schedule published by the NTA.

🔲 Secure the NTA examination score [expected in July-August 2022].

🔵 **At TU Portal**

🔲 After obtaining NTA score, register and fill in the ACF online at the TU admission portal on or before the last date specified for the purpose.

🔲 Wait for merit lists for admission cum counselling. The lists will be published at TU admission portal.

4. M.Sc. in Molecular Biology and Biotechnology

Eligibility Criteria

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.

a) Total intake is 30 seats.

b) Out of this total intake, only 10 (ten) seats are reserved for the candidates who are domicile of any of the NE states of India and the rest 20 (twenty) seats will be filled up on all India basis according to the GAT-B score.

c)   Before applying for the programme, please check its eligibility criteria carefully.

d) **Admission Procedure**
Candidates will be selected on the basis of the GAT-B score. The examination of GAT-B is conducted by the Regional Centre for Bio-technology, Faridabad under the Department of Biotechnology (DBT), Govt. of India. PRC is to be mandatorily provided while applying for the 10 (ten) quota seats for the NE states. The prescribed format of PRC is provided in Annexure-1.

5. Master of Business Administration (MBA)

Eligibility Criteria

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. Relaxation of 5% of the minimum percentage will be applicable to the reserved categories as per Govt. of India rules.

a) Total intake for this programme is 58 seats.

b) Any desirous candiadate must first satisfy the eligibility criteria for the programme before applying for it.

c) **Admission Procedure**

- 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 on the basis of 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.
- *Admission process is already over for the Academic Year 2022-23.*

6. Master of Design (M. Des.)

Eligibility Criteria

Bachelor's degree in Design/Engineering/Architecture/Planning/Interior Design (10+2+4 years)/ 4-year B. Sc. (Engineering)/ 4-year Diploma in Design/ 4-year BFA / with minimum CPI/CGPA of 6.0 in a 10-point scale or a minimum of 60% of total/ aggregate marks in qualifying degree and qualified CEED 2022 examination. The minimum marks requirement is relaxed by lowering 0.5 in CPI/CGPA or 5% in marks for SC/ST/PWD candidates.

a) The programme's sanctioned intake is 18 seats.

b) Admission Procedure

Candidates with valid CEED-2022 score will be admitted directly on merit basis. The merit list will be prepared on the basis of CEED score, portfolio and Personal Interview (PI).

7. M. Tech. Programmes

a)   Admission to various M.Tech. programmes shown in the Table 7.1, is on the basis of performance in the CUET (PG)-2022 conducted by NTA, New Delhi or on the basis of valid score in GATE examination. Candidates having valid GATE score in relevant subject can apply directly for M.Tech. programmes. Candidates not having GATE qualification, must register and appear for the CUET (PG)-2022 conducted by NTA in the test question paper mentioned in Table 3.2. With score of CUET (PG), they can apply for M.Tech. programmes.

b)   The GATE-qualified candidates may still apply and appear in CUET (PG)-2022 test to secure their chance.

c)   Category-wise merit lists of GATE-qualified candidates and CUET (PG) qualified candidates will be prepared separately and will be notified on TU admission portal.

d)   All candidates desirous to be admitted to any of the M.Tech. programmes need to register and fill the ACF at TU admission portal.

Table 7.1: Duration and Intake of M.Tech. Programmes

Sl.No	Programmes	Intake*	Duration (No. of Semesters)	
			Minimum	Maximum
01.	M.Tech. in Bioelectronics	19	04	08
02.	M.Tech. in Civil Engineering (Specialization in Geotechnical Engineering)	11	04	08
03.	M.Tech. in Computer Science and Engineering	28	04	08
04.	M.Tech. in Electronics Design and Technology	35	04	08
05.	M.Tech. in Energy Technology	35	04	08
06.	M.Tech. in Food Engineering and Technology	23	04	08
07.	M.Tech. in Information Technology	25	04	08
08.	M.Tech. in Mechanical Engineering (Specialization: 1. Machine Design and 2. Thermo Fluids)	23	04	08

* Out of the total intake, the number of sanctioned GATE seats in M.Tech. in Civil Engineering is 04 (Four) only and it is 18 (eighteen) in the M.Tech. programme in other disciplines. In any discipline, if the sanctioned GATE seats cannot be filled up fully due to non-availability of applicants with valid GATE score, then the vacant seats will be filled up from the merit list of applicants with CUET (PG) score. Such candidates admitted through CUET (PG) will not be entitled for GATE scholarship. However, if they have valid GATE score in other eligible discipline, they may be recommended for GATE fellowship from AICTE.

Table 7.2: Eligibility and Test Code in CUET (PG) for M.Tech. Programmes

Sl. No.	Discipline	ELIGIBLITY#	Test code for CUET(PG)
01.	Bioelectronics	B.E./B.Tech. 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 M.Sc. in Biotechnology/ Biochemistry/ Chemistry/ Polymer Science/ Physics/ Electronics/ Nano Science and Technology/ Instrumentation or MBBS with minimum 50% aggregate marks or equivalent grade point. **	PGQP55/ PGQP52
02.	Civil Engineering	B.E./B.Tech. in Civil Engineering with minimum 50% aggregate marks or equivalent grade point, where applicable. **	PGQP08 (Civil Engg.)
03.	Computer Science and Engineering	B.E./B.Tech. or equivalent Bachelor's degree in Computer Science and Engineering or MCA with minimum 50% aggregate marks or equivalent grade point. **	PGQP54
04.	Electronics Design and Technology	B .E./B.Tech. or equivalent Bachelor's degree in Electronics/ Electrical/ Instrumentation Engineering or M.Sc. in Electronics/ Instrumentation/ Physics (Electronics as specialization) with minimum 50% aggregate marks or equivalent grade point. **	PGQP52

05.	Energy Technology	B.E./B.Tech. 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/ M.Voc. in Renewable Energy with minimum 50% aggregate marks or equivalent grade point. **	PGQP45
06.	Food Engineering and Technology	B.E./B.Tech. /M.Sc. 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. **	PGQP08 (Food Engg & Tech.)
07.	Information Technology	B.E./B.Tech. 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 M.Sc. in Computer Science/ Information Technology/ Electronics/ Mathematics/ Statistics with minimum 50% aggregate marks or equivalent grade point. Candidates selected under GATE should have a valid GATE score in Computer Science. **	PGQP54
08.	Mechanical Engineering (Specialization: 1. Machine Design 2. Thermo Fluids)	B.E./B.Tech. 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. **	(Mechanical Engg.)

*** Candidates having valid GATE score in the eligible discipline will be considered against GATE seats for direct admission with GATE fellowship. For Information Technology, GATE must be in the Computer Science only*
#The recruitment in the department will be made as per the AICTE norms

e) Admission Procedure

🔵 **At NTA Portal**
◼ Register for the CUET (PG)-2022 at NTA web portal available at [https://nta.ac.in] [https://cuet.nta.ac.in] by following the guidelines provided. Candidates with valid GATE score may/may not register for CUET (PG)-2022.

◼ Select Tezpur University from the list of universities and then select your desired M.Tech. programme under Tezpur University.

◼ Select the correct test paper for the selected M.Tech. programme and your preference for examination centres.

◼ Appear in the CUET (PG) examination in the selected test paper as per the schedule published by the NTA.

◼ Secure the NTA examination score.

🔵 **At TU Portal**
◼ All candidates (GATE qualified/CUET (PG) qualified) must register and fill in the ACF online at the TU admission portal on or before the last date specified for the purpose.

◼ Wait for the merit lists that will be published at TU admission portal.

8. Other PG Programmes (M.A./M.Sc./M.Com./MCA/LL.M./MTTM/B.Ed./PG Diploma)

a) Candidates for any of these programmes will be selected on the basis of the performance in the CUET (PG)-2022 conducted by NTA for PG programmes. The intake capacity and duration of each programme are given in Table 8.1

b) Before applying, candidates must check the eligibility criteria and CUET (PG) test paper code for each of the programmes from Table 8.2. Only candidates satisfying the eligible criteria can apply for that programme.

e) Admission Procedure

🔵 **At NTA Portal**
◼ First register for the CUET (PG)-2022 at the NTA web portal available at [https://nta.ac.in] [https://cuet.nta.nic.in].

- Fill up the application form on the NTA portal as per the guidelines provided there.
- While filling up the form, select Tezpur University from the list of universities and then select your desired programme(s) under Tezpur University.
- Select the correct test paper(s) for the selected programme(s) and your preference for examination centres.
- Appear in the CUET (PG) examination in the selected test paper(s) as per the schedule published by the NTA.
- Secure the NTA examination score [expected in July-August 2022].

● At TU Portal

- All candidates must register and fill in the ACF online at TU admission portal on or before the last date specified for the purpose. While filling in the form, all or some of the programmes registered in the NTA web portal for the CUET (PG) can be selected.
- Check for merit lists that will be prepared based on CUET (PG) test score and will be published at Tezpur University website
- Only the candidates short-listed in the merit list will be called for admission at Tezpur University.

Table 8.1 Intake and duration for all Postgarduates Programmes

SN	Programmes	Intake*	Duration (No. of Semesters)	
			Minimum	Maximum
01.	B.Ed.	63	04	08
02.	LL.M.	25	04	08
03.	M.A. in Assamese	10	04	08
04.	M.A. in Communication for Development	15	04	08
05.	M.A. in Cultural Studies	35	04	08
06.	M.A. in Education	38	04	08
07.	M.A. in English	63	04	08
08.	M.A. in Hindi	31	04	08
09.	M.A. in Linguistics and Language Technology	38	04	08
10.	M.A. in Mass Communication and Journalism	44	04	08
11.	M.A. in Social Work	22	04	08
12.	M.A. in Sociology	38	04	08
13.	M.Com. Commerce	20	04	08
14.	M.Sc. in Chemistry	25	04	08
15.	M.Sc. in Environmental Sciences	38	04	08
16.	M.Sc. in Mathematics	53	04	08
17.	M.Sc. in Physics	38	04	08
18.	M.Sc. in Molecular Biology and Biotechnology	30**	04	08
19.	Master on Computer Application (MCA)	56	04	08
20.	Master of Tourism and Travel Management (MTTM)	19	04	08
21.	PG Diploma in Translation (Hindi)	31	02	04
22.	PG Diploma in Women's Studies	25	02	04

*__**Only ten seats are reserved for GAT-B qualifiers who are permanent residents of Northestern states and rest twenty seats will be filled from GAT-B qualifiers on All India basis.__*

Table 8.2: Eligibility Creteria and CUET (PG) Test Codes

Sl. No.	Programmes	Eligibility	Test code for CUET-PG
01.	B.Ed.	Bachelor's degree in any discipline (B.A./B.Sc./B.Tech./B.E.) with minimum 55% marks or equivalent grade point	PGQP01
02.	LL.M.	Bachelor's degree in Law with minimum 50% aggregate marks or equivalent grade point.	PGQP02
03.	M.A. in 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.	PGQP60
04.	M.A. in Communication for Development	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.	PGQP41
05.	M.A. in Cultural Studies		PGQP40
06.	M.A. in Education		PGQP03

07.	M.A. in English	Bachelor's degree with Major/ Honours in English with at least 45% marks or equivalent grade point in the major/ honours subject.	PGQP05
08.	M.A. in 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.	PGQP06
09.	M.A. in Linguistics and Language Technology	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.	PGQP23
10.	M.A. in 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.	PGQP41
11.	M.A. in 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.	PGQP20
12.	M.A. in Sociology		PGQP15
13.	M.Com.	B.Com. with minimum 50% marks or equivalent grade point in major/ honours. Mathematics at degree level is desirable	PGQP37
14.	M.Sc. in 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.	PGQP25
15.	M.Sc. in Environmental Sciences	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.	PGQP32
16.	M.Sc. in 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.	PGQP27
17.	M. Sc. in 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.	PGQP28
18.	MCA in Computer Science	Bachelor's degree in any discipline with minimum 50% aggregate marks or equivalent grade point, where applicable. Also, candidates should have Mathematics at 10+2 Standard with pass marks or equivalent grade point.	PGQP26
19.	Master of Tourism and Travel Management (MTTM)	Bachelor's degree in any discipline with minimum 45% marks or equivalent grade point, where applicable in major/ honours subject or in aggregate.	PGQP38
20.	PG Diploma in Translation (Hindi)	Bachelor's degree in any discipline having Hindi as the major/ honours subject or as a subsidiary subject, or Praveen/Sahityaratna in Hindi, with minimum 45% aggregate marks or equivalent grade point.	PGQP06
21.	PG Diploma in Women's Studies	Bachelor's degree in any discipline with 45% marks or equivalent grade point in aggregate	PGQP40

9. Ph.D. Programmes

a) General criteria as per UGC Guidelines for admission into Ph.D. programmes:

● Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7- point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

- Candidates possessing a degree considered equivalent to M.Phil. degree of an Indian institution, from a foreign educational institution accredited by an assessment and accreditation agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions, shall be eligible for admission to Ph.D. programme.

b) Department specific further requirement for admission into Ph.D. Programme in Tezpur University is given separately. Refer to Tables 9.1-9.4 for department specific requirements for Ph.D. programmes under different schools.

c) Ph.D. candidates for admission in Autumn 2022 will be selected on the basis of (i) Performance in an OMR based Written Entrance Examination (OWEE) conducted by Tezpur University Entrance Examination (TUEE) Cell at centres in Guwahati and Tezpur, and Personal Interview (PI) in online/physical mode. Candidates with UGC-(NET/JRF)/UGC-CSIR(NET/JRF)/ DBT-JRF/ICMR-JRF/ ICAR-NET/ GATE/ SLET / M.Phil. will be selected on the basis of the performance in the personal interview only.

d) Candidate desiring full time Ph. D. will be given preference.

Table 9.1: Department Specific Criteria for Ph.D. Programmes in School of Engineering

Sl. No.	Department	Research Areas	Pre-requisite
01.	Applied Sciences (Physics) *	Theoretical Modeling of Astrophysical Flows Around Compact Objects/ 2D Layered Materials for Applications.	M.Sc./Integrated M.Sc. in Physics/ Astrophysics/ Electronics/ Geophysics/Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science. **OR** M.Phil./M.Tech. in Solid State Material/ Material Science/ Electronics/ Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences. **OR** M.S Astronomy and Astrophysics. **OR** B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.
	Applied Sciences (Mathematics)*	Differential Equations, Harmonic Analysis/ Spectral Graph Theory/ Operations Research, Inventory Modeling, Fuzzy Mathematics and Optimization, Mathematics Modelling.	M.Sc./M.A./M.E./M.Tech. /MS/BS-MS/Integrated M.Sc. degree in Mathematics/ Statistics/ Engineering Mathematics/ Mathematics and Computing/ Applied Mathematics/ Operations Research/ Mechanical Engg./ Industrial Engineering/ Computer Science and Engineering/ Information Technology/any allied subject with 55% marks in aggregate or equivalent CGPA. **OR** B.Tech. in Mathematics and Computing/any allied subjects with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation letters from the institute/ University from where B.E./B.Tech. degree was obtained.
	Applied Sciences (Chemictry)*	Metal-Organic Frameworks, Porous Organic Polymers.	M.Sc. in Chemistry/ Chemical Sciences/ Polymer Chemistry/Polymer Science/ Physics/ Nano Science/ Material Science/ Environmental Science or allied subjects **OR** M.E./M.Tech. in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering/ Energy etc.)
	*Separate PI will be conducted for the short-listed candidates for Ph.D. in Applied Sciences Department.		
02.	Civil Engineering	Geotechnical Engineering/ EnvironmentalEngineering/ Transportation Engineering.	(a) M.E./M.Tech. /M.Sc. (Engg.) in Civil Engg. or allied areas or (b) M.Sc. in relevant discipline with minimum 70% marks in aggregate or equivalent CGPA or (c) B.E. / B.Tech. with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation letters from the institute /University from where B.E./B.Tech. degree was obtained.
03.	Computer Science & Engineering	Data mining, Image processing/ Computer vision and Geometry/Bioinformatics/ 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.	M.Tech. in Computer Science/ I.T./ Electronics or MCA/M.Sc. in Computer Science/ I.T. or B.E. / B.Tech. with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation letters from the institute/ University from where B.E./B.Tech. degree was obtained.

04.	Electronics & Communication Engineering	Robotics, Biomedical Signal Processing/Image Processing, Computer Vision, Deep learning-based signal and image analysis, Biomedical signal Processing/Bio-electronics/Semiconductor Devices Flexible Electronics/Neuro-engineering, Bioelectronics/ Semiconductor Devices, Simulation and Modeling/ Bio-sensors, Quantum Technology/Machine learning for smart Sensing, Sensors/ Sensor and Nanotechnology/ Vehicular electronics, Bio-electronic Devices.	M.E. / M.Tech. / M.Sc. Engg. / M.S. in Electronics/ Communication/ Electronics Design/ Electrical/ Instrumentation/ Control/ Microwave/ Biomedical/ Bioelectronics/ Biotechnology/ Computer Science/ Information Technology. **or** M.Sc. in Electronics/ Physics/ Applied Mathematics. MCA with Physics, Chemistry and Mathematics in Bachelor's degree, MBBS with MD/ MS degree. OR B.E. / B.Tech. with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation letters from the institute/ University from where B.E./ B.Tech. degree was obtained.
05.	Electrical Engineering	Sensor Fabrication for Application in Food Industry, IOT & health monitoring Green Energy Sensor/ Control System, Smart energy system, chaos, IOT, Waste water Purification/ Renewable Energy, Power System, Electronic Drives, Electric Vehicles/ Power Electronics & Drives Micro grid/ Smart Grid.	ME/M.Tech. in any relevant discipline of Engineering or MBBS with MD/MS or M.Sc. in any relevant Science discipline, or B.E./B.Tech. with 75% marks aggregate orc equivalent CGPA with a valid GATE Score and minimum two recommendation letters from the Institute or University from where B.E. /B.Tech. degree was obtained.
06.	Energy	Energy Management, Bio-energy, IoT for Biogas/ Bio-fuels, Bio-energy, Catalytic transformation of Biofuels, Energy-Environment/ Building Energy, Biomass Energy/ Hybrid energy system, Grid integration, instrumentation and control, waste management/ Fuel Cell, Green Hydrogen, Battery Supercapacitor, Hybrid UAV based air quality monitor/ Solar Energy, Photovoltaic, Energy Systems, Solar Hybrid Systems/ Heating & Ventilation, Radiant System, Ground Source Heat	M.Sc. / M.E. / M.Tech. degree in Energy Technology/ Energy Management/Energy related Engineering and Technology/Physics/ Chemistry/Agriculture Allied subjects.
07.	Food Engineering and Technology	Functional Foods and Food Chemistry/Food Packaging, Food Processing waste utilization/ Food process engineering.	M.Tech. / M.E. /Integrated M. Tech. in Food Engineering and Technology/Food and Dairy related other programme/Mechanical Engineering/Chemical Engineering/Bio-Process/Bio-chemical/Biotechnology, **or** M.Sc. and Integrated M.Sc. in Food Engineering and Technology/Food and Dairy related other programme/ Applied Microbiology/Microbiology/Bio-Chemistry/ Chemistry/ Biotechnology/Bioscience and Informatics, or, B.E./B.Tech. (in Food Engineering and Technology/ Food and Dairy related other programme) with 75% marks in aggregate or equivalent CGPA with valid GATE Score). Minimum two recommendation letters from the institute/University from where B.E./B.Tech. degree was obtained.
08.	Mechanical Engineering	Design and Analysis of Heat Exchangers, Thermodynamic modelling and optimization of (i) Solar thermal power and cooling systems (ii) Gas turbine based combined power systems with steam Rankine, organic Rankine and Kalina as bottoming cycles (iii) vapour absorption cooling systems/Optimum design of Structures and systems using evolutionary algorithms with special emphasis to multi- Objective Combinatorial optimization problems/Solar Thermal Energy Applications, Drying Technology Including Solar Hybrid Drying, Thermal Energy Storage/ Solar Thermal Energy storage Material Characterization/ Thermal Engineering, Heat Transfer System/ Rehabilitation robotics- Prosthetic Hand, Single Objective and Multi- objective Optimization Facility Layout Problem, Mechatronics/ Stress Analysis, Plasticity, Autofrettage, Fracture Mechanics.	M.E. / M.Tech. / M.Sc. (Engg.) in Mechanical Engineering or any other relevant Engineering branches including Chemical Engineering and Materials Science Engineering. Or, M.Sc Degree in any relevant discipline with CSIR-UGC JRF/NET Qualified certificate or a valid GATE score. Candidates other than those with M.Sc. Mathematics must have studied Mathematics up to BSc level. Or, B.E. / B.Tech degree with 75% marks in aggregate or equivalent CGPA with valid GATE Score. Minimum two recommendation Letters from the Institute /University from where B.E./B.Tech degree was obtained..

Table 9.2: Department Specific Criteria for Ph.D. Programmes in School of Humanities and Social Sciences

SL. No.	Department	Research Areas	Pre-requisite
01.	Assamese	Modern Assamese Literature, Film Studies & Theatre Studies/Translation Studies, Comparative Literature & Ethnic Literature/Assamese Literature & Colonial Assam, Languages of Assam.	Postgraduate in Assamese or in any allied discipline/subjects with 55% marks.
02.	Cultural Studies	Masculinity, Protest Music, Comparative Literature and Film Studies/Digital Culture/Design Ethnography/ Media and Culture/Folklore/Visual Culture & Art History.	M.A. in any of the disciplines in Humanities or Social Sciences with a uniformly good academic career. Candidates with UGC JRF, UGC NET or NE SET will be given preference.
03.	Education	Education Technology, Teacher Education, Language Education/ Mathematics Education, Cognitive Science, Blended Learning, E-Content Development, Inclusive Education.	Post Graduate in Education or in any allied discipline/subjects with 55% marks.
04.	English	Material Development Language Policy, Curriculum Design/ Life Writing, Travel Writing, Contemporary British Literature, Translation/ Gender & Literature/ Film Adaption, Indian Literature in English, Popular Culture/ Anglophone South Asian Literature, Indian Writing in English, Ecocriticism / English Language Education.	MA in English (specialization may be in American Literature as well as in English Language Teaching, English Literature, Indian Writing in English, New literature in English and Women's Writing in English).
05.	Hindi	M.A. in Hindi.	Linguistics, Poetry & Journalism/ Fiction & Modern Hindi Literature.
06.	Mass Communication & Journalism	New Media, ICT for Development.	M. A. in Mass Communication, Mass Communication & Journalism/ Communication. Master of Mass Communication (MMC). Master of Journalism & Mass Communication (MJMC). Master of Science in Communication (M. S. Communication). M. Sc. Communication. Master of Journalism..
07.	Sociology	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.	Post Graduation in Sociology / Cultural Studies/ Anthropology (with specialization in Social Anthropology) / Economics / History / Political Science / Philosophy / Mass Communication / English / Law / Management/ Social Work.
08.	Social Work	Social Work & Mental Health, Psychosocial Care in Disaster Management, Street Children, and Application of Social Work Methods/Migration, Rural Development, Social Innovation	MA in Social Work and allied Social Sciences such as Sociology, Psychology, Rural Development, Development Studies, Law, Public Health, Education and Management.
09.	Linguistics & Language Technology	Morphology, Language Description, Documentation and Language Typology	M.A. in Linguistics and Language Technology/M.A. Linguistics/M.A. in allied Subjects

Table 9.3: Department Specific Criteria for Ph.D. Programmes under School of Management Sciences

SL. No	Department	Research Areas	Pre-requisite
01.	Business Administration	Human Resource Management, Organization Behaviour/ accounting, taxation, social Development Issues/ Tourism Marketing Management/ Finance, Green Finance, Fin Tech, agriculture Finance, Stock Market/ Tourism, Logistic & Supply Chain Management, Intellectual Property Management, Community Conserved Areas.	M.B.A. , M.Com. , M.A. / M.Sc. in Economics, M.A. in Psychology/ Sociology/Social Work/ Cultural Studies, MCA , M.T.M. / M.T.A. FCA/ FCS/ FICWA.
02.	Commerce	Sustainability, Climate Change/ Economic Growth, Financial Development/ Corporate Finance.	1. M.Com., 2. M.A./M.Sc. in Economics, 3. FCA/ FCMA/ FCS.

Table 9.4: Department Specific Criteria for Ph.D. Programmes under School of Sciences

SL. No	Department	Research Areas	Pre-requisite
01.	Chemical Sciences	Polymer Chemistry/ water Purification, Theoretical Chemistry/ Organic Synthesis, Computational & Inorganic Chemistry/ Ionic Liquid Based Material, Electrocatalysis/ Molecular Magnetism, Organic Chemistry/ Synthetic Organic Chemistry/ Catalysis/ Physical Chemistry.	M.Sc. in all branches of Chemical Science/ Physics/Nanoscience/ Material Science/ Biotechnology/ Biochemistry/ Bioinformatics/ Environmental Science. M.E./M.Tech. in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering etc.).
02.	Environmental Sciences	Atmospheric Chemistry/ Air Pollution/ Climate change and forest ecosystem dynamics/ Pollution Biology and Health Entomology/ Plant -Insect Interface/ Indoor Air Pollution, Human Environment Interactions.	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.
03.	Mathematical Sciences	Topology and Fuzzy Mathematics/ Functional Analysis and Operator Theory/ Computational Fluid Dynamics/ Number Theory/ Coding Theory/ Fractional Differential Equations.	M.A. / M.Sc. in Mathematics or M.A./M.Sc. in Statistics with requisite background in Mathematics.
04.	Molecular Biology & Biotechnology	Cancer Biology/Inflammation/ Bioinformatics, computational Biotechnology/Whole genome sequencing (WGS) and metabolic pathway analysis / Type 2 Diabetics/ Plant pathogenicity, gene expressions.	Masters in any branches of Life Sciences/ Physical Sciences/ Chemical Sciences/ Mathematical Sciences/ Agricultural Sciences / Veterinary or Sciences / Engineering Sciences /Medical Sciences or in any allied field. B. Tech./ B. E. degree with 80% marks in CGPA (with GATE score > 90.00 percentile) in Chemical Engineering/ Chemical Sciences/ Bioinformatics or any allied field. MBBS or BVSc. Degree with at least 60% marks or equivalent CGPA. Apart from the above, candidates having consistently good academic record will be preferred.
05.	Physics	High Energy Physics/ Microwave Materials & Devices/ Optoelectronics, Laser Physics/ Nanosciences, Condensed Matter Physics, Multidisciplinary/ Mesoscopic Physics, Quantum Systems/ Neutrino Physics/ Applied Photonics, Biomedical Instrumentation/ Applied Optics & Instrumentation/ Astronomy & Astrophysics/ Materials Science.	M.Sc. in Physics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science. M.Phil., M.Tech. in Solid State Material/ Material Science/ Electronics/Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences. B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.

Admission Procedure

● **At TU Portal**

■ Candidates must first satisfy all the criteria and department specific eligibility before applying for admission into the Ph.D. prgrammes. Refer to Tables 9.1 – 9.4 for department specific eligibility criteria for Ph.D. programmes in the four schools.

■ Eligible candidates must register themselves and fill in the ACF form available at TU admission portal on or before the last date specified for the purpose.

■ Candidates without UGC-(NET/JRF)/UGC-CSIR(NET/JRF)/DBT-JRF/ICMR-JRF/ICAR-NET/GATE/SLET/M.Phil. must appear in the OWEE to be conducted by TUEE Cell at centres in Guwahati and Tezpur. Candidates must give the preference of the examination centers while filling up the form.

■ The performance of the candidates in the OWEE will be published on the University website.

■ Only the candidates short-listed in the merit list will be called for a personal interview in the respective department.

■ Candidates qualified in the UGC NET-JRF/ UGC-CSIR NET-JRF, UGC/CSIR NET (LS)/ SLET (LS), GATE and M. Phil. degree holders are exempted from appearing in the written test; however, such candidates are still required to register and to fill in the ACF available at TU admission portal on or before the last date specified for the purpose. Further they shall also appear in the personal interview.

- A candidate can only apply for two programmes during the application process.

- Finally selected candidates shall be notified through University website for getting admission into the Ph.D. programme.

- The candidates who have appeared in the qualifying examination, but their results are yet to be declared may be selected provisionally for admission to Ph.D. programme. Such candidates must produce marksheets of the qualifying examination fulfilling the eligibility criteria at the time of admission.

- 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.

4. 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 the calender. Each academic programme of the University is comprised of a set of courses, some of which are core and others are elective. There are two types of elective courses - (1) Discipline specific electives (DSE) offered by the Department which are specific to the programme; and (2) Generic or open electives which are to be chosen by the students of other Departments.

The University follows the choice-based system of UGC for all programmes except for engineering which follows AICTE model. The courses across the Departments are designed in such a way that multiple teaching pedagogies can be incorporated in delivering the contents.

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-term and End-term) apart from two class 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,

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Kovind
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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 leftout 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.

Course Registration

A student needs to register for some courses/ research work(s) in each semester through a prescribed Registration Card. The course adviser appointed by the Head of a Department/Centre assists the students in selecting courses for a semester. The Registration Card contains four copies: one each for the Academic Section, Department, Hostel Warden, and the student.

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 (maximum credit load allowed per semester is 25).
● 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.

Financial Help from the Government

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

● Institutional fellowship for meritorious Ph.D. 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 Director of Welfare of Tea and Ex-tea garden.
● AICTE scholarship for the GATE qualified students of M. Tech.
● 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.
● Selected candidates belonging to BPL / AAY Category will be provided free studentship.

Students admitted on the basis of GATE score to the M.Tech. 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. As per the records of recent past, there is a waiting time for the release of the first instalment of the Scholarship, due to the time taken for official procedures which is beyond the control of the University.

5. DEPARTMENT PROFILE

Departments Under Different Schools

School of Engineering

- Applied Sciences
- Civil Engineering
- Computer Science & Engineering
- Design
- Electrical Engineering
- Electronics & Communication Engineering
- Energy
- Food Engineering & Technology
- Mechanical Engineering

School of Humanities and Social Sciences

- Assamese
- Cultural Studies
- Education
- English
- Foreign Languages
- Hindi
- Law
- Linguistics & Language Technology
- Mass Communication & Jornalism
- Social Work
- Sociology

School of Management Sciences

- Business Administration
- Commerce

School of Scinces

- Chemical Sciences
- Environmental Science
- Mathematical Sciences
- Molecular Biology & Biotechnology
- Physics

APPLIED SCIENCES
(Year of Establishment: 2019)

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.

Mathematical Sciences

Programmes offered

1.Ph.D. in Mathematical Sciences

Faculty and Areas of Interest

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

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

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

Selected Publications

○ S. Pal and R. Haloi, Existence and uniqueness of solutions to the damped Navier−Stokes equations with Navier boundary conditions for three-dimensional incompressible fluid, Journal of Applied Mathematics and Computing, Vol. 66 (1) (2021), 307-325.

○ Saha, P. Majumder, D. Dutta, B. K. Debnath., Multi-attribute Decision Making Using q-rung Orthopair Fuzzy Weighted Fairly Aggregation Operators , Journal of Ambient Intelligence and Humanized Computing, Vol. 12 (2021), 8149-8171.

○ S. Paul, Distance Laplacian spectra of joined union of graphs, Asian-European Journal of Mathematics, Vol. 15 (2022), 2250039.

Chemical Sciences

Programmes offered

1.Ph.D. in Chemical Sciences.

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.

Selected Publications

○ S. Seth and S. Jhulki., Porous Flexible Frameworks: Origin of Flexibility and Applications, Materials Horizons, Vol. 8 (2021), 700-727.

Physics

Programmes offered

1.Ph.D. in 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.

Assistant Professor
Biplob Sarkar*, Ph.D. (IITG)
Theoretical Modeling of Astrophysical Flows, Study of X-ray Binaries, X-ray Data Analysis and Interpretation

Selected Publications

○ S. H. Yu, P. K. Gogoi, A. Rath, H. Dai, Z. Q. Cavin Ng, K. Suenaga, S. J. Pennycook, D. H. C. Chua, In-situ Derived Highly Active NiS_2 and MoS_2 Nanosheets on $NiMoO_4$ Microcuboids via Controlled Surface Sulfidation for High-current-density Hydrogen Evolution Reaction, Electrochimica Acta Vol. 389 (2021) 138733.

*** Recognized Ph.D. Supervisor**

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
No. of papers published in the year 2021- 2022   : **15**
No. of ongoing research projects   : **04**
No. of current Ph.D. scholars   : **06**

Courses offered in B.Tech. program

First Semester				Second Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
CH103	Chemistry	4		MS105	Mathematics II	4
MS104	Mathematics I	4		PH104	Physics II	2
PH103	Physics I	3				

Third Semester		
Course Code	Course Title	Cr.
MS205	Mathematics III	3

Courses offered in Ph.D. in Chemistry

Course Code	Course Title	Cr.
AC701	Supramolecular Chemistry	4
AC702	Chemistry of Porous Materials	4

Remaining credits to be fulfilled by open elective courses

Courses offered in Ph.D. in Mathematical Sciences

Course Code	Course Title	Cr.
AM701	Inventory Modeling	4
AM702	Optimization Techniques	4
AM703	Transportation problems and Soft Computing	4
AM704	Graphs and Matrices	4
AM705	Linear Algebra and Applicable Matrix Theory	4

Remaining credits to be fulfilled by open elective courses

Courses offered in Ph.D. in Physics

Course Code	Course Title	Cr.
AP701	Astrophysical Gas Dynamics and Accretion Process	4
AP702	Optical Properties of Solids	4

Remaining credits to be fulfilled by open elective courses

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

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 and Areas of Interest

Professor

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

Associate Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

Shailen Deka*, Ph.D. (IITG)
Geotechnical Engineering

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

* Recognized Ph.D. Supervisor

CIVIL ENGINEERING

((Year of Establishment: 2009)

ACRONYMS:

GU   : Gauhati University,
P&D   : Planning and Development,
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, Kanpu;
HoD   : Head of the Department.

