



TEZPUR UNIVERSITY

PROSPECTUS AUTUMN 2021

2021





Kalia Bhomora Bridge over the Brahmaputra River



<https://www.facebook.com/TezpurUniversity/>



<https://www.twitter.com/TezpurUniv/>



<https://www.youtube.com/c/TezpurUniversity94>

Edited by: Members of TUEE 2021

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Tezpur University
ADMISSION POLICY- 2021

Tezpur University shall follow this Admission Policy for *selection of students* into different programmes offered by it for the Academic Year 2021-22. The programmes include: **Ph.D., M.Tech., M.Sc., M.A., Integrated Programmes, B.Tech., B.Ed., PG Diploma and Certificate** programmes. The detailed program list along with the number of intake is available in the *Prospectus*. The University shall follow the Govt. of India reservation policy while preparing the merit list for admission. It is to be noted that admission to MBA (full-time), MBA (Executive) and M. Des. Programmes are already completed.

- 1. Ph.D. Programmes:** Candidates will be selected based on (i) Performance in qualifying examination and past academic performance, (ii) *Statement of Purpose* (SOP), embedded with a set of questions and (iii) Personal Interview (PI) in online mode. 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. M.Tech. Programmes:**
 - (a) Non-GATE Candidates-** Candidates will be selected based on (i) Personal Interview, (ii) Academic performance in qualifying examinations and (iii) other performances (such as research publication, research experience, and past academic performance).
 - (b) GATE Candidates-** Candidates will be selected based on valid GATE score in eligible discipline. Detail seat matrix for GATE and Non-GATE candidates is available in the *Prospectus*.
- 3. M.A./M.Sc./Other PG Programmes (LLM, MTTM, MSW, MCA and M. Com):** Candidates will be selected based on (i) Personal Interview, (ii) academic performance in qualifying examinations and (iii) Marks from 10+2 Board Examinations. *(In case final examination is not complete, previous semesters' marksheets must be submitted. However, candidates should clear all subjects up-to the pre-final semester in case of semester-based system or pre-final year in case of year-based system).*

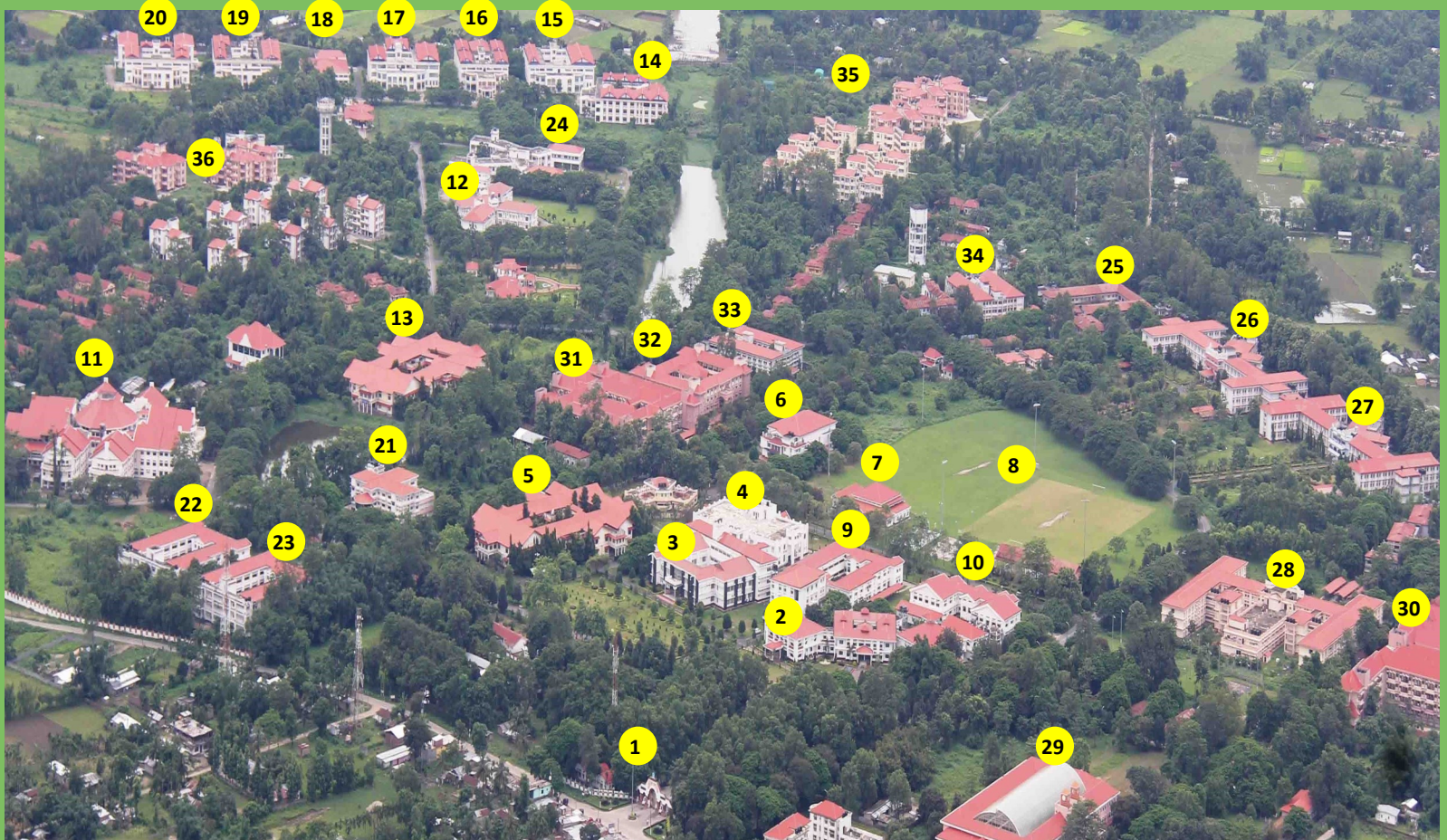
** There shall be no Personal Interview for M.Sc. in Mathematics. Admission to M.Sc. in MBBT will be based on valid GAT-B score.*
- 4. Integrated Programmes:** Candidates will be selected based on (i) academic performance in 10+2 and (ii) class 10 Board Examinations.
- 5. B.Tech. :** Candidates will be selected for admission to B. Tech. programmes based on All India Rank (CRL) of JEE (Main) conducted by the NTA. Counseling and Admission will be done against NE quota seats as well as for All India open seats through B.Tech. Screening and Selection Committee (BSSC) of the University and CSAB, respectively. Candidates for admission to the B.Tech. (lateral entry) programmes will be selected based on (1) Personal Interview and (2) Academic Performance.
- 6. B.Ed.:** Candidates will be selected based on (i) Personal Interview, (ii) academic performance in qualifying examinations and (iii) Marks from 10+2 Board Examinations.
- 7. PG Diploma and Certificate Programmes:** Candidates will be selected based on (i) academic performance in qualifying examinations and (ii) past academic performance. *(In case final examination is not complete, marksheet of the pre-final examination must be submitted.)*

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Aerial View



- 1. Main Entrance
- 5. Academic Building-II
- 9. Dept. of Chemical Sciences
- 13. Academic Building-I
- 17. Dept. of ME
- 21. Dept. of MCJ
- 25. Dhansiri Women's Hostel
- 29. KV school 4
- 33. Subansiri Women's Hostel

- 2. Administrative Block
- 6. KBR Auditorium
- 10. Dept. of Energy
- 14. Dept. of ECE
- 18. Central Workshop
- 22. Dept. of MBBT
- 26. Kanchanjunga Men's Hostel
- 30. SCVR Men's Hostel
- 34. Pragjyotika Women's Hostel

- 3. Central Library
- 7. Students' Activity Centre
- 11. School of HSS
- 15. Dept. of CSE
- 19. Dept. of FET
- 23. Dept. of EVS
- 27. Nilachal Men's Hostel
- 31. PMC Women's Hostel
- 35. RCC B-Type Qrts.