Facilities

The Department has the following Laboratory facilities.

Computational Laboratory Facilities

○ SAAP 2000
○ Plaxis 2D

Core Departmental Laboratories

Geotechnical Engg. Laboratory

Structural Engg. & NDT Laboratory

Environmental Engg. Laboratory

Transportation Engg. Laboratory

Water Resources Laboratory

Surveying Laboratory

Surveying Laboratory

Research Activities

No. of papers published in the year 2021- 2022 : **07**
No. of ongoing research projects : **02**
No. of current Ph.D. scholars : **10**

Selected Publications

○ Bhagowati, B., Talukdar, B., Narzary, BK and Ahamad, KU. Prediction of lake eutrophication using ANN and ANFIS by artificial simulation of lake ecosystem, Modeling Earth Systems and Environment, 1-16, (2022)

○ Singh, P., Vaishya, RC., Soni, P. and Medhi, H.A. Methodological comparison on Spatiotemporal prediction of criteria air pollutants. Asian Journal of Atmospheric Environment, 16(1), 1-17, (2022)

○ Doley, C., Das, U.K. and Shukla, S.K. Load-settlement behaviour of geotextile-based geocell reinforced sand bed. Geotechnical Engineering journal of SEAGS & AGSSEA, 53(1), (2022)

○ Narzary, BK and Ahamad, KU. Estimation of Equivalent Modulus of Fine-Grained Subgrade Soil from Numerical Model. Journal of Transportation Engineering, Part B: Pavements (ASCE), 147 (1), 04020084, (2021)

○ Doley, C., Das, UK. and Shukla, SK. Response of square footing on geocell-reinforced sand bed under static and repeated loads. International Journal of Geosynthetics and Ground Engineering 7, 90, (2021)

○ Chakraborty, A. and Goswami, A. Prediction of California Bearing Ratio (CBR) from Index Properties of Fine-Grained Soil. Geotechnical Engineering Journal of the SEAGS & AGSSEA. 52(4), 57-64, (2021)

Courses Offered in B.Tech. in Civil Engineering

First Semester		
Course Code	**Course Title**	**Cr.**
MS104	Mathematics I	4
PH103	Physics I	3
CH103	Chemistry	4
EE103	Basic Electrical Engineering	3
EE104	Basic Electrical Engineering Lab	1
EF103	English	3
SE100	Induction Programme	0

Second Semester		
Course Code	**Course Title**	**Cr.**
PH104	Physics II	2
MS105	Mathematics II	4
CO103	Introductory Computing	3
ME103	Workshop Practice	2
CE103	Engineering Graphics	3
CO104	Computing Laboratory	2
ME102	Engineering Mechanics	4
EC102	Basic Electronics	4

Third Semester		
Course Code	**Course Title**	**Cr.**
MS205	Mathematics-III	3
ES201	Environmental Science	0
BA201	Economics	3
CE220	Building Construction and Drawing	4
CE221	Building Materials & Technology	3
CE 222	Concrete & Structure Lab	2
CE228	Engineering Geology	2
CE229	Solid Mechanics	4

Fourth Semester		
Course Code	**Course Title**	**Cr.**
BT201	Biology	3
CE 223	Fluid Mechanics	4
CE224	Surveying	5
CE225	Structural Analysis-I	4
CE226	Geotechnical Engineering-I	4
CE227	Geotechnical Engineering Lab	2

Fifth Semester		
Course Code	Course Title	Cr.
LW301	Indian Constitution	0
CE320	Structural Design-I	4
CE321	Hydraulics	3
CE322	Structural Analysis-II	3
CE323	Geotechnical Engineering-II	3
CE324	Environmental Engineering-I	3
CE325	Environmental Engineering Lab.	2
CE326	Transportation Engineering-I	3
CE327	Transportation Engineering Lab.	1

Sixth Semester		
Course Code	Course Title	Cr.
IC361	Accounting and Financial Management	3
CE328	Structural Design-II	3
CE329	Environmental Engineering-II	3
CE330	Estimating, Costing and Valuation	3
CE331	Construction Management	3
CExxx	Programme Elective-I	3
XXxxx	Open Elective-I	3

Seventh Semester		
Course Code	Course Title	Cr.
XXxxx	HSS / Management Elective	3
CExxx	Programme Elective-II	3
CExxx	Programme Elective-III	3
CExxx	Programme Elective-IV	3
XXxxx	Open Elective-II	3
CE471	Industrial Summer Training	2
CE483	Project-I	4
CT465	Essence of Indian Traditional Knowledge	0

Eighth Semester		
Course Code	Course Title	Cr.
CExxx	Programme Elective	3
CExxx	Programme Elective	3
XXxxx	Open Elective	3
CE484	Project	6

Elective Courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CE 421	Advanced Reinforced Concrete Design	3	CE 432	Hydraulic Machines	3
CE 422	Dynamics of Structures	3	CE 433	Groundwater Hydrology and Management	3
CE 423	Pre-stressed Concrete and Industrial Structures	3	CE 434	Air Pollution and Industrial Waste Management	3
CE 424	Bridge Engineering	3	CE 435	Solid Waste Engineering	3
CE 425	Soil Dynamics and Foundation Engineering	3	CE 436	Environmental Impact Assessment	3
CE 426	Ground Improvement Methods	3	CE 437	Remote Sensing and GIS	3
CE 427	Earth Retaining Structures	3	CE 438	Pavement Design	3
CE 428	Applied Geotechnical Engineering	3	CE 439	Pavements Materials	3
CE 429	Environmental Geo-techniques	3	CE 440	Geometric Design of Road Transportation System	3
CE 430	Open Channel Flow	3	CE 441	Design and Construction of Rural Roads	3
CE 431	Hydraulic Structures	3	CE442	Analysis and design of foundations	3

Courses offered in M. Tech. in Civil Engineering
(Specialization: Geotechnical Engineering)

First Semester		
Course Code	Course Title	Cr.
CE501	Engineering Behaviour of Soil	4
CE 502	Geotechnical Exploration and Testing	5
CE 503	Strength and Compressibility of Soils	3
-	Elective I	3
CE 101	Elective II	3
-	Open Elective I	3

Second Semester		
Course Code	Course Title	Cr.
Open Elective I	Engineering Behaviour of Soil	4
CE 502	Geotechnical Exploration and Testing	5
CE 503	Strength and Compressibility of Soils	3
-	Elective I	3
CE 101	Elective II	3
-	Elective V	3
-	Open Elective II	3

Third Semester		
Course Code	**Course Title**	**Cr.**
CE 598	M. Tech Project (MTP) Phase-I	12

Fourth Semester		
Course Code	**Course Title**	**Cr.**
CE 599	M. Tech Project (MTP) Phase-II	12

Elective Courses

First Semester		
Course Code	**Course Title**	**Cr.**
CE 521	Unsaturated Soil Mechanics	3
CE 522	Reinforced Earth and Geosynthetics	3
CE 523	Rock Mechanics	3
CE 524	Groundwater Hydrology	3
CE 525	Numerical Methods in Engineering	3
CE 526	Analysis and Design of Pavements	3

Second Semester		
Course Code	**Course Title**	**Cr.**
CE 527	Slope stability and Retaining Structures	3
CE 528	Soil Dynamics and Foundation Engineering	3
CE 529	Earth and Rockfill Dams	3
CE 530	Geotechnical Aspects of Waste Disposal	3
CE 531	Environmental Geotechnology	3
CE 532	Earthquake Engineering	3

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

COMPUTER SCIENCE AND ENGINEERING
(Year of Establishment: 1994)

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 Ministry of Education (Formerly 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, GoI 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 Information Technology
4. M. Tech. in Computer Science and Engineering
5. B. Tech. in Computer Science and Engineering

Faculty and Areas of Interest

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

Professor
Dhruba K Bhattacharyya*, Ph.D. (TU), Pro-VC
Data Mining, Network Security, Bioinformatics

Professor
Smriti Kumar Sinha*, Ph.D. (TU),
Workflow Automation, Web Theory

Professor
Utpal Sharma*, Ph.D. (TU)
Natural Language Processing

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

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

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

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

Associate Professor

Siddhartha Sankar Satapathy*, Ph.D. (TU)
Computational Biology and Bioinformatics, Wireless Sensor Network

Associate Professor

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

Associate Professor

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

Associate Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

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

Assistant Professor

Monisha Devi, M.Tech. (TU)(Guest Faculty)
Cognitive Radio Networks

Assistant Professor

Ram Charan Baishya*, Ph.D. (TU) (Guest faculty)
Data Mining, Network Security

Assistant Professor

Faiz Iqbal Faiz, Ph.D. (NERIST) (Guest Faculty)
Machine Learning in Information Security

Assistant Professor

Habila Basumatary*, M.Tech (NERIST), (Guest Faculty),
Wireless Communications, Wireless Sensor Network

* 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;
HoD : Head of the Department

Facilities
The Department has the following Laboratory facilities

State-of-the-art computer laboratories

Basic Programming Laboratories

Software Engineering Laboratory

Hardware Laboratory

Mobile Computing Laboratory

High Performance Computing (23 TFlops speed and 50 TB storage) centre

SEA Laboratory

Research / Special Computing Facilities

- ○ Network/Information Security Laboratory
- ○ Biomimetic and Cognitive Robotics Laboratory
- ○ Natural Language Processing Laboratory
- ○ Cognitive Radio Network Research Laboratory
- ○ Malware Research Laboratory
- ○ AR/VR Laboratory
- ○ IoT 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

No. of papers published in the year 2021-2022   : **26**
No. of ongoing research projects   : **06**
No. of current Ph.D. scholars   : **63**

Selected Publications

○ Ahmed S. A. and Nath B. Identification of adverse disease agents and risk analysis using frequent pattern mining. Information Sciences, 576, 2021. https://doi.org/10.1016/j.ins.2021.07.061

○ Chowdhury H. A., Bhattacharyya D. K and Kalita J. K. UIFDBC: Effective density-based clustering to find clusters of arbitrary shapes without user input. Expert Systems with Applications, 186, 2021. https://doi.org/10.1016/j.eswa.2021.115746

○ Hijam D. and Saharia S. On developing complete character set meitei mayek handwritten character database. The Visual Computer, 38(2), 2022. https://doi.org/10.1007/s00371-020-02032-y

○ Mandal K., Sarmah R. and Bhattacharyya D. K. POPTric: Pathway-based Order Preserving Triclustering for gene sample time data analysis. Expert Systems with Applications, 192, 2022. DOI: https://doi.org/10.1016/j.eswa.2021.116336

○ Patra S. and Barman B. A novel dependency definition exploiting boundary samples in rough set theory for hyperspectral band selection. Journal of Applied Soft Computing, 99, 2021. https://doi.org/10.1016/j.asoc.2020.106944

○ Rahman N. and Borah B. An unsupervised method for word sense disambiguation. Journal of King Saud University-Computer and Information Sciences, 33, 2021. https://doi.org/10.1016/j.jksuci.2021.07.022

○ Roy A. and Sarma N. A synchronous duty-cycled reservation-based MAC protocol for underwater wireless sensor networks. Digital Communications & Networks, 7(3), 2021. https://doi.org/10.1016/j.dcan.2020.09.002

○ Sen P., Aziz R., Deka R. C., Feil E. J., Ray S. K. and Satapathy S. S. Stem Region of tRNA Genes Favors Transition Substitution Towards Keto Bases in Bacteria. Journal of Molecular Evolution, 90, 2022. https://doi.org/10.1007/s00239-021-10045-x

Courses offered in B. Tech. in Computer Science and Engineering

First Semester		
Course Code	Course Title	Cr.
CH103	Chemistry	4
PH103	Physics-I	3
MS104	Mathematics-I	4
EE103	Basic Electrical Engineering	3
EE104	Basic Electrical Engineering Lab	1
EF103	Communicative English	3
SE100	Induction Program	3

Second Semester		
Course Code	Course Title	Cr.
PH104	Physics-II	2
MS105	Mathematics-II	4
CO105	Discrete Mathematics	4
EC102	Basic Electronics	4
ME103	Workshop Practice	2
CO103	Introductory Computing	3
CO104	Computing Lab	2
CE103	Engineering Graphics	3

Third Semester		
Course Code	Course Title	Cr.
MS205	Mathematics – III	3
CO202	Digital Logic Design	4
CO209	Computing Workshop	2
BA201	Economics	3
CO210	Data Structures	4
CO211	Data structures using Object Oriented Programming Lab	3
EC201	Signals and Systems	3
ES201	Environmental Science	-

Fourth Semester		
Course Code	Course Title	Cr.
BT201	Biology	3
CO218	Data Communication	3
CO214	Computer Architecture and Organization	4
CO215	Computer Organization Lab	1
CO216	Formal Language and Automata	3
CO206	Design and Analysis of Algorithms	4
CO217	Graph Theory	3

Fifth Semester		
Course Code	Course Title	Cr.
CO309	Operating Systems	3
CO311	Software Engineering	3
CO310	Operating Systems Lab	1
CO312	Database Systems	3
CO313	Data base Systems Lab	2
CO303	Computer Graphics	4
-	Elective-I (PEC01)	3
-	Open Elective-I (OEC01)	3
LW301	Indian Constitution (MC- Non Credit)	-

Sixth Semester		
Course Code	Course Title	Cr.
CO314	System Software and Compiler Design	4
-	Elective-II (PEC02)	4
-	Open Elective-II (OEC02)	3
CO315	Computer Networks	3
CO316	Computer Networks Lab	1
IC361	Accounting and Financial Management	3
CO317	Project-I (using SE perspective)	2

Seventh Semester		
Course Code	Course Title	Cr.
XXxxxx	* HSS/Management Elective	3
CO401	Artificial Intelligence	3
-	Elective-III (PEC03)	4
-	Elective-IV (PEC04)	3
-	Open Elective-III (OEC03)	3
CO402	Project-II	4
CT465	Essence of Indian Traditional Knowledge	2

Eight Semester		
Course Code	Course Title	Cr.
-	Elective-V (PEC05)	3
-	Open Elective-IV (OEC04)	3
CO403	Project-III	8

Mandatory Non-credit Courses

Course Code	Course Title	Schedule
SE100	Induction Programme	Semester I
CO404	Summer Internship /Industrial Training	After Semester VI
CO405	Comprehensive Written Exam	Semester VII/Semester VIII

ES201	Environmental Science	Semester III
LW301	Indian Constitution	Semester V
CT465	Essence of Indian Traditional Knowledge	Semester VI

Professional Elective Courses (PEC):

PEC01, PEC02, PEC03, PEC04, PEC05 will be offered from the following list of Elective courses from the Department. Some of the elective courses are already running in the B.Tech. Programme and some of them are added newly.

Course Code	Course Title	Credit
CO304	Principles of Programming Languages	3
CO318	Cryptography	3
CO432	Information Theory and Coding	3
CO319	Statistical Modelling and Applications	3
CO423	Web Technology	4
CO306	Embedded Systems	4
CO426	Advanced Computer Architecture	4
CO422	Theory of Computation	4
CO406	Distributed Systems	4
CO509	Computer Vision & Image Processing	4
CO512	Parallel Programming	4
CO513	Fundamentals of Speech Processing	4
CO514	Machine Learning	4
CO515	Knowledge Representation and Reasoning	4
CO516	Advanced Algorithms	4
CO517	Virtual and Augmented Reality	4
CO518	Cloud Computing	3
CO504	Natural Language Processing	3
CO519	Internet of Things	3
CO520	Software Defined Networking and Network Function Virtualization	3
CO521	Computational Geometry	3
CO522	Bioinformatics	3
CO523	Quantum Computing	3
CO524	Linear Optimization	3
CO505	Advanced Database Management System	3
CO503	Fuzzy Logic and Neural Networks	3
CO435	Mobile Computing	3
CO525	Data Mining	4
CO526	Operation Research	3

Courses offered in Master of Computer Application (MCA)

Bridge Semester-I (Only for students not having adequate CS/IT degree background)			**Bridge Semester-II** (Only for students not having adequate CS/IT degree background)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CO103	Introductory Computing (Audit)	3	CO208	Object Oriented Programming (Audit)	4
CO104	Computing Lab (Audit)	2	CO214	Computer Architecture and Organization (Audit)	4
CO202	Digital Logic Design (Audit)	4	CO215	Computer Organization Lab (Audit)	1
CO209	Computing Workshop (Audit)	2	CO218	Data Communication (Audit)	3
			CS305	Internet Concepts and Web Technology (Audit)	3

First Semester		
Course Code	**Course Title**	**Cr.**
EF103	Communicative English (Audit)	3
CS405	Discrete Mathematics	3
CS412	Data Structures	4
CS416	Object Oriented programming and data Structures Lab	3
-	Elective-1	3
-	Elective-2	3
-	Elective-3	3

Second Semester		
Course Code	**Course Title**	**Cr.**
IC361	Accounting and Financial Management	3
CS413	Database Management System	3
CS414	Database Management System Lab	2
CS417	Operating Systems	3
CS418	Operating Systems Lab	2
-	Elective-4	3
-	Elective-5	3
-	Open Elective-1	3

Third Semester		
Course Code	**Course Title**	**Cr.**
CS513	Software Engineering	3
CS518	Software Engineering Lab	1
CS519	Computer Networks	4
CS520	Computer Networks Lab	1
CS510	Minor Project	5
-	Elective-6	3
-	Elective-7	3
-	Open Elective-2	3

Fourth Semester		
Course Code	**Course Title**	**Cr.**
CS515	Major Project	16

Elective Courses					
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
CS421	Graph Theory	3	CS525	Artificial Intelligence	3
CS422	Numerical Methods	4	CS532	Compiler Design	4
CS424	Formal Language and Automata	3	CS541	Mathematical Foundation for Computer Science	4
CO423	Web Technology	4	CS530	Data Analytics and Visualization	4
CO504	Natural Language Processing	3	CS538	Computational Geometry	3
CO505	Advanced Database Management System	3	CS529	Embedded Systems	4
CO513	Fundamentals of Speech Processing	4	CS601	Design & Analysis of Algorithms	3
CO517	Virtual and Augmented Reality	4	CS602	Image Processing	3
IT504	E-Commerce	3	CS606	Computer Architecture and Parallel Processing	3
IT509	Data Mining & Data Warehousing	4	CS609	Geographic Information Systems	3
IT507	Computer Security & Cryptography	3	CS610	Bioinformatics	3
IT517	Pattern Recognition	4	IT611	Distributed Systems	3
CS522	Computer Graphics	4	CS621	Mobile Computing	4
CS524	Theory of Computation	3	CS638	Software Defined Networking & Network Function Virtualization	3

Courses offered in M. Tech in Information Technology

First Semester

Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
CS531	Object Oriented Programming and Design	5	IT610	Advanced Database System	4
CS634	Selected Topics in Computer Networks	4	CS545	Seminar	2
CS 601	Design and Analysis of Algorithms	3	-	Elective-II	3
CS543	Advanced Programming Lab I	3	-	Elective-III	3
-	Elective-I	3	-	Elective-IV	3
-	Open Elective -I	3	-	Open Elective-II	3

Third Semester		
Course Code	Course Title	Cr.
IT604	Term Project-I	8
-	Elective-V	3
-	Elective-VI	3

Fourth Semester		
Course Code	Course Title	Cr.
IT605	Term Project-II	16

Elective Courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS509	Data Communication	4	CS533	Computational Geometry	3
CS505	Software Engineering	4	IT523	Discrete Mathematics	3
CS525	Artificial Intelligence	3	CS522	Computer Graphics	4
CS424	Formal Language and Automata	3	CS523	Enterprise Resource Planning	3
IT518	Graph Theory	3	CS524	Theory of Computation	3
CS529	Embedded Systems	4	CS502	System Software	3
CS621	Mobile Computing	4	CS507	Computer Networks	4
CS625	Web Technology	4	CS523	Enterprise Resource Planning	3
IT517	Pattern Recognition	4	CS524	Theory of Computation	3
IT509	Data Mining and Data Warehousing	4	CS502	System Software	3
IT507	Computer Security and Cryptography	3	CS507	Computer Networks	4
CO504	Natural Language Processing	3	CS508	Database Management Systems	5
CS610	Bioinformatics	3	IT503	Multimedia Systems	4
IT611	Distributed Systems	3	IT504	E-Commerce	3
CS725	Knowledge Representation and Reasoning	4	CS602	Image Processing	3
CS731	Data Mining in Security	4	CS607	Optimization Technique	3
CO501	Network Management and Security	3	CO503	Fuzzy Logic and Neural Networks	3
CS606	Computer Architecture and Parallel Processing	3	CS638	Software-Defined Networking and Network Function Virtualization	3

Courses offered in M. Tech. in Computer Science and Engineering

First Semester		
Course Code	Course Title	Cr.
CS541	Mathematical Foundation for Computer Science	4
CS542	Advanced Algorithms and Data Structures	3
CS544	Selected Topics in Computer Networks	4
CS543	Advanced Programming Lab I	3
IT510	Advanced Operating Systems	4

Second Semester		
Course Code	Course Title	Cr.
CS634	Computer Architecture and Parallel Processing	3
CS606	Advanced Programming Lab II	3
CS545	Seminar	2
--	Elective I	3/4
--	Elective II	3/4
--	Open Elective I	3

Third Semester		
Course Code	Course Title	Cr.
-	Elective III	¾
-	Elective IV	¾
-	Open Elective II	3
CS640	Term Project I	8

Fourth Semester		
Course Code	Course Title	Cr.
CS641	Term Project-II	16

Elective I

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IT610	Advanced Database System	4	IT611	Distributed Systems	3
CS607	Optimization Techniques	3	CS612	Advanced Computer Graphics	3
CS659	An Introduction to Probability in Computing	3	CS613	Image Processing and Computer Vision	3
CS622	Modern Compiler Design	3	CS614	Graph Theoretic Algorithms	3
IT517	Pattern Recognition	4	CS664	Parallel Algorithms	3

Elective II

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS615	Robotics	3	CS538	Computational Geometry	3
CS637	Topics on Cognitive Radio and Networks	4	IT509	Data Mining and Data Warehousing	4
CS525	Artificial Intelligence	3	CS504	Natural Language Processing	3
CS616	Machine Learning	3	CS610	Bioinformatics	3
CS529	Embedded Systems	4	CS663	Randomized Algorithms	3
CS653	Introduction to Internet of Things	3	CS638	Software Defined Networking and Network Function Virtualization	3
IT503	Multimedia Systems	4	CS524	Theory of Computation	3
CS617	VLSI Design	3	CS618	Information Theory and Coding	3

Elective III and IV

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS621	Mobile Computing	4	CO503	Fuzzy Logic and Neural Networks	3
IT507	Computer Security and Cryptography	3	CS619	Privacy and Security in Online Social	3
CS725	Knowledge Representation and Reasoning	4	CS668	NBleockchtworka in Architecture and Use cases	3
CS602	Image Processing	3	CS620	Data Science	3

Additional Elective Courses (from SWAYAM MOOCs courses of UGC)

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS650	Introduction to Machine Learning	2	CS666	Embedded System Design with ARM	2
CS651	Artificial Intelligence Search Methods for problem	3	CS667	Introduction to Soft Computing	2
CS652	Privacy and Security in Online social media	2	CS668	Blockchain Architecture and Use Cases	3
CS653	Introduction to Internet of Things	3	CS669	Introduction to Industry 4.0 and Industrial Internet of Things	3
CS654	Programming, Data Structures and Algorithms using Python	2	CS670	Deep Learning	3
CS655	Scalable Data Science	2	CS671	Reinforcement Learning	3
CS656	Introduction to R Software	2	CS672	Ethical Hacking	3
CS657	Cloud Computing	2	CS673	Demystifying networking	1
CS658	Social Networks	3	CS674	Theory of Computation	2
CS659	An Introduction to Probability in Computing	1	CS675	Practical Machine Learning with Tensor flow	2
CS660	Programming in Java	3	CS676	Human Computer Interactions	2
CS661	Data Science for Engineers	2	CS677	Introduction to Machine Learning	3
CS662	Machine Learning for Engineering and Science	3	CS681	GPU Architecture and Programming	3
CS663	Applications Randomized Algorithms	3	CS682	Multi-Core Computer Architecture - Storage and	2

CS664	Parallel Algorithms	3	CS683	IDnatertaco Annnalectsytics with Python	3
CS664	Parallel Algorithms	3	CS684	Cloud Computing and Distributed Systems	2
CS665	AI: Knowledge Representation and Reasoning	3	PD 216	Thermodynamics and Statistical Physics	3
ED 201	Environmental Education	3	ED 203	Contemporary Issues in Education	3
ED 202	Learner and Learning	3	ED 204	Assessment and Evaluation	3
MD219	Mathematics-III	3	PD 298	Physics Lab-IV	4
PD 297	Physics Lab-III	4			
PD 201	Physics III (for non-major)	3			
-	Open Elective-I	3			

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

DESIGN

(Year of Establishment: 2019)

Tezpur University is starting this new department "Department of Design" under the School of Engineering considering the importance of design in the success of any product. India represents a huge market and an "Atmanirbhar Bharat" needs enormous range of well-designed products for its own population as well as the rest of the world. That needs training and preparing future generations of technocrats with the right design perspective.

Initially, the department will be offering elective courses to the B. Tech. and M. Tech. programmes with the objective of providing the students of the engineering disciplines, with the perspectives of design thinking and the necessary training. Soon these will be extended to students of other programmes. That will be followed by starting of UG/ PG programmes on design in phases. We also envisage the need for catering to students/ project specific requirements. This will add a new perspective to design and innovation of various engineering product design development initiatives by adding a human centric focus.

Programmes offered

1. Master of Design (M. Des.)

Faculty and Areas of Interest

Associate Professor
Nayan Moni Kakoty *, Ph.D. (TU) HoD (i/c)
Rehabilitation Robotics

Assistant Professor
Shiv Kumar Verma*, Ph.D. (IITG)
Design Methods, Form Studies, Design Science, Design Education and Pedagogy

Assistant Professor
Srinivasan G*, Ph.D.(IIITDM)
Product Design, Thermal Sciences

Assistant Professor (Guest)
Ms. Kankana Narayan Dev, M. Arch. (MAHE)
Visual Communication Design

Assistant Professor (Guest)
Mr. Pranjal Protim Borah, M. Tech.(ABU)
Interaction Design

* Recognized Ph.D. Supervisor

ACRONYMS:

TU   : Tezpur University;
IITG   : Indian Institute of Technology, Guwahati;
IIITDM : Indian Institute of Information Technology, Design and Manufacturing Kancheepuram;
MAHE   : Manipal Academy of Higher Education,
ADBU   : Assam Don Bosco University

Facilities

The Department has the following facilities

Digital Prototyping Studio

The studio has the following equipments

○ 10 numbers of High End Computers (HP Z2 G4 Intel Core i7-9700/ 16GB/ 1TB)

○ 2 numbers of Workstation (Dell Preci- sion 3640)

○ Software Packages (Solidworks, Rhino, Adobe master suit)

○ Cintiq Pro for product styling, illustrations, and visual de- sign
● Wacom Cintiq Pro 32 inch
● Wacom Cintiq Pro 24 inch
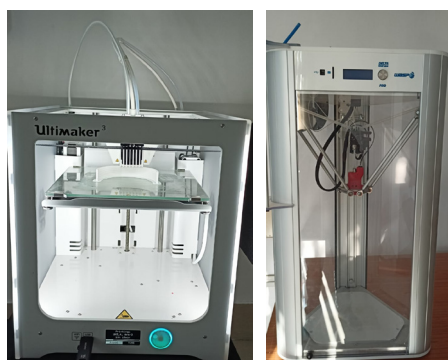
Physical Prototyping Studio

The studio has the following equipments

○ 3D Clay and Plastic Printer

○ 3D Printer with Nylon, PLA, ABS, CPE and PVA Printing

Communication Studio The studio has the following equipments

○ DSLR Camera

○ Tripods

Facilty planned in near future

○ Product Development Workshop-Three divisions for Wood work, Metal work, and Paint work for large scale prototype development.

Selected Publications

○ Verma S.K., Punekar R.M. (2021). Decoding Nature Inspired Form Generation Processes. In: Chakrabarti, A., Poovaiah, R., Bokil, P., Kant, V. (eds) Design for Tomorrow. Smart Innovation, Systems and Tech nologies, Springer.

○ Verma S.K., Punekar R.M. (2020). Design Science Approach to Nature Inspired Product Forms: Studies on Processes and Products. Synergy: Design Research Society (DRS) 2020.

○ Verma S.K., Punekar R.M. (2019) Observing Nature—What Designers Can Learn from Biologists. In: Chakrabarti A. (eds) Research into Design for a Connected World. Smart Innovation, Systems and Technologies, vol 135. Springer, Singapore

Courses offered

1. Open Elective "DD 301 Introduction to Design" offered in Autumn 2020.
2. Open Elective "DD 302 Design Methods" offered in Spring 2021.

Courses offered in Master of Design (M. Des.)

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
DD-511	Design and Creativity - An Introduction	4	DD-521	Design Methods and Sustainability – Issues and concerns	4
DD-512	Elements & Principles of Product Form Design	4	DD-522	Ergonomics for Designers	6
DD-513	Visual Design – Principles and Technology	4	DD-523	Principles of Interaction Design	4
DD-514	User Interface Design	4			
DD-515	Communication Techniques for Designers	2	DD-524	Design Project	4

Electives (anyone from the below Design courses excluding CBCT)			Electives (anyone from the below Design courses excluding CBCT)		
DD-516	Materials and Manufacturing Processes for Designers	4	DD-525	Product Communication & Digital Products	4
DD-518	User Research Methods	4	DD-526	Product Graphics and Packaging – Principles and Applications	4
	CBCT (University Open Electives)	3		CBCT (University Open Electives)	3

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
DD-531	Advancements in Design Research Methodologies	6	DD-541	Design Research Seminar (focused on scientific writing) or Design Workshops (Lecture series by visiting faculties)	4
DD-532	Usability Engineering	4	DD-542	M. Des. Thesis Project - Stage II	14
DD-533	M. Des. Thesis Project - Stage I	8			
Electives **(Anyone from the Design courses below excluding CBCT)**					
DD-534	Design and Industry – Management, Ethics and Law	4			
DD-535	Semantics and Communication Theory	4			
DD-536	Product Detailing	4			
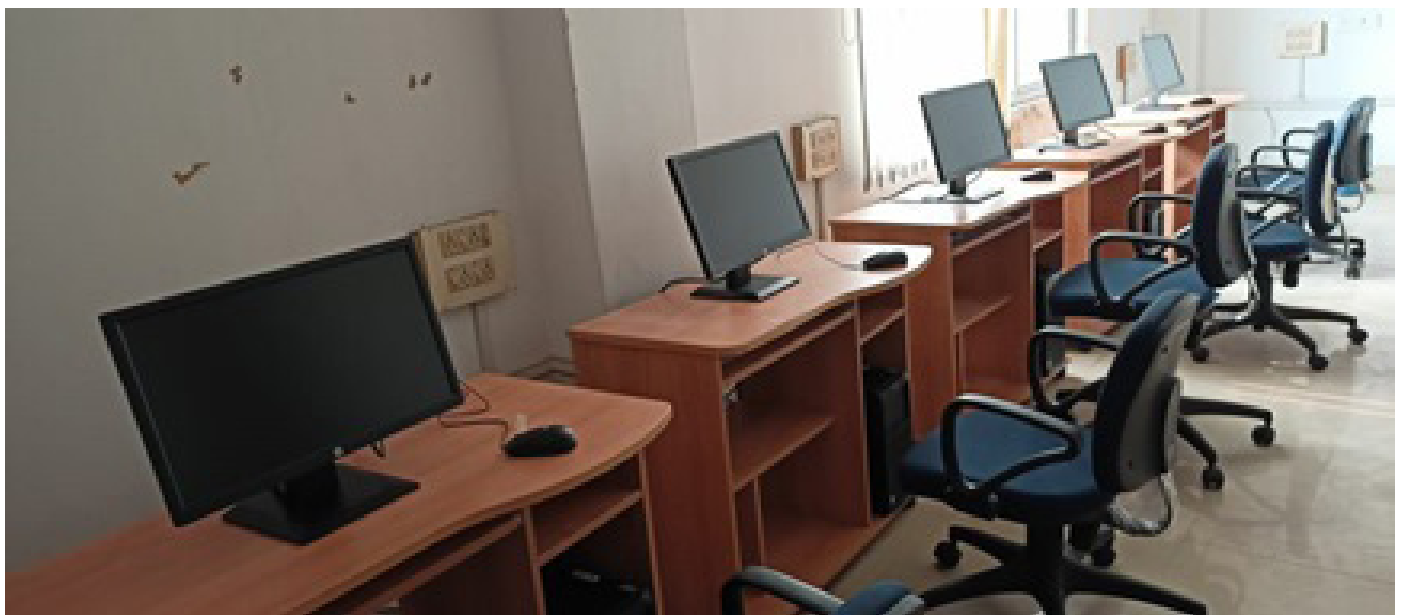
The Department of Electrical Engineering, Tezpur University was established in 2014. The prime motive of the department is to impart quality education, training, and research at the undergraduate level in forefront areas of Electrical Engineering and its allied technologies. The Department currently offers B.Tech. in Electrical Engineering. This programme aims at producing engineers with sound basic and applied knowledge in electrical engineering. Department plans 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 and 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, Bioelectronics and Neuroengineering. The department also offers consultancy on project related to instrumentation, design, SCADA, renewable energy etc.

Programmes offered

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

Faculty and Areas of Interest

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

Associate Professor
Asim Datta*, Ph.D. (JMI)
Energy Engineering, Renewable Energy Sources.

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.

Assistant Professor
Manashita Borah*, Ph.D. (NITS)
Control Systems, Chaos and Fractional Order Systems, biomedical applications, wastewater management, IoT, Smart energy system.

Assistant Professor
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

Assistant Professor

Anish Ahmad*, (IIT-BHU)

Power Electronics and Drives, Vehicular Electronics, Instrumentation and its Control, Control techniques in Power Electronics, Electric Vehicle/Hybrid Electric Vehicle and Microgrid

Assistant Professor

Soumya Samanta*, Ph.D. (NITS)

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

*** Recognized Ph.D. Supervisor**

ACRONYMS:

TU	: Tezpur University;
JMI	: Jamia Milia Islamia, New Delhi;
NITS	: National Insti- tute 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

Laboratory facilities.

○ Basic Electrical Engineering Laboratory
○ Network Laboratory
○ Measurement and Instrumentation Laboratory
○ Electrical Machine Laboratory
○ Power Systems Laboratory
○ Thod-Phod-Jod Laboratory
○ Control System Design Laboratory

Selected Publications

○ A. Ahmad, K. Shiluveru, and R. K. Singh, "Switched Capacitor based Continuous Input Current High Step-up Imped-ance Source DC-DC Converter" IET Power Electronics Vol.13, no. 18, P. 4204 - 4213, 2020

○ M.R. Mahboob, A. U. Khan, L. Kumar and T. Islam, "Investigation of Chip Temperature on Response Characteristics of the Humidity Sensor From ppm to %RH," in IEEE Transactions on Device and Materials Reliability, vol. 20, no. 3, pp. 576 -58 3, Sept. 2020, doi: 10.1109/TDMR.2020.3011736.

○ M. Borah and B. K. Roy, "Hidden multistability in four fractional-order memristive, meminductive and memcapacitive cha-otic systems with bursting and boosting phenomena", European Physical Journal Special Topics, pp.1--11, 2020, Springer (accepted).

○ K Shiluveru, A Singh, Anish Ahmad, and R. K.Singh, "Hybrid Buck-Boost Multi Output Quasi Z-Source Converter with Dual DC and Single AC Outputs" IEEE Transactions on Power Electronics, vol. 35, no. 7, pp. 7246-7260, July 2020.

○ M.A. Siddiqui, M.N. Anwar, S. H. Laskar, M. R. Mahboob, "A unified approach to design controller in cascade control struc-ture for unstable, integrating and stable processes", ISA Transactions, Accepted (22 Dec 2020).

○ M. Borah and B. K. Roy, "Systematic construction of high dimensional fractional-order hyperchaotic systems", Chaos, Sol-itons and Fractals, vol. 131, 2020, Elsevier.

Courses offered in B.Tech. in Electrical Engineering

First Semester		
Course Code	Course Title	Cr.
CH 103	Chemistry	4
MS 104	Mathematics-I	4
EE 103	Basic Electrical Engineering	3
EE 104	Basic Electrical Engineering lab	1
PH 103	Physics-I	3
EF 103	English	3
SE 100	Induction Program	-

Second Semester		
Course Code	Course Title	Cr.
PH 104	Physics-II	2
MS 105	Mathematics-II	4
CE 103	Engineering Graphics	3
ME 103	Workshop Practice	2
CO 103	Introductory Computing / Programming for Problem Solving	3
CO 104	Computing Lab	2
ME 102	Engineering Mechanics	4

Third Semester		
Course Code	Course Title	Cr.
MS 205	Mathematics III	3
ES 201	Environmental Science	0
BA 201	Economics	3
EE 211	Electrical Circuit Analysis	4
EC 201	Electronics Devices	3
EC 202	Electronics Devices Lab	1
EE 214	Electrical Machines – I	3
EE 215	Electrical Machines Laboratory – I	1
EC 205	Signals and Systems	3

Fourth Semester		
Course Code	Course Title	Cr.
BT 201	Biology	3
EE 217	Digital Electronics	1
EE 218	Digital Electronics Laboratory	3
EE 219	Electrical Machines – II	1
EE 220	Electrical Machines Laboratory – II	3
EC211	Microcontroller and Microprocessor	1
EC212	Microcontroller Lab	4
EE 216	Electromagnetic Fields	3
	*Open Elective-1	

Fifth Semester		
Course Code	Course Title	Cr.
EE 311	Power Systems – I (Apparatus and Modelling)	3
EE 312	Power Systems Laboratory – I	1
EE 313	Control Systems	3
EE 314	Control Systems Laboratory	1
EE 315	Power Electronics	3
EE 316	Power Electronics Laboratory	1
-	Program Elective – 1	3
-	*Open Elective – 2	3
LW 301	Indian Constitution	0

Sixth Semester		
Course Code	Course Title	Cr.
IC 361	Accounting & Financial Management	3
EE 318	Power Systems – II (Operation and Control)	3
EE 319	Power Systems Laboratory - II	1
EE 320	Measurements and Instrumentation Laboratory	4
EE 321	Electronics Design Laboratory	3
-	Program Elective – 2	4
-	Program Elective – 3	3
-	Open Elective – 3	3
EE 322	Summer Internship #	0

Seventh Semester		
Course Code	Course Title	Cr.
XX xxx	HSS / Management Elective	3
-	Program Elective -4	3
-	Program Elective -5	3
-	Open Elective – 4	3
-	Open Elective – 5	3
EE 412	Project Stage-I	6
CT 430	Essence of Indian Traditional Knowledge	0
XX xxx	HSS / Management Elective	3
-	Program Elective -4	3

Eighth Semester		
Course Code	Course Title	Cr.
-	Program Elective -6	3
-	Open Elective -6	3
EE 420	Project Stage-II	10
-	Program Elective -6	3

For Program Elective −2 and Program Elective −3

EE 323	Line Commutated and Active Rectifiers
EE 324	Electrical Drives
EE 325	High Voltage Engineering
EE 326	Electrical Energy Conservation and Auditing
EE 327	Industrial Electrical Systems
EE 328	Digital Control Systems
EE 330	Computer Architecture
EE 331	Electromagnetic Waves
EE 332	Computational Electromagnetics
EE 333	Control Systems Design

*Open Elective: Any course of level 400 and above offered in the University and recommended by the department.

$ The 7th semester will start a month later than usual and therefore be shorted by a month. To compensate for it there shall be 4 class hours per week for a 3-credit course.

Industrial Summer Training: Training shall be of 8 weeks duration carried out during the summer break after the 6th semester. The report will be submitted in the 7th semester.

Elective courses are offered on the basis of the choice of students and availability of teacher for teaching a particular course.

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

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 has 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
- Visvesvaraya Ph.D. Scheme under Meity, GoI

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

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)
Optical Networks and its Components, Clinical Instrumentation, Micro-fabrication, Quantum Technology

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

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

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

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

Professor
Bhabesh Deka*, Ph.D. (IITG)
Image Processing, Computer Vision, Pattern Recognition, Deep Learning

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

Associate Professor
Deepika Hazarika*, Ph.D. (TU)
Image and Video Processing

Associate Professor
Ratul Kumar Baruah*, Ph.D. (IITG)
Nanoelectronics, Biosensors, Flexible Electronics.

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

Assistant Professor
Biplob Mondal*, Ph.D. (JU)
VLSI and MEMS Devices

Assistant Professor
Durlav Sonowal*, Ph.D. (TU)
Sensors, Signal Processing

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

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

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

** Recognized Ph.D. Supervisor*

ACRONYMS:

JU   : Jadavpur University, Jadavpur ;
DU   : University of Delhi, Delhi ;
TU   : Tezpur University;
IITG   : Indian Institute of Technology, Guwahati;
NITS   : National Institute of Technology, Silchar;
HoD   : Head of the Department

Facilities
The Department has the following 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

Research Laboratories

- E-mobility research laboratory
- Microwave Engineering Laboratory
- Wireless Communication Engineering Laboratory
- E-nose Laboratory
- Intelligent Imaging and Vision Research Laboratory
- Hydrogen fuel Lab
- Bioelectronics Lab.

Major Equipment

- RIE (Reactive Ion Etching)
- PECVD (Plasma Enhanced Chemical Vapour Deposition)
- PVD
- Auto Lab
- Galvanostate / potentiostate
- Photolithography
- Vacuum coating unit (Thermal evaporation and E-Beam Technology)
- Oxidation Furnace
- Prism Coupler Water De-ionizer
- Stero-microscope
- IV-QE measurement set up
- FPGA kit and FPGA board
- Mentor Graphics
- Laminar Air Flow Unit
- Thickness measurement instrument
- GP-GPU-based High-Performance Computing server
- Bio-signal measurement system
- Cadence EDA tool
- Xilinx
- Spin coating unit
- Sentaurus TCAD

Research Activities

No. of papers published in the year 2021-2022 : **31**
No of ongoing research projects : **12**
No. of current Ph.D. scholars : **46**

Selected Publications

- D. Deka and B. Deka, "An improved multiscale distribution entropy for analyzing complexity of real-world signals" Chaos, Solitons and Fractals: the interdisciplinary journal of Nonlinear Science, and Nonequilibrium and Complex Phenomena (Elsevier), Volume 158, 2022,

- D. Deb, R. Goswami, R. K. Baruah, R. Saha, and K. Kandpal, "Parametric Investigation and Trap Sensitivity of n-p-n Double Gate TFETs", Computers and Electrical Engineering, Elsevier, vol. 100, 2022

- B. Mondal and P K Gogoi, "Nanoscale Heterostructured Materials Based on Metal Oxides for a Chemiresistive Gas Sensor" ACS Applied Electronic Materials, Vol 4, Issue 1, 59-86

- S Das, PP Sahu, "A novel electrochemical interdigitated electrodes sensor for limonin quantification and reduction in citrus limetta juice, Food Chemistry, Volume 381, 2022,

- Satyabrat Malla Bujar Baruah and Soumik Roy; Modelling neuron fiber interaction and coupling in non-myelinated bundled fiber; Biomed. Phys. Eng. Express 8 (2022) 035016.

- N M Kakoty et. al. Real-time EMG based prosthetic hand controller realizing neuromuscular constraint. International Journal of Intelligent Robotics and Applications, Vol.6, 2022.

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".

Patents

○ P. P. Sahu, "A portable optical fiber instrument for instant petrol purity detection"

○ D. J. Gogoi, D. Borah, N.S. Bhattacharyya, and S. Bhattacharyya, "Flexible and thin microwave dielectric absorber in X-band applications"

○ N. M. Kakoty and L. Gohain, "An EMG based prosthetic hand controller for real time grasping realizing neuro-muscular constraint"

○ R. Goswami, D. Barah, V. R. Mate, and B. Bhowmick, "System, method and apparatus for generating true random numbers for security and verification"

○ A. Das, B Muchahary, A.Raj, M Kumar, F Ahmed, C Adhikary, S Roy, 'IOT based Portable Ventilator'

Design Registration

○ S. Das, N. M. Kakoty and L. Gohain. "Prosthetic Hand, Class: 24-00-Medical and laboratory Equipment"

Courses offered in B. Tech. in Electronics and Communication Engineering

First Semester			Second Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
CH103	Chemistry	4	PH104	Physics-II	2
MS104	Mathematics-I	4	MS105	Mathematics-II	4
EE103	Basic Electrical Engineering	3	EC102	Basic Electronics	4
EE104	Basic Electrical Engineering Lab	1	ME103	Workshop Practice	2
PH103	Physics-I	3	CO103	Introductory Computing	3
EF103	English	3	CO104	Computing Lab	2
SE100	Induction Program	-	ME102	Engineering Mechanics	4
			CE103	Engineering Graphics	3

Third Semester			Fourth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
EC201	Electronics Devices	3	EC207	Analog & Digital Communication	3
EC202	Electronics Devices Lab	1	EC208	Analog & Digital Communication Lab	1
EC203	Digital System Design	3	EC209	Analog Circuits	3
EC204	Digital System Design Lab	13	EC210	Analog Circuits Lab	1
EC205	Signals and Systems	3	EC211	Microcontroller and Microprocessor	3
EC206	Network Theory	3	EC212	Microcontroller Lab	1
MS205	Mathematics-III	3	BT201	Biology	3
BA201	Economics	3	CS201	Data Structure & Operating System	3
ES201	Environmental Science	0			

Fifth Semester			Sixth Semester #		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
EC301	Electromagnetic Waves	3	EC311	Control System	3
EC302	Electromagnetic Waves Lab	1	EC312	Computer Network	3
EC303	Computer Architecture	3	EC313	Computer Network Lab	2
EC304	Probability Theory & Stochastic Process	3	EC314	Electronic Measurement Lab	1
EC305	Digital Signal Processing	3	EC315	Mini Project	2
EC306	Digital Signal Processing Lab	1	**ECE Elective-II** **(any one from the subjects below)**		
ECE Elective-I **(any one from the subjects below)**			EC316	Microwave techniques	3
EC307	Mobile communication& Networks	3	EC317	Speech and Audio processing	3

EC308	Electrical machines and power protection	3		EC318	Digital image and video processing	3
EC309	Intelligent instrumentation	3		EC319	VLSI Design	3
EC310	CMOS design	3		IC361	Open Elective-II	3
	Open Elective-I	3			Accounting & Financial Management	3
LW301	Indian constitution (MC- Non-Credit)	0				

#Students will undergo a summer training of 4 weeks after 6th semester during summer vacation and submit the report and the certificate of completion in the department in the beginning of 7th semester.

Seventh Semester		
Course Code	Course Title	Cr.
ECE Elective –III (any one from the subjects		
EC401	Information Theory & Coding	3
EC402	Embedded systems	3
EC403	Satellite communication	3
EC404	Digital systems and VHDL	3
ECE Elective-IV (any one from the subjects		
EC405	Computer Vision	3
EC406	Biomedical Signal Processing	3
EC407	Antenna and propagation	3
EC408	Digital control system	3
ECE Elective-V (any one from the subjects		
EC409	Introduction to MEMS	3
EC410	Biomedical electronics	3
EC411	Fibre optic communication	3
EC412	Nano-electronics	3
ECE Elective-VII (any one from the subjects		
EC413	Fuzzy Logic and Neural network	3
EC414	Bioneuro engineering	3
EC415	Digital signal processor	3
EC416	Electronics design automation	3
Open Elective -III		
EC417	Project- Stage I	6
* HSS/Management Elective		
CT465	Essence of Indian Traditional Knowledge (MC- Non- Credit)	0

Eighth Semester		
Course Code	Course Title	Cr.
ECE Elective-VI (any one from the subjects below)		
EC418	Power electronics	
EC419	Mixed signal design	3
EC420	High speed electronics	3
Open Elective-IV		
EC421	Project- Stage II	10

Courses offered in M. Tech. in Electronics Design and Technology

First Semester		
Course Code	Course Title	Cr.
EL517	Physical and Industrial Design of Electronics Systems	4
EL531	Design of Digital Systems	4
EL521	Design and Technology of Electronic Devices	4
EL523	Advanced Programming Language	5
-	Open Elective I	3
-	Elective I	4

Second Semester		
Course Code	Course Title	Cr.
EL516	Design of Fine Mechanics and Power Devices	4
EL530	VLSI Design	4
EL538	Advanced Electronic Devices	3
EL540	Intelligent Instrumentation	4

Course Code	Course Title	Cr.
EL601	M. Tech. Dissertation	24

Elective I (Any one from the following courses)			Elective II (Any one from the following		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EL 533	Data Communication & Networks	4	EL 546	Modeling and Simulation of Digital Sytems	4
EL 535	Information Systems	4	EL 544	CMOS Analog Circuits	4

Courses offered in M. Tech. in Bioelectronics

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BE 515	Basic Bioelectronics	3	BE 524	Advanced Bioelectronic Devices	4
BE 517	Biomedical Signal Processing	4	BE 504	Neuroengineering	3
BE 519	Bioinspired Systems and Engineering	3	BE 506	Biomedical Image Processing	4
BE 509	Biomathematics	3	BE518	Bioelectronic Systems and Controls	4
BE 511	Basic Bioelectronics Laboratory	3	EL 540	Sensor & Sensor Intelligence	4
-	Open Elective I		-	Open Elective II	3
-	Elective I	4	-	Elective – II	3

Third Semester and Fourth Semester		
Course Code	Course Title	Cr.
BE 601	M. Tech. Dissertation	

Elective I (Any one from the following courses)			Elective II(Any one from the following courses)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BE 507	Bioinformatics	4	BE 528	MEMS and Nanotechnology	3
BE 513	Biomedical Electronics	4			

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

The Department of Energy has been one of the vibrant academic Department of the University, engaging itself with a mandate to produce a qualified manpower pool in the field of energy, development of new and efficient energy technologies, R & D and extension activities in diverse areas of energy. The Department offers a two-year (four semesters) AICTE approved M.Tech. programme in Energy Technology, and Ph. D. in energy related areas. The thrust areas of research are Biomass energy, solar energy, Energy-Environment interface, Energy Conservation and Management, Energy Efficiency, Climate Responsive Buildings, Hydrogen Energy, Fuel Cell and Rural Hybrid Energy. Apart from teaching and research, the department also organizes training programmes, workshops, and seminars in the relevant areas of energy. The Faculty of the Department has successfully completed several international collaborative research projects and has ongoing international collaborative projects like Indo-Hungary, Indo- UK. The Department also has ten ongoing research projects.

Programmes offered

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

Faculty and Areas of Interest

Professor
Debendra Chandra Baruah*, Ph.D. (PAU)-HoD
Renewable Energy and Energy Management.

Professor
Dhanapati Deka*, Ph.D. (TU), DSW
Biofuels, Catalytic transformation of biomass to biofuel and chemical, Bioenergy and Environment

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

Professor
Sadhan Mahapatra*, Ph.D. (IISc)
Biomass Gasification, Climate Responsive Buildings, Decentralized Energy Options, Energy Conservation.

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

Assistant Professor
Biraj Kumar Kakati*, Ph.D. (IITG)
Fuel Cell, Hydrogen Technology and Redox Flow Battery, Graphene, Nanocatalyst.

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

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

ENERGY
(Year of Establishment:1996)

ACRONYMS:

PAU	: Punjab Agriculture University;
TU	: Tezpur University;
DSW	: Dean, Student's Welfare;
IISc.	: Indian Institute of Science, Bangalore;
IITG	: Indian Institute of Technology, Guwahati;
HWU	: Heriot Watt University, United Kingdom;
IITR	: Indian Institute of Technology, Roorkee;
HoD	: Head of the Department;
JU	: Jadavpur University

Facilities

The Department has the following facilities

Laboratory

Bio-diesel plant at laboratory

Students and Lab instructor with biomass gasifier

The Department is equipped with various equipment such as Gas Chromatograph, Electrochemical Analyzer, Fuel cell, Solar PV grid integration system, Biomass gasifier system, Wind electric generator, Single cylinder 4-stroke petrol engine Test Rig with electrical Dynamometer, Flue Gas analyzer, Carbon-Hydrogen analyzer, UV-visible spectrophotometer, TOC Analyser, Petrol and Diesel Engine Test set-up, Hydrocarbon type Analyser, Pyrolyser, Adiabatic Bomb Calorimeter, TBP Apparatus, Duel Fuel Engine, Micro-hydel test set-up, Research Radiometer, Solar thermal collector test set-up, Solar Dryer, Biodiesel Plant, Waste to Energy Facilities including 50 m3 AD Plant and various renewable energy systems.

Experimental biomass gasifier

Computerized Diesel Engine Test Rig

Departmental Library

A good number of books, theses, video cassettes and CDs on Energy and related areas are available for the students. Several national and international journals related to different areas of energy are also being subscribed by Central Library of the University.

Scholarship

Ministry of Education (Formerly MHRD) fellowships are available for GATE qualified candidates.

Research Activities

Number of papers published in the year 2020-21	: **25**
No. of ongoing research projects	: **10**
No of current Ph.D. scholars	: **27**

Selected Publications

○ Das, S., Sarkar, P. K., Mahapatra, S., Single particle combustion studies of coal/biomass fuel mixtures. Energy, 217: 119329,2021.

○ Hiloidhari, M., Vandit, V., Banerjee, R., Baruah, D.C., Rao, A. B., Energy-carbon-water footprint of sugarcane bioenergy: A district-level life cycle assessment in the state of Maharashtra, India. Renewable and Sustainable Energy Reviews, 151, 111583, 2021.

○ Gohain, M., Hasin, M., Eldiehy, K. S.H., Bardhan, P., Laskar, K., Phukon, H., Mandal, M., Kalita, D., Deka, D., Bio-ethanol production: A route to sustainability of fuels using bio-based heterogeneous catalyst derived from waste. Process Safety and Environmental Protection, 146, 190-200, 2021.

○ Choudhury, N. D., Bhuyan, N., Bordoloi, N., Saikia, N., Kataki, R., Production of bio-oil from coir pith via pyrolysis: kinetics, thermodynamics, and optimization using response surface methodology. Biomass Conversion and Biorefinery, 11, 2881-2898, 2021.

Courses offered in M. Tech. in Energy Technology

<table>
<tr><th colspan="3">First Semester</th><th colspan="3">Second Semester</th></tr>
<tr><th>Course Code</th><th>Course Title</th><th>Cr.</th><th>Course Code</th><th>Course Title</th><th>Cr.</th></tr>
<tr><td>EN 560</td><td>Foundation for Energy Engineering</td><td>3</td><td>EN 570</td><td>Energy Management and Auditing</td><td>4</td></tr>
<tr><td>EN 561</td><td>Fuel and Combustion</td><td>3</td><td>EN 571</td><td>Energy Economics and Planning</td><td>3</td></tr>
<tr><td>EN 562</td><td>Heat Transfer</td><td>3</td><td>EN 572</td><td>Energy Systems and Simulation Laboratory</td><td>3</td></tr>
<tr><td>EN 563</td><td>Solar Energy Engineering and Application</td><td>3</td><td>EN 573</td><td>Energy Study with Community Engagement</td><td>2</td></tr>
<tr><td>EN 564</td><td>Biomass Energy and Application</td><td>3</td><td>-</td><td>Elective - I</td><td>3</td></tr>
<tr><td>EN 565</td><td>Wind and Hydro Energy</td><td>3</td><td>-</td><td>Elective - II</td><td>3</td></tr>
<tr><td>EN 566</td><td>Energy Laboratory</td><td>3</td><td>-</td><td>Elective- III</td><td>3</td></tr>
<tr><td>-</td><td>CBCT- I</td><td>3</td><td>-</td><td>CBCT- III</td><td>3</td></tr>
</table>

<table>
<tr><th colspan="3">Third Semester</th><th colspan="3">Fourth Semester</th></tr>
<tr><th>Course Code</th><th>Course Title</th><th>Cr.</th><th>Course Code</th><th>Course Title</th><th>Cr.</th></tr>
<tr><td>EN 539</td><td>Project (Part-I)</td><td>8</td><td>EN 540</td><td>Project (Part-II)</td><td>16</td></tr>
<tr><td colspan="3">Elective – I (Any one from the following Courses)</td><td colspan="3">Elective – II & III (Any two from the following Courses)</td></tr>
<tr><td>EN 515</td><td>Advanced Bio-Energy</td><td>3</td><td>EN 525</td><td>Thermal Power Plant Engineering</td><td>3</td></tr>
<tr><td>EN 516</td><td>Advanced Solar Thermal Energy</td><td>3</td><td>EN 526</td><td>Energy Efficient Buildings</td><td>3</td></tr>
<tr><td>EN 517</td><td>Advanced Solar Photovoltaic Energy</td><td>3</td><td>EN 527</td><td>Renewable Energy Grid Integration</td><td>3</td></tr>
<tr><td>EN 518</td><td>Hydrogen Energy and Fuel Cell</td><td>3</td><td>EN 528</td><td>Decentralized Energy Systems</td><td>3</td></tr>
<tr><td>EN 519</td><td>Alternative Fuels for IC Engines</td><td>3</td><td>EN 529</td><td>Energy, Climate Change and Carbon Trade</td><td>3</td></tr>
<tr><td>EN 520</td><td>Petroleum Exploration, Production and Refining</td><td>3</td><td>EN 530</td><td>Instrumentation and Control for Energy Systems</td><td>3</td></tr>
<tr><td>EN 521</td><td>Nuclear Energy</td><td>3</td><td>EN 531</td><td>Numerical Heat Transfer and Fluid Flow</td><td>3</td></tr>
<tr><td></td><td></td><td></td><td>EN 532</td><td>Energy Conservation and Waste Heat Recovery</td><td>3</td></tr>
</table>

EN 533	Energy Storage Systems	3
EN 534	Energy Modeling and Optimization	3
EN 535	Energy Environment Interaction	3
EN 536	Materials and Devices for Energy Applications	3
EN 537	Power Generation and System Planning	3
EN 538	Hybrid Renewable Energy Systems Design	3
EN 541	Electricity Regulations and Reforms in India	3

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

Students are installing Solar Street light at the University Campus

Oxidation Stability Analyser

Gas Chromatograph
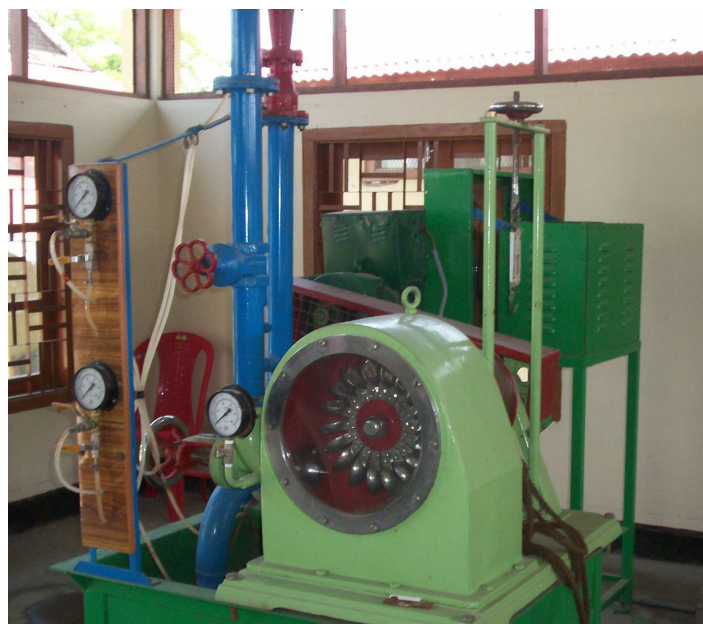
Micro-Hydal Power Plant

1 kWp Solar PV power Plant

The Department of Food Engineering and Technology (FET) was established in the year 2006 with the aim of creating skilled human resources in the engineering aspect of food processing to cater to 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 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.

Students from the department have benefited from Ministry of Education's schemes for North-East under ISHAN UDAY, ISHAN VIKAS etc. B. Tech. and M. Tech. students are finding placements in organizations such as, Tata global beverages, ITC Ltd, Himalayan Foods, Adani Wilmar, Britannia, Parle Agro, Mother Dairy, etc. Ph. D. scholars of the Department have availed the various International Fellowships such as *Fulbright-Nehru Doctoral Research Fellowship, Commonwealth SPLIT-SITE Ph.D. Programme, Newton Bhabha Ph. D. Placement Programme, UNESCO / Peoples Republic of China (The Great Wall) Scholarship, Indo-US Fellowship for Women in STEMM etc.*

The department has well developed laboratories for teaching and research created from grants received from various agencies viz., HRD grant from the Ministry of Food Processing Industries (MoFPI), Govt. of India, grant under the FIST programme (Level I) from the Department of Science and Technology (DST), grant under the UGC-SAP (DRS-I) programme of the University Grant Commission, and grant under the NEQIP Scheme of the AICTE. To cater the requirements of testing nutritional parameters of various food items by food industries and with the support from the MoFPI, the Department has established NABL accredited Food Quality Control Laboratory (FQCL). 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.

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 local youths to start their own enterprises.

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

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

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

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

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

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

Professor

Laxmikant S. Badwaik*, Ph.D. (TU)

Food Packaging, Food Safety and Laws, Food Processing Waste Utilization

Assistant Professor

Amit Baran Das*, Ph.D. (IITG)

Food Process Modeling, Food Rheology, Functional Food and Biopolymer, Food Extrusion

Assistant Professor

Nishant Rachayya Swami Hulle*, Ph.D. (IITKgp)

Food Process Technology, Non-Thermal Processing, Product Development.

Assistant Professor

Tabi Ghosh, Ph.D. (IITG)

Food Processing, Nanotechnology in edible food packaging, Bionanostructured materials, Functionalized coating

Assistant Professor

Nickhil C, Ph.D. (ICAR-IARI)

Food process engineering, Grain Storage and Structures, Fruits and vegetable processing and machineries

Assistant Professor

Soumya Ranjan Purohit, Ph.D. (IITKgp)

Food bioprocessing, Rice chemistry and Technology, Value addition of local crops

* Recognized Ph.D. Supervisor

ACRONYMS:

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

Facilities
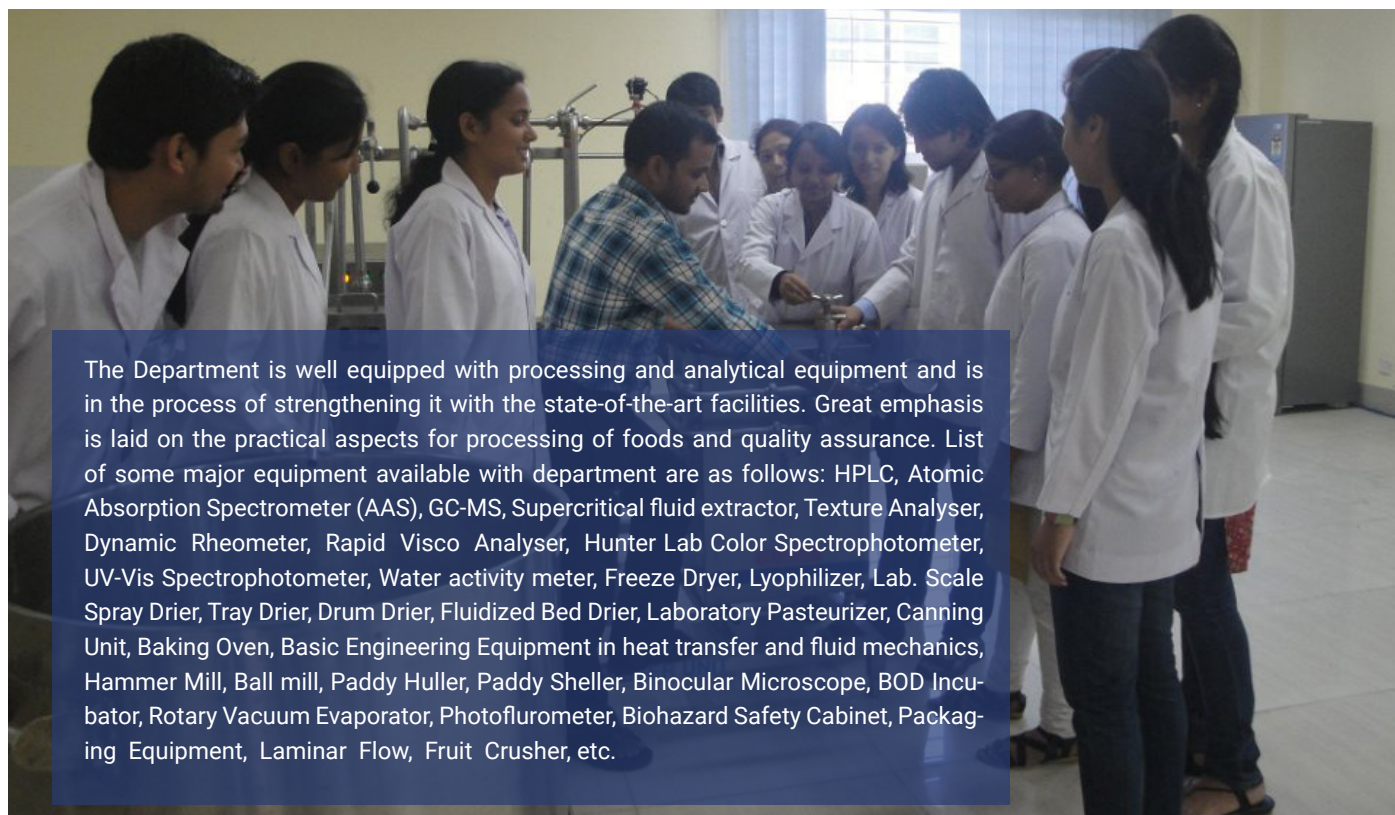
The Department is well equipped with processing and analytical equipment and is in the process of strengthening it with the state-of-the-art facilities. Great emphasis is laid on the practical aspects for processing of foods and quality assurance. List of some major equipment available with department 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 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

Number of papers published in the year 2020-21	:	**49**
Number of ongoing research projects	:	**07**
Number of current Ph.D. scholars	:	**64**

Selected Publications

○ Gupta, A. K., Sahu, P. P., & Mishra, P. Ultrasound aided debittering of bitter variety of citrus fruit juice: Effect on chemical, volatile profile and antioxidative potential. Ultrasonics Sonochemistry, 81, 105839, 2021.

○ Khurshida, S., Das, M. J., Deka, S. C., & Sit, N. Effect of dual modification sequence on physicochemical, pasting, rheological and digestibility properties of cassava starch modified by acetic acid and ultrasound. International Journal of Biological Macromolecules, 188, 649-656, 2021

○ Barman, M., Das, A. B., & Badwaik, L. S. Effect of xanthan gum, guar gum, and pectin on physicochemical, color, textural, sensory, and drying characteristics of kiwi fruit leather. Journal of Food Processing and Preservation, 45(5), e15478, 2021.