- 4. SAIC
- 8. Play Ground
- 12. Guest House
- 16. Dean's Building
- 20. Dept. of CE
- 24. Dept. of MBA
- 28. Patkai Men's Hostel
- 32. Kopili Women's Hostel
- 36. RCC C-Type Qrts.

Major buildings are highlighted

What to do if you are interested in

- The application form will be available through online mode ONLY.
- The online application is starting from **06/07/2021**
- Click here for admission details - www.tezuadmissions.in
- No candidates will receive any application form by post or courier.
- Login to Fill/Submit/View Application form at www.tezuadmissions.in
- User login id and password are required to access TUEE candidate login 2021.
- Before filling the application form, candidates must also go through the *eligibility norms* for each academic programme online in the prospectus to check if they are eligible or not.
- Candidates will be able to apply for a maximum of *three programmes* in some *selected* programmes in the same application form.

Useful Contacts:

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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 73 academic programmes (UG, PG, Ph.D., Certificate & Diploma programmes) through 26 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 facility, which currently houses a number of sophisticated instruments. The Central Library with its LybSys software, serves as the hub of information services apart from being a knowledge center with more than 1,10,342 documents comprising books, theses, journals/e-journals, conference proceedings, CDs, etc. along with latest academic related softwares.

The University at present boasts of 27 foreign students from different countries such as Sri Lanka, Thailand, Ethiopia, Palestine, Botswana, and Sierra Leone amongst others. 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 is 56:44. The University attracts a number of students from North-eastern states as well as from other parts of the country, making the campus a hub of mosaic and multicultural society.

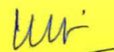
The University takes special care to cultivate the minds of the students through various co-curricular activities. The talent & quality of the students can be gauged from the fact that the University students have for three consecutive years (2017-19) have been awarded the prestigious Gandhian Young Technological Innovation (GYTI) Awards 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 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 Award in research category in 2017 & 18. Three faculty members are already Fellows of the Royal Society of Chemistry (FRSC).

Our system is designed to meet the aspiration 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. April 21, 2021


(V. K. Jain)
Vice - Chancellor

Map of Tezpur University





SECTION I GENERAL INFORMATION



তেজপুৰ বিশ্ববিদ্যালয়
অষ্টাদশ সম্মানৰ্জন সমাবেশ

तेजपुर विश्वविद्यालय
अठ्ठादहवा दीक्षांत समारोह

Tezpur University
XVIII Convocation



Prime Minister Narendra Modi's Address as Chief Guest

22 January 2021





Welcome to 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 a number of 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 a number of 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.

Welcome to Tezpur University

Cosmopolitan Community

At present approximately 4129 students are on the campus comprising of Male (58.5 %) and Female (41.5 %). We have diverse students' groups from all corners of India from states like Bihar, Maharashtra, J&K, Jharkhand, Uttar Pradesh, Uttaranchal, West Bengal. We have maximum number of students from the state of Assam belonging to different ethnic and indigenous groups.

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

Wide Choice of Courses

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. Each academic programme of the University is comprised of a set of Courses, some of which are core and others are elective. Flexibility exists for students to opt for elective Courses on their own choices from a pool. Students are also required to register for some inter-disciplinary Courses as open elective under the Choice Based Credit System. The Courses across the Departments are designed in such a way that multiple teaching pedagogies can be incorporated in delivering the contents of a Course.

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.

To relate theoretical knowledge to the practical field, proper measures are taken to conduct case studies and guided field works from real life problems. Group Discussion is also used as a teaching pedagogy to increase the analytical capability and creativity of the students.

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 and Cultural Studies with the University of Nottingham, UK.
- 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)



More than a Degree

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 for three consecutive years (2017-19) have been awarded the prestigious Gandhian Young Technological Innovation (GYTI) Awards for their innovative ideas.

The University has also made its mark in co-curricular activities. 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, New Delhi during 11-15th Nov 2019 Tezpur University achieved 1st position in Quiz and Western Vocal Solo, 2nd in Classical Vocal Solo – Folk Orchestra – Western Group Song, 3rd in One act Play and Mehendi competition. Best Music Team etc.

In the 34th Inter University East Zone Youth Festival held at Lalit Narayan Mithila University in January 2019, Tezpur University achieved 1st position in Quiz and Folk Orchestra respectively. The Folk Orchestra team of the University was invited to participate in 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 a number of AIU National and Zonal Sports meets some of them are Inter Zonal Archery Tournament, East Zone Basketball, East Zone Badminton, East Zone Cricket etc. One student of Tezpur University also represented Assam in 40th Junior National Archery. An alumnus also got selected for the Assam Cricket Team under 23. Our students also won 29 medals in the 36th Annual Meet 2019 organized by Sonitpur District Bodybuilding Association.

Students Publication

- Annual magazine (**Srijan**: An annual multi-lingual magazine) with articles written in English, Assamese, Hindi etc.
- A science and society-based publication under the aegis '**InSciIgnis**' is brought out every year and edited by a committee of students during National Science Day Celebration.
- A Souvenir for **Tech-Xetra** is published on the occasion of its annual Technological festival organised by SoE
- A Souvenir for **Sampark** is released on the occasion of business Academia interaction.
- Hostels and Departments bring out their own Wall Magazines every year during the University Annual Meet



Studying at Tezpur University

Culture on Campus

The campus has a vibrant culture. It emanates from the healthy male female ratio, which currently is 56:44. Further, the University attracts a number of students from North Eastern states. Currently, approximately 15% students belong to other than NE states in the campus, making the campus a hub of mosaic and multicultural society. The University is also able to attract International students during last few years.

Safe and Sustainable

The 262-Acre campus of the University is located in a safe & 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 MW-scale Solar Power Plant in the entire North Eastern Region

Student Satisfaction

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

The ICC at Tezpur University actively organized sensitization programme for Officers, non-teaching staff, faculty members, security staff, local vendors, students etc. An Orientation programme is also organized every year for the newly admitted students to sensitize them on prevention, prohibition and redressal of Sexual Harassment and the role of ICC. The committee

has nominated members from all the Departments/ Centres.

Quality Assurance

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) based on the inputs received from all the Departments/Centres/Cells/ Offices of the University.

Tezpur University Media

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.



Academic Information

Curricula

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 of a Course.

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 a number of 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 based on these assessments.

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

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 below:

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.

Important Academic Rules

Course Registration

A student needs to register for some courses/ research work(s) in each semester through a 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 Requirement

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.

Important Rules

- During studentship of the University, students are governed by the disciplinary rules of the University, on and off the campus.
- Motorized vehicles by students are not allowed in the campus. Students are advised to avoid vehicles, rather may use bicycles.
- Consumption or possession of any kind of alcoholic beverages/items 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 University/hostels' common events, like celebrations, competitions are subject to their willingness and is not mandatory



Study Abroad

World-class partners: The University has tied up with a number of top rated educational/ research institutions as well as with industry by signing no. of 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

Ranking and Achievement

The University participates in the noted global rankings such as Times Higher Education (THE) University Rankings, QS Rankings and NIRF rankings. The University featured in the World's top 20 Best Small Universities in 2018 by the Times Higher Education. Some of the notable achievements of the University is given below:

Major Awards/Accolades for the 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
- Times Higher Education (THE) World's top 20 Best Small Universities 2018: 20
- Visitor's Award in —Research category: 2017, 2018.
- MHRD NIRF Ranking: 2016: 5, 2017- 48 (Overall), 30 (Amongst Universities), 2018- 46 (Overall), 29 (Amongst Universities), 2019- 48 (Overall), 29 (Amongst Universities), 2020- 65 (Overall), 39 (Amongst Universities), Times Higher Education World Young University Rankings, 2020-251–300
- Visitor's Best University in 2016
- NAAC Accreditation-A Grade
- THE Asia University Rankings-TU Ranked 4th in India in "Research" category
- Fellow of the Royal Society of Chemistry (FRSC): 3 (last 2 years)
- INSA Teachers Award: 2016, 2017 & 2018
- 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 list of the world's top 2% scientists in 2020



Tezpur Life

Introducing Tezpur

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

Getting Around

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.

To reach Tezpur University, University Bus Services are available from Tezpur ASTC Bus Station, Tezpur via Dolabari 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

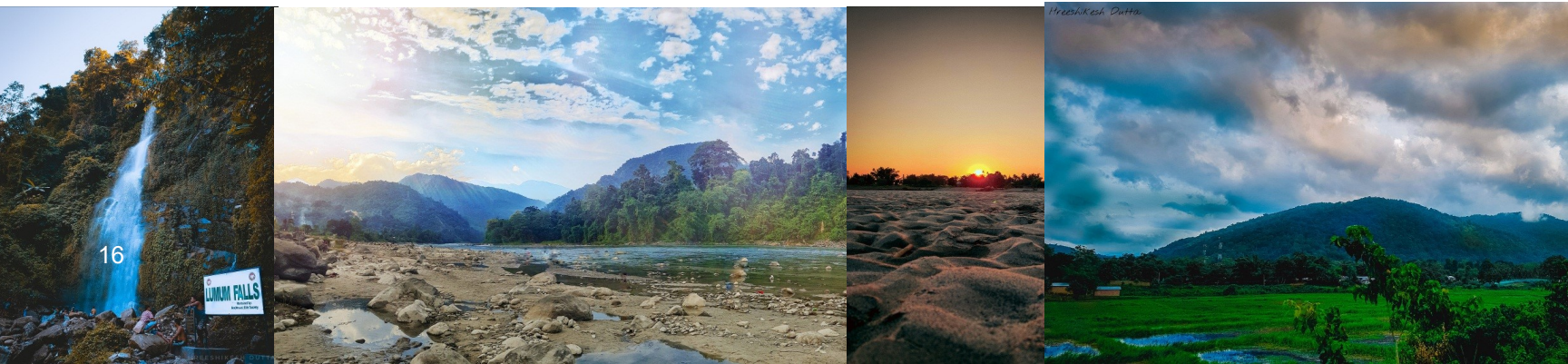
By Rail: Tezpur is connected with Kamakhya Junction railway station by a broad-gauge line from the new Dekargaon Railway Station via Rangapara and Rangia Railway Junction.

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.

Shopping

One of the most popular shopping destinations is Chowk Bazaar on MC Road in the heart of Tezpur town. It has many showrooms and dealers that provides a wide range of clothing and other household essentials like Vishal and pantaloons. It also has a traditional fish and vegetable market. One will find a wide range of traditional handwoven Assamese silks and gifting material in this market. Shop for traditional handicrafts, in particular cane and bamboo household articles and musical instruments, bellmetal utensils like the *xorai* traditionally used for offering *betel-nut* and *paan* to distinguished guests, and of course both silk and cotton handlooms for which Assam is so famous.

Other traditional crafts include clay, pith, wooden, bamboo and cloth toys, pottery, woodcraft, masks and gold jewellery.



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 imprisoned inside the palace which was surrounded by a wall of fire. The palace gives a panoramic view of the Great 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.

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.

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 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.

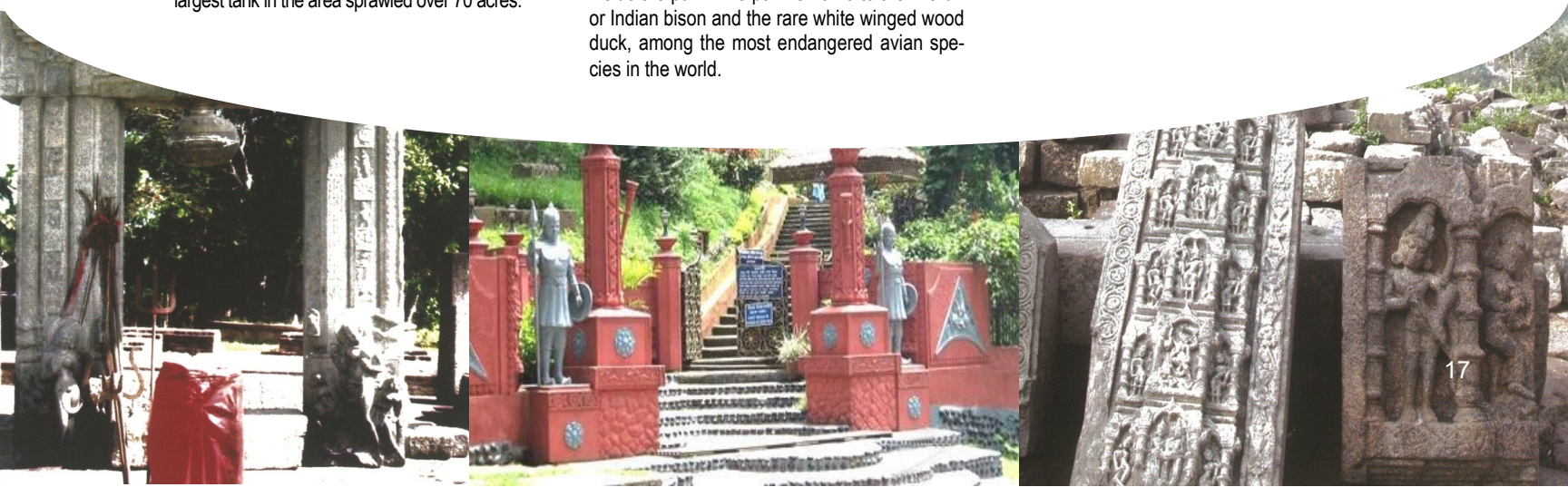
Nameri National Park: Near the Jia Bhoroli River, the Nameri National Park sprawls over from Assam to Arunachal Pradesh. As in Kaziranga, the best way to travel within the Park is atop elephants. There are no roads inside the park. The park is home to the mithun or Indian bison and the rare white winged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

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

Bhomoraguri: A mammoth stone inscription made by the Ahom General Kalia Bhomora Phukan, who planned to construct a bridge over 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.



Historical Places (continued)



Eating Out

Fast Food

There are many pockets friendly fast-food chain and cafeteria to grab a quick bite in and around Tezpur Town. 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, KFC.

Restaurants

Tezpur has a wide range of restaurant 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, The Fern Residency

Cinema

There are three good cinemas in and around Tezpur town which has become the hub for cinemagoers, Anwar VRS Cinema 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.