○ Chutia, H., & Mahanta, C. L. Properties of starch nanoparticle obtained by ultrasonication and high-pressure homogenization for developing carotenoids-enriched powder and Pickering nanoemulsion. Innovative Food Science & Emerging Technologies, 74, 102822, 2021.

○ Kumar, A., Begum, A., Hoque, M., Hussain, S., & Srivastava, B. Textural degradation, drying and rehydration behaviour of ohmically treated pineapple cubes. LWT, 142, 110988, 2021.

Achievement/output of the department

○ The B. Tech. and M Tech program (Food Engineering and Technology) are approved by AICTE.

○ The department received NBA accreditation (as Washington Accord) for B. Tech program for the year 2016-2022.

○ 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 UGC SAP DRS-I.

○ 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.

Courses offered in B. Tech. in Food Engineering and Technology

First Semester		
Course Code	Course Title	Cr.
MS 104	Mathematics-I	4
PH 103	Physics-I	3
CH 103	Chemistry	4
EE 103	Basic Electrical Engineering	3
EE 104	Basic Electrical Engineering Lab	1
EF 103	English	3
SE 100	Induction Programme	-
-	CBCT- III	3

Second Semester		
Course Code	Course Title	Cr.
PH 104	Physics-II	2
MS 105	Mathematics-II	4
CO 103	Introductory Computing	3
ME 103	Workshop Practice	2
CE 103	Engineering Graphics	3
CO 104	Computing Laboratory	2
ME 102	Engineering Mechanics	4
FE 101	Introduction to Food Engineering & Technology	4

Third Semester		
Course Code	Course Title	Cr.
MS 205	Mathematics III	3
BA 201	Economics	3
FE 201	Biochemistry and Nutrition	4
FE 202	Process Thermodynamics & Reaction Kinetics	4
FE 203	Fluid Mechanics	4
FE 204	Basic & Food Microbiology	4

Fourth Semester		
Course Code	Course Title	Cr.
FE 205	Food Chemistry	4
FE 206	Transport Phenomena	4
FE 207	Principles of Food Processing & Preservation	2
FE 208	Mechanical Operations & Material Handling	3
FE 209	Food Process Calculations	2
FE 210	Food Material Science & Engineering	3
	Open Elective I	3

Fifth Semester		
Course Code	Course Title	Cr.
FE 301	Instrumentation & Process Control in Food Industry	4
FE 302	Thermal Operations in Food Processing	4
FE 303	Separation Techniques in Food Processing	3
FE 304	Grains and Oilseeds Processing Technology	3
FE 305	Food Analysis & Quality Control	4
LW301	Indian Constitution	0
-	Elective I	3
-	Open elective II	3

Sixth Semester #		
Course Code	Course Title	Cr.
IC 361	Accounting & Financial Management	3
FE 307	Food Process Equipment Design	3
FE 308	Fruits and Vegetables Processing Technology	3
FE 309	Biochemical Engineering	3
FE 350	Credit seminar	1
-	Elective II	3
-	Open elective III	3

Seventh Semester		
Course Code	Course Title	Cr.
FE 401	Dairy Products Technology	3
FE 402	Plantation Products & Spices Processing Technology	3
FE 471	Industrial Summer Training#	2
FE 481	Project-I	4
CT 430	Essence of Indian Traditional Knowledge	0
-	HSS//Management Elective	3
-	Elective III	3
-	Elective IV	3

Eight Semester		
Course Code	Course Title	Cr.
FE 480	Comprehensive viva-voce	0
FE 482	Project-II	8
-	Open elective IV	3

Industrial Summer Training: Training shall be of 8 weeks duration carried out during the summer break after the 6th semester. The report will be submitted in the 7th semester.

Elective Courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
FE 421	Meat, Fish & Poultry Processing	3	FE 431	Plant Design & Layout	3
FE 422	Bakery & Confectionery Technology	3	FE 432	Food Plant Utilities	3
FE 423	Oils & Fats Technology	3	FE 433	Food Safety & Quality Assurance	3
FE 424	Functional Foods	3		**Open Elective Courses**	
FE 425	Traditional Indian Foods	3	FE451	Operation Research	3
FE 426	Recent Trends in Food Processing	3	FE452	Food Enterprise Development	3
FE 427	Process Modelling & Simulations	3	FE453	Optimization Techniques	3
FE 428	Refrigeration & Cold Storage Systems	3	FE454	Numerical Methods	3
FE 429	Food Supply Chain Management	3	FE455	Process Modelling & Simulations	3
FE 430	Food Plant Hygiene & Sanitation	3			

Courses offered in M. Tech. in Food Engineering and Technology

First Semester		
Course Code	Course Title	Cr.
FT 511	Research Methodology	3
FT 512	Transport Phenomena in Food Engineering	4
FT 513	Engineering Properties of Biological Materials	3
	Elective- I	3
	Elective- II	3
	Elective -III	3
	Open elective- I	3

Second Semester		
Course Code	Course Title	Cr.
FT 516	Emerging Food Processing Technologies	3
FT 517	Food Equipment and Plant Design	3
FT 518	Recent Trends in Food Product Development and Packaging	3
FT 519	Food Process Modeling and Simulation	3
FT 571	Seminar	3
	Elective- IV	1
	Elective- V	3
	Open elective-II	3

Third Semester			Fourth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
FT 681	Project work & dissertation part I	12	FT 682	Project work & dissertation part-II	12

Elective Courses					
Group-I			**Group-II**		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
FT 541	Recent Trends in Plant Products Technology	3	FT 546	Powder Technology	3
FT 542	Recent Trends in Animal Products Technology	3	FT 547	Recent trends in Biochemical Engineering	3
FT 543	Recent Trend in Baking and Confectionary	3	FT 548	**Nano Technology in Food Applications**	3
FT 544	Extrusion Technology	3	FT 549	Recent Trends in Fermentation Technology	3
FT 545	Traditional Indian Food; Case Studies	3	FT550	Recent Trend in Enzyme Technology	3
			FT 551	Valorization of Food Byproduct	3
Group-III					
Course Code	**Course Title**	**Cr.**			
FT 552	Recent Trend in Drying and Dehydration	3			
FT 553	Food Microstructure and Texture	3			
FT 554	Novel Separation Process	3			
FT 555	Food Supply Chain Management Case Study	3			
FT 556	Chemistry of Food processes	3			

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

MECHANICAL ENGINEERING

(Year of Establishment: 2006)
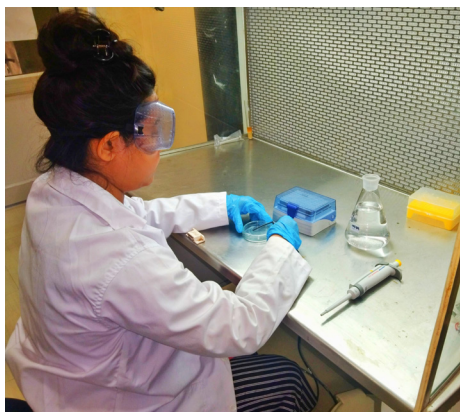
The Department of Mechanical Engineering was established in the year 2006 under School of Engineering for offering B. Tech degree in Mechanical Engineering. Subsequently, M.Tech. and Ph.D. programmes were started in the year 2013. The vision of the department is to emerge as a centre of excellence producing quality engineers and conducting cuttingedge research. Both the B.Tech. and M.Tech. (Mechanical Engineering) programmes are approved by AICTE. Moreover, B. Tech Mechanical Engineering programme is accredited by National Board of Accreditation with effect from 01/01/2016.

Programmes offered

1. Ph.D.in Mechanical Engineering
2. M. Tech. in Mechanical Engineering (Two Specializations)
3. M. Tech. in Thermal and Fluid Engineering
4. M. Tech. in Machine Design
5. B. Tech. in Mechanical Engineering

Faculty and Areas of Interest

Professor
Dilip Datta*, Ph.D. (IITK)
Design, Optimization and Operational Research

Professor
Partha Pratim Dutta*, Ph.D. (TU)
Renewable energy and Drying Technology

Assistant Professor
Polash Pratim Dutta*, Ph.D. (IITG)
CAD, Laser Forming, Mechatronics, Soft Computing

Assistant Professor
Prabin Haloi, M.E. (GU)
Fluid and Thermal Engineering

Assistant Professor
Monoj Bardalai*, Ph.D. (GU)
Thermal Engineering, Renewal Energy Conversion

Professor
Tapan Kumar Gogoi*, Ph.D. (TU), HoD
Thermodynamic modeling, simulation and analysis of multi-generation and solar hybrid systems

Assistant Professor
Paragmoni Kalita*, Ph.D. (IITG)
Computational Fluid Dynamics, High speed flows

Assistant Professor
Sushen Kirtania*, Ph.D. (IITG)
Composite Materials, Carbon Nanotubes, Carbon Nanotubes Based Composites, Finite Element Method, Fracture Mechanics

Assistant Professor
Sanjib Banerjee*, Ph.D. (IITG)
Materials and Manufacturing

Assistant Professor
Zahnupriya Kalita*, Ph.D. (TU)
Mechatronics

Assistant Professor
Rakesh Bhadra, ME (BESUS)(On study leave)
Manufacturing, Production Engineering

Assistant Professor
Seikh Mustafa Kamal, Ph.D. (IITG)
Machine Design

Assistant Professor
Shikha Bhuyan, M. Tech. (NITS)
Thermal Engineering

Assistant Professor
Satadru Kashyap*, Ph.D. (TU)
Manufacturing and Materials Science

Assistant Professor
Barnali Chowdhury, ME (AEC)
Mechanical Engineering

Assistant Professor
Vivek Kumar Mehta, Ph.D. (IITK)
Robotics, Optimization: Classical and Evolutionary Algorithms, Multi-objective Optimization, Multi-modal Optimization

*** Recognized Ph.D. Supervisor**

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

ACRONYMS:

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

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, oxy-acetylene 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

Number of papers published in the year 2020-2021   : **13**
Number of ongoing research projects   : **02**
Number of current Ph.D. scholars   : **17**

Selected Publications

○ Musharavati F., Khanmohammadi S. Nondy J., Gogoi T.K. Proposal of a new low-temperature thermodynamic cycle: 3E analysis and optimization of a solar pond integrated with fuel cell and thermoelectric generator, Journal of Cleaner Production, 331 (2021) 129908

○ Nondy J. and Gogoi T .K. Exergoeconomic investigation and multi-objective optimization of different ORC configurations for waste heat recovery: A comparative study, Energy Conversion and Management, 245 (2021) 114593

○ Nondy J. and Gogoi T. K. A comparative study of metaheuristic techniques for the thermoenvironomic optimization of a gas turbine-based benchmark combined heat and power system. ASME J. of Energy Resources Technology, 143(6) (2021) 062104.

○ Nondy J. and Gogoi T. K. Performance comparison of multi-objective evolutionary algorithms for exergetic and exergoenvironomic optimization of a benchmark combined heat and power system, Energy 233 (2021) 121135

○ Dutta P., Dutta P.P. and Kalita P., Thermal performance studies for drying of Garcinia pedunculata in a free convection corrugated type of solar dryer, Renewable Energy, 163 (2021) 599-612.

○ Kalita, P., Dass A.K., and Hazarika J. A new approach for numerical-diffusion control of Flux-Vector-Splitting schemes for viscous-compressible flows. International Journal of Numerical Methods for Heat and Fluid Flow, 21 (1) (2021) 497−518.

○ Kamal S.M. Estimation of Optimum Rotational Speed for Rotational Autofrettage of Disks Incorporating Bauschinger Effect, Mechanics Based Design of Structures and Machines, (2020) 1780608

○ Nondy J. and Gogoi T. K. Comparative performance analysis of four different combined power and cooling systems integrated with a topping gas turbine plant, Energy Conversion and Management, 223 (2020) 113242

○ Gogoi T. K. and Hazarika P. Comparative assessment of four novel solar based triple effect absorption refrigeration systems integrated with organic Rankine and Kalina cycles. Energy Conversion and Management, 226 (2020) 113561

Courses offered in B.Tech. in Mechanical Engineering

First Semester		
Course Code	**Course Title**	**Cr.**
CH103	Chemistry	4
MS104	Mathematics -I	4
PH103	Physics -I	3
EE103	Basic Electrical Engineering	3
EE104	Basic Electrical Engineering Lab	1
EF103	English	3
SE100	Induction Program	-

Second Semester		
Course Code	**Course Title**	**Cr.**
PH 104	Physics -II	2
MS 105	Mathematics -II	4
EC 102	Basic Electronics	4
ME 102	Engineering Mechanics	4
ME103	Workshop Practice	2
CO103	Introductory Computing	3
CO104	Computing Laboratory	2

Third Semester		
Course Code	**Course Title**	**Cr.**
MS 205	Mathematics- III	3
BA 201	Economics	3
ME 201	Solid Mechanics	4
ME 202	Fluid Mechanics- I	3
ME 203	Material Science	3
ME 208	Manufacturing Technology- I	3
ME 217	ME Lab (Design)-I	2
ES201*	Environmental Science	0

Fourth Semester		
Course Code	**Course Title**	**Cr.**
BT 201	Biology	3
ME 205	Thermodynamics	4
ME 209	Fluid Mechanics- II	3
ME 214	Kinematics of Machinery	3
ME 215	Mechanical Measurements and Instrumentation	3
ME 216	Manufacturing Technology- II	3

Fifth Semester		
Course Code	Course Title	Cr.
ME 308	Heat and Mass Transfer	4
ME 311	Machine Design -II	3
ME 313	Dynamics of Machinery	3
ME 314	Applied Thermodynamics	4
ME 315	ME Lab (Manufacturing)-II	2
-	ME-Elective I	3
-	Open Elective I	3
LW 301*	Indian Constitution	0

Sixth Semester		
Course Code	Course Title	Cr.
IC 316	Accounting and Finance Management	3
ME 312	Machine Design II	3
ME 316	Computer-Aided Engineering	3
ME 317	ME Lab (Thermal) III	2
ME 318	Mini Project	2
-	ME-Elective II	3
-	ME-Elective III	3
-	Open Elective II	3

Seventh Semester		
Course Code	Course Title	Cr.
XXxxx	HSS/Management Elective	3
ME 401	Industrial System Engineering	3
ME471		
**	Industrial Summer Training #	2
ME 483	Project I	4
-	ME Elective IV	3
-	ME Elective V	3
-	Open Elective III	3
CT 465*	Essence of Indian Traditional Knowledge	0

Eighth Semester		
Course Code	Course Title	Cr.
-	ME Elective VI	3
-	Open Elective IV	3
ME 484	Project II	8

*ES201, LW301 and CT465 are Mandatory-Non-Credit courses as per the revised-AICTE guideline. The lectures and laboratory class-es assigned for these courses are not considered in the calculation of total credit structure. However, these courses are considered while calculating the number of hours.

****The credit-break up for ME471 (Industrial Summer Training) is not shown in the table. However, its contribution of 2 credit is con-sidered while calculating the total credit of 161 for the curriculum.

Industrial Summer Training: Training shall be of 8 weeks duration carried out during the summer break after the 6th semester. The report will be submitted in the 7th semester.

*Open Elective: Any course of level 400 and above offered in the University and recommended by the department.

Elective Courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ME 421	Computer Graphics and Solid Modeling	3	ME 431	Fracture and Fatigue	3
ME 422	Optimization Methods in Engineering	3	ME 432	Engineering Optimization	3
ME 423	Mechanical Vibration	3	ME 433	Experimental Stress Analysis	3
ME 424	Theory of Elasticity	3	ME 434	Composite Materials	3
ME 425	Machine Tools and Machining	3	ME 435	Machine Tool Design	3
ME 426	Reliability Engineering	3	ME 436	Combustion Engineering	3
ME 427	Productivity Improvement Techniques	3	ME 437	Tea Machineries	3
ME 428	Finite Element Methods in Engineering	3	ME 438	Petroleum and Drilling Technology	3
ME 429	Gas Turbine and Compressor	3	ME 439	Refrigeration and Air Conditioning	3
ME 430	Value Engineering	3	ME 440	Advanced Mechanics of Solids	3
ME 503	Mechanics of Composite Materials	4	ME 531	Project Management	3
ME 504	Failure Analysis of Materials	3	ME 532	Power Plant Engineering	3
ME 505	Advanced Dynamics	4	ME 533	Energy Management	3
ME 506	Theory of Elasticity and Plasticity	3	ME 534	Mechatronics	3
ME 507	Theory of Plates and Shells	3	ME 535	Advanced Engineering Thermodynamics	3
ME 508	Continuum Mechanics	3	ME 537	Applied Computational Methods	4
ME 521	Robotics	3	ME 538	Computer-Aided-Design in Engineering	4
ME 522	Quality Engineering	3	ME 539	Optimization Techniques in Engineering	3

ME 523	Non-Conventional Energy	3		ME 540	Evolutionary Algorithms for Optimum Design	3
ME 524	Operations Management	3		ME 542	Computational Fluid Dynamics	4
ME 525	Tribology	3		ME 543	Compressible Flow	4
ME 526	Modern Control System	3		ME 544	Turbulent Shear Flow	3
ME 527	CAD-CAM	3		ME 545	Viscous Fluid Flow	3
ME 528	Energy Conservation and Waste Heat Recovery	3		ME 546	Fluid Transportation System	3
ME 529	Artificial Intelligence in Engineering	3		ME 547	Two Phase Flow	3
ME 601	Automobile Engineering	3		ME 621	Energy Conservation and Waste Heat Recovery	3
ME 602	Computational Fluid Dynamics and HeatTransfer	3		ME 622	Communication Skills for Scientists and Engineers	3
ME 605	Hybrid Electric Vehicles	3				
ME 701	Advance Heat Transfer	3				

$ The 7thsemester will start a month later than usual and therefore be shorted by a month. To compensate for it there shall be 4 class hours per week for a 3-credit course.

Industrial Summer Training: Training shall be of 8 weeks duration carried out during the summer break after the 6thsemester. The report will be submitted in the 7th semester.

Elective courses are offered on the basis of the choice of students and availability of teacher for teaching a particular course.

Courses offered in M.Tech. in Mechanical Engineering

First Semester				Second Semester		
Specialization: Machine Design				**Specialization: Machine Design**		
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
ME 501	Advanced Solid Mechanics	4		ME 502	Finite Element Methods	4
ME 623	Mathematical Methods for Engineers	4		ME 510	Engineering Design Laboratory	3
ME 509	Advanced Dynamics and Vibration	5		ME 592	Term Paper	2
xx-xxx	Open Elective I	3		xx-xxx	Open Elective II	3
xx-xxx	Programme Elective I	3*		xx-xxx	Programme Elective III	3
xx-xxx	Programme Elective II	3*		xx-xxx	Programme Elective IV	3*
				xx-xxx	Programme Elective V	3*

First Semester				Second Semester		
Specialization: Thermal and Fluid Engineering				**Specialization: Thermal and Fluid Engineering**		
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
ME 535	Advanced Engg. Thermodynamics	3		ME 530	Numerical methods	4
ME 541	Advanced Fluid Mechanics	4		ME 548	Convective Heat and Mass transfer	3
ME 562	Experimental Methods in Thermal and Fluid Engineering	5		ME 593	Seminar	2
xx-xxx	Open Elective I	3		xx-xxx	Open Elective II	3
xx-xxx	Programme Elective I	3*		xx-xxx	Programme Elective III	3
xx-xxx	Programme Elective II	3*		xx-xxx	Programme Elective IV	3*
				xx-xxx	Programme Elective V	3*

Third and Fourth Semester						
Specialization: Machine Design				**Specialization: Thermal and Fluid Engineering**		
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
ME 613	M. Tech. Thesis Part I	12		ME 611	M. Tech. Thesis Part I	12
ME 614	M. Tech. Thesis Part II	12		ME 612	M. Tech. Thesis Part II	12

Elective Courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ME 503	Mechanics of Composite Materials	4	ME 534	Mechatronics	3
ME 504	Failure Analysis of Materials	3	ME 535	Advanced Engineering Thermodynamics	3
ME 505	Advanced Dynamics	4	ME 537	Applied Computational Methods	4
ME 506	Theory of Elasticity and Plasticity	3	ME 538	Computer Aided Design in Engineering	4
ME 507	Theory of Plates and Shells	3	ME 539	Optimization Techniques in Engineering	3
ME 508	Continuum Mechanics	3	ME 540	Evolutionary Algorithms for Optimum Design	3
ME 521	Robotics	3	ME 542	Computational Fluid Dynamics	4
ME 522	Quality Engineering	3	ME 543	Compressible Flow	4
ME 523	Non-Conventional Energy	3	ME 544	Turbulent Shear Flow	3
ME 524	Operations Management	3	ME 545	Viscous Fluid Flow	3
ME 525	Tribology	3	ME 546	Fluid Transportation Systems	3
ME 526	Modern Control System	3	ME 547	Two Phase Flow	3
ME 527	CAD-CAM	3	ME 601	Automobile Engineering	3
ME 528	Energy Conservation and Waste Heat Recovery	3	ME 602	Computational Fluid Dynamics and Heat Transfer	3
ME 529	Artificial Intelligence in Engineering	3	ME 603	Hybrid Electric Vehicles	3
ME 531	Project Management	3	ME 622	Communication Skills for Scientists and Engineers	3
ME 532	Power Plant Engineering	3	ME 701	Advance Heat Transfer	3
ME 533	Energy Management	3			

New Elective Courses (Specialization: Machine Design)					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ME 511	Experimental Stress Analysis for Design	5	ME 607	Soft Computing Technique in Engineering	3
ME 512	Theory of Plasticity	3	ME 608	Mechatronics and Industrial Automotion	3
ME 513	Introduction to Fracture Mechanics	3	ME 609	Design of Internal Combustion Engine	3
ME 521	Robotics	4	ME 610	Kinematics and Dynamics of Internal Combustion Engine	3
ME 606	Stability Problem in Applied Mechanics	3	ME 624	Design of Internal Combustion Engine Auxiliary System	3

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

Academic Building I

ASSAMESE
(Year of Establishment: 2019)

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 humanties have also been identified as the thrust are as in research.

Programmes offered

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

Faculty and Areas of Interest

Associate Professor
Subrat Jyoti Neog*, Ph.D. (GU)-HoD
Assamese Literature, Film Studies, Theatre Studies, Stylistics, Creative Writing (Play and Screenwriting)

Assistant Professor
Juri Dutta*, Ph.D. (RGU)
Regional Literatures of India, Translation Studies and Comparative Literature, Creative Writing

Assistant Professor
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.

Assistant Professor
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 2020- 21   : **09**
- No. of ongoing research projects   : **2**
- No.of current Ph.D. scholars   : **2**

Selected Publications:

- "Sapunjyoti Thakurar Natak" (Sapunjyoti Thakur's Play), Gariyoshi, May, 2021

- "Pratiki Sailire Ananya Manchayan-Black and white"(Symbolic Play- Black and White), Satsari, May, 2021

- "Avinash Sarmar Natak" (Avinash Sarma's Play), Gariyoshi, August, 2021

- "Aahar aru Paricalak Abinash Sarmar Moulik Cinta"(Abinash Sarma's Directorial Venture and Aahar), Satsari, November, 2021

- "Abhinaba Sailir Kathabastu aro Angikere Samiddha Indian Panorama", Gariyoshi, Feb, 2022.

- "Mukti and Tare Zameen Par: An Inter-textual Study", Anvesan, February, 2022.

- "Asamiya Upanyasat Queer Cetana" (Queer Consciousness in Assamese Novels) in Satsari, January, 2022.

- "Kahini Kathan, Bhima Carita aru Oupanibesik Asam: Pathanar Ek Itihas" (Story Telling, Bhima Carita and Colonial Assam: A History of Reading), Satsari, March 2022

- "Aalocanir Bhraman Sahitya: Upekshita Ekhan Aalocani aro Upekshita Eti Sahitya Bidha" (Travel Literature of Aalocani) Gariyoshi, March, 2022

Courses offered in M.A. in Assamese

First Semester		
Course Code	**Course Title**	**Cr.**
AS401	History of Assamese Language	4
AS402	History of Assamese Literature	4
AS403	Assamese Poetry	4
AS404	Historiography of Assamese Literature	4
AS405	Literary Theory and Criticism	4

Second Semester		
Course Code	**Course Title**	**Cr.**
AS406	Structure of Assamese Language	4
AS407	Assamese Culture	4
AS408	Assamese Drama	4
AS409	Assamese Novel	4
AS410	Creative Writing, Editing and Assamese DTP	2
Open Elective	To be chosen from other departments	3

Third Semester		
Course Code	**Course Title**	**Cr.**
AS411	Textual Criticism and Assamese cript	4
AS412	Introduction to Digital Humanities	4
AS413	Assamese Prose	4
AS414	Introduction to Linguistics (EC)	4
AS415	Introduction to Translation Studies (EC)	4
AS416	History of Assamese Book (EC)	4
AS417	Comparative Literature (EC)	4
Opend ElectiveE	To be chosen from other departments	3
*EC-Elective Course (Anyone)		

Fourth Semester		
Course Code	**Course Title**	**Cr.**
AS418	Assamese Short Story	4
AS419	Non-fictional Writings from Assamese Periodicals	4
AS420	Women's Writings in Assamese: Non-Fictional Prose	4
AS421	Sanskrit Literature (EC)	4
AS422	World Literature in English/Assamese Translation(EC)	4
AS423	Introduction to Applied Linguistics (EC)	4
AS424	Tibeto Burman Languages of As- sam(EC)	4
AS425	Film and Literature(EC)	4
AS426	Dissertation	6

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

Humanities & Social Science Building

With faculty members from the country and adjunct faculties from abroad, the Department of Cultural Studies engages in an analysis of society, culture, and expressive cultural forms from a wide range of disciplinary engagements. The academic curricula of the department aim towards understanding of emergent socio-cultural issues which include 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 to document and study the rich cultural heritage, including the folk and oral inheritances of the region. The department is currently supported by UGC-SAP (DRS-II) and has been able to build up a rich and effective network with prominent institutions (of India and abroad) and communities through its regular field investigations and students' internships.

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

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

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

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

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

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

Assistant Professor
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

Adjunct Faculty
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 Universit;
UoH : University of Hyderabad;
MSUB : MS University of Baroda;
HoD : Head of the Department,
UO : University of Otago;
AU : University of Auckland.

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 center-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

No. of papers published in the year 2021-22 : **17**
No. of ongoing research projects : **02**
No. of current Ph.D. scholars : **30**

Selected Publications:

○ J. G. Konwar. (Ed.) Sanctum Sanctorum, Art of Chaklong: Retelling the Story of a Tai-Ahom Ceremony in Art Design and Society: Global Perspective. Apurba Pandey and Sabita Kumari. Macmillan Education, New Delhi, Pp 70-76. ISBN 93-90370-84-1.2022

○ P Sarmah, D P Nath. Oti Axamiyagiri: Assamese nationalistic masculine identity, United Liberation Front of Asom and cyberspace. Ethnicities, A Sage Publication. Vol 0(0). 1-17

○ P Dutta, N C Goswami, P Richman and R Bharucha. 'Question around Vijay: Sattriya in a Monastic Tradition'. In Performing the Ramayana Tradition: Enactments, Interpretations and Arguments edited by Paula Richman and Rustom Bharucha. New York: Oxford University Press. 2021

Courses offered in M.A. in Cultural Studies

<table>
<tr><th colspan="3">First Semester</th><th colspan="3">Second Semester</th></tr>
<tr><th>Course Code</th><th>Course Title</th><th>Cr.</th><th>Course Code</th><th>Course Title</th><th>Cr.</th></tr>
<tr><td>CT420</td><td>Introduction to Cultural Studies</td><td>4</td><td>CT430</td><td>Media and Culture</td><td>3</td></tr>
<tr><td>CT421</td><td>Cultural Theory: Key Concepts</td><td>4</td><td>CT431</td><td>Gender and Culture</td><td>4</td></tr>
<tr><td>CT422</td><td>Introduction to Popular Culture</td><td>4</td><td>CT432</td><td>Folklore and Culture</td><td>4</td></tr>
<tr><td>CT423</td><td>Research Methods</td><td>4</td><td>CT433</td><td>Exploring North East India</td><td>4</td></tr>
<tr><td>CT424</td><td>Reading Culture: Perspectives from the West</td><td>3</td><td colspan="3">Any 1(one) course from this cluster CT434 and CT435</td></tr>
<tr><td></td><td></td><td></td><td>CT434</td><td>Culture and Environment</td><td>3</td></tr>
<tr><td></td><td></td><td></td><td>CT435</td><td>Indian Society and Culture</td><td>3</td></tr>
</table>

Any 1(one) course from this cluster	CT436 and CT437	
CT436	Culture and Heritage	3
CT437	Digital Culture	3

Third Semester				Fourth Semester		
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
CT520	Visual Culture	4		CT 530	Dissertation	6
CT521	Audio-Visual Production	4		Any 2 (two) course from this cluster of CT31, CT532, CT533,CT534 and CT535		
Any 1(one)course from this cluster CT522 and CT523				CT531	Cultural Industries	3
CT522	Music and Culture	3		CT532	Performance and Culture	3
CT523	Cinema and Culture	3		CT533	Culture and Science: Select Readings	3
Any 1 (one)course from this cluster of CT524, CT525, CT526 and CT527				CT534	Cultural Policy	3
CT524	Cultural Memos	3		CT535	Reading India through the Cinematic Lens	3
CT525	Community Dance in Assam	3		Any 2 (two) course from this cluster of CT536, CT537, CT538, CT539, CT540, CT541, CT542		
CT526	Dance Ethnography	3		CT536	Culture for Social Change	3
CT527	Understanding New Media	3		CT537	Cultural Spectacles and Infotainment	3
Any 1 (one)course from this cluster of CT528 and CT529				CT538	Reading Culture: Perspectives front Assam	3
CT528	Oral History Project	4		CT539	Intercultural Communication	3
CT529	Cyber Ethnography	4		CT540	Folk and Tribal Arts	3
Open Elective (CBCS)		3		CT541	Cross Cultural Studies: North East India and South East Asia	3
				CT542	Bhakti Aesthetics	3

For more information one can visit the departmental website http://www.tezu.ernet.in/dtcaf
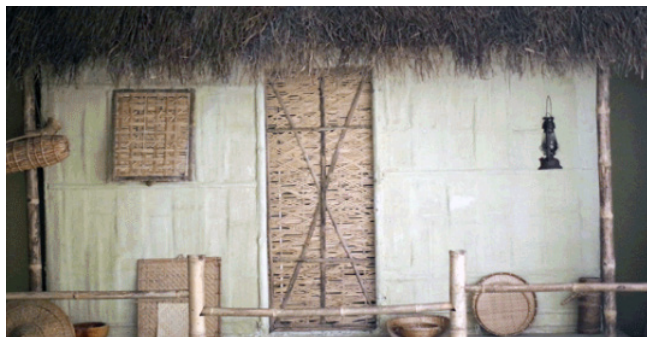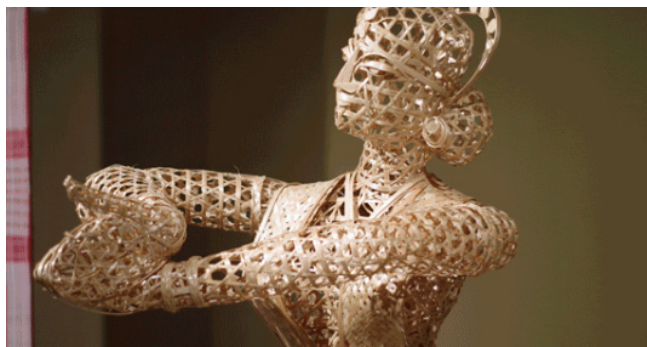
Humanities & Social Science Building

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. 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.

Assistant Professor
Yeasmin Sultana, Ph.D. (AU)

Language Education and Research Methodology

Assistant Professor
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

Assistant Professor
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

Assistant Professor
Sashapra Chakrawarty*, Ph.D. (BHU)

Biological Science, Educational Psychology, Teacher Education, Elementary Education, Special Education, Guidance and Counselling

Assistant Professor
Pratima Pallai*, Ph.D. (LU)

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

Assistant Professor
Mohammad Asif, M.Ed. (JMI)

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

Assistant Professor
Sradhanjali Pradhan, Ph.D. (UU)

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

Assistant Professor
Rajinder Singh*, Ph.D. (PU)

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

Assistant Professor
Sanghamitra Das, Ph.D. (NUEPA)

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

EDUCATION

(Year of Establishment:2014)

Assistant Professor

Gopal Singh, Ph.D. (MDSU)

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

ACRONYMS:

AU   : Assam University;
PU   : Pondicherry University;
DAV   : Devi Ahilya Vishwavidyalaya, Indore;
BHU   : Banaras Hindu University, Varanasi;
LU   : Lucknow University;
JMI   : Jamia Millai Islamia, New Delhi;
UU   : Utkal University, Odisha;
PU^   : Panjab University;
MJPRU   : MJP Rohikhand University, Bareily;
NUEPA   : National University of Education Planning and Administration;
MDSU   : Mharshi Dayanand Saraswati University;
HoD   : Head of the Department

* Recognized Ph.D. Supervisor

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

No. of paper published in the year 2020–21   : **17**
No. of ongoing research projects   : **02**
No. of current Ph.D. scholars   : **28**

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 Jour- nal: 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

Courses offered in B.Ed.