Students' Life

Student Activities

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

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 competitions 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 Week 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.

TechXetra

TechXetra is the annual technical festival organized by the initiative of students belonging to School of Engineering. It is a national level event where students from different educational institutes participate in different competitions, seminars, workshop etc. Reputed personalities are invited to the *TechXetra* event.

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 Na-

tional Science Day, it is one of the largest science-fest of the North-Eastern 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.

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 organise photographic exhibition and competitions in the University. Trekking to mountain 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 of the University. Astronomy club encourages the students to study and observed major astrophysical phenomena. Students with interest in Quiz form *Adda Quiz Club* and organize quiz competition regularly. There is also an active Yoga Centre under the mentorship of a faculty member to cater the need of the Students.



Students' Life (continued)

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. Tezpur University also has **CRY** (Child Rights and You) 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.

NCC

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

NSS

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

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 Jayantee, Yoga day, Birthday of Sri Atal Bihari Bajpayee, Anniversary of Sardar Ballabh Bhai Patel, Ambedkar Jayantee, Remembrance Day of Dr Bhupendra Hazarika, Rabha Divas, Shilpi Divas, National Unity Day, National Education Day, International Yoga Day etc.

Tezpur University Student 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 through secret ballots.

Students' Activity Centre

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.

Student Societies

SAE (SOCIETY OF AUTOMATIVE ENGINEERS)

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 North East region.

Tezpur University Robotics Society (TURS)

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

UNIFEST

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

Annual Meet

Held every year in January, the Annual Meet comprises Inter-hostel sports, quiz and various other cultural and literary events.



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 University also has a married research scholar's hostel with a capacity of accommodating more than 36 2BHK apartments to accommodate married scholars with family and visiting faculty members. However, hostel seats will be allotted on merit basis as per availability. All hostels are well furnished and 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
- Music system
- Washing Machine
- 24 hours water supply
- Common Rooms
- Modern Kitchen equipment and Dining Hall
- Cycle Stand
- Special filters and water coolers for drinking water Solar Water Heating System at one Men Hostel (Nilachal Men's Hostel) and three Women hostels (Pragjyotika Women's Hostel, Bordoichila Women's Hostel & New Women's Hostel)

- Mini canteen
- Bio-gas plant (available at one Hostel i.e. Patkai Mens' Hostel).

TU hostel Life

Hostel life at TU provides the experience of home away from home for its boarders, from undergrads to research scholars. The hostel celebrates get-togethers, Senior's Farewell, local festivals and rituals. Apart from this, boarders participate in inter-hostel competitions such as the March-Past, choir competition, and more.

Hostels are installed with Wi-Fi network, coolers, indoor and outdoor sports, washing machines (with a handler), canteen in every hostel etc. The rooms are large enough for 2 people, and come equipped with attached wardrobes, shelves, tables and beds.. There are canteens in every hostel. A good strength of staff is also present in the hostel. Generally, rooms are two-seater with two beds, two wardrobes, two shelf, two tables, two chair, one fan, uninterrupted power supply and fine wifi work.

TU Accommodation

The hostel accommodation are multi-storied RCC buildings with well-maintained gardens. A wide range of single, double and triple seaters are available. 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. There is designated pantry facility in all the hostels.

The hostel mess are run by the students of the University. Regular maintenance work of the hostels is done periodically for proper upkeep of the hostels.

Admission

At the time of admission, the students are given the option to stay in the hostel or arrange their private accommodation. Since, it is a residential University, efforts are made to accommodate all the students in the hostels subject to availability of the seats.

Hostel Administration

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.

How to Apply

Admission to Hostel for a Student/Research Scholar is subject to the availability of seat and submission of duly filled in application as well as declaration signed by the Parent (s)/Guardian at the time of admission/ registration for a semester. At the time of admission, interested students should fill application for hostel application. Applying for hostel accommodation do not ensure admission to the hostel.



Student Accommodations (continued)

Support and Advice

Pre-arrival Support and Settling in

The University prepares a detailed academic calendar at the beginning of every academic year and all activities are carried out while strictly adhering to the same. A week-long orientation programmes for newly admitted students are conducted at the beginning of every academic year. The students are familiarized with the facilities and the scope which the University offers and made known the expectations bestowed upon them.

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

Students Involvement

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) Academic Council (Two) Students 'Disciplinary Committee (Two) Library Committee (One) Grievance Redressal Committee (Two) Anti-Ragging Committee (Fourteen)

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 counseling 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.

Students' with Disability Support

The University provides vehicles for differently-abled students to commute to their classes. The University has adopted the policy of at least 30% Multiple Choice Questions (MCQs) in different examinations for the benefit of differently abled students.

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.

Teaching and Learning Facilities

Library

The University has a Central Library with a rapidly increasing collection of books, periodicals, journals and e-resources. The Library is fully computerized with integrated library management software KOHA (Open Source Software) which is an integrated multi-user library management system that supports all its in-house operations and modernized with barcoding based automation system that facilitates check-in, check-out 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 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 IN-FLIBNET Centre and DelCon 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 in reading halls of Central Library and which is remain open throughout the year from 09.00 am to 01.00 am midnight. Library has also Digital Resource

Centre with 30 PCs for the users for e-resources browsing.

Total Collection of Central Library at present is as follows:

Sl. No.	Items	Qty.
1	Books	1,10,342
2	Journals	Print 216
		Online 10360
3	Online Databases	41
4	E-Books (Collected)	502
5	Back Volumes of Journals	9770
6	Theses	706
7	Master Dissertations	1485
8	CDs/DVDs	2653
9	Govt. Publications/Conference Proceedings	1025
10	VHS Cassettes	36
11	Newspapers	10
12	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. A number of sophisticated equipment, 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 North East 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, agar-bark 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.



Teaching and Learning Facilities (continued)

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

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 re-search projects, Organising public lectures and, Conducting awareness and skill development programmes

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 (PMMMNTT) scheme. The scheme is funded by Department of Higher Education, MHRD. 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.





Research and Development

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, MHRD, DST, DBT, DeitY, AICTE, DAE, DRDO, DRL, ISRO, ICMR, ICAR, IUAC CSIR, INSA, UNICEF, Ministry of Earth Science, Ministry of Food Processing Industries, MNRE, ONGC and others. In addition to management of extramural research projects sanction to individual PI, this office also manages the Departmental and institutional research projects such as UGC-SAP, UGC-BSR start up grants, DST-FIST and DBT funded schemes such as Establishment of Institutional Level Biotech Hub. Dean R&D also conducts the Tezpur University Ethical Committee, Tezpur University Animal Ethical Committee, Tezpur University Biosafety Committee, and Bioinformatics Infrastructure Facility meetings.

The office also facilitates consultancy projects of faculty as per the TU guidelines. In addition, the office also deals with various fellowship matters

Such as UGC-NET JRF, NFOBC, NFST, 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

Sophisticated Analytical Instrumentation Centre (SAIC)

Instrumental methods of analysis form an indispensable aspect of Research and Development. Tezpur University has a number of 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 north-east 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 of colleges.

The SAIC was established in 2010 with two equipment, namely, High-performance liquid chromatography (HPLC) and Gel permeation chromatography (GPC). Now thirty equipment including Transmission electron Microscope (TEM), Scanning Electron microscope (SEM), Single crystal XRD, Powder XRD, BET (Surface and Pore size) analyzer, Raman Spectrometer, Atomic absorption spectrometer (AAS), Nuclear magnetic resonance spectroscopy (NMR), Inductively Couple plasma optical Emission Spectrophotometer (ICP-OES) are under the umbrella of SAIC. The centre also focuses to install many sophisticated equipment like XPS, HR-MS, Confocal Microscope etc. in future.

Tezpur University Intellectual Property Rights Cell (TUIPR Cell) it was created 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. Several patent and copyright applications have been filed based on the innovations done in Tezpur University. The Cell has been involved in several IPR Awareness and implementation programmes in the University Campus and in the North East Region. The Cell is gradually building IPR consciousness in the Re-

Research and Development (continued)

gion, not only within the institutions but also among the different strata in the society.

The Ministry of Human Resource Development (MHRD), Government of India, awarded the prestigious MHRD IPR Chair to Tezpur University in 2010. The Chair has been set up to initiate and execute IPR capability development programmes in the North East Region. The TUIPR Cell also aims to offer assistance to grassroot innovators in the North East Region to realize the commercial benefits of their innovations.

The DBT Nodal Cell was set up in Tezpur University in 2009 with the main objective of creating a healthy research environment in North Eastern region, by bringing together physicians & scientists on a common platform to develop multidisciplinary research programs on diseases and ailments common to the region.

The ONGC-Center for Petroleum Biotechnology (ONGC-CPBT) at the Department of Molecular Biology and Biotechnology (MBBT) was established in 1999 with financial support from the Oil and Natural Gas Co-operation by entering a MOU. Finally, in 30th April 2010,

shaped into a permanent Centre. The goal of the centre is to conduct research in the field of petroleum biotechnology and develop skilled human resource.

The DBT funded-Bioinformatics Infrastructure Facility (BIF) at the Department of Molecular Biology and Biotechnology (MBBT), Tezpur University, was established 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 indigenously built PARAM Shavak having compute power of around 3TF each for high performance computing in Big Data Analytics. It is expected to meet the high-performance computing needs of researchers from all-over North-East India.

The DST-funded technology enabling centre (DST-TEC) is established at Tezpur University is established in the Year 2019. The objective of DST-TEC is 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.

TU Innovation

There is an active Innovation Club in the University. The Centre for Innovation, Incubation and Entrepreneurship has been established to encourage the students in innovation and creative works. There is an Exhibition Hall (TUNOVATION) which displays the innovations developed by the students and faculties of the University. The innovations are in the field of energy saving, food processing etc.

The 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.



Support and Facilities

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 Language 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

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 Under-graduate Programmes.

Residential Support

Buses and Transport

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, where as third one is close to the Samaroh Restaurant' in SOE block.

Punjab National Bank (PNB) Tezpur University Branch is located inside the University campus. But the ATM is outside the main gate of the University.

United Bank of India (UBI) Tezpur University Branch: It is located inside the University campus. But the ATM is 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.

Support and Facilities (continued)

Quarters

The University provides residential facilities to its teaching and non-teaching employees on 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. 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.

KBR

Kalaguru Bishnu Prasad Rabha (KBR), 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 that needs 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 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



Health Centre

The University has a Health Centre to provide health care services to students, faculty members, staff and their families with its own medical and paramedical staff. As of now the Health Centre has over 5000 beneficiaries including the people working at the University construction sites. It offers OPD services. One Medical Officer is always available for 24 hours on emergency duty. The cases requiring hospitalization are referred to the referral hospitals at Tezpur. Ambulance service is available round the clock. A stock of common medicines including lifesaving drugs are maintained and supplied free of cost. Routine laboratory investigations are also done free of cost.

Advanced equipment, such as Auto analyser (fully automatic), Hormone Analyser (Mini-Vidas), Ultrasound scanning, ECG and X-ray, required for laboratory investigations are made available at the Health Centre for the benefit of the University community. A set of appliances for person with disability are kept separately.

The University has engaged Specialists of different disciplines (Pediatrics, Obstetrics and Gynecology), who visit the Health Centre on different days of the week on regular basis for the benefit of the University community.

One Sonologist visits the Health Centre once a week for ultrasound scanning. One Physiotherapist visits twice a week for physiotherapy of differently abled students. Besides, annual health checkup for employees, fogging in the campus, pulse polio immunization camps and blood donation camps are organized in the campus as per the directive of the University/Government

All the students of the University are provided mediclaim coverage for their hospitalized expenditure. A nominal fee for payment of the premium is charged at the time of admission. The mediclaim policy for the students will be effective from the last week of August although the admission process begins quite early.



Sports

In order to facilitate sporting activities without hampering normal academic activities during daytime, the University provides evening sports facility with floodlit playgrounds for football, volleyball, tennis, basketball, etc., state-of-the art indoor stadium and gymnasium.

Sports

For the benefit of the students' the University has established good infrastructure and support system for Sports and Games. Some of the major facilities are -

- Two Football/cricket grounds (with flood light)
- Two Basketball courts
- Two Volleyball courts
- One Tennis court
- One Badminton court with night playing facility
- One indoor stadium

- A modern gymnasium
- Table Tennis Hall for two tables.
- One Archery Range.

Swimming Pool

State-of-the-art Swimming pool was constructed under a special scheme of UGC with a world class ambience and its use by the TU fraternity.

Gymnasium

The students also avail themselves of an excellent mini indoor stadium and also a world class gymnasium equipped with the most modern and state-of-the-art equipments.

- Sports with Friends
- Sports Centre Membership

Dedicated Sports Venue

The University's Sports Complex has modern facilities for sports like football, cricket, volleyball, lawn tennis, track and field events, basket-

ball and many more.

Sports section is accommodated in the Students Activity Centre building. Key facilities are as given below:

1. Playground (Football) : 01
2. 400 mtr. track cum cricket field : 01
3. Gymnasium : 01
4. Mini indoor stadium : 01
5. Basketball court : 02
6. Volleyball court : 03
7. Lawn Tennis (Hard court) : 01
8. Table Tennis Hall : 01
9. Swimming Pool (Olympic Standard) : 01
10. All hostels have badminton courts.
11. Table tennis boards are placed in every hostel.
12. Net practice facility for cricket.
13. Archery Range adjoining with playground.
14. Playgrounds and courts have night playing facility.
15. Mini indoor stadium has one badminton court with YY-Yonex synthetic badminton mat (made in Japan) 264 seating capacity.
16. Gymnasium has world class equipments (Weider, USA & Afton, Tywan products)



Employment Prospects

Placement at Tezpur

The Placement Cell plays a crucial role in locating job opportunities for Under-Graduates and Post-Graduates passing out from the Tezpur University by keeping in touch with reputed firms and industrial establishments. The Placement Cell operates round the year to facilitate contacts between organisations and students. The number of students placed through the campus interviews is continuously rising. On invitation, many reputed industries visit the institute to conduct interviews. We have been successful in maintaining our high placement statistics over the years. The recruiting organizations begins their recruitment process in September every year. Many organizations from the public sector, private sector and government sector have visited the University and recruited students from various disciplines/departments. It also arranges internship opportunities for students to get an exposure in the industries/ organizations.

Training & Placement Cell of Tezpur University invites companies from various fields in order to make opportunities available to all stream of students, in spite of the bleak job market in the country, many leading corporates recruited students from our campus. More than 90% of our Management students on campus. Some of our alumni have also taken initiative to bring their organisations for campus placement are placed. All the activities of the Cell are led by the team of Training and Placement office along with the faculty coordinators at department level and student Coordinators from different programmes. The campus recruitment process also act as a bridge between passing out students and the cell maintains a constant contact with its

students through Emails and WhatsApp groups and notify them about the companies that would be visiting.