First Semester			Second Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
BD 401	Human Growth and Development	5	BD 501	Teaching Learning and Management	4
BD 402	Contemporary Indian Education	5	BD 502/ BD 503/ BD 504	Teaching of Assamese -Part I/ Teaching of English -PartI/ Teaching of Hindi -Part I	3
BD 403	Language Across the Curriculum	4	BD 507/ BD 508	Teaching of Mathematics -Part I/ Teaching of Biological Science- Part I	3
BD 404	Understanding Disciplines	4	BD 505/ BD 506	Teaching of Social Science -Part I/ Teaching of Physical Science-Part I	3
BD 405	Reading and Reflecting on Texts	2	BD 509	Knowledge and Curriculum -Part I	3

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
-	Open Elective- I	3	BD 510	Assessment and Evaluation of Learning	3
			BD 511	Drama and Art in Education	2
			BD 512	Pre-Internship	4
			-	Open Elective- II	3

Third Semester*			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BD 550/ BD 551/ BD 552	Teaching of Assamese -Part II/ Teaching of English – Part II/ Teaching of Hindi -Part II	3	BD 575	Gender, School, and Society	3
BD 555/ BD 556	Teaching of Mathematics -Part II/ Teaching of Biological Science- Part II	3	BD 576	Knowledge and Curriculum -Part II	3
BD 553/ BD 554	Teaching of Social Science -Part II/ Teaching of Physical Science-Part II	3	BD 577	Creating an Inclusive School	3
BD 557	School Internship	16	BD 578	Guidance and Counselling	3
			BD 579/ BD 580	Peace Education/ Environmental Education	3
			BD 581	Critical Understanding of ICT	4
			BD 582	Understanding the Self	2

*Note: Students of Physical Science Pedagogy would select Mathematics / Biological Sciences as 2nd pedagogy and Students of Social Science pedagogy would select English / Assamese as 2nd Pedagogy and vice-versa in the 2nd and 3rd semester.

Courses offered in M.A. in Education

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MA 106	Philosophical Underpinnings of Education	4	MA 206	Educational Technology	4
MA 107	Psychology Foundations of Education	4	MA 207	Measurement and Evaluation in Education	4
MA 108	Methodology of Educational Research	4	MA 208	Inclusive Education	4
MA 109	Sociological Foundations of Education	4	MA 209	Psychological Experiments	4
MA 110	Teacher Education	4	MA 210	Academic Writing (Practicum)	2
			-	Open Elective- I (CBCT)	3

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MA 306	History of Education: India and World	4	MA 405	Educational Administration and Management	4
MA 307	Statistics in Education	4	MA 406	Politics and Economics of Education	4
MA 308	Curriculum Studies	4	MA 407 / MA 408/ MA 409/ MA 410	Principles and Techniques of Teaching / Educational Guidance and counseling / Indian Intellectual Traditions / Yoga & Personality Development	4
MA 309/ MA 310/ MA 311/ MA 312	Open and Distance Learning/ Human Rights, Peace and Value Education/ Education for Sustainable Development/ ICT in Education	4	MA 411	Dissertation	6
MA 313	Research Proposal and Review Presentation	2			
-	Open Elective-II (CBCT)	3			

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

Humanities & Social Science Building

ENGLISH
(Year of Establishment:1994)

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

Professor
Prasanta Kumar Das*, Ph.D. (GU)

Indian Writing in English, British Literature, Book History

Associate Professor
Debasish Mohapatra*, Ph.D. (EFLU)

Curriculum Development, Materials Production, Language Policy

Associate Professor
Hemjyoti Medhi*, Ph.D. (DU^)

Gender and Literature, New Literatures in English, Indian Vernacular Literature

Assistanat Professor
Pallavi Jha, Ph.D. (UoH)

Children's Literature, Popular Culture and Literature, Postcolonial Writing

Assistanat Professor
Esther Daimari*, Ph.D. (GU)

South Asian English Literature

Professor
Farheena Danta*, Ph.D. (DU),

Dean, School of Humanities & Social Sciences
American Literature, Postcolonial Studies, Modernist Poetics

Professor
Sravani Biswas* , Ph.D. (NEHU), HoD

Indian Writing in English, Postcolonial Studies, British Romantic Poetry

Associate Professor
Sanjib Sahoo*, Ph.D. (TU)

Life Writing, Translation Studies, Travel Writing, Contemporary British Literature

Assistanat Professor
Reetamoni Narzari, Ph.D. (TU)

Women's Writing, Indian Writing in English, Postcolonial Literature

Assistanat Professor
Bashabi Gogoi*, Ph.D. (GU)

Critical Theory, Adaptation Studies, Indian Writing in English & Film Studies

Assistanat Professor
Sarat Kr. Doley*, Ph.D. (GEFLU, Shillong)

English Language Education, Language Testing, SLA

Assistanat Professor
Sarat Kr. Doley*, M.A. (TU)
American Literature, Modernity Studies

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, Hyderabad ;
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

No. of papers published in the year 2021- 2022 : **04**
No. of ongoing research projects : **02**
No. of current Ph.D. scholars : **42**

Select Publications

Journals

○ 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.

Book Chapters

○ 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.

Courses offered in Integrated M. A. in English*

First Semester			Second Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
EG111	Reading Literature	4	EG113	History of English Literature	4
EG112	English for Communication	3	EG114	English Poetry I: Chaucer to Dryden	3
CS101	Basics in Computer Application	3	ES103	Environmental Science	3
			NS102	NSS/NCC	2
MIL (ANY ONE)			**MIL (ANY ONE)**		
AS101	MIL Assamese: Poetry (Early and Modern)	3	AS102	Assamese : Drama	3
HN101	Madhyakalin aur Adhunik Kabya (in Hindi)	3	HN102	Kahani aur Upanyas (in Hindi)	3
EG106	Alternative English -I	3	EG109	Alternative English-II	3
OPTIONAL COURSES (ANY TWO)			**OPTIONAL COURSES (ANY TWO)**		
SO102	**Introduction to Sociology**	**2**	SO103	Introduction to Sociological Thought	2
CT161	**Basic Concepts in Cultural Studies -I**	**2**	CT162	Introduction to Folklore Studies	2
MC101	**Introduction to Communication**	**2**	MC201	Journalism	2

Third Semester		
Course Code	**Course Title**	**Cr.**
EG211	British Drama I: Beginning to Shakespeare	4
EG212	English Fiction-I	3
EG213	English Poetry-II: Pope to Romantics	4
To be chosen by students	CBCT-I	3
MIL (ANY ONE)		
AS201	MIL (Assamese): Short Story and Novel	2
EG209	Alternative English -III	2
HN201	Natak Aur Ekanki (Hindi)	2
OPTIONAL COURSES (ANY TWO)		
SO201	Society in India	2
CT163	Basic Concepts in Cultural Studies-II	2
MC301	Advertising and Public Relations	2

Fourth Semester		
Course Code	**Course Title**	**Cr.**
EG214	Literary Criticism-I	4
EG215	Drama-II: Jacobean to Eighteenth Century	4
EG216	Fiction-II: Victorian to Modern	4
To be chosen by students	CBCT-II	3
MIL (ANY ONE)		
AS202	MIL (Assamese) Essay, Structure of Assamese	2
EG211	Alternative English -IV	2
HN202	Nibandh Aur Hindi Bhasa Ki Bhasik Sangrachana	2
OPTIONAL COURSES (ANY TWO)		
SO202	Social Research Method	2
CT164	Cultural Studies: Its Development and Trends	2
MC401	Electronic Media	2

Fift Semester		
Course Code	**Course Title**	**Cr.**
EG311	Poetry-III: Victorian to Modern	4
EG312	Non-Fictional Prose	4
EG313	Drama-III: Shaw to Beckett	4
EG314	Phonetics of English and ELT	4
To be chosen by students	CBCT-III	3

Sixth Semester		
Course Code	**Course Title**	**Cr.**
EG315	Literary Criticism-II	4
EG316	Introduction to Postcolonial Literature	4
EG317	Introduction to Children's Literature	3
EG318	Introduction to South Asian Writing	3
To be chosen by students	CBCT-IV/Open Elective	3

*Subject to revision.

First Semester		
Course Code	**Course Title**	**Cr.**
EG451	Literary and Critical Theory-I	4
EG452	English Literature from Chaucer to Marlowe	4
EG453	Shakespearean Drama	4
EG454	Fiction-I (Early to Jane Austen)	4
EG417	Academic and Critical Writing in English	3
Elective −I (Any One from the following Courses)		
Course Code	**Course Title**	**Cr.**
EG507	**Translation-I**	**4**
EG509	**Gender and Literature-I**	**4**
EG511	**American Literature-I**	**4**
EG513	**Indian Writing in English-I**	**4**
EG515	**ELT-I**	**4**

Second Semester		
Course Code	**Course Title**	**Cr.**
EG455	Language and Language Education	4
EG456	Puritan to Eighteenth Century Literature (Poetry and Drama)	4
EG457	Romantic Poetry and Prose	4
EG458	Fiction-II (Nineteenth Century)	4
EG460	Fundamentals of Research	4
To be chosen by students	CBCT	3
Elective −II (Any One from the following Courses)		
Course Code	**Course Title**	**Cr.**
EG508	**Translation-II**	**4**
EG510	**Gender and Literature-II**	**4**
EG512	**American Literature-II**	**4**
EG514	**Indian Writing in English-II**	**4**
EG516	**ELT-II**	**4**

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

Humanities & Social Science Building

Tezpur University has been offering German since 2001, Chinese since 2003, and French since 2007 as foreign language courses under the Department of English and Foreign Languages. The Department of Foreign Languages, established in 2019, offers a full-time Certificate Course in Chinese, and Open Elective Choice Based Credit courses in German, French and Chinese languages. The new department has plans to extend the number of programmes at all levels and is committed to fostering professionals with competent skills in languages, intercultural communication, international affairs and cultural understanding from various nuanced perspectives.

Programmes offered

1. One Year Certificate Course in Chinese
2. CBCS (Basic Chinese – I & II, Basic German – I & II, Basic French – I & II)

Faculty and Areas of Interest

Professor

Prasanta Kumar Das, Ph.D. (GU) (HoD i/c)
Indian Writing in English, Literatures in English, Book History

Assistant Professor

Rathijit Chakraborty, M.Phil.(Chinese Studies),(JNU)
Chinese Language and literature

Assistant Professor

Daveirou Lanamai, M.A. (Chinese Studies) (JNU)
Chinese Language, Literature & Culture, Intercultural Studies
* Recognized Ph.D. Supervisor

Assistant Professor

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.

Research Activities

No of papers published in the year 2019-20 : **4**
No of ongoing research projects : **Nil**
No of current Ph.D. scholars : **Nil**

FOREIGN LANGUAGES (Year of Establishment: 2019)

Selected Publications

○ Pallavi, "The Role of Emotions in Identity Formations of Female Literary Characters in Partition-Narratives", Shodh Sarita, Vol. 7, issue 8, October-December

○ 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, 2019. Parallels and Contrasts in the Popular Folklore of the Chinese and the Nagas. Journal of Northeast Indian Cultures, 4(2), 44 - 56, 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

Humanities & Social Science Building

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. Doctor of Philosophy (Ph.D.)
2. Master of Arts (M.A.)
3. PG Diploma in Translation (Hindi)

Faculty and Areas of Interest

Professor
Suryakant Tripathi*, Ph.D.(BHU)
Anuprayukt bhashavigyan, Bharatiya kavyashastra, Lok-Sahitya

Associate Professor
Anju Lata*, Ph.D.(TU)
Hindi Katha Sahitya, Vimarshmulak Adhyayan, Adhunik Kavita

Assistant Professor
Anushabda*, Ph.D.(DU)
Kavita Kavyashastra, Media Bhaashaavigyaan

Assistant Professor
Pramod kumar sharma, Ph.D. (UoH)
Madhyakaaleen Kavita

Assistant Professor
Shipra Shukla, Ph.D.(DU)
Adhunik Hindi Sahitya, Hindi Sahitya ka Itihas

* Recognized Ph.D. Supervisor

ACRONYMS:

BH	: -Bhanarash Hindu University;
DU	: Delhi University;
UoH	: University of Hydrabad;
TU	: Tezpur University;
HoD	: Head of the Department

HINDI
(Year of Establishment: 2010)

Facilities

○ The department lays emphasis on discussing various topics and issues referred to the departmental curriculum and co-curricular. Keeping this objective in mind, the seminar hall has been arranged. These halls are useful for group discussions, educational meetings and other important conferences of the department, online interviews, video conferences etc.

○ An official meeting room has been arranged in the department for official meetings of the department and for presentation of plans and progress reports of Research Scholar etc., which are related to the official administrative work of the department.

○ The departments are in favor of using the tools of educational technology in teaching. Sound system, project presentation and white projector skin have been arranged in the department to make learning effective by creating, utilizing and managing appropriate technical processes and resources of educational technology

○ Keeping in mind the convenience of the girls, the department made one girl's common room, where their health-related primary services are provided.

○ In the department have one scholar room made for easy and smooth study and doing research works.

Research and Publications

Research Paper

○ Tripathi, Suryakant (2020), "Pandit Vidyaniwas Mishra ke nibandhon ki bhashik banawatbunawat", Visva Hindi Patrika, (An International Refereed Research Journal, Visva Hindi Sachiwalay, Maritus, ISSN no.1694-2477, Page no.163-170.

○ Article published in Bhasha, Title: "Bhartiya Bhashaye Evam Vaidik Gayan Vigayan", ISSN -0523-1418 (March-April 2020).

○ "Naye pratimanon ke nirman aur samajik hastakshep ki Kavita", published in Gaveshana by Kendriya Hindi Sansthan, Agara, Issue- January-March 2020, Vol.-119, ISSN No:0435-1460

○ Shankardev ka 'Kirtan Ghosha', published in Gagananchal by Bharatiya Sanskritik Sambandh Parishad, Delhi, Issue- September-October 2021, Vol.-5, ISSN No:0971-1430

○ Article Published in Vishwabhaarati Patrika, Title-Mahaamaati Pranaath: Bhaashaayi Ektaa ki Talaash ,ISBN-23484977,vol-76,no.-1,April-June 2020

○ Article Published in Shodh Saritaa Patrikaa, Title- Samkaalin Hindi Kahaaniyaan- Viklaangataa kaa Laingik Sandarbh , vol-8 , issue-29, January-March 2021

○ Article published in Apni Maati e-Patrikaa, Title – Yuddh ki Traasdi aur Stri Asmitaa Prakaashan Samay , No-37, November 2021

Book Chapter

○ Tripathi.Suryakant (2020), "Gunon kesmuchchay: Ram" in the book Bhartiya Bhashaon mein Ramkatha (Asamiya bhasha Part-2)' Edited by Dr.Anushabda, New Delhi: Vani Prakashan, ISBN: 978-93-89915-83-9, Page no.67-72.

○ Anju Lata, Lockdown: Mere Anubhav: Mere Vichar, 2020, ISBN-978-93-90052-35-6 Vanya Publication, Kanpur.

Course Offered in Master of Arts

प्रथम-सत्र (First Semester)			द्वितीय-सत्र (Second Semester)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
HN 430	आदिकालीन एवं निर्गुण काव्य	04	HN 435	सगुण भक्ति एवं रीति काव्य	04
HN 431	छायावादी काव्य	04	HN 436	छायावादोत्तर काव्य	04
HN 432	हिंदी साहित्य का इतिहास : आदिकाल और मध्यकाल	04	HN 437	हिंदी साहित्य का इतिहास : आधुनिक काल	04
HN 433	भारतीय काव्यशास्त्र	04	HN 438	हिंदी भाषा एवं लिपि	04
HN 434	पाश्चात्य काव्यशास्त्र	04	Open elective		03

तृतीय-सत्र (Third Semester)		
Course Code	**Course Title**	**Cr.**
HN 540	हिंदी कथा साहित्य : उपन्यास एवं कहानी	04
HN 541	हिंदी नाटक और निबंध	04
HN 542	भाषा विज्ञान	04
HN 543	हिंदी आलोचना	04
Open elective		03

चतुर्थ-सत्र (Fourth Semester)		
वैकल्पिक-पत्र (Elective Course)		

प्रयोजनमूलक हिंदी (Prayojanmoolak Hindi)			आधुनिक हिंदी साहित्य (Adhunik Hindi Sahitya)		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
HN 544	प्रयोजनमूलक हिंदी : सिद्धांत-संदर्भ	04	HN 549	प्रेमचंद	04
HN 545	राजभाषा हिंदी: संवैधानिक स्थिति एवं उसका अनुप्रयोगात्मक पक्ष	04	HN 550	जयशंकर प्रसाद	04
HN 546	हिंदी पत्रकारिता और जनसंचार	04	HN 551	सूर्यकांत त्रिपाठी 'निराला'	04
HN 547	अनुवाद विज्ञान : सिद्धान्त एवं अनुप्रयोग	04	HN 552	सच्चिदानंद हीरानंद वात्सायन 'अज्ञेय'	04
HN 548	लघु शोध-प्रबंध / परियोजना कार्य	06	HN 553	लघु शोध-प्रबंध / परियोजना कार्य	06
अनुप्रयुक्त भाषा विज्ञान (Anuprayukt Bhasha vigyan)			तुलनात्मक साहित्य (Tulnatmak Sahitya)		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
HN 554	भाषा शिक्षण	04	HN 559	तुलनात्मक साहित्य:स्वरूप, उदभव और विकास	04
HN 555	शैलीविज्ञान	04	HN 560	भारतीय साहित्य : अवधारणा और विशेषताएँ	04
HN 556	समाज भाषाविज्ञान	04	HN 561	पूर्वोत्तर की संस्कृति और साहित्य	04
HN 557	कोश विज्ञान	04	HN 562	असम की संस्कृति और साहित्य	04
HN 558	लघु शोध-प्रबंध / परियोजना कार्य	06	HN 563	लघु शोध-प्रबंध / परियोजना कार्य	06
लोक साहित्य (Lok Sahitya)			विमर्शमूलक अध्ययन (Vimarshmoolak adhayan)		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
HN 564	लोक साहित्य : सिद्धांत-संदर्भ	04	HN 569	अस्मितामूलक विमर्श	04
HN 565	लोकगीत और लोकगाथा	04	HN 570	स्त्रीमूलक विमर्श	04
HN 566	लोक कथा एवं लोक नाटक	04	HN 571	दलितमूलक विमर्श	04
HN 567	लोक सुभाषित	04	HN 572	आदिवासीमूलक विमर्श	04
HN 568	लघु शोध-प्रबंध / परियोजना कार्य	06	HN 573	लघु शोध-प्रबंध / परियोजना कार्य	06

सिनेमा, साहित्य और समाज (Cinema, Sahitya aur Samaj)		
Course Code	**Course Title**	**Cr.**
HN 569	अस्मितामूलक विमर्श	04
HN 570	स्त्रीमूलक विमर्श	04
HN 571	दलितमूलक विमर्श	04
HN 572	आदिवासीमूलक विमर्श	04
HN 573	लघु शोध-प्रबंध / परियोजना कार्य	06

Courses offered in PG Diploma in Translation (Hindi)

प्रथम-सत्र (First Semester)			द्वितीय-सत्र (Second Semester)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
HN 411	प्रयोजनमूलक हिंदी, भाषाप्रयुक्ति और अनुवाद	04	HN 421	अनुवाद का व्यवहारिक पक्ष	04
HN 412	हिंदी भाषा की संवैधानिक स्थिति और अनुवाद	04	HN 422	जनसंचार माध्यम और अनुवाद	04
HN 413	अनुवाद विज्ञान और उसका सिद्धांत	04	HN 423	पारिभाषिक शब्दावली,कोश विज्ञान और अनुवाद	04
HN 414	कार्यालय हिंदी और अनुवाद	04	HN 424	परियोजना कार्य-II	06
HN 415	परियोजना कार्य-I	06			

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

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 officers and most importantly, work for the society as a good citizen. Presently, the department is offering two-year Master of Laws (LL.M.) programme with specializations in Human Rights Laws and Criminology & Criminal law. The objective of the programme is to make the department a vibrant centre of legal education and research and give an opportunity to all aspirants who wants to be a good academician, researcher, and work for social transformation. Two batches of the department have successfully post graduated in the year 2020 and 2021 respectively.

The department is making progress with existing four young and energetic 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, Migration Laws, Environment Laws, Criminal Laws, Juvenile Justice, 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 & ethics, promote inter-disciplinary research, provide free legal assistance for persons in need and inspire students for competitive examinations. The department is proposed to start subsequently the Five-Year B.A.LL.B.(Hons.); and Ph.D. programmes.

Programmes offered

1. Master of Laws (LL.M.) Two-Year with the following specializations:
    i. Criminology and Criminal Law
    ii. Human Rights Laws

Faculty and Areas of Interest

Associate Professor
Dr. Priya Ranjan Kumar, Ph.D. (GU) HOD

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

Assistant Professor
Ms. Madhumita Acharjee, LL.M.(AU)

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

Guest Faculty
Miss. Bhagyashree Das, LL.M.(GU)

Criminal Law, Penology, and Environmental Law

Assistant Professor
Ms. Angel Habamon Syiem, LL.M.(SIU)

Human rights, International Law, and Tribal issues

Assistant Professor
Mr. Debajit Kumar Sarmah, LL.M.(IP)

Criminology and Criminal Law

Guest Faculty
Miss. Sriparna Rajkhowa, LL.M.(GU), Ph.D. (GU)

Human Rights Laws, Humanitarian Law, and Medical Law

ACRONYMS:

GU	: Gauhati University;
SIU	: Symbiosis International (Deemed)University ;
AU	: Assam University;
IP	: Guru Gobind Singh Indraprastha University;
HoD	: Head of the Department

LAW
(Year of Establishment:2017)

Facilities

○ Central Library with Law text books, reference books and journals
○ Subscription of SCC Online and Manupatra
○ ICT enabled classroom
○ Computer Lab

Research Activities

No. of papers published in the year 2021-22 : **04**
Total LL.M. Dissertation : **18**

Selected Publications

○ Mr. Debajit Kumar Sarmah, "Policy and Laws related with Environment Protection in India", Sambodhi Indological Research Journal of L.D.I.I., Vol-44., No.01(XV): 2021, ISSN:2249-6661

○ Mr. Debajit Kumar Sarmah, "Investigation under the Code of Criminal Procedure", Kashmir Journal of Legal Studies, Vol IX KJLS (2021-22) ISSN:2250-2084

○ Ms. Angel H. Syiem & Dr. Priya Ranjan Kumar, "Trans Rights Are Human Rights: An Evaluation of Law on the Protection of Transgender Rights in India", Indian Journal of Law and Justice, March 2022, ISSN:0976-3570 (Accepted)

○ Dr. Priya Ranjan Kumar & Prof. Umesh Kumar, "Raashtreeya Shiksha Neeti Va Kaanoonee Shiksha", Mekal Meemaansa, July-Dec 2021 ISSN:0974-0118 (Accepted)

Courses offered in Master of Laws

First Semester		
Course Code	**Course Title**	**Cr.**
LW0401	Indian Constitutional Law and Emerging Challenges	5
LW0402	Research Methodology	5
LW0403	Legislation-Principles, Methods & Interpretation	4
SPECIALISATION ELECTIVE (compulsory)		
LW0404	Criminology, Penology and Victimology	5
LW0405	Human Rights Jurisprudence	5
LW0406	General principles of Criminal law	5
LW0407	International Human Rights Law	5
AUDIT COURSE		
LW0408	Interpretation of Status	0

Second Semester		
Course Code	**Course Title**	**Cr.**
LW0420	Judicial Process	5
LW0421	Project	3
SPECIALISATION ELECTIVE (Two elective courses to be opted for each specialization)		
LW0422	Socio Economic Offences	5
LW0423	Law Relating to Cyber Crime	5
LW0424	Emerging Challenges in Evidence Law	5
LW0425	Criminal Justice and Human Rights	5
LW0426	Protection and Enforcement of Human Rights in India	5
LW0427	Environment and Human Rights	5
-	Open Elective (to be chosen from other departments)	3

Third Semester		
Course Code	**Course Title**	**Cr.**
LW0501	Law and Social Transformation	5
LW0502	Research Seminar	3
ELECTIVE (Two elective courses to be opted for each specialization)		
LW0503	Correctional Law and Administration in India	5
LW0504	Comparative Criminal Procedure	5
LW0505	Human Rights and Criminal Justice Administration	5
LW0506	International Humanitarian Law	5
LW0407	International Refugee Law	5
LW0408	Media and Human Rights	5
-	Open Elective (to be chosen from other departments)	3

Fourth Semester		
Course Code	**Course Title**	**Cr.**
LW0520	Legal Drafting Skills and Outreach Activities	5
LW0521	Pedagogy in Law	3
LW0522	Dissertation and Viva -Voce	8

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

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 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)
Linguistics (Syntax, Psycholinguistics), Field Linguistics, Documentation

Professor
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

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

* Recognized Ph.D. Supervisor

Assistant Professor
Amalesh Gope*, Ph.D. (IITG)
Acoustic Phonetics, Experimental Phonology, Computational Linguistics, and Language Documentation

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 for 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 also to its two advanced multipurpose Seminar-cum Conference Halls. Furthermore, the classrooms of the department have most facilities of a smart class room.

Research Activities

No. of papers published in the year 2020-2021   : **13**
No. of ongoing research projects   : **03** (including the ones of Centre for Endangered Languages)
No. of current Ph.D. scholars   : **20**

Selected Publications

Barborah, Madumita and Gautam K. Borah (eds). 2021. The Syntax of Biate, Hrangkhol, Khelma, Onaeme, Purum, Liangmai and Yimchunger. Lesser Studies Language Series, Vol III. Guwahati: S.S. Graphics. ISBN:978-93-91902-14-8.

Nath, Arup Kumar, Monali Longmailai and Dhanapati Shrougrakpam (eds). 2021. The Morphology of Biate, Hrangkhol, Khelma, Onaeme, Purum, Liangmai and Yimchunger. Lesser Studies Language Series, Vol II. Guwahati: S.S. Graphics. ISBN: 978-93-91902-12-4.

Patgiri, Bipasha, Amalesh Gope and Bobita Sarangthem (eds). 2021. The Phonology of Biate, Hrangkhol, Khelma, Onaeme, Purum, Liangmai and Yimchunger. Lesser Studies Language Series, Vol I. Guwahati: S.S. Graphics. ISBN: 978-93-91902-13-4.

Patgiri, Bipasha. 2021. "Voicing Assimilation as a Universal Phonological Process: A Case Study of Nalbaria Assamese." International Journal of Dravidian Linguistics (IJDL) Vol. 50 No. 2 June 2021. pp 134–164. ISSN 0378–2484.

Gope, Amalesh. 2021. "The Phonetics of Tone and Voice Quality Interactions in Sylheti." Languages 6, no. 4: 154. https://doi.org/10.3390/languages6040154

Mahanta, Shakuntala, Amalesh Gope and Priti Raychoudhury. 2021. "Pitch Range and voice Quality in Dimasa Focus Intonation" Languages 6, no. 4: 185. https://doi.org/10.3390/languages6040185

Courses offered in M.A. in Linguistics and Language Technology Program

First Semester		
Course Code	Course Title	Cr.
LG 421	Philosophy of Linguistics	3
LG 422	Phonetics and Phonology I	4
LG 423	Morphology	3
LG 424	Basic Syntax	4
LG 425	Introduction to Computational Linguistics	3

Second Semester		
Course Code	Course Title	Cr.
LG 426	Phonetics and Phonology II	3
LG 427	Syntax	3
LG 428	Semantics	3
LG 429	Field Linguistics	3
LG 430	Cognitive Linguistics	4

Third Semester		
Course Code	Course Title	Cr.
LG 501	Language Typology and Language Universals	4
LG 502	Sociolinguistics	4
LG 503	Natural Language Processing	4
LG 511	Research Methodology	3
(Elective Courses (any one of the following to be opted for)		
LG 504	Advanced Phonology	4
LG 505	Advanced Cognitive Linguistics-I	4
LG 506	Generative Syntax	4
LG 507	Lexicography	4
LG 508	Acoustic Phonetics: Instrumental Techniques and Data Analysis	4
LG 517*	Language Documentation and Grammar Writing*	4

Fourth Semester		
Course Code	Course Title	Cr.
LG 509	Historical Linguistics	4
LG 510	Advanced Computational Linguistics	4
LG 518	Introduction to Psycholinguistics*	4
LG 521	Dissertation	6

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

The Department of Mass Communication and Journalism offers an energetic learning environ- ment 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.

Programmes offered

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

Faculty and Areas of Interest

Professor
Abhijit Bora*, Ph.D. (GU)

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

Professor
Joya Chakraborty*, Ph.D. (UoH)-HoD

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

Associate Professor
Uttam Kumar Pegu*, Ph.D. (JMI)

ICT Implications on Society, Science Communication, Film Studies, Media Analysis. (On Lien)

Assistant Professor
Anjuman Borah, Ph.D. (TU)

Development Communication, Television and Traditional Media

Assistant Professor
Perosh Jimmy Daimari, Ph.D. (TU)

Television Production, Photography, Visual Communications, Film Studies.

Assistant Professor
Kapou Malakar, Ph.D. (TU)

New Media for Development, Multimedia Journalism, Political Communication, Online Jou nalism, Media Studies,

Assistant Professor
Manoj Deori*, Ph.D. (BU)

Online Journalism, Multimedia Productions, Media and Disaster Management

Assistant Professor
Junali Deka*, Ph.D. (AUS)

Cultural Studies, Visual Communication, New Media and Society

Recognized Ph.D. Supervisor

MASS COMMUNICATION AND JOURNALISM (Year of Establishment:2001)

ACRONYMS:

GU   : Gauhati University;
UoH   : University of Hyderabad, Telangana
JMI   : Jamia Millia Islamia, New Delhi;
TU   : Tezpur University,
BU   : Berhampur University, Odisha;
AUS   : 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, TV, Radio and web journalism. These include industry grade HD digital video cameras, linear and non-linear editing all in broadcast quality. Students get handson 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

Number of papers published in the year 2019-20   : **10**
Number of ongoing research projects   : **02**
Number of current Ph.D. scholars   : **26**

Selected Publications

○ Pegu, U.K. (2019). Acculturation and cultural revivalism of the Mising tribe of Assam. International Journal of Advance and Innovative Research, 6 (1). 117-119.

○ Hazarika, M., & Chakraborty, J. (2019).Women in local e-governance: A case study of Assam. In Proceedings of the 12th International Conference on Theory and Practice of Electronic Governance (ICEGOV2019), Melbourne, VIC, Australia, April 3-5. https:// doi.org/10.1145/3326365.3326425

○ Bora, Abhijit (Co-author). (2020). Assamese Cinema through Nine Decades: Challenging Journey With Encouraging Trends. Global Media Journal – Indian Edition (UGC-CARE List). December, 2020. Vol. 12, No. 2. ISSN 2249-5835. Manipal Academy of Higher Education (MAHE), Manipal

Courses offered in M.A. in Mass Communication and Journalism

First Semester		
Course Code	**Course Title**	**Cr.**
MC 572	Communication Theories	3
MC 573	Principles of Journalism	4
MC 574	Advertising	4
MC 575	Broadcast media: Radio	4
MC 576	New Media: Evolution, principles & theory	4
MC 577	Media in Northeast India	3

Second Semester		
Course Code	**Course Title**	**Cr.**
MC 578	Writing for media	4
MC 579	Photojournalism	3
MC 580	Broadcast Media: Television	3
MC 581	PR & Corporate communication	4
MC 582	Portfolio preparation and Comprehensive Viva-Voce-I	2
	Elective I	4
	CBCS	4

Third Semester		
Course Code	**Course Title**	**Cr.**
MC 588	Communication research methods	4
MC 589	Communication for social change and development	3
MC 590	Media law and ethics	3
MC 591	Internship	4
	Elective II	3

Fourth Semester		
Course Code	**Course Title**	**Cr.**
MC 599	Understanding cinema	3
MC 600	Science Communication	4
MC 601	Political and International Communication	3
MC 602	Communication research project	4
MC 603	Portfolio preparation and Comprehensive Viva-Voce-II	2

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
	CBCS	3		Elective III	4
Electives Semester II for MA-MCJ			**Electives Semester III for MA-MCJ**		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
MC 583	**Media Management**	**4**	**MC 592**	**Media Culture and Society**	**3**
MC 584	**Graphic design for media**	**4**	**MC 593**	**Television Program Production**	**3**
MC 585	**Health Communication**	**4**	**MC 594**	**Folk and Community Media**	**3**
MC 586	**Film appreciation and criticism**	**3**			
MC 587	**Digital media literacy**	**3**			

Course Code	Course Title	Cr.
Electives Semester IV for MA-MCJ		
Course Code	**Course Title**	**Cr.**
MC 604	New media production	4
MC 605	Documentary production	4
MC 606	Community radio	4

Courses offered in M.A. in Communication for Development

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
First Semester			**Second Semester**		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
CD416	Theories of Communication and Media	3	CD 421	Research Monitoring and Evaluation	4
CD417	Theories of Communication for Development	3	CD 422	Participatory Audio and Video Production	6
CD418	Issues in Development	4	CD 423	Human Rights	4
CD419	Development Journalism	5	CD 424	Media Message Designing for Development	5
CD420	Introduction to Audio and Video Production	5	-	CBCS	3

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
Third Semester			**Fourth Semester**		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
CD 425	Campaign Planning	5	DC 415	Project *	16
CD 426	Folk and Community Media	5	* Students would be attached to different governmental/ non- governmental development agencies/International Organization to carry out		
CD 427	New Media for Development	4			
CD 428	NGO participation and Management	3			
CD 414	Internship	4			
-	CBCS	3			

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

SOCIAL WORK

(Year of Establishment:2014)

Humanities & Social Science Building

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.