Graduate in Demand

Organization like Oil India, BCPL, Power Grid Corporation of India Ltd, NEDFI ,Tata Consultancy Services , Infosys, Wipro, Tech Mahindra ,Britania Industries, Cognizant, Concept Education, Cummins India, ITC, Intel, Asian Paints, Berger Paints, Pantaloons, SBI Life , AMUL , DHL , HDFC Bank, Dalmia Cement, Colgate Palmolive, Zaloni Technologies, PRADAN, RBL Finserve, Cummins India, ICICI Bank, Mahindra Finance, Axis Bank, Cholaman-dalam Finance & Investment ,Bandhan Bank, Vivekananda Kendra Vidyalayas, Qua Qua Experiences, Zaloni, LOADSHARE, UTI AMC Ltd , Gandhi Fellowship-Piramal Foundation, Svatantra Microfin Pvt. Ltd., Federal Bank , MRF Tyres, Apollo Tyres, , GlaxoSmithKline, Blueberry Digital Labs, Schoogle, Crompton Greave Electrical Pvt Ltd, Azim Premji Foundation, Greenwood, Ramoji Film City, Sesta, ASOMI FINANCE, Montex Glass Fibre Industries , Arohan Finance ,Uflex, Mahindra & Mahindra, HDFC AMC ,UNICEF, Vimta Labs, Teach for India, E TV and many more conducted recruitment process for our University students.

Grooming

As a part of the pre-event capacity building exercise, the Training & Placement Cell of the University, organized capsule programmes to increase the employability of the targeted students, i.e., those who were in the last two semesters. Accordingly, the modules included focused and practice-oriented programmes on

communicative English, public speaking skills, interview-facing techniques, CV writing, corporate preparedness, corporate communication, and other related areas of soft skill. The Cell organises sessions on general soft skills, practice sessions on Group Discussion and mock interview and sessions on Discussion with Industrialist.

Organised Sessions

- Sessions on resume making, Mock GD and Interviews
- Personality and Success in Career, Corporate expectation about fresher, Corporate culture & etiquette sessions.
- Career Awareness Workshops by alumni working in various firms who were invited to share their experience and provide students an insight into the corporate world.
- Workshop on AutoCAD and CATIA / STAADPRO
- Awareness programme on various fellowships like Fulbright Fellowships for Indian Nationals, Graduate fellowships in the United States conducted by USIEF

Professional Accreditation

Tezpur University is recognized as a premier institution in the country that has proven its academic excellence, commitment towards diverse and relevant research subjects. We have been awarded accreditation from prestigious international and national accreditation bodies.

- The President of India awarded TU as the Best University in 2016.

Employment Prospects (continued)

- It has secured 5th rank among all the universities including technical institutes in India by NIRF for 2016
- It has NAAC ranking with A grade
- MHRD NIRF Ranking 2020: 65 (Overall), 39 (Amongst Universities).
- MHRD NIRF Ranking 2019: 48 (Overall), 29 (Amongst Universities).
- Times Higher Education (THE) Young University Rankings 2019: 101-150
- 2 Times Higher Education (THE) Asia University Rankings 2019:130
- 3 Times Higher Education (THE) World's top 20 Best Small Universities 2018: 20
- The QS (Quacquarelli Symonds) BRICS University Rankings 2019-146.

Working with Employers

The Placement Cell works closely with students and employers alike to ensure the right students are connected with the right companies. We also try to build 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 and also 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 to the students. Some of the alumnae brings their respective organisations for campus placements and some of them use to share the off campus opportunity details to students and also guide the students to get a good jobs. Alumni Association use to organize alumni career guidance programme to groom our present batch students.



International Students

International Office

The International Office of Tezpur University was established in February 2013. The International Office has since then been run by a part-time Director and a part-time Deputy Director. Over the years, the International 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 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, the majority of 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.

Entrance Requirements and Applications: Direct entry, self-financing foreign students, TUEE norms will apply.

Category of International /NRI

International /NRI students are categorized as follows:

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

Reservation of seats

5% of the supernumerary quota fixed for International students will be earmarked to the children of India working in the Gulf or South East Asia and other foreign nations.

For PG programmes

15% of the total seats for each PG programme except for MBA shall be made available for International/NRI students. These seats shall be additional to the readily available seats for a programme. However for MBA maximum number of seats for International/NRI students will be 5.

For Ph.D./Research programme

A maximum of 30 (thirty) International/NRI students in a year shall be admitted to Research/Ph.D. programme not exceeding two (2) in a department

How to Apply

Admission information

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.

Provisional admission form

The application for provisional admission is to be submitted to the IO 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 has to 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 International country, or
- b) High Commissioner of students country in India, or
- c) Ministry of Education in International country.

In case of Ph.D. course enclose 6 copies of the outline of the proposed research along with the application form.

- 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).

- The IO 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 University.

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 Admission 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. Studying at Tezpur University

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 Office does a certain amount of hand holding. The University had effective support systems for all its student, including foreign one

For more details: <http://www.tezu.ernet.in/io/notice/Rules%20for%20International-NRI%20students-revised-1.pdf>

For information related to International Office : <http://www.tezu.ernet.in/io/>



Finance

TEZPUR UNIVERSITY FEE STRUCTURE: 2021-2022

Particulars	B. Tech./ B. Tech. Lateral Entry	Chinese	Integrated M.Com/ Integrated MA/ Integrated B.A.B.Ed.	Integrated MSc/ Integrated B.Sc.B.Ed/ B.Voc	M.A./M. Com	MCA	M. A. in MCJ	M. Sc.	M. Tech./ M. Design	PG Diploma in Translation (HINDI)	MTTM/ P. G. Diploma in Women's Studies/ PG Diploma in Child Rights & Governance	Two year B.Ed.	Master of Laws (LLM)
Only once at the time of admission													
Registration	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
Convocation	1000.00	-	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
Training & Placement	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	-	500.00	500.00	500.00
Placement Brochure	-	-	-	-	-	-	1000.00	-	-	-	-	-	-
I Card	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Provisional certificate	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
TU Alumni Association	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00
Fees to be paid per semester													
Admission / Enrolment	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00
Tuition	15000.00	500.00	1000.00	3500.00	1000.00	6000.00	5000.00	3500.00	10000.00	1500.00	2000.00	2500.00	5000.00
Library	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	1050.00
Students' activity	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00
Medical	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00
Transport	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
Laboratory (including Computer usage)	550.00	-	550.00	550.00	550.00	1050.00	1050.00	1050.00	1050.00	550.00	550.00	550.00	550.00

Finance (continued)

Examination (Theoretical)	600.00	600.00	600.00	600.00	600.00	600.00	600.00	600.00	600.00	600.00	600.00	600.00	600.00
Examination (Practical/ Dissertation)	200.00	-	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
Grade Card	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Hostel Admission/ re- Admission	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00
Menial Charges	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00
Infrastructure & amenity	1100.00	1100.00	1100.00	1100.00	1100.00	1100.00	1100.00	1100.00	1100.00	1100.00	1100.00	1100.00	1100.00
Fan, Electricity & Water Charges	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00
Student Welfare fund	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
Medical Insurance	143.00	143.00	143.00	143.00	143.00	143.00	143.00	143.00	143.00	143.00	143.00	143.00	143.00
Development fund	2500.00	2500.00	2500.00	2500.00	2500.00	2500.00	2500.00	2500.00	2500.00	-	2500.00	2500.00	2500.00
Publication production and field activity fees.	-	-	-	-	-	-	5000.00	-	-	-	-	-	-
Outdoor activities	-	-	-	-	-	-	-	-	-	-	3500.00	-	-
Refundable Caution Deposit (once at the time of admission)													
Caution deposit (Library and Laboratory)	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00	2000.00
Hostel caution deposit	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00	3000.00
Total (A+B+C)	34243.00	17993.00	20243.00	22743.00	20243.00	25743.00	30743.0	23243.00	29743.00	17743.00	24743.00	21743.00	24893.00

NOTE: Candidates of the following programmes will be required to pay an additional fee of Rs.1200/- per semester on **account of consumables**:

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

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

TEZPUR UNIVERSITY STATEMENT OF SEMESTER WISE FEE (2021-2022)

Particulars	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester	9th Semester	10th Semester	Refundable (included in the fees of 1st semester)
Integrated M. Com (5 years)	20243.00	12943.00	12943.00	12943.00	12943.00	12943.00	12943.00	12943.00	12943.00	12943.00	5000.00
Integrated M. A. (5 years)	20243.00	12943.00	12943.00	12943.00	12943.00	12943.00	12943.00	12943.00	12943.00	12943.00	5000.00
Integrated M. Sc. (Physics, Mathematics) (5 years)	22743.00	15443.00	15443.00	15443.00	15443.00	15443.00	15443.00	15443.00	15443.00	15443.00	5000.00
Integrated M. Sc. (Chemistry, Life Sciences) (5 years)	23943.00	16643.00	16643.00	16643.00	16643.00	16643.00	16643.00	16643.00	16643.00	16643.00	5000.00
Integrated B.Sc.B.Ed. (Physics, Mathematics) (4 years)	22743.00	15443.00	15443.00	15443.00	15443.00	15443.00	15443.00	15443.00	-	-	5000.00
Integrated B.Sc.B.Ed. (Chemistry) (4 years)	23943.00	16643.00	16643.00	16643.00	16643.00	16643.00	16643.00	16643.00			5000.00
B. Tech. (CSE, ECE, ME, CE, EE)	34243.00	26943.00	26943.00	26943.00	26943.00	26943.00	26943.00	26943.00	-	-	5000.00
B. Tech. (FET)	35443.00	28143.00	28143.00	28143.00	28143.00	28143.00	28143.00	28143.00	-	-	5000.00
B. Tech. (Lateral Entry) (CSE, ECE, ME, CE, EE)	34243.00	26943.00	26943.00	26943.00	26943.00	26943.00	34243.00	26943.00	-	-	5000.00
B. Tech. (Lateral Entry) (FET)	35443.00	28443.00	28443.00	28443.00	28443.00	28443.00	28443.00	28443.00	-	-	5000.00
Master of Computer Application	25743.00	18443.00	18443.00	18443.00	18443.00	18443.00	-	-	-	-	5000.00
B.Ed.	21743.00	14443.00	14443.00	14443.00	-	-	-	-	-	-	5000.00
M. A. (except M.A. in Mass Communication & Journalism)	20243.00	12943.00	12943.00	12943.00	-	-	-	-	-	-	5000.00
M. Com.	20243.00	12943.00	12943.00	12943.00							5000.00
M. Sc. (Physics, Mathematics)	20943.00	13643.00	13643.00	13643.00	-	-	-	-	-	-	5000.00
M. Sc. (Chemistry, MBBT, Environmental Science)	22143.00	14843.00	14843.00	14843.00	-	-	-	-	-	-	5000.00
M. Tech. (ME, IT, ELDT, Bioelectronics, CSE)	29743.00	22443.00	22443.00	22443.00	-	-	-	-	-	-	5000.00
M. Tech. (FET, Energy Technology)	30943.00	23643.00	23643.00	23643.00	-	-	-	-	-	-	5000.00
Master of Design	30943.00	23643.00	23643.00	23643.00							5000.00
M. A. in Mass Communication & Journalism	30743.00	22443.00	22443.00	22443.00	-	-	-	-	-	-	5000.00
Master of Tourism & Travel Management	24743.00	17443.00	17443.00	17443.00	-	-	-	-	-	-	5000.00
Master of Laws (LLM)	24893.00	17593.00	17593.00	17593.00	-	-	-	-	-	-	5000.00
Certificate in Chinese	17993.00	11693.00	-	-	-	-	-	-	-		5000.00
PG Diploma in Translation	17743.00	10943.00	-	-	-	-	-	-	-	-	5000.00
PG Diploma in Women's Studies	17993.00	11693.00	-	-	-	-	-	-	-	-	5000.00
PG Diploma in Child Rights & Governance	17993.00	11693.00	-	-	-	-	-	-	-	-	5000.00

* Fee is subject to change at any time

Finance (continued)

FEE STRUCTURE FOR Ph.D. STUDENTS TO BE ADMITTED IN AUTUMN SEMESTER, 2021

Particular Fee	Full Time (Hosteller)	Full Time (Non- hosteller)	Part Time	TU Employee
At the time of Admission				
Admission	500	500	500	500
Registration	150	150	150	150
Identity card	50	50	50	50
Convocation	1000	1000	1000	1000
Provisional certificate	100	100	100	100
Alumni Association	500	500	500	500
Per semester				
* Hostel admission/re-admission (Single seater for Ph.D. students)	3000			
Tuition	1500	1500	2000	2000
Library	400	400	400	
Students' activity	500	500	500	500
Medical	300	300	300	
Transport	1000	1000	1000	
Laboratory (including computer usage)	1050	1050	1050	1050
Research Fee	3000	3000	4000	4000
Infrastructure and amenity	1100	1100	1100	1100
Fan, Electricity and Water charge	400	400	400	400
Students' Welfare Fund	150	150	150	150
Departmental Development Fund	2500	2500	2500	2500
**Consumable Charge	2000	2000	2000	2000
Menial Charge	1500			
*** Health Insurance	143	143		
Refundable caution deposit (Once at the time of admission)				
Caution deposit (Library and Laboratory)	2000	2000	2000	2000
Hostel Caution deposit	3000			
Total fee to be paid by the students of the Dept. of Chemical Sc./MBBT//FET/ Environmental Sc. at the time of admission	25843	18343	19700	18000
Total fee to be paid by the students of other departments at the time of admission.	23843	16343	17700	16000

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

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

*** Students above 30 years of age are not covered in this scheme.

FEE STRUCTURE FOR INTERNATIONAL STUDENTS, AUTUMN SEMESTER, 2021 (in US Dollar)