Programmes offered

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

Faculty and Areas of Interest

Professor
Chandan Kumar Sharma, Ph.D. (DU)-HoD

Development, Environment, Urbanisation, Migration, Agrarian Studies, Ethnicity, Social Movements, Society and Polities of Northeast India

Assistant Professor
Apurba Saha*, Ph.D. (NIMHANS)

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

Assistant Professor
Rajesh Kalarivayil*, Ph.D. (JNU)

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

Assistant Professor
Namami Sharma, Ph.D. (DU)

Environment and Ecology, Tribal Studies, Community development

Assistant Professor
Prerana Banik, M.Phil. (TISS)

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

Assistant Professor
Samhita Barooah, Ph.D. (TISS Guwahati)

Gender Queer Movements, Social Work Education and Practice, Feminist Research Methodologies, Participatory Communication.

* Recognized Ph.D. Supervisor

ACRONYMS:

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

Selected Publications

○ Kalarivayil R. and Desai P.N. Emerging technologies and innovation policies in India: how disparities in cancer research might be furthering health inequities? Journal of Asian Public Policy, 13 (2), 2020.

○ Saha A. Psychiatric Social Work Intervention and Social Functioning for Person with BPAD: A Randomized Control Trial. Journal of Minerva Psichiatrica, ISSN 0391-1772eISSN 1827-1731, 2020.

○ Prerana Banik. Implication of Social Work and Women's Livelihood in India. Published in The Asian Man. Volume14, Issue 1, ISSN 0974-6366, 2020.

○ Barooah S. Exclusive Commons, The Erosion of Women's Agency in North East India, Economic and Political Weekly, Vol 56, (9), Feb 2021

Courses offered in M.A. in Social Work

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SW451	Understanding Society	2	SW 459	Research Methods (Part-I; Qualitative)	2
SW452	Human Behaviour and Social Environment	2	SW 460	Social Work Methods: Work with Communities	3
SW453	Political Economy: State, Society and Social Devel- opment	2	SW 461	Social Work Methods: Working with Groups	3
SW454	Social Work Profession	3	-	Electives (Choose any one group) **Group A or Group B**	2+2
SW455	Social Work Methods: Working with Individuals and Families	3	-	Open Elective	3
SW456	Community Health	2	SW 463	Field Work	5+1*
SW457	Social work with Children and Older adults	2	**OpenElectve Courses Offered by the Department**		
SW458	Field Work	6	SW 462	Engaging with Communities	3

* Credit is for Urban Camp

Elective Courses for the Second Semester (Any two) Both the Courses from any of Elective Group A or B					
Elective Group A			Elective Group B		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SW421	Urban Community Development	2	SW423	Social Work in Schools	2
SW422	Rural and Tribal Community Development	2	SW424	Development Communication for Social Work	2

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SW521	Development Administration	2	SW 527	Human Rights and Social Justice	2
SW522	Social Action, Advocacy and Move-ments	2	SW528	Social Policy and Planning	2
SW523	Research Methods (Part II); Quantitative)	2	-	Electives I (Choose any one course)	2
SW524	Gender issues	2	-	Electives II (Choose any one group) **Group A or Group B**	2+2
	Electives (Choose any one group) **Group A or Group B**	2+2	SW529	BLOCK FIELD WORK	6

SW 525	FIELD WORK	5+1*		SW530	Dissertation	4
SW 526	Dissertation	2				
-	Open Elective	3				

* Credit is for Urban Camp   **Internship non-credited but mandator**

Elective Courses for the Third Semester (Any two) Both the Courses from any of Elective Group A or B						
Elective Group A				**Elective Group B**		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
SW571	Social Work and Mental Health	2		SW573	Ecology and Social Work	2
SW572	Social Work Practice in HIV and Other Infectious Diseases	2		SW574	Social Work and Livelihoods Promotion	2

Elective Courses for the Fourth Semester (Any two) One Course from Elective I and from Elective II: Both the Courses from any of Elective Group A or B						
Elective I				**Elective II**		
				Elective Group A		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
SW575	Introduction to Dalit Studies	2		SW577	Disaster Management	2
SW576	Social Works with Persons with Disabilites	2		SW577	Peace education and Conflict Management	2
				Elective Group B		
				Course Code	Course Title	Cr.
				SW579	**Labour Legislation**	**2**
				SW580	**H.R. Management and CSR**	**2**

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

SOCIOLOGY
(Year of Establishment:2006)

Humanities & Social Science Building

The Department of Sociology was established in 2006 with a Master's programme. Subsequently, it launched a Ph.D. programme in 2008. The department is dedicated towards nurturing competent and socially sensitive graduates through rigorous teaching and research activities. The faculty members of the department have a wide range of interests and expertise and are currently engaged in research in areas such as Development, Education, Environment, Ethnic Conflicts, Governance, Health, Migration, Social Movements, Science Studies, etc. The curriculum lays emphasis on teaching and learning of general concerns of sociology as well as issues of sociological significance in Northeastern India which constitute a special focus of the teaching and research of the department. 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 visits as part of their mandatory research projects. The department also makes an effort to expose the students to the prevailing social realities through outreach programmes, regular film screening, seminars and other activities collaboration with other 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, Urbanisation, Migration, Agrarian Studies, Ethnicity, Social Movements, Society and Polities of Northeast India

Professor
Rabin Deka*, Ph.D. (DU)-HoD
Sociological Theories, Sociology of Movement, Agrarian Sociology

Professor
Kedilezo Kikhi*, Ph.D. (NEHU)
Research Methodology, Gender and Society, Sociology of Northeast India, Tribal Studies

Associate Professor
Amiya Kumar Das*, Ph.D. (TU)
Sociology of Development, Sociology of Health and Illness, Sociology of Governance

Assistant Professor
Sumesh, S. S.*, Ph.D. (UK)
Social Stigma and Exclusion, Sociology of Body, Sexuality

Assistant Professor
Nirmali Goswami*, Ph.D. (IITK)
Sociology of Education, Identity Politics, Multiculturalism

Assistant Professor
Sarmistha Das*, Ph.D. (TU)
Gender Studies, Sociology of North East India, Land and Livelihood

Assistant Professor
Subhadeepta Ray*, Ph.D. (DU^)
Sociology of Science and Sociology of India

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

Assistant Professor
A.S. Shimreiwung*, Ph.D. (JNU)
Sociology of Religion, Northeast India Studies, Sociology of Mass Media

* 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 Delh;
GU   : Gauhati University;
HoD   : Head of the Department.

Research Activities

No. of papers published in the year 21-22   : **10**
No. of ongoing research projects   : **04**
No. of current Ph.D. scholars   : **35**

Facilities

○ A library with selected books and photocopied materials.
○ A smart classroom with all modern ICT facilities.
○ ICT enabled classrooms.
○ Dedicated room for research scholars with individual cubicles.
○ Photocopy and Scanner machines.

Selected Publications

○ Sumesh S. S. and Gogoi., N. (2022). The Political Economy of Public Health Inequalities and Inequities in India: Complexities, Challenges, and Strategies for Inclusive Public Health Care Policy. International Journal of Health Services. 52(2): 225-235.

○ Bhuyan, N. and Goswami N. (2022). Of Sankardeva, Sanskrit and Saraswati: The Interplay of the Regional and the National Symbols in a School in Assam. Contemporary Education Dialogue. 9 (1):16-36.

○ Ray Subhadeepta. (2021).The Virality of Pandemics: Reassembling the Social in the Anthropocene" Society and Culture in South Asia. 7(1): 16-31.

○ Hazarika, O.B. and Das, S. (2021). Paid and unpaid work during the Covid-19 pandemic: a study of the gendered division of domestic responsibilities during lockdown. Journal of Gender Studies, 30 (4): 429-439.

Courses offered in M.A. in Sociology

First Semester			Second Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
SC451	Classical Sociological Traditions	4	SC455	Sociology of India – II	4
SC452	Research Methodology	4	SC456	Modern Sociological Theories and Perspectives	4
SC453	Sociology of Family and Kinship	4	SC457	**Economic Sociology**	4
SC454	Sociology of India – I	4	SC458	**Social Stratification**	4
-	CBCT	3	-	**Elective – I**	3
			-	**CBCT**	3

Third Semester			Fourth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
SC521	Political Sociology	4	SC524	Sociology of Religion	4
SC522	Sociology of Development	4	SC525	Social Movements in India	4
SC523	Sociology of Northeast India	4	SC526	**Research Project**	8
-	Elective –II	3	-	**Elective –III**	3
-	CBCT	3	-	**Elective- IV**	3
			-	**CBCT**	3

Elective courses offered by the Department					
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
SC 471	Social Statistics	3	SC 574	Environmental Sociology	3
SC 472	Population and Society	3	SC 575	Sociology of Mass Media	3
SC 571	Gender and Society	3	SC 576	Sociology of Governance	3
SC 572	Industrial Sociology	3	SC 577	Sociology of Education	3
SC 573	Sociology of Health and Illness	3	SC 578	Identity and Violence	3
			SC 579	Sociology of Science	3
			SC 580	Urban Sociology	3
			SC 581	Body, Gender and Sexuality	3

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

BUSINESS ADMINISTRATION

(Year of Establishment:1995)

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)
Dean, Academic Affairs
Services Marketing, Tourism Marketing

Professor
Subhrangshu Sekhar Sarkar*, Ph.D. (RGU)
(On lien)
Director, CDOE Accounting, Taxation,
Social Development Issues

Professor
Chandan Goswami*, Ph.D. (TU)-HoD
Marketing and Promotional Strategies,
Consumer Behaviour, Tourism

Associate Professor
Tridib Ranjan Sarma*, Ph.D. (TU)
Operations Management, Project Management,
Tourism

Professor
Chandana Goswami*, Ph.D. (GU)
Financial Management, General Management

Professor
Debabrata Das*, Ph.D. (TU)
Financial Management, Financial Markets
and Development Finance

Professor
Papori Baruah*, Ph.D. (TU)
Dean, SoMS
Human Resource Management, Organization Behaviour, Change Management, Rural Development, NGOs

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

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

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

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

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

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

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

* Recognized Ph.D. Supervisor

ACRONYMS:

TU   : Tezpur University;
GU   : Gauhati University;
CDOE : Centre for Distance and Online Education;
RGU   : Rajiv Gandhi University, Itanagar;
SoMS : School of Management Sciences;
DU   : Dibrugarh 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

No. of papers published in the year 2021-2022 : **10**
No. of ongoing research projects : **04**
No. of current Ph.D. scholars : **42**

Selected Publications

○ Bhatia, R & Baruah, P. (2020). Exclusive talent management and its consequenc- es: 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

Courses offered in Master of Business Administration

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BA 551	Management Fundamentals	3	BA 581	Research Methods in Business	3
BA 552	Business Communication and Negotiation	3	BA 582	Financial Management	3
BA 553	Financial Accounting	3	BA 583	Business Law	3
BA 554	Information Technology Management	3	BA 584	Operations Management	3
BA 555	Managerial Economics	4	BA 585	Integrated Business Applications	4
BA 556	Quantitative Technique	3	BA 586	Marketing Management	3
BA 557	Organization Behaviour	3	BA 587	Human Resource Management	3
			-	CBCS (Optional MOOCS)	3

Third Semester			Fourth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
BA 635	Strategic Management	3	BA 645	Entrepreneurship Development Programme	2
BA 636	General Elective	3	BA 646	International Business and International	3
BA 637	Operation Research/ Supply Chain	3	-	Finance	
BA 638	Summer Internship Project	2	-	Specialisation-A 3	3
-	Specialisation-A 1	3	-	Specialisation-B 3	3
-	Specialisation-B1	3	-	Specialisation-A 4	3
-	Specialisation-A 2	3	-	Specialisation-B 4	3
-	Specialisation-B2	3	BA 647	Dissertation	2
BA 639	Business Ethics and Social Responsibility	2	BA 648	Comprehensive Viva	2
	CBCS (Optional MOOCS)	3	BA 649 BA 650 BA 651	**General Elective** Business Analytics/ Knowledge Management/ Project Management	3 3 3

SPECIALISATION COURSES (Third and Fourth Semesters)

(Students are to take any two specializations from the areas mentioned below. Students can choose the total credit requirement out of the basket of papers offered within a specialization in a particular Semester)

AREA-1: FINANCE (Total of 12 Credits Spread over Semester 3 & 4)			AREA-2: HUMAN RESOURCE MANAGEMENT (Total of 12 Credits Spread over Semester 3 & 4)		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
BA 655	Security Analysis & Portfolio Management	3	BA 664	Human Resource Development	3
BA 656	Advanced Financial Management	3	BA 665	Labour Law	3
BA 657	Taxation	3	BA 666	Industrial Relations	3
BA 658	Financial Engineering	3	BA 667	Social and Industrial Psychology	3
BA 659	Financial Institutions & Financial Services	3	BA 668	Talent Acquisition and Management	3
BA 660	Management of Banking Operations	3	BA 669	Compensation and Benefits	3
			BA 670	Organization Effectiveness and Change	3
			BA 671	Cross Culture and International HRM	3

AREA-3:MARKETING MANAGEMENT (Total of 12 Credits Spread over Semester 3 & 4)			AREA-4: OPERATIONS MANAGEMENT (Total of 12 Credits Spread over Semester 3 & **4**)		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
BA 673	Understanding Consumers	3	BA 682	Material Management & Inventory Control	3
BA 674	Services Marketing	3	BA 683	Quality Management	3
BA 675	Social Marketing	3	BA 684	Logistics and Transportation Management	3
BA 676	Digital Marketing	3	BA 685	Process Certification	3
BA 677	Integrated Marketing Communication	3	BA 686	Advanced Operation Research & Optimization	3
BA 678	Contemporary Retailing	3	BA 687	Technology and Innovation Management	3
BA 679	Relationship Marketing and Salesmanship	3			
BA 680	Product and Brand Management	3			
BA 681	Rural Marketing	3			

Course Code	Course Title	Cr.
BA 691	Database Management System	3
BA 692	Object Oriented Analysis & Design	3
BA 693	Software Engineering	3
BA 694	Web Designing	3
BA 695	Operating Systems	3
BA 696	Networking & Communication	3
BA 697	Data Mining	3

Courses offered in Master of Tourism and Travel Management (M.T.T.M.)

First Semester			Second Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
TM 501	Fundamentals of Tourism	3	TM 541	Finance and Accounting for Tourism	3
TM 502	Destination Geography, History and Heritage	3	TM 542	Marketing in Tourism	3
TM 503	Fundamentals of Management	3	TM 543	Human Resource Management	3
TM 504	Tourism and Travel Industry	3	TM 544	Travel Agency and Tour Operation	3
TM511/ TM 512	Department Centric Elective -I		TM 561/ TM 562	Department Centric Elective -II	3
				Open Elective- Foreign Language Base	3

Third Semester			Fourth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
TM 601	Research Methods	3	TM 641	Destination Planning and Management	3
TM 602	Tourism Entrepreneurship	3	TM 642	Sustainable Tourism	3
TM 603	Foundation of Information Technology and Computerised Reservation System	3	TM 643	Legal and Ethical Issues in Tourism	3
TM 604	Hospitality Management	3	TM 661/ TM 663/	Department Centric Elective -IV	3
TM 605	Summer Internship	5	-	Department Centric Elective-V	3
TM 611/ TM 612	Department Centric Elective - III	3	-	Open Elective	3
-	Open Elective- Foreign Language Base	3	TM 665	Dissertation based on outdoor activities	3

Department Centric Elective –I			Department Centric Elective –II		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
TM 511	Soft Skill Development	3	TM 561	Tour Guiding and Local Handling	3
TM 512	Leisure Delivery System	3	TM 562	Basic Cargo Rating and Handling	3

Department Centric Elective –III			Department Centric Elective –IV and V		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
TM 611	Tourism in North East India	3	TM 661	Managerial and Financial Decisions for Small Business	3
TM 612	Promotional Strategies in Tourism	3	TM 662	MICE Management	3
			TM 663	Tourist Behaviour	3
			TM 664	Basic Airfare	3

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

COMMERCE
(Year of Establishment:2014)

Humanities & Social Science Building

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.

Programmes offered

1. Ph.D. in Commerce
2. Master of Commerce.
3. Integrated M.Com.

Faculty and Areas of Interest

Associate Professor
Santi Gopal Maji *, Ph.D. (UB)-HoD
Finance and Accounting

Assistant Professor
Reshma Tiwari, Ph.D. (GU)
Accounting and Auditing

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

Assistant Professor
Manish Kumar, Ph.D. (DU^)
Corporate Finance, Accounting

Assistant Professor
Manish Kumar, Ph.D. (DU^)
Corporate Finance, Accounting

Assistant Professor
Dhritabrata Jyoti Bharadwaz, M.Phil. (DU)
Accounting and Finance, Micro Finance and Risk Management

Assistant Professor
Biswajit Ghose, Ph.D. (NEHU)
Accounting and Finance, Micro Finance and Risk Management

Assistant Professor
Prasenjit Roy, Ph.D.(NEHU)
Finance and Banking.

Guest / Visiting Faculty
CS Amitava Banerjee, NFCG, New Delhi
Corporate Governance

Guest / Visiting Faculty
Anjan Choudhury, Indian Skills Academy, Guwahati.
Inter-personal Skills

Guest / Visiting Faculty

Shobhan Singh Khanka,

Marketing Management, Human Resource Management, Entrepreneurship

Guest / Visiting Faculty

Anand Thakur

Marketing of Financial Services.

Guest / Visiting Faculty

CA Rajkumar Nahata

Indirect Taxes

Guest / Visiting Faculty

Jitendra Ladha

Tally.

Guest / Visiting Faculty

CA Kamal Mour

Auditing

Guest / Visiting Faculty

K. Ramesha

Retail Banking

Guest / Visiting Faculty

Manoj Khaund

Marketing

Guest / Visiting Faculty

Ananya Sarmah

Banking & Finance

* Recognized Ph.D. Supervisor

ACRONYMS:

UB	: University of Burdwan;
GU	: Gauhati University;
DU	: Dibrugarh University;
DU^	: University of Delhi;
NEHU	: North Eastern Hill University, Shillong;
NFCG	: National Foundation for Cor porate 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

No. of paper published in the year 2020-21	:	**11**
No. of research projects completed	:	**01**
No of current Ph.D. scholars	:	**10**

Selected Publications

◯ Ghose, B. & Kabra, K. C. (2020). Does Growth Affect Firms' Leverage Adjustment Speed? A Study of Indian Firms. Business Perspective and Research, 8 (2), 139-155. doi.org/10.1177/2278533719887002

◯ Roy, P. & Singh, S. (2020). The Microfinance Fintech Solution: A SWOC Analysis Approach. ANVESAK, 51 (1(IV)), 93 – 102.

◯ Roy, P. & Ghose, B. (2020). Infrastructure availability and comfortability of online education: a study from students' perspective in north east India. Wesleyan Journal of Research, 13 (4 (VIII)), 165-176.

◯ Debnath, J. & Tiwari, R.K. (2020). Research and Teaching in Higher Education: The Trade Off. Research and Reflections on Education, 18 (2), 1-7.

◯ Maji, S.G. & Goswami, M. (2020). Is the influence of intellectual capital on firm performance homogeneous? Evidence from India employing quantile regression model. International Journal of Learning and Intellectual Capital, 17 (2), 187-211. https://doi.org/10.1504/IJLIC.2020.108897

○ Tiwari, R.K. & Debnath, J. (2021). Joint Provision of Non-audit Services to Audit Clients: Empirical Evidences from India. VIKALPA The Journal for Decision Makers, 46 (3), 153−165. DOI: 10.1177/02560909211041796

○ Maji, S. G. and Hussain, F. (2021). Technical efficiency, intellectual capital efficiency and bank performance in emerging markets: the case of India. Journal of Advances in Management Research, 18 (5), 708-737. https://doi.org/10.1108/JAMR-09-2020-0218

○ Kumar, M., & Goswami, R. (2021). Managerial ability and real earnings management among Indian listed firms. Vision: The Journal of Business Perspective, https://doi.org/10.1177/09722629211046065

○ Kumar, M., Vij, M., & Goswami, R. (2021). Effect of real earnings management on firm performance: Evidence from India. Vision: The Journal of Business Perspective, (), . https://doi.org/10.1177/09722629211007577

○ 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

Courses offered in Integrated M.Com. and M.Com. *

First Semester				Second Semester			
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**	
IC 107	Business Organization and Environment	4		IC 122	Principles and Practice of Management	4	
IC 108	Micro Economics	4		IC 124	Business Mathematics- I	4	
IC 110	English Comprehension Skill	4		IC 126	Financial Accounting – II	5	
IC 111	Business Regulatory Framework-I	4		IC 127	Macro Economics	4	
IC 112	Financial Accounting – I	5		ES 103	Environmental Studies	4	

Third Semester				Fourth Semester			
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**	
IC 201	Business Regulatory Framework-II	3		IC 222	Indirect Taxes	4	
IC 205	Functional Communicative Skill	3		IC 224	Banking Laws and Practice	4	
IC 207	Inter-Personal Skills	3		IC 225	Corporate Accounting -II	4	
IC 208	Basic Statistics	5		IC 227	Fundamentals of Insurance	3	
IC 209	Cost Accounting	4		IC 228	Business Mathematics- II	4	
IC 210	Corporate Accounting- I	4			Open Elective	3	

Fifth Semester				Sixth Semester			
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**	
IC 301	Company Law	2		IC 321 Or IC 341	Computer and Its Application in Accounting and	4	
IC 304	Income Tax – Law and Practice	4			Computer and Its Application in Banking and Finance		
IC 307	Entrepreneurship	4		IC 327 Or IC 342	Auditing and Assurance	3	
IC 308	Business Finance	4			Indian Financial Market and Financial System		
IC 309	Corporate Accounting-III	5		IC 323 or IC 343	Management Accounting	4	
-	Open Elective	3			Financial Services		

Course Code	Course Title	Cr.
IC 324 or IC 344	Public Finance	
	Banking Regulatory Framework	4
IC 327 Or IC 342	Tax Planning and Procedures	
	Capital Market Operations	4
IC 326 or IC 346	Dissertation (Accounting, Taxation	
	Dissertation (Banking, Finance Area)	3

Seventh Semester (Integrated M.Com.) / First Semester (M.Com.)

Course Code	Course Title	Cr.
IC 501	Organizational Theory and Behaviour	4
IC 502	Financial Statement Analysis	4
IC 503	Statistics for Business Decisions	4
IC 504	Corporate Governance and Business Ethics	3
IC 505	International Business	3

Eighth Semester (Integrated M.Com.) / Second Semester (M.Com.)

Course Code	Course Title	Cr.
IC 521	Human Resource Management	3
IC 522	Marketing Management	3
IC 523	Managerial Economics	4
IC 524	Operations Research	4
IC 525	Methodology for Business Research	4
-	Open Elective	3

Ninth Semester (Integrated M.Com.) / Third Semester (M.Com.)

Course Code	Course Title	Cr.
IC 602	Management Information System	4
IC 605	Project Work	4
IC 608	Strategic Management	4
	Open Elective	3
Group A: Accounting and Taxation		
IC 603	Corporate Financial Reporting	4
IC 604	Business Valuation	3
GROUP 'B': Banking and Finance		
IC 606	Retail Banking	4
IC 607	Insurance Management	3

Tenth Semester (Integrated M.Com.) / Fourth Semester (M.Com.)

Course Code	Course Title	Cr.
IC 625	Strategic Financial Management	4
	GROUP 'A': Accounting And	
IC 622	Strategic Cost & Management Accounting	3
IC 624	Corporate Tax Management	4
IC 631	Advanced Auditing	4
IC 633	Project Planning and Control	4
	GROUP 'B': Banking and Finance	
IC 626	Security Analysis and Portfolio Management	4
IC 627	International Finance	3
IC 634	Marketing of Financial Services	4
IC 632 or IC 633	Credit and Risk Management or Project Planning and Control	4

Subject to revision.

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

CHEMICAL SCIENCES
(Year of Establishment: 1997)

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
3. Integrated B.Sc. B.Ed. in Chemistry
4. Integrated M.Sc. in Chemistry

Faculty and Areas of Interest

Professor
Swapan Kumar Dolui*, Ph.D. (IITKgp)
Hydrogel, Electroactive Polymer, Polymers from Vegetable oil, Solar Cell

Professor
Nashreen Islam*, Ph.D. (NEHU)
Synthetic Inorganic Chemistry and Biomimetic Chemistry of Transition Metals, Catalysis

Professor
Tarun Kumar Maji*, Ph.D. (CU)
Polymer composite, Drug delivery

Professor
Robin Kumar Dutta*, Ph.D. (NEHU)
Drinking water and traditional manuscripts writing and paintings

Professor
Niranjan Karak*, Ph.D. (IITKgp) (Dean R&D)
Synthesis of Advanced Polymers, Polymer Nanocomposites and Nanomaterials

Professor
Ramesh Chandra Deka*, Ph.D. (NCL)
Theoretical Chemistry, Catalysis and Drug Design

Professor
Ashim Jyoti Thakur*, Ph.D. (NEIST)
Heterocyclic Chemistry, Organic Synthesis and Molecular Container Chemistry

Professor
Ashwini Kumar Phukan*, Ph.D. (UoHyd)
Theoretical Inorganic and Organometallic Chemistry

Professor
Ruli Borah*, Ph.D. (NEIST)- HoD
Ionic liquids and Catalysis, Greener organic synthesis

Associate Professor
Panchanan Puzari*, Ph.D. (IITG)
Biosensors, Chemical Sensors & Molecular dynamics

Associate Professor
Utpal Bora*, Ph.D. (NEIST)
Synthetic Organic Chemistry

Assistant Professor
Kusum Kumar Bania*, Ph.D. (TU)
Heterogeneous Catalysis, Fuel Cell and Photocatalysis

Assistant Professor
Pankaj Bharali*, Ph.D. (IICT)
Inorganic Materials, Heterogeneous Catalysis, Electrocatalysis

Assistant Professor
Nayanmoni Gogoi*, Ph.D. (IITB)
Molecular Magnet, Functional Metal OrganicFramework

Assistant Professor
Bipul Sarma*, Ph.D. (UoH)
Pharmaceutical crystallization, Porous materials

Assistant Professor
Sajal Kumar Das*, Ph.D. (CDRI & JNU)
Synthetic Organic Chemistry

Assistant Professor
Sanjeev Pran Mahanta*, Ph.D. (UoHyd)
*Physical Chemistry, Molecular Engineering and Molecular Recognition*

Assistant Professor
Mohini Mohan Konai, Ph.D.(JNCASR)
Medicinal Chemistry

*** Recognized Ph.D. Supervisor**

ACRONYMS:

KU   : Kurukshetra University Haryana,
CU   : Calcutta University,
NCL   : National   Chemical Laboratory Pune,
NEHU   : North Eastern Hill University,
NEIST   : North East Institute of Science and Technology Jorhat ,
UoH   : University of Hyderabad,
IITG   : Indian Institute of Technology Guwahati,
IITKgp   : Indian Institute of Technology Kharagpur,
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,
HoD   : Head of the Department.
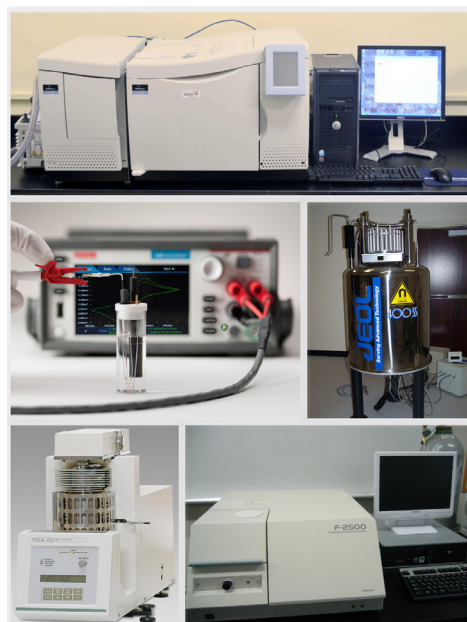
Facilities

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

    No. of papers published in the year 2021-22 : **83**
    No. of ongoing research projects   : **13**
    No. of current Ph.D. scholars   : **89**

Selected Publications

○ Das A. J., Chouhan R., and Das S. K. (2021). Hexafluoroisopropanol-Mediated Intramolecular Ring-Opening Cyclization of Indolyl-N-Tethered Epoxides: Tether-Length-Controlled Synthesis of 1,7- and 1,2-Fused Indoles. J. Org. Chem., 86, 12, 8274–8285.

○ Ghosh B., Fantuzzi F., and Phukan A. K. (2021). Understanding, Modulating, and Leveraging Transannular M->Z Interactions. Inorg. Chem., 60, 12790–12800.

○ Baruah M. J., Dutta A., Biswas S., Gogoi G., Hoque N., Bhattacharyya P. K., and Bania K. K. (2022). Fe2O3 Nanocatalysts Supported on Zeolite-Y for the Selective Synthesis of C2 Di-Indolyl Indolones and Isatins. ACS Appl. Nano Mater., 5, 1, 1446–1459

Courses offered in Integrated B.Sc. B.Ed. in Chemistry*

First Semester		
Course Code	Course Title	Cr.
CD 101	Chemistry-I	3
PD 101	Physics-I	3
MD 101	Mathematics-I-I	3
CD 103	Chemistry Lab-I	3
ED 106	Education:An Evolutional perspective	3
ED 104	Communicative English (Language Proficiency)	3
ED 105	Basics in Computer Applications	3
CD107	Chemistry Laboratory (for Maths)	3
PD197	Physics Lab	3

Second Semester		
Course Code	Course Title	Cr.
CD 102	Chemistry-II	3
PD 102	Physics-II	3
MD 102	Mathematics-II	3
CD 104	Chemistry Lab-II	3
ES 103	Environmental Science	4
ED 107	Education and Development	3
NS 106	National Service Scheme	2
CD 107	Chemistry Laboratory (for Physics)	3

Third Semester		
Course Code	Course Title	Cr.
CD 201	Chemistry-III (for Non major)	3
CD 203	Physical Chemistry-I	3
CD 205	Organic Chemistry-I	3
CD 207	Inorganic Chemistry-I	3
CD 209	Chemistry Lab-III	3
MD 219	Mathematics-III	3
PD 201	Physics-III	3
ED 205	Environmental Education	3
ED 202	Learner and Learning	

Fourth Semester		
Course Code	Course Title	Cr.
CD 204	Physical Chemistry-II	3
CD 206	Organic Chemistry-II	3
CD 208	Inorganic Chemistry-II	3
CD 212	Chemistry Laboratory-IV	4
CD 214	IT Skills for Chemists	3
ED 203	Contemporary Issues in Education	3
ED 204	Assessment and Evaluation	3

Fifth Semester		
Course Code	Course Title	Cr.
CD 301	Physical Chemistry–III	3
CD303	Organic Chemistry-III	3
CD 305	Inorganic Chemistry-III	3
CD 307	Quantum Chemistry	3
CD 309	Chemistry Laboratory-V	4
ED 301	Teaching Approaches and Learning Resources	3
ED 302	Classroom Organization and Management	3

Sixth Semester		
Course Code	Course Title	Cr.
CD 302	Physical Chemistry-IV	3
CD 304	Organic Chemistry-IV	3
CD 306	Inorganic Chemistry-IV	3
CD 308	Principles of Spectroscopy	3
CD 310	Chemistry Laboratory-VI	4
ED 308	Pedagogy A: Physical Science I	3
ED 307 Or, ED 309	Pedagogy B: Mathematics I Or,	3
	Pedagogy B: Bio Science I	
ED303	School Education in NE India	2

Seventh Semester		
Course Code	Course Title	Cr.
CD 401	Principles of Inorganic Chemistry	3
CD 407	Principles of Organic Chemistry	3
ED408	Pedagogy A: Physical Science II	3
ED 407 Or	Pedagogy B: Mathematics II Or Pedagogy B: BioScience II	3
ED404	Initial School Experience/ School Internship-I	4
CD409	Chemistry laboratory –VII	3

Eighth Semester		
Course Code	Course Title	Cr.
CD 402	Chemistry Laboratory-VIII	4
ED405	School Internship-II	16
CD 416	History of Chemistry	3

Subject to revision.

Courses offered in Integrated M.Sc. in Chemistry#

First Semester				Second Semester		
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
CI 101	Chemistry-I	3		CI 102	Chemistry-II	3
PI 101	Physics-I	3		PI 102	Physics-II	3
BI 101	Biology-I	3		BI 102	Biology-II	3
MI 101	Mathematics-I	3		MI 102	Mathematics-II	3
EG 101	Communicative English (Language Proficiency)	3		ES 103	Environmental Studies	4
CI 105	Chemistry Laboratory- I	3		CI 106	Chemistry Laboratory -II	3
PI 197	Physics laboratory	3		BI 107	Biology Laboratory	3
CI 107	Chemistry Laboratory (for Math)	3		CI 107	Chemistry Laboratory (For Bio and Phys)	3

Third Semester				Fourth Semester		
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
CI 201	Chemistry-III (for Non-major)	3		CI 204	Physical Chemistry-II	3
PI 201	Physics-III	3		CI 206	Organic Chemistry-II	3
MI219 219	Mathematics-III	3		CI 208	Inorganic Chemistry-II	3
CI 203	Physical Chemistry-I	3		CI 212	Chemistry Laboratory-IV	4
CI 205	Organic Chemistry-I	3		CI 214	IT Skills for Chemists	3
CI 207	Inorganic Chemistry-I	3		CI 216	Basic Analytical Chemistry	3
CS 535	Introduction to Scientific Computing	3		DM 101	Disaster Management	3
CI 209	Chemistry Laboratory -III	3				
NS 201	NSS	2				

Fifth Semester				Sixth Semester		
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
CI 301	Physical Chemistry−III	3		CI 302	Physical Chemistry-IV	3
CI 303	Organic Chemistry-III	3		CI 304	Organic Chemistry-IV	3
CI 305	Inorganic Chemistry-III	3		CI 306	Inorganic Chemistry-IV	3
CI 307	Quantum Chemistry	3		CI 308	Principles of Spectroscopy	3
CI 309	Chemistry Laboratory-V	4		CI 310	Chemistry Laboratory-VI	4
CI 311	Green Methods in Chemistry	3		CI 312	Introduction to Polymer Chemistry	3
CI 313	Industrial Chemistry	3		CI 314	Seminar	1

Seventh Semester				Eighth Semester		
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
CI 401	Principles of Inorganic Chemistry	3		CI 408	Chemistry of Transition Elements	3
CI 403	Chemical and Statistical Thermodynamics	3		CI 410	Chemical Dynamics and Electro-chemistry	3
CI 407	Principles of Organic Chemistry	3		CI 414	Quantum Chemistry and Chemical Bonding-II	3
CI 409	Quantum Chemistry and Chemical Bonding-I	3		CI 412	Laboratory Course in Inorganic Chemistry	6
CI 411	Principles and Applications of Spectroscopy	3		CI 418	Organic Reactions and Mechanism	3
CI 405	Laboratory Course in Organic Chemistry	6		CI 416	History of Chemistry	3

Ninth Semester			Tenth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CI 501	Bio-Organic Chemistry	3	CI 506/508/ 528/532	Elective I	3
CI 519	Physical Chemistry of Surface and Condensed Systems	3	CI 514/516/ 518/ 520/534	Elective II	3
CI 521	Analytical Methods in Chemistry	3	CI 522/524/ 526/536	Elective III	3
CI 523	Chemical Technology and Society	3	CI 530	Project Work*	8
CI 525	Organometallic Chemistry	3			
CI 505	Laboratory Course in Physical Chemistry	6			

* To be carried out in the Department under the guidance of an assigned faculty member of the Department.

Elective I: Any one from the following			Elective II: Any one from the following group		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CI 506	Catalysis	3	CI 514	Biomolecular Chemistry	3
CI 508	Methods in Organic Synthesis	3	CI 516	Computational Chemistry and Numerical Analysis	3
CI 528	Special Topics in Inorganic Chemistry	3	CI 518	Organic Solid States Chemistry	3
CI 532	Chemistry of Paints and Surface Coating	3	CI 520	Environmental and Green Chemistry	3
			CI 534	Industrial Polymer	3

Elective III: Any one from the following		
Course Code	Course Title	Cr.
CI 522	Polymer Chemistry	3
CI 524	Heterocyclic Compounds and Medicinal Applications	3
CI 526	Bio-inorganic Chemistry	3
CI 536	Chemistry of Materials	3

#Subject to revision.

Courses offered in M.Sc. in Chemistry

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CH 401	Principles of Inorganic Chemistry	3	CH 408	Chemistry of Transition Elements	3
CH 403	Chemical and Statistical Thermodynamics	3	CH 410	Chemical Dynamics and ElectrochemistryCH 414: Quantum Chemistry and	3
CH 407	Principles of Organic Chemistry	3	CH 414	Quantum Chemistry and Chemical Bonding-II	3
CH 409	Quantum Chemistry and Chemical Bonding-I	3	CH 412	Laboratory Course in Inorganic Chemistry	6
CH 411	Principles and Applications of Spectroscopy	3	CH 418	Organic Reactions and Mechanism	3
CH 405	Laboratory Course in Organic Chemistry	6	CH 416	History of Chemistry	3

Third Semester		
Course Code	Course Title	Cr.
CH 501	Bio-Organic Chemistry	3
CH 519	Physical Chemistry of Surface and Condensed Systems	3
CH 521	Analytical Methods in Chemistry	3
CH 525	Organometallic Chemistry	3
CH 505	Laboratory Course in Physical Chemistry	6
CH 523	Chemical Technology and Society	3

Fourth Semester		
Course Code	Course Title	Cr.
CH 530	Project Work*	8
CH 506/ CH 508/ CH 528/ CH 532	Elective I	3
CH 514/ CH516/ CH518/ CH520/ CH534	Elective II	3
CH 522/ CH 524/ CH 526/ CH 536	Elective III	3

Elective I: Any one from the following group		
Course Code	Course Title	Cr.
CH 506	Catalysis	3
CH 508	Methods in Organic Synthesis	3
CH 528	Special Topics in Inorganic Chemistry	3
CH 532	Chemistry of Paints and Surface Coating	3

Elective II: Any one from the following group		
Course Code	Course Title	Cr.
CH 514	Biomolecular Chemistry	3
CH 516	Computational Chemistry and Numerical Analysis	3
CH 518	Organic Solid States Chemistry	3
CH 520	Environmental and Green Chemistry	3
CH 534	Industrial Polymer	

Elective III: Any one from the following		
Course Code	Course Title	Cr.
CH 522	Polymer Chemistry	3
CH 524	Heterocyclic Compounds and Medicinal Applications	3
CH 526	Bio-inorganic Chemistry	3
CH 536	Chemistry of Materials	3

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

ENVIRONMENTAL SCIENCE
(Year of Establishment: 2004)

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 Modeling. The department is a recipient of grant under UGC-SAP and DST-FIST.

Programmes offered

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

Faculty and Areas of Interest

Professor
Raza Rafiqul Hoque*, Ph.D. (JNU)-HoD
Atmospheric chemistry, Air pollution source apportionment and transport, Environmental PAHs

Associate Professor
Ashalata Devi*, Ph.D. (NEHU)
Forest Ecology, Ecosystem Dynamics, & Wildlife and Biodiversity Conservation

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

Vermiculture, Plant Nutrition and Soil Fertility Management, Soil C management, Plant products & Nano fertilizers

Assistant Professor
Amit Prakash*, Ph.D. (JNU)
Air pollution Meteorology, Noise Pollution Monitoring and Modelling, Environmental System Modelling & Urban Climate

Assistant Professor
Santa Kalita*, Ph.D. (GU)
Entomology & Environmental Physiology

Professor
Apurba Kumar Das*, Ph.D. (JNU)
Geomorphology & Regional Climate

Assistant Professor
Nirmali Gogoi*, Ph.D. (DU)
Stress Physiology & Biochemistry

Assistant Professor
Sumi Handique*, Ph.D. (TU)
Geochemistry of River Basins & Hydrogeochemistry

Assistant Professor
Nayanmoni Gogoi*, Ph.D. (IITG)
Ecohydrology, ecosystem functions, nanotechnology in environmental research

Assistant Professor
Pratibha Deka*, Ph.D. (TU)
Environmental Pollution, Air, Water & Soil; Human Environment Interactions

* Recognized Ph.D. Supervisor

ACRONYMS:

JNU	: Jawaharlal Nehru University,
NEHU	: North Eastern Hill University;
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

No. of papers published in the year 2021-2022	: **37**
No. of ongoing research projects	: **06**
No of current Ph.D. scholars	: **48**

Selected Publications

○ Paul, S., Goswami, L., Pegu, R., Chatterjee, S. K., & Bhattacharya, S. S. (2022). Epigenetic regulations enhance adaptability and valorization efficiency in Eisenia fetida and Eudrilus eugeniae during vermicomposting of textile sludge: Insights on repair mechanisms of metal-induced genetic damage and oxidative stress. Bioresource Technology, 345, 126493.

○ Sarania, B., Kumar, A., Sarma, K., Brahma, B. S., Basumatary, H., & Devi, A. (2021). A comparative assessment of external morphological traits between Macaca munzala, Tawang and Macaca assamensis, Goalpara population in Northeast India. Primates, 62(2), 343-360.

○ Mondal, S. C., Gogoi, N., Nath, D., & Gayan, A. (2022). Soil amendments for improving grain quality of grass pea (Lathyrus sativus L.) under drought. JSFA Reports, 2(1), 27-36.

○ Paul, B., Bhattacharya, S. S., & Gogoi, N. (2021). Primacy of ecological engineering tools for combating eutrophication: An ecohydrological assessment pathway. Science of The Total Environment, 762, 143171.

○ Paul, B., Mishra, M. K., & 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, 1-11.

Courses offered in M.Sc. in Environmental Science

First Semester			Second Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
ES551	Fundamentals of Environmental Science	2	ES556	Solid Waste Management and Technology	3
ES552	Statistical Methods and Environmental Application	3	ES557	Climatology and Meteorology	2
ES553	Ecology and Ecosystem Dynamics	3	ES558	Environmental Biology	3
ES554	Earth Processes and Natural Hazards	3	ES573	Environmental Extension and Field Survey	1
ES555	Environmental Chemistry and Toxicology	3	ES560	GIS-Remote Sensing and application	2
ES559	Environmental Physics	3	ES572	Natural Resource and Biodiversity Conservation	3
			-	Discipline Centric Elective (one out of the courses below: -	
			ES570	Environmental Laws and Policies	2
			ES548	Environmental Economics	2

	Third Semester				Fourth Semester	
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
ES562	Analytical Methods	3		ES563	Environmental Impact Assessment	2
ES564	Agriculture and Environmental Sustainability	2		ES579	Energy and Environment	2
ES565	Environmental Pollution and Management	3		ES550	Project	10
ES566	Soil Science	3			Discipline Centric Elective (one out of the courses below: -	
ES567	Environmental Plant Physiology and Biochemistry	3		ES546	Environmental Biotechnology	2
ES568	Hydrogeochemical Processes	2		ES571	Climate Change and Its Impact	2
ES543	Environmental Economics and Management	1				
-	*Open elective (one course)	3				
-	Departmental Elective (one course of 2 credit to be chooses from offered courses)	2				

*Students are to choose a total of 06 Credits of Open Elective courses offered by other departments, preferably to be finished within 3rd semester

	Third Semester				Fourth Semester	
Course Code	**Course Title**	**Cr.**		**Course Code**	**Course Title**	**Cr.**
ES545	Human Population, Social issues and the Environment	2		ES 541	Contemporary Environmental Issues	3
ES546	Environmental Biotechnology	2		ES 542	Laboratory Guidance and Safety	3
ES547	Agro-Forestry and Forest Management	2		ES 543	Environmental Economics and Management	3
ES548	Environmental Economics	2		ES 544	Introductory Air Pollution	3
ES574	Laboratory Safety	2		ES 577	Indoor Air Pollution and Human Health	3
ES570	Environmental Laws and Policies	2		ES 578	Environmental Pollution	3
ES575	Atmospheric Chemistry	2		ES576	Environmental System Analysis	3

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

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 B.Sc. B.Ed (Major in   Mathematics)
4. Integrated M.Sc. in Mathematics

Faculty and Areas of Interest

Professor
Nayandeep Deka Baruah*, Ph.D. (TU)
Number Theory, Ramanujan's Mathematics

Professor
Debajit Hazarika*, Ph.D. (JMI)
Dean, School of Sciences
General Topology, Fuzzy Sets and Applications

Professor
Munmun Hazarika*, Ph.D. (TU)
Functional Analysis, Operator Theory

Professor
Milan Nath*, Ph.D. (IITG)-HoD
Ordinary Graph Spectra, Inverse Eigen Value Problem

Professor
Santanu Dutta*, Ph.D. (TU)
Statistics (Non-parametric)

Professor
Dhiren Kumar Basnet*, (DU)
Algebra

Associate Professor
Bhim Prasad Sarmah*, Ph.D. (GU)
High Energy Astrophysics, Relativity

Associate Professor
Shuvam Sen*, (IITG)
Computational Fluid Dynamics

Assistant Professor
Bipul Kumar Sarmah*, Ph.D. (TU)
Theory of Partition, Ramanujan's Mathematics

Assistant Professor
Rajat Kanti Nath*, (NEHU)
Theory of Finite Groups

Assistant Professor
Debajit Kalita*, Ph.D. (IITG)
Algebraic Graph Theory

Assistant Professor
Deepjyoti Goswami*, Ph.D. (IITB)
Finite Element Method

Assistant Professor
Pankaj Kumar Das*, Ph.D. (DU^)
Coding Theory

Assistant Professor
Jayanta Borah*, Ph.D. (IITG)
Abstract Fractional Differential Equations, Mathematical Control theory

Assistant Professor
Biswajit Das*, Ph.D. (IITG)
Numerical Linear Algebra, Matrix Analysis

* Recognized Ph.D. Supervisor

ACRONYMS:

TU	: Tezpur University,
JMI	: Jamia Millia Islamia New Delhi,
IITG	: Indian Institute of Technolo gy 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

Research Activities

No. of papers published in the year 2020-21	: **43**
No. of ongoing research projects	: **06**
No of current Ph.D. scholars	: **32**

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 Center via LAN with access to the INTERNET. One Systems Analyst and one Technical Assistant look after the computational and networking facilities of the department.

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,Anew transformationfree 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

Courses offered in Integrated B.Sc. B.Ed. (Major in Mathematics)*

First Semester		
Course Code	**Course Title**	**Cr.**
PD 101	Physics-I	3
CD 101	Chemistry-I	3
CD 107	Chemistry-Lab	3
ED 105	Basics in Computer Applications	3

Second Semester		
Course Code	**Course Title**	**Cr.**
PD 102	Physics-II	3
PD 197	Physics-Lab	3
CD 102	Chemistry-II	3
ED 107	Education and Development	3

MD 103	Foundation of Mathematics	3	MD 106	Group Theory	3
MD 105	Real Analysis-I	3	NS 102	National Service Scheme	2
ED 104	Communicative English	3	ES 103	Environmental Studies	4

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MD 221	Introductory Statistics & Probability	3	MD 218	Introductory ODE & PDE	4
MD 223	Calculus-I	3	MD 220	Linear Algebra-I	4
PD 201	Physics-III	3	MD 222	Co-ordinate Geometry	4
CD 201	Chemistry-III	3	MD 224	Numerical Methods and Boolean Algebra	4
ED 205	Environmental Education	3	ED 203	Contemporary Issues in Education	3
ED 202	Learner and Learning	3	ED 204	Assessment and Evaluation	3
DM 301	Fundamentals of Disaster Management	3			

Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MD 311	Calculus-II	4	MD 318	Introductory Topology	4
MD 313	Programming Algorithm and Mathematical Software	4	MD 314	Elementary Number Theory	4
MD 315	Statics and Dynamics	4	MD 316	Introduction to Optimization	4
MD 317	Elementary Complex Analysis	4	MD322	Seminar	3
ED 301	Teaching Approaches and Strategies	3	ED 308	Pedagogy A: Physical Science-I	3
ED 302	Classroom Organization Management and Management	3	ED 307	Pedagogy B: Mathematics I	3
			ED 303	School Education in North East India	2

Seventh Semester			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MD 425	Combinatorics	4	MD 422	Elementary Coding and Information Theory	4
MD 414	Computer Programming+	4	ED 405	School Internship	16
MD 421	Computer Lab	2			
ED 408	Pedagogy A: Physical Science-II	3			
ED 407	Pedagogy B: Mathematics II	3			
ED 404	Initial School Experience/ School/Internship-I	4			
-	Open Elective I #	3			

Courses offered in Integrated M.Sc. in Mathematics*

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PI 101	Physics-I	3	PI 102	Physics-II	3
CI 101	Chemistry-I	3	PI 197	Physics-Lab	3
CI 107	Chemistry-Lab	3	CI 102	Chemistry-II	3
BI 101	Biology-I	3	BI 107	Biology-Lab	3
MI 103	Foundation of Mathematics	3	MI 104	Real Analysis-II	3
MI 105	Real Analysis-I	3	MI 106	Group Theory	3
EG 101	Communicative English	3	ES 103	Environmental Studies	4

Third Semester			Fourth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
MI 221	Introductory Statistics & Probability	3	MI 218	Introductory ODE & PDE	4
MI 223	Calculus-I	4	MI 220	Linear Algebra-I	4
MI 225	Combinatorics	4	MI 222	Co-ordinate Geometry	4
PI 201	Physics-III	3	MI 224	Numerical Methods and Boolean Algebra	4
CI 201	Chemistry-III	3	MI 226	Introductory Topology	4
CS 535	Introduction to Scientific computing	3	DM 301	Fundamentals of Disaster Management	3
NS 102	National Service Scheme	2			

Fifth Semester			Sixth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
MI 311	Calculus-II	4	MI 312	Ring Theory	3
MI 313	Programming, Algorithm and Mathematical Software	4	MI 314	Elementary Number Theory	4
MI 315	Statics and Dynamics	4	MI 316	Introduction to Optimization	4
MI 317	Elementary Complex Analysis	4	MI 318	Elementary Integral Transforms and Special Functions	4
MI 319	Graph Theory	4	MI 322	Seminar	3
			MI 320	Elementary Coding and Information Theory	4

Seventh Semester			Eighth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
MI 412	Abstract Algebra	4	MI 408	Complex analysis	4
MI 417	Linear Algebra-II	4	MI 418	Theory of Ordinary Differential Equations	4
MI 413	Real analysis-III	4	MI 419	Topology	4
MI 414	Computer Programming	4	MI 416	Numerical Analysis	4
MI 415	Lebesgue Measure and Integration	4	MI 424	Computer lab	1
MI 421	Computer Lab	1	-	Open elective	3

Ninth Semester			Tenth Semester		
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
MI 507	Partial Differential Equations	4	MI 599	Probability Theory	4
MI 510	Functional Analysis	4	MI 508	Mathematical Methods	4
-	DSE-I	4	MI509	Classical Mechanics	4
-	Open Elective II#	3	-	DSE-II	4
MI 517	Project	4	-	DSE-III	4

* Subject to revision.
\# List to be notified by the CoE from time to time.
+ Course for which there is a separate practical unit assigned as Computer Lab..

Department Specific Electives (DSE) to be offered from the following courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MI 538	Theory of Partial Differential Equation	4	MI 569	Coding Theory-I	4
MI 539	Advanced Numerical Analysis	4	MI 570	Coding Theory-II	4
MI 541	Fluid Mechanics	4	MI 572	Operator Theory −II	4
MI 543	Relativity	4	MI 573	Analytic Number Theory	4
MI 552	Operator Theory-I	4	MI 574	Galois Theory	4
MI 554	Commutative Algebra	4	MI 581	Stochastic Process - II	4
MI 558	General Theory of Relativity	4	MI 585	Fuzzy Sets and Applications -II	4
MI 561	Stochastic processes-I	4	MI 588	Applied Matrix Theory	4
MI 565	Fuzzy Sets and Applications-I	4	MI 591	Computational Fluid Dynamics	4
MI 566	Fourier Analysis	4	MI 594	Advanced Topology-I	4
MI 567	Continuum Mechanics	4	MI 596	Advanced Topology-II	4
MI 568	Theory of Distribution and Sobolev Spaces	4			

Courses offered in M. Sc. in Mathematics

First Semester				Second Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
MS 401	Abstract Algebra	4		MS 406	Complex Analysis	4
MS 403	Linear Algebra	4		MS 414	Theory of Ordinary Differential Equations	4
MS 405	Real Analysis	4		MS 408	Topology	4
MS 411	Computer Programming+	4		MS 416	Numerical Analysis+	4
MS 425	Lebesgue Measure and Integration	4		MS 424	Computer Lab	1
MS 421	Computer Lab	1		-	Open Elective-I#	3

Third Semester				Fourth Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
MS 507	Partial Differential Equations	4		MS 599	Probability Theory	4
MS 510	Functional Analysis	4		MS 508	Mathematical Methods	4
-	DSE-I	4		MS 501	Classical mechanics	4
-	Open Elective II#	3		-	DSE -II	4
MS 517	Project	4		-	DSE-III	4

List to be notified by the CoE from time to time
+Course for which there is a separate practical unit assigned as Computer Laboratory

Third Semester				Fourth Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
MS 538	Theory of Partial Differential Equation	4		MS 568	Theory of Distribution and Sobolev Spaces	4
MS 539	Advanced Numerical Analysis	4		MS 569	Coding Theory-I	4
MS 541	Fluid Mechanics	4		MS 570	Coding Theory-II	4
MS 543	Relativity	4		MS 572	Operator Theory −II	4
MS 549	Graph Theory	4		MS 573	Analytic Number Theory	4
MS 552	Operator Theory-I	4		MS 574	Galois Theory	4
MS 554	Commutative Algebra	4		MS 581	Stochastic Process - II	4
MS 558	General Theory of Relativity	4		MS 585	Fuzzy Sets and Applications -II	4
MS 561	Stochastic processes-I	4		MS 588	Applied Matrix Theory	4
MS 565	Fuzzy Sets and Applications-I	4		MS 591	Computational Fluid Dynamics	4
MS 566	Fourier Analysis	4		MS 594	Advanced Topology-I	4
MS 567	Continuum Mechanics	4		MS 596	Advanced Topology-II	4

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

BIOLOGY AND BIOTECHNOLOGY

(Year of Establishment:1997)

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-Center 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)
Petroleum Biotechnology, Plant Biotechnology, Genetic Engineering and Metagenomics, Bioenergy

Professor
Ashis Kumar Mukherjee*, Ph.D. (BU), D.Sc. (CU)
(On deputation)
Snake Venom Biochemistry and Microbial Biotechnology

Professor
Shashi Baruah*, Ph.D. (PGIMER)
Innate Immunity and Immunogenetics
(Heterogeneity and Evolution of Immune Responses)

Professor
Anand Ramteke*, Ph.D. (JNU)
Cancer Genetics and Chemoprevention

Professor
Suvendra Kumar Ray*, Ph.D. (CCMB-JNU)
Molecular Plant -Microbe Interactions, Molecular Evolution, Food and Activities on Human Health

Professor
Manabendra Mandal*, Ph.D. (IGIB)
Probiotics and Nutrition, Microbial Biofilm, Bioenergy

Professor
Robin Doley*, Ph.D. (TU)-HoD
Snake venomics and antivenomics

Associate Professor
Rupak Mukhopadhyay*, Ph.D.(IACS-JU)
Inflammation, Cancer Biology

Associate Professor
Thiyam Ramsing Singh*, Ph.D.(CDRI)
Genomic Instability and Cancer Biology

Assistant Professor
Eeshan Kalita*, Ph.D. (NIPGR-GU) (On Lien)
Nanobiotechnology and Plant Functional Biology

Assistant Professor
Surya Prakash G. Ponnam*, Ph.D. (LVPEI-UoH)
Molecular Genetics   and Synthetic biology

Assistant Professor
Anupam Nath Jha*, Ph.D.(IISc)
Computational Biophysics, Bioinformatics, Systems Biology

Assistant Professor
Nima D. Namsa*, Ph.D. (IISc)
Molecular Biology of Rotavirus

Assistant Professor
Suman Dasgupta*, Ph.D. (VB)
Insulin Resistance and Type 2 Diabetes

Assistant Professor
Mattaparthi V. Satish Kumar*, Ph.D. (IITG)
Computational Biotechnology and Bioinformatics

Assistant Professor
Jyoti Prasad Saikia*, Ph.D. (TU)
Plant Biotechnology

Assistant Professor
Aditya Kumar*, Ph.D. (IISc)
Computational Biophysics, Genomics and Bioinformatics

Assistant Professor
Pankaj Barah*, Ph.D. (NTNU)
Geonomics, System Biology, Big data in Biology, Molecular evolution

*** 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,
IGIB : Institute of Genomics and Integrated Biology Delhi,
JNU : Jawaharlal Nehru University New Delhi,
TU : Tezpur University,
IITKgp : Indian Institute of Technology Kharagpur,
NIPGR : National Institute of Plant Genome Research New Delhi,
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,
IITG : Indian Institute of Technology Guwahati,
NTNU : Norwegian University of Science and Technology Norway,
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

No. of papers published in the year 2020-2021   : **66**
No. of ongoing research projects   : **37**
No of current Ph.D. Scholars   : **79**

Selected Publications

○ Kabyashree K, Kumar R, Sen P, Satapathy SS and Ray SK., Ralstonia solanacearum preferential colonization in the shoot api-cal 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 p38δ 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

Courses offered in Integrated M.Sc. in Life Science*

First Semester		
Course Code	Course Title	Cr.
LI 101	Biology Major I (Biodiversity, Microbes, Algae, Fungi and Archegoniate)	3
LI 103	Biology Major I Lab	3
PI 101	Physics I	3
CI 101	Chemistry I	3
MI 101	Mathematics I	3
PI 197	Physics I Lab	3
EG 101	Communicative English	3
Non-Biology		
LI 105	Biology I	3
LI 107	Biology I Lab	3

Second Semester		
Course Code	Course Title	Cr.
LI 102	Biology Major II (Animal Diversity)	3
LI 104	Biology Major II Lab	3
PI 102	Physics II	3
CI 102	Chemistry II	3
MI 102	Mathematics II	3
CI 107	Chemistry I Lab	3
ES 103	Environmental Studies	4
LI 106	Biology II (GE for Non-Bio)	3
LI 107	Biology I Lab (for Chem, Math)	3

Third Semester		
Course Code	Course Title	Cr.
LI 201	Plant Ecology and Taxonomy	3
LI 203	Comparative anatomy of vertebrates	3
LI 205	Plant Anatomy and Embryology	3
LI 207	Biology Major III Lab (Anatomy: Plant and animal)	3
LI 209	Introduction to computing	3
PI 201	Physics III	3
CI 201	Chemistry III	3
NS 201	NSS	2

Fourth Semester		
Course Code	Course Title	Cr.
LI 202	Genetics and Evolutionary Biology	3
LI 204	Microbiology	3
LI 206	Cell Biology-I	3
LI 208	Biochemistry I	3
LI 210	Biology Lab-IV (Biochemistry)	3
LI 212	Biology lab V(Cell Biology)	3
LI 214	Seminar	1
DM 101	Disaster Management	3

Fifth Semester		
Course Code	**Course Title**	**Cr.**
LI 301	Plant Physiology	3
LI 303	Animal Physiology	3
LI 305	Basic Bioinformatics	3
LI 307	Molecular Biology	3
LI 309	Biology lab VI (Physiology)	3
LI 311	Biology lab VII (Molecular Biology)	3
LI 313	Public Health and Hygiene	3

Sixth Semester		
Course Code	**Course Title**	**Cr.**
LI 302	Immunology I	3
LI 304	Biocomputing and Biostatistics	3
LI 306	Developmental Biology	3
LI 308	Analytical Techniques	4
LI 310	Mini Project	8

Seventh Semester		
Course Code	**Course Title**	**Cr.**
LI 401	Biochemistry – II	3
LI 403	Molecular Genetics	3
LI 405	Immunology II	3
LI 407	Biological Database Management System	3
LI 409	Cell Biology II	3
LI 411	Biology Lab VIII (Biochemistry)	3
LI 413	Biology Lab –IX (Immunology)	3

Eighth Semester		
Course Code	**Course Title**	**Cr.**
LI 402	Biophysics &Structural Biology	3
LI 404	Genetic Engineering	3
LI 406	Applied Microbiology and Bioprocess Engineering	3
LI 408	Computational Biology	3
LI 410	Cell and Tissue culture	3
LI 412	Biology Lab X (Genetic Engineering)	3
LI 414	Biology Lab XI (Applied Microbiology)	3

Ninth Semester		
Course Code	**Course Title**	**Cr.**
LI 501	Genomics and Proteomics	3
LI 503	Bioinformatics Software and Algorithm	3
LI 505	Lab on Advanced programming	2
LI 507	Biosafety and IPR	2
Option I		
LI 509	Plant Biotechnology	3
LI 511	Economic Botany	3
LI 513	Biology Lab XII (Plant Sciences)	4
Option II		
LI 515	Animal Biotechnology	3
LI 517	Economic Zoology	3
LI 519	Biology Lab XII (Animal Science)	4

Tenth Semester		
Course Code	**Course Title**	**Cr.**
LI 502	Project – I (Dissertation/Project)	15
Elective (s) for Option I (DSE)		
LI522	Evolutionary Biology	3
LI524	Ethnomedicine and Herbal Technology	3
LI526	Plant metabolism & secondary metabolites	3
LI528	System Biology	3
Elective(s) for Option II (DSE)		
LI530	Wildlife and Animal Behaviour	3
LI532	Fish Biology	3
LI534	Cancer Biology	3
LI536	Pyschoneuro immunology	3
LI538	Insect vector and Diseases	3
LI540	Immunotechnology	3
LI542	Computer aided drug designing	3

* Subject to revision.

Courses offered in M. Sc. in Molecular Biology and Biotechnology

Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BT 441	Biochemistry	3	BT 440	Molecular Biology	3
BT 443	Cell Biology	3	BT 442	Immunology	3
BT 478	Microbiology	3	BT 444	Developmental Biology	3
BT 447	Genetics	3	BT 446	Bioinformatics	3
BT 449	Basics of Mathematics and Statistics	2	BT 448	Genomics and Proteomics	3
BT 451	Basics of Chemistry and Physics	2	BT 450	Lab-III Molecular Biology	3
BT 453	Lab-I Biochemistry and Analytical Techniques	3	BT 452	Lab-IV Immunology	3
BT 455	Lab-II Microbiology	3	BT 454	Biophysical methods and emerging technologies	2

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BT 457	Genetic Engineering	3	BT 462	Project	20
BT 459	Molecular Diagnostics	2	BT 466	Bioentrepreneurship	2
BT 461	Bioprocess Engineering and Technology	3			
BT 463 BT 465 BT467 BT 477 BT 479 BT 499	Elective-I Plant Biotechnology Animal Biotechnology Microbial Biotechnology Computational Biology Nanobiotechnology	3			
BT 469	Intellectual Property Rights, Biosafety and Bioethics	2			
BT 471	Lab-V Genetic Engineering	3			
BT 473	Lab-VI Bioprocess Engineering and Technology	3			
BT 475	Critical Analysis of classical papers and scientific communication skills	2			

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

Academic Building II

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 B.Sc. B.Ed. (Major in Physics)
4. Integrated M. Sc. in Physics

Faculty and Areas of Interest

Professor
Jayanta Kumar Sarma*, Ph.D. (GU)
Theoretical High Energy Physics, Particle Physics

Professor
Nidhi Saxena Bhattacharyya*, Ph.D. (DU^)
Microwave Devices, Antennas and EMI Materials

Professor
Gazi Ameen Ahmed*, Ph.D. (GU)
Laser Physics, Optoelectronics

Professor
Nilakshi Das*, Ph.D. (GU)
Dusty Plasma Physics, Laser-Plasma Interaction

Professor
Dambarudhar Mohanta* , Ph.D. (TU)
Condensed Matter Physics, Nanoscience

Professor
Pritam Deb* , Ph.D. (JU)
Nanoscience and Nano Technology, Physics of Materials

Professor
Pralay Kumar Karmakar*, Ph.D. (GU)
Plasma Physics, Astrophysics, Nonlinear Dynamics

Professor
Mrinal Kumar Das* , Ph.D. (GU) -HoD
Theoretical High Energy Physics: Physics Beyond Standard Model, Neutrino Physics, BAU, Dark Matter

Professor
Pabitra Nath*, Ph.D. (GU)

Photonics

Associate Professor
Ng K. Francis*, Ph.D. (GU)

Particle Physics Phenomenology and Particle Cosmology

Assistant Professor
Rajib Biswas*, Ph.D. (DU)

Fiber Optic Instrumentation, PCFs, Geophysical Instrumentation

Assistant Professor
Rupjyoti Gogoi*, Ph.D. (GU)

Astrophysics

Assistant Professor
Shyamal Kumar Das*, Ph.D. (IISc)

Material Science

Assistant Professor
Ritupan Sarmah*, Ph.D. (IISc)

Computational Material Science

Assistant Professor
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

Assistant Professor
Jugal Lahkar, Ph.D. (GU)

Cosmology & High Energy Physics

Assistant Professor
Diana Thongjaomayum, Ph.D. (NEHU)

Condensed Matter Physics (Theory)

Inspire Faculty
Sorokhaibam Nilakash Singh, Ph.D. (TIFR)

String Theory, Black Hole Physics

* 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,
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

No. of papers published in the year 2021-2022   : **65**
No. of ongoing research projects   : **22**
No. of current Ph.D. scholars   : **82**

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.

○ 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).

Courses offered in Integrated B.Sc. B.Ed. in Physics*

First Semester		
Course Code	Course Title	Cr.
PD 101	Physics-I	3
PD 103	General Physics-I	3
CD 101	Chemistry-I	3
MD101	Mathematics-I	3
PD 197	Physics Lab-1	3
ED 106	Education: An Evolutionary Perspective	3
ED 104	Communicative English (Language Proficiency)	3
ED 105	Basics in Computer Applications	3

Second Semester		
Course Code	Course Title	Cr.
PD 102	Physics-II	3
PD 104	General Physics-II	3
CD 102	Chemistry-II	3
MD 102	Mathematics-II	3
PD 198	Physics Lab-II	3
CD 107	Chemistry Laboratory	3
ES 103	Environmental Studies	4
ED 102	Education and Development	3
NS 106	National Service Scheme	2

Third Semester		
Course Code	Course Title	Cr.
PD 203	Classical Mechanics	3
PD 301	Mathematical Physics-I	3
CD 201	Chemistry-III	3
ED 201	Environmental Education	3
ED 202	Learner and Learning	3
MD219	Mathematics-III	3
PD 297	Physics Lab-III	4
PD 201	Physics III (for non-major)	3
-	Open Elective-I	3

Fourth Semester		
Course Code	Course Title	Cr.
PD 205	Electromagnetism	3
PD 214	Electronics	3
PD 218	Modern Physics	3
PD 216	Thermodynamics and Statistical Physics	3
ED 203	Contemporary Issues in Education	3
ED 204	Assessment and Evaluation	3
PD 298	Physics Lab-IV	4

Fifth Semester		
Course Code	Course Title	Cr.
PD 303	Physical and Geometrical Optics	3
PD 202	Introductory QM	3
PD 315	Mathematical Physics II	3
PD 309	Analog Electronics and Communications	3
PD 204	Atomic and Nuclear Physics	4
PD 399	Physics Lab-V	3
ED 301	Teaching Approaches and Strategies	3
ED 302	Classroom Organization and Management	3

Sixth Semester		
Course Code	Course Title	Cr.
PD 307	Basic Material Science	3
PD 317	Basic Computational Techniques	3
PD 311	Waves and Acoustics	3
ED 308	Pedagogy A: Physical Science I	3
ED 307 or ED 309	Pedagogy B: Mathematics I or Pedagogy B: Bio Science I	3
ED 303	School Education in NE India	2
PD 300	Physics Lab-VI	4
-	Elective I	3

Seventh Semester		
Course Code	Course Title	Cr.
ED 408	Pedagoggy A: Physical Sciences	3
ED 407 or ED 409	Pedagoggy B: Mathematics II or Pedagoggy B: Bio-scince	3
ED 404	Initial School Experience/School Internship -I	4
PD 308	Laser Physics	4
PD 400	Laboratory-VII	4
-	Open Elective-II	3

Eight Semester		
Course Code	Course Title	Cr.
PD 314	Measurement Physics	3
ED 405	School Internship	15

*Subject to revision.

Courses offered in Integrated M. Sc. in Physics*

First Semester		
Course Code	Course Title	Cr.
PI 101	Physics-I	3
PI 103	General Physics-I	3
CI 101	Chemistry-I	3
MI 101	Mathematics-I	3
BI 101	Biology-I	3
PI 197	Physics Lab -I	3
BI 107	Biology Laboratory	3
EG 110	Communicative English	3

Second Semester		
Course Code	Course Title	Cr.
PI 102	Physics-II	3
PI 104	General Physics-II	3
CI 102	Chemistry-II	3
BI 102	Biology-II	3
MI 102	Mathematics-II	3
PI 198	Physics Lab-II	3
CI 105	Chemistry Lab	3
ES 103	Environmental Studies	4

Third Semester		
Course Code	Course Title	Cr.
PI 203	Classical Mechanics	3
PI 217	Mathematical Physics-I	3
CI 201	Chemistry III	3
MI 201	Mathematics III	3
PI 297	Physics Lab-III	4
NS 106	NSS	2
CS 535	Introduction to Scientific Computing	3
PI 201	Physics III (for Non-major)	3

Fourth Semester		
Course Code	Course Title	Cr.
PI 205	Electromagnetism	3
PI 214	Electronics	4
PI 325	Thermodynamics and Statistical Physics	3
PI 218	Modern Physics	3
PI 298	Physics Lab-IV	4
-	Elective I	3
DM 101	Disaster Management	3

	Fifth Semester			Sixth Semester	
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
PI 303	Physical and Geometrical Optics	3	PI 307	Basic Material Science	3
PI 202	Introductory QM	3	PI 317	Basic Computation Techniques	3
PI 315	Mathematical Physics II	3	PI 314	Measurement Physics	3
PI 309	Analog Electronics and communications	3	-	Elective II	3
PI 204	Atomic and Nuclear Physics	3	PI 311	Waves and Acoustics	3
PI 308	Laser Physics	3	-	Open Elective	3
PI 399	Physics Lab-V	4	PI 300	Project cum Physics Lab-VI	4

	Seventh Semester			Eighth Semester	
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
PI 403	Electromagnetic Theory I	3	PI 552	Quantum Mechanics-II	3
PI 413	Advanced Classical Mechanics	3	PI 310	Statistical Physics	3
PI 414	Quantum Mechanics –I	3	PI 551	Electromagnetic Theory II	3
PI 416	Condensed Matter Physics and Material Science	3	PI 417	Advanced Mathematical Physics	3
PI 499	Physics and Computational Lab	4	PI 302	Analog and Digital Electronics	4
PI 405	Semiconductor Devices	3	PI 450	Seminar	1
PI 400	Physics Lab-VII	4	PI 498	Physics Lab-VIII	4

	Ninth Semester			Tenth Semester	
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
PI 559	Project-1	6	PI 500	Project-II	10
PI 402	Nuclear and Particle Physics	3	-	Elective III	3
PI 553	Atomic and Molecular Spectroscopy	3	-	Elective IV	3
-	Elective I	3	-	Open Elective	3
-	Elective II	3			
-	Open Elective	3			

Elective Courses offered by the Department in Semester IX and X					
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
PI 501	Quantum Field Theory	3	PI 525	Nonlinear Plasma Physics	3
PI 507	Digital Signal Processing	3	PI 554	Soft Condensed Matter Physics	3
PI 508	Digital Communication Systems	3	PI 557	Photonics	3
PI 510	Advanced Condensed Matter Physics and Material Science	3	PI 559	Nanophotonics	3
PI 516	Microprocessors and Digital Signal Processing Based Systems	3	PI 562	Quantum Effects in Low Dimensional Systems	3
PI 517	Microwave systems and Antenna Propagation	3	PI 563	Physics of Nano devices	3
PI 540	Particle Physics	3	PI 564	Introductory Astrophysics	3
PI 521	Fundamentals of Plasma Physics	3	PI 565	Elements of GTR and Cosmology	3

*Subject to revision.

Course offered in M.Sc. In Physics

First Semester		
Course Code	**Course Title**	**Cr.**
PH 405	Semiconductor Devices	3
PH 408	Electromagnetic Theory I	3
PH 416	Condensed Matter Physics and Material Science	3
PH 417	Advanced Classical Mechanics	3
PH 418	Quantum Mechanics-I	3
PH 400	Physics and Computational Lab	4
PH 498	Physics Lab-I	4

Second Semester		
Course Code	**Course Title**	**Cr.**
PH 411	Statistical Physics	3
PH 412	Analog and Digital Electronics	4
PH 417	Advanced Mathematical Physics	3
PH 551	Electromagnetic Theory II	3
PH 552	Quantum Mechanics-II	3
PH 455	Seminar	2
PH 499	Physics Lab-II	4

Third Semester		
Course Code	**Course Title**	**Cr.**
PH 500	Project I	6
PH 415	Nuclear and Particle Physics	3
PH 553	Atomic and Molecular Spectroscopy	3
-	Elective I	3
-	Elective II	3
-	Open Elective-I	3

Fourth Semester		
Course Code	**Course Title**	**Cr.**
PH 599	Project-II	10
-	Elective III	3
-	Elective IV	3
-	Open Elective II	3

Electives Courses offered by the Department in Semester III and Semester IV					
Course Code	**Course Title**	**Cr.**	**Course Code**	**Course Title**	**Cr.**
PH 519	Quantum Field Theory	3	PH 547	Nonlinear Plasma Physics	3
PH 522	Communication Systems	3	PH 554	Soft Condensed Matter Physics	3
PH 523	Microwave systems and Antenna Propagation	3	PH 557	Photonics	3
PH 524	Digital Signal Processing	3	PH 559	Nanophotonics	3
PH 525	Microprocessors and Digital Signal Processing Based Systems	3	PH 562	Quantum Effects in Low Dimensional Systems	3
PH 539	Advanced Condensed Matter Physics and Material Science	3	PH 563	Physics of Nano devices	3
PH 540	Particle Physics	3	PH 564	Introductory Astrophysics	3
PH 545	Fundamentals of Plasma Physics	3	PH 565	Elements of GTR and Cosmology	3

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

CHANDRAPRABHA SAIKIANI

(1901-1972)

PRIDE OF ASSAM

PIONEER OF THE WOMEN'S MOVEMENT

"BREAK THE SHACKLES OF THE PRISON

WITH THY OWN HANDS;

OPEN THE DOOR AND ENTER

WITH TIME STILL IN HAND "
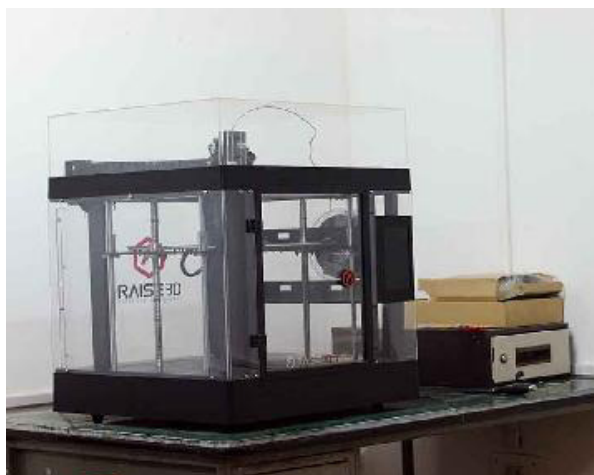
Centres

- Computer Centre
- Centre for Endangered Languages
- Centre for Disaster Management
- Centre for Distance and Online Education
- Centre for Inclusive Developement
- Centre for Innovation, Incubation & Entrepreneurship
- Centre for Multidisciplinary Research
- Chandraprabha Saikiani Centre for Women Studies
- DBT Nodal Center
- ONGC Center for Petrolium Biotechnology
- Teaching Learning Center
- Sophiscticated Analytical Intrumentation Center
- Technology Enabling Center

Cells

- Internal Quality Assurance Cell
- Itellectual Property Right Cell
- Training & Placement Cell
- Research Development Cell

Facilities

- DBT Funded-Bioinformatics Infrastrcure Facility
- High Performance Computing Facility

Chair

- Dr. Ambedkar Chair

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-equiped Computer Laboratories with modern computational capabilites. Computer laboratories maintained by Computer Centre are used by students and University employees like for purposed like classes, assignments, workshops, online interviews, computational needs, etc.

ICT services across the whole campus of University is served by Computer Centre through its dedicated team. Computer Center team comprises of 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 unders its umbrella.

The campus-wide Local Area Network (LAN) is equipped with 10Gigabit 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 it's 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 Performace Cloud (HPC) Server is also 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 automation projects of administration, academic departments and other user departments. Most of such applications are also selft hosted in-campus. Computer Centre is currently adding new infrastructure to enable cloud-based servers in-campus in a step to modernize its server infrastructure.

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 under construction to aid in recording and preparation of audio/video lectures activities 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 facilitated 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 Ministry of Education (Formerly MHRD) has been operational since 2017 mostly covers academic complexes, administration, student hostels and student activity areas with a user base of 4300. The WiFi services under this scheme is 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 others 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	16
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	Seconday 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 with Storage	IBM/X3650 + IBM/DS3524	Windows 2008 R2 Server/ 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 are created already.

○ To cope with pandemic and growing need to work from home, Conputer Centre has started rolling out WiFi services to quarters of teaching staffs and other officials.

○ Computer Centre has also stepped into world of cloud computing with ongoing installation of infrastucture

○ 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.

The personnels of the centre

Director
Nityananda Sarma, PhD (IIT Guwahati)
Professor, Department of Computer Science & Engineering
Specialization/Areas of Interest: Ad Hoc Networks, Mobile Computing
E-mail: nitya@tezu.ernet.in

Computer Engineer `Technical Staff`
Dhiraj Kumar Sarma, BE(DU),MS (Tezpur)
Specialization/Areas of Interest: Computer Networks and Security
E-mail: dhiraj@tezu.ernet.in

Junior Programmer `Technical Staff`
Dipak Chandra Choudhury, MCA (Tezpur)
E-mail: dcc@tezu.ernet.in

Junior Programmer `Technical Staff`
Jamil Ahmed, MTech(CSE) (NIT, Meghalaya)
E-mail: jamil@tezu.ernet.in

Senior Technical Assistant `Technical Staff`
Abani Kumar Das, Diploma in Engg. (CSE)
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Senior Technical Assistant `Technical Staff`
Nirnajan Kumar Deka, Diploma in Engg. (Electronics & Telecommunication)
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Manjul Baruah, Diploma in Engg (CSE)
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Technical Assistant `Technical Staff`
Prandeep Borah, DOEACC-A Level, MS(IT)
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Technical Assistant `Technical Staff`
Raghvendra Choudhary, Diploma in Engg (CSE), CCNA
E-mail: raghav@tezu.ernet.in

Technical Assistant `Technical Staff`
Milan Jyoti Deka, BTech(GUIST)
E-mail: milan16@tezu.ernet.in

Other Support Staff
Multi Tasking Staff   : 03
EPABX Technicians   : 01 (Contractual)

Centre for Endangered Languages

(Year of Establishment: 2014)

The University was awarded with 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 during each semester (Academic session):
1. LE223: Language Society and Endangerment
2. LE224: Language Policy, Education and Language Revitalization

Faculty and Areas of Interest
(The faculties associated with the Centre are of the Department of Linguistics and Language Technology)

Coordinator
Madhumita Barbora*, Ph.D. (TU)
Linguistics (Syntax, Psycholinguistics), Field Linguistics, Documentation

Coordinator
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

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

Assistant Professor
Amalesh Gope, Ph.D. (IITG)
Acoustic Phonetics, Experimental Phonology, Computational Linguistics, and Language

*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,

Research Activities

No. of papers published in the year 2021– 2022   : **13**
No. of ongoing research projects   : **02**
(Centre for Endangered Languages itself is a research project)

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 Profes- sional Mixing Console; Denon DN -4SOR Professional Grade Installed Recording Device; Presonus Audiobox i2 Soundcard; Presonus HP4 Head-phone Amplifier; Video Camera full HD recording (MODEL: HTC- MDH2M); Video Camera (MODEL: HC- X1000); Camera (MODEL: COOLPIX P900); Recorder - Olympus LS-100 &Mobile– Samsung

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.

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.

Outreach activities of the Centre as research work (continued):

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:

Table with 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	Hrangkhol
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:
   I. A Learner's Book of the Biate Language
   II. A Learner's Book of the Khelma Language
   III. A Learner's Book of the Hrangkhol Language
   IV. A Learner's Book of the Onaeme Language
   V. A Learner's Book of the Purum Language
   VI. A Learner's Book of the Liangmai Language
   VII. A Learner's Book of the Yimchunger Language

○ The Phonetics and Phonology of Biate, Khelma, Hrangkhol, Onaeme, Purum, Liangmai and Yimchunger
○ The Morphology of Biate, Khelma, Hrangkhol, Onaeme, Purum, Liangmai and Yimchunger
○ The Syntax of Biate, Khelma, Hrangkhol, Onaeme, Purum, Liangmai and Yimchunger

Manpower of the Centre as approved by UGC:

The Centre is approved with the following numbers of faculties and staff (academic and administrative):
1. 3 Assistant Professors
2. 4 Research Associates
3. 8 Field Assistants
4. 2 Office staff

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

Centre for Disaster Management

(Year of Establishment: 1997)

The Centre for Disaster Management was established in1997under 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 Envionment and Disaster Management

Faculty and Areas of Interest

Assistant Professor & Head (i/c)
Dipak Nath, Ph.D. (GU)
Disaster Risk Assessment and Risk Mitigation Approaches

Acronym

GU : GauhatiUniversity

SelectedPublications

○ Deb Nath, R. & Nath, D. (2018) Statusof 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 Multidisiplinary, 4(2),224-239.

○ Nath,R. D. & Nath, D.(2015) Women's Movement for Human Rights in India and Bangladesh: A Sociological Analasis, Intellection: a biannual interdisciplinary research journal, 3(1).

For more information one can visit centre website www://tezu.ernet.in/cdm

Centre for Distance and Online Education

(Year of Establishment: 2011)

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. Rajeev K. Doley, Ph.D. (IITG)
Inclusive Development
Child rights and governance
Communication skills

Faculty and Areas of Interest

Associate Professor (Additional Charge)
Sanjib Sahoo*, Ph.D. (TU)
English (Indian Writing in English, Eco Criticism)

Assistant Professor
Suchibrata Goswami, Ph.D. (DU)
English (American Literature, Post–Colonial Writing)

Associate Professor
Madhusmita Boruah, Ph.D. (TU)
Mass Communication (Advertising and Public Relation)

Assistant Professor
Dhriti Sonowal, M.A.,M.Phil (JNU)
Sociology

Programme Coordinators
Kapou Malakar*, Ph.D. (TU)
Programme: M.A. in Mass Communication

Programme Coordinators
Amiya Kumar Das*, Ph.D. (TU)
Programme: M.A. Sociology

Programme Coordinators
Esther Daimari, M.A. (GU), Ph.D. (GU), M. Phil. (GU)
Programme: M.A. English

Programme Coordinators
Runumi Das*, Ph.D. (GU)
Programme: Diploma in Human Resource Management

<table>
<tr><td>

Programme Coordinators
Dipak Nath, Ph.D. (GU)
Programme: Diploma in Environmental and Disaster Management

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Programme Coordinators
Nirmali Gogoi*, Ph.D. (DU)
Programme: Diploma in Environmental and Disaster Management

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<tr><td>

Programme Coordinators
Subhragshu Dhar, Ph.D. (Visva– Bharati, W.B).
Programme: Diploma in Child Rights and Governance

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Administrative Officer
Mr. Partha Pratim Kalita, MBA (TU)
(Assistant Registrar)

</td></tr>
</table>

*Recognized Ph.D. Supervisor

ACRONYMS

IITG	: Indian Institute of Technology Guwahati,
TU	: Tezpur University,
DU	: Dibrugarh University,
JNU	: Jawaharlal Neheru University New Delhi,
GU	: Gauhati University

Academic Session

The academic Session for the programmes under Distance Education commence twice a year usually in January and July, respectively. All the programmes under the Centre of Distance and Online Education (CDOE) may not be offered in each of the sessions.

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 niversity:

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	
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 Governance	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

Centre for Inclusive Development

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, etc.

The centre also offers academic programmes with the objective of making meaningful contributions to the society by developing professional human resource in relevant areas. At present, the thrust area of academic programme is Child Rights and Governance. The current programme is designed in consonance with the belief that the University as an institution of higher education must endeavor to protect and strengthen the lives of our future citizens, i.e., the children. The centre also envisions to engage with the issues pertaining to development of the marginalized section of the society, particularly in the northeastern India, in future.

Programmes offered

1. P.G. Diploma in Child Rights and Governance in partnership with UNICEF (Conventional Mode; kept in abeyance)
2. P.G. Diploma in Child Rights and Governance (Distance Mode)

Faculty and Areas of Interest

Director
Rajeev K. Doley, Ph.D. (IITG)
English, Sociolinguistics

Visiting Faculty
Subhrangshu Dhar, Ph.D. (VB)
Child Rights, Human Rights

Visiting Faculty
Krishna Moni Bordoloi, LL.M. (DU)
Child Rights, Human Rights, International Law

Acronyms

IITG : Indian Institute of Technology Guwahati,
VB : Vivsa- Bharatai 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.

Courses offered in P.G. Diploma in Child Rights and Governance (conventional Mode/ Distance Mode)

Total Credits : **40**; Open Elective (Optional) : **3**

First Semester

Course Code	Course Title	Cr.
CG 401	Understanding Childhood	4
CG 402	Child Rights as Human Rights- Paper I	4
CG 403	Vulnerabilities of Children in Northeast	4
CG 404	Field Work/ Observational Field Visit	4
CG 405	Communication Skills (English)	4

Second   Semester

Course Code	Course Title	Cr.
CG 406	Social Policies for Children	4
CG 407	Child Rights as Human Rights- Paper II	4
CG 408	Governance and Child Rights	4
CG 409	Research in Child Rights	4
CG 410	Research Project/Dissertation	4
	Open Elective (optional)	3

For more information one can visit the departmental 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 started 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.

Centre For Multidisciplinary Research
(Year of Establishment: 2020)

The centre for Multidisciplinary Research was established in the year 2020 with a group of researchers to take up research activities of multidisciplinary nature. The centre emphasizes to take up research activities in challenging areas such as human health, societal issues, tradition and knowledge system, regional as well as indigenous issues adopting both holistic as well as reductionist approaches. The centre has started Ph.D. programme in multidisciplinary research from 2021. Some of the areas of multidisciplinary nature are as follows:

- Technology innovation for sustainable development
- Rural technologies for drinking water
- Traditional foods and beverages
- Traditional knowledge and health
- Yoga, food and human biochemistry
- Culture, health and society
- Nutrition and health
- Meditation and positive thinking
- Neuronal plasticity
- Medicines from plants and microbes
- Molecular evolution, infectious diseases and life style
- Religion and modernity; Asian Modernity
- Language, Literature and Script of Assam
- Women and history of science
- Gender equity and educational development in Assam

Programmes Offered

Ph.D. in Multidisciplinary Research

Facilities

The centre has a well-equipped classroom, computer facilities with internet connection. The centre also has a seminar hall to facilitate student activities such as seminars, workshops, group discussions, etc

Director
Ramesh Chandra Deka, PhD
Professor, Department of Chemical Sciences
Email: ramesh@tezu.ernet.in

Contact

Center for Multidisciplinary Research
Tezpur University, Napaam
Tezpur, Sonitpur
Assam, 784028, INDIA.
Email: cmdr@tezu.ernet.in

Structure of PhD Coursework

Minimum credit requirement : **16**

Course Code	Tittle	Credit Structure & Course Type				
MR 701	Research Methodology	L	P	T	Cr.	CT
MR 702	Literature Review	4	0	0	4	C
MR 703	Philosophy of Research	4	0	0	4	C
MR 704	History of Science	3	0	0	3	E
MR 705	Reductionist and Holistic Approaches to Life and Research	3	0	0	3	E
RP 799	Research and Publication Ethics	2	0	0	2	C

(L=Lecture, P=Practical, T=Tutorial, Cr= Credit, CT=Course Type, C=Core, E=Elective)

Chandraprabha Saikiani Centre For Women Studies
(Year of Establishment: 2009)

Chandraprabha 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 Chandraprabha 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.

Programme offered

1.   P.G. Diploma in Women Studies
2.   Ph.D.

Research Activities

No. of papers published in the year 2017– 2018: **9**
No. of current Ph. D. scholars   : **3**

Faculty and Areas of Interest

Associate Professor & Head
Madhurima Goswami *,   Ph.D. (TU)
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

Book

Goswami, Madhurima (2020) ed. Chandraprabha Saikiani: A Force in History.DVS publication, Guwahati. ISBN:9789385839-31-3

Project

Indian Council of Historical Research funded a project grant for the study entitled "Lives of the Ritual Priestesses of Assam: A Study with Special Reference to the Institution of Doudini in the Bodo Society" for a period of two years (2021-2023).

Chapters in Book:

○ Goswami, Madhurima and Mahanta, Mousumi (2020), Globalization as a Threat: Narratives of Women Weavers. Women and Urbanity: Cultural Memory of North-East India edited by Mandakini Barua, published by Tezpur University, Napaam

○ Mahanta, Mousumi (2019) Political Violence: It's Impact on Women's Mental Health in India. Gender, Law and Health: International Perspectives, edited by Sita Vanka and Rekha Pande, Rawat Publication: New Delhi, 153-160

○ Boro, Sonali. (2019) Political mobilization of Women: A case Study of Tezpur Mahila Samiti, Civil Society in Changing India: Emerging Roles, Relationship and Strategies edited by Dipok Goswami. 978-0-596-80552-4

Courses offered in P.G. Diploma in Women Studies

First Semester

Course Code	Course Title	Cr.
WS 103	Women's Movement in India	4
WS 104	Introducing Women's Studies	4
WS 105	Women in Media	4
WS 106	Women and Health	4

Second Semester

Course Code	Course Title	Cr.
WS 107	Women's Studies and Research Methodology	4
WS 108	Women and Law	3
WS 109	Women and Development	3
WS 110	Project Work/Dissertation	6

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

DBT Nodal Cell

Cell was set up in Tezpur University in 2009 with the main objective of creating a healthy research environment in Northeastern region, by bringing together physicians & scientists on a common platform to develop multidisciplinary research programs on diseases and ailments common to the region.

ONGC-Center For Petroleum Biotechnology

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.

Sophisticated Analytical Instrumentation Centre (SAIC)

Instrumental methods of analysis form an indispensable aspect of Research and Development. Tezpur University has several departments and centers 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 equipments, 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 equipments like XPS, HR-MS, Confocal Microscope etc. in future.

Teaching Learning Centre
(Year of Establishment: 2016)

The Teaching Learning Centre (TLC), 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 (PMMMNMTT) scheme. The scheme is funded by Department of Higher Education, Ministry of Education (Formerly MHRD), GoI. 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.

Among the objectives of the TLC are:

- To organize workshops and seminars to facilitate capacity building and professional development of teachers.
- To provide assistance 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.

The target group of TLC, Tezpur University are College and University Level Teachers and 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 Professor
Swapnarani Bora, Ph.D. (DU)
Folklore, Sociolinguistics, Assamese Studies

Assistant Professor
Ikbal Hussain Ahmed, M.Phil. (DU*)
Evolutionary Ethics, Environmental Ethics, Symbolic Logic, Philosophy of Education

Acronyms:

TU   : Tezpur University,
DU   : Dibrugarh University,
DU*   : Delhi University,
GU   : Gauhati University

Major facility

1. One ICT Lab.
2. Lecture Recording and Resource generation

Teachers trained: **5000**

Major Achievements

TLC, TU has conducted till now 84 programs and trained more than 5000 teachers and prospective teachers. Through these programs TLC has been providing assistance and support for promoting best practices in teaching learning environment among higher education communities.

Main 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 e-content (video) developed : **93**

Technology Enabling Centre

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.

Internal Quality Assurance Cell (IQAC)

The Tezpur University Internal Quality Assurance Cell (TU IQAC) is engaged in a series of activities required to foster the spirit of quality among the members of the University community. The IQAC also prepares the template of applications for promotion of faculty members under CAS as per norms specified by the UGC. Further, as per the mandatory requirement of National Assessment and Accreditation Council (NAAC), IQAC prepares the Annual Quality Assurance Report (AQAR) on the basis of the inputs received from all the Departments/Centres/Cells/ Offices of the University.

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 patents, 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 Northeastern 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 focus 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 is a matter of pride that young researchers from our University have received the Gandhian Young Technological Innovation (GYTI) Awards for 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 with 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 a numerous skill development, faculty development, 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 workshop annually in the campus for the benefit of students and researchers. Recently, during 21st March, 2022, the Cell organized an advanced training programme for senior police officials of Assam Police in Police Training Centre, Dergaon.

During the years, the cell has kept the thrust on low number of "Authorised Users" for GIs of Assam. It has conducted many brainstorming and industry-academia conclaves to provide solutions to technological demands through deliberations to various sectors. With the continuous support from the University, the Cell has provided technical support and facilitated registration process of more than 400 registered GI users from the state.

IP Profile of Tezpur University Intellectual Property Rights Cell

Particular	Status	Total
Patents	Applied	38
	Published	41
	Granted	19
Copyrights		3
Design		2

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

Graduate in Demand

Organization like Oil India, BCPL, Power Grid Corporation of India Ltd, NEDFI , Amazon, Tata Consultancy Services , ITC Infotech, Infosys, Alstom, Wipro, Accenture, Capgemini, Cognizant Technologies, Bharti Airtel Ltd, Hindustan Unilever, Velocity, Siemens Technology and Services, Landmark Group, MRF Limited, Perfetti Van Melle India, UDAAN, Adfactors PR, Cactus Communications, Software AG, KEC International, Maventic , Imeg, Aurigene Discovery Technologies, Accolite Digital, Synopsys, Netenrich Technologies, Antares Tech, WazirX, Tech Variable, Allegion, Brainayan, 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.

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.
- ○ Technical Trainings on IOT, Python, CATIA , STAADPRO, SAP2000, MATLAB, AutoCAD, 'C',JAVA, ETabs and Verilog etc.
- ○ 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 is one of the sources of internship and final placement opportunities for the students. Some of the alumni brings their respective organisations for campus placement, share off campus opportunities for the students and also guide them to get lucrative jobs and develop an illustrious career. The Alumni Association and the Alumni Cell use to organize alumni career guidance programme to groom our present batch students.

Research And Development Cell

The office of the Dean, R&D facilitates the implementation and smooth creation of extramural research projects funded by the various Government and non-Government funding Agencies like UGC, Ministry of Education (Formerly MHRD), DST, DBT, MeitY, AICTE, DAE, DRDO, DRL, ISRO, ICMR, ICAR, ICHR, DHR, NEC, ICSSR, IUAC, CSIR, INSA, UNICEF, Ministry of Food Processing Industries, MNRE, ONGC, NRL and others. In addition to management of extramural research projects, UGC-BSR start up grants, sanction to individual PI, this office also manages the Departmental and institutional research project such as UGC-SAP and DST-FIST. Dean R&D also conducts the Tezpur University Ethical Committee, Tezpur University Animal Ethical Committee and Tezpur University Biosafety Committee.

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 etc. The projects implemented through the Research and Development have augmented the research skills of the project staff and have created trained manpower to cater to the need of the society.

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.

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 indigeneously 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.

Dr. Ambedkar Chair

Dr. Ambedkar Chair, Tezpur University was established by Dr. Ambedkar Foundation, Ministry of Social Justice and Empowerment, New Delhi in the year 2016, to serve as core centre for North East India furthering ideas and philosophy of Dr. B.R. Ambedkar and emancipation of the disadvantaged sections. The thrust area of the Chair is to conduct research on issues related to disadvantaged communities in the context of North East India with particular emphasis on their marginalisation, development and participation. The Chair was set up with the objectives of Teaching and research, Building a library, Conducting research projects, Organising public lectures and, Conducting awareness and skill development programmes

Annexure 1: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-INo. 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) 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.

vii) 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 Par-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 of .... state. 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:…………………………   District Magistrate/Deputy Commissioner/Competent Authority
                                                                                          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 Stipen- diary 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.

   iii) Revenue Officer not below the rank of Tehsil darand

   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 from ……………………. as 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: Signature ....

Place: Name ....

                                                              Official Seal of the employer

1.   Verified by:
     Signature………………….Date…………………… Name:………………………………….Designation…………………

2. Recommended/Not Recommended

     Signature: …………………………… Name: ……………………………………..

     Chairperson, Selection Committee/Head, Department of …………………………..
      Date…………………………………………………

(In letter head of the employer)

Format for No Objection Certificate (for other than Ph.D. programme)

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   Signature of Officer
Date   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 of ………………………………permanent resident of ………………Village/Street …………………………Post Office   District …………………………in 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)

Signature with Seal of Office   Name_

Designation

Recent Passport size attested photograph of the applicant

*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
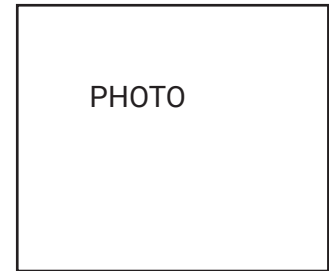***Note 3: The property held by a "Family" in different locations or different places/cities have been clubbed while applying the land or property holding test to deter- mine EWS status.

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. ……………..

PHOTO

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

Annexure 2: Important Contacts for any Query related to Admission

For any query related to the admission to an Academic Programme in 2022, the concerned Department/Centre may be contacted on the following contact number/E-mail ID:

Department/Office	Mobile Number** (HoD)	E-mail ID
Applied Sciences	8876531540	rhaloi@tezu.ernet.in
Business Administration	9435080776	hod_ba@tezu.ernet.in
Centre for Assamese Studies	8486776391	hod_assamese@tezu.ernet.in
Centre for Inclusive Development	9954449475	rkdoley@tezu.ernet.in
Center for Distance and Online Education	9954449475	cdoe@tezu.ernet.in
Chandraprabha Saikiani Centre for Women Studies	9476677622	hodwsc@tezu.ernet.in
Chemical Sciences	9435380377	hod_chem@tezu.ernet.in
Civil Engineering	9864060200	hod_civil@tezu.ernet.in
Commerce	9434030244	hod_com@tezu.ernet.in
Computer Science and Engineering	9435084063	hod_cse@tezu.ernet.in
Cultural Studies	9435381337	hod_cul@tezu.ernet.in
Design	8135823686	hod_design@tezu.ernet.in
Education	70762-96461	hod_edu@tezu.ernet.in
Electrical Engineering	9864182681	hod_ee@tezu.ernet.in
Electronics and Communication Engineering	8876342920	hod_ece@tezu.ernet.in
Energy	9435508563	hod_ene@tezu.ernet.in
English and Foreign Languages	9435082113	hod_fl@tezu.ernet.in
Environmental Science	9854035039	hod_env@tezu.ernet.in
Food Engineering and Technology	9864362377	nandan@tezu.ernet.in
Hindi	94353-84799	hod_hin@tezu.ernet.in
Law	9957777781	hod_law@tezu.ernet.in
Mass Communication and Journalism	9435749345	hod_mcj@tezu.ernet.in
Mathematical Sciences	9435180666	hod_ms@tezu.ernet.in
Mechanical Engineering	9435471300	hod_mech@tezu.ernet.in
Molecular Biology and Biotechnology	9435507394	hod_mbbt@tezu.ernet.in
Physics	9706980913	hod_phy@tezu.ernet.in
Social Work	9435144482	hod_sw@tezu.ernet.in
Sociology	9435711002	rdeka@tezu.ernet.in
Teaching and Learning Centre	9435080384	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 3: Frequently Asked Questions

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. Sufficient number of 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 2022 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 tuee2021@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 tuee2022@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 2022

Tezpur University

（A central University）

Prospectus

Autumn 2022

For any enquiry

🌐 www.tezu.ernet.in

✉ admin@tezu.ernet.in

📞 +91-3712-273332

📍 Tezpur University, Sonitpur, PO: Napaam, Assam - 784028