Particulars	Mode	M.A. Integrated M.A. & Integrated B.A. B.Ed.	M.Sc.	M.sc (with Consumable Charges)	MCA/M. Tech	M. Tech (with consumable charges)	Integrated M.Sc. & Integrated B.Sc. B.Ed	Integrated M.Sc. & Integrated B.Sc. B.Ed (with consumable charges)	MBA	B. Tech	B. Tech. (with consumable charges)	PGDMMC	PGDTM	MCJ	Chinese	Ph.D. (Full Time)	Ph.D. (Full Time) (with consumable charges)	Ph.D. (Part Time)	Ph.D. (Part Time) (with consumable charges)
Admission fee	Once on admission	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Registration fee	Once on admission	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Enrolment fee	Per semester from second semester (US\$20)															20	20	20	20
Tuition fee	Per semester	100	120	120	200	200	350	350	552.8	700	700	200	200	500	50	150	150	200	200
Library fee	Per semester	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Student's activity fee	Per semester	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Medical fee	Per semester	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Convocation fee	Once on admission	30	30	30	30	30	30	30	30	30	30	30	30	30	0	30	30	30	30
Transport fee	Per semester	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Placement brochure fee	Once on admission											30		60					
Training & Placement fee	Once on admission	30	30	30	30	30	30	30		30	30	30	30	30	30				
Identity card fee	Once on admission	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Laboratory fee (including computer usage)	Per semester	20	50	50	50	50	40	40	50	40	40	50	20	50	0	50	50	50	50
Caution deposit (Library & Laboratory)	Once on admission	60	60	60	60	60	150	150	60	120	120	60	60	60	60	120	120	120	120
Hostel Caution deposit	Once on admission	60	60	60	60	60	60	60	60	60	60	60	60	60	0	60	60	60	60
Provisional certificate fee	Once on admission	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Examination fee (Theoretical)	Per semester	30	30	30	30	30	30	30	30	30	30	30	30	30	30	300	300	400	400
Examination fee (Practical/dissertation)	Per semester	20	20	20	20	20	20	20	20	20	20	20	20	20					
Grade Card fee	Per semester	5	5	5	5	5	5	5	5	5	5	5	5	5	5				
Alumni Association fee	Once on admission	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Hostel admission/re-admission fee	Per semester	180	180	180	180	180	180	180	180	180	180	180	180	180		180	180	180	180
Infrastructure and amenity fee	Per semester	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Fan, Electricity & Water charges	Per semester	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Student welfare	Per semester	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Medical Insurance	Per semester	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9				
Hostel advance mess deposit	Once on admission	90	90	90	90	90	90	90	90	90	90	90	90	90		90	90	90	90
Outdoor activity fee	Per semester											50	350						
Development fund fee	Per semester (For MBA program 1 st & 3 rd semester)	75	75	75	75	75	75	75	2500	150	150	75	75	150	75	150	150	150	150
Educational kit	Once on admission								300										
Charge for consumables	Per semester			120		120		120			120	200		500			200	0	200
Total		1021.9	1071.9	1191.9	1151.9	1271.9	1381.9	1501.9	4199.7	1776.9	1896.9	1431.9	1471.9	2086.9	571.9	1455	1655	1605	1805

Financial Help from the Government

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

1. Institutional fellowship for meritorious Ph.D. students.
2. AICTE Doctoral Fellowship.
3. UGC Research Fellowship.
4. UGC Merit Scholarship for SC/ST students pursuing PG level professional courses.
5. PG Indira Gandhi Scholarship for single girl child.
6. UGC Merit scholarship for University rank holders.
7. Ishan Uday scholarship for the students (from NE States) of UG courses.
8. Inspire Scholarship.
9. Post Matric Scholarship for SC, ST and OBC students under different schemes of the Govt.
10. Merit cum Means Based scholarship for professional and Technical courses (from Ministry of Minority Affairs).
11. Post-Matric Scholarship from the Director of Welfare of Tea and Ex-tea garden.
12. AICTE scholarship for the GATE qualified students of M. Tech.
13. DBT scholarship.
14. NEC scholarship from Director of Technical Education.
15. Post-Matric scholarship for students belonging to Minority communities.
16. Scholarship for differently abled students from National Handicapped Finance and Development Corporation and many more.
17. Selected candidates belonging to BPL / AAY Category will be provided free studentship.

Students admitted on the basis of GATE score to the M.Tech. courses 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.

List of Academic Programmes

UG Degree/Integrated/Diploma/Certificate Programmes

Sl. No.	Programme	Department/Centre	School
1	B.Tech. in Civil Engineering	Civil Engineering	Engineering
2	B.Tech. in Computer Science and Engineering #	Computer Science and Engineering	
3	B.Tech. in Electrical Engineering	Electrical Engineering	
4	B.Tech. in Electronics and Communication Engineering #	Electronics and Communication Engineering	
5	B.Tech. in Food Engineering and Technology #	Food Engineering and Technology	
6	B.Tech. in Mechanical Engineering #	Mechanical Engineering	
7	Lateral Entry to 2 nd year of B.Tech	Electrical Engineering Food Engineering and Technology	
8	B.Ed.	Education	Humanities and Social Sciences
9	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 Science	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

All B.Tech. Programme are AICTE Approved

List of Academic Programmes (continued)

PG Degree/Diploma Programmes

Sl. No.	Programme	Department /Centre	School
1	Master of Computer Application (M.C.A.)	Computer Science and Engineering	Engineering
2	M.Tech. in Information Technology		
3	M.Tech. in Computer Science & Engineering		
4	M. Tech. in Civil Engineering	Civil Engineering	
5	Master of Design (M.Des.)	Design	
6	M.Tech. in Bioelectronics	Electronics and Communication Engineering	
7	M.Tech. in Electronics Design and Technology		
8	M. Tech. in Energy Technology	Energy	
9	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.*		Management Sciences
26	Master of Tourism and Travel Management (MTTM)	Business Administration	
27	Certificate in NCCMP# (Part Time) (Not Through TUEE)		
28	M.Com.	Commerce	Sciences
29	M.Sc. in Chemistry	Chemical 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 to M.B.A. is made on the basis of basis of CAT/ MAT/XAT/ATMA/GMAT/CMAT score.

All M.Tech. Programme are AICTE Approved. # Admission not through TUEE

Ph.D. Programmes

Sl. No.	Programme	Department /Centre	School
1	Ph.D. in Applied Sciences	Applied Sciences	Engineering
2	Ph.D. in Civil Engineering	Civil Engineering	
3	Ph.D. in Computer Science and Engineering	Computer Science and Engineering	
4	Ph.D. in Electronics and Communication Engineering	Electronics and Communication Engineering	
5	Ph.D. in Energy	Energy	
6	Ph.D. in Food Engineering and Technology	Food Engineering and Technology	
7	Ph.D. in Mechanical Engineering	Mechanical Engineering	
8	Ph. D. in Electrical Engineering	Electrical Engineering	
9	Ph.D. in Cultural Studies	Cultural Studies	Humanities and Social Sciences
10	Ph.D. in Education	Education	
11	Ph.D. in English	English	
12	Ph.D. in Hindi	Hindi	
13	Ph.D. in Mass Communication and Journalism	Mass Communication and Journalism	
14	Ph.D. in Sociology	Sociology	
15	Ph.D. in Social Work	Social Work	Management Sciences
16	Ph.D. in Business Administration	Business Administration	
17	Ph.D. in Commerce	Commerce	Sciences
18	Ph.D. in Chemical Sciences	Chemical Sciences	
19	Ph.D. in Environmental Science	Environmental Science	
20	Ph.D. in Mathematical Sciences	Mathematical Sciences	
21	Ph.D. in Molecular Biology and Biotechnology	Molecular Biology and Biotechnology	
22	Ph.D. in Physics	Physics	





SECTION- II

Programmes, Intake & Eligibility Criteria for
Admission

SECTION- II

Programmes, Intake & Eligibility Criteria for Admission

2.1 UG Degree/ Integrated/ Certificate Programmes

2.2 Post Graduate Degree/ Diploma Programmes

2.3 Ph. D. Programmes

Programmes, Intake & Eligibility Criteria for Admission

2.1 UG Degree/ Integrated/ Certificate Programmes			
Sl. No.	Programme Names	Intake	Eligibility
1	B. Tech. in Civil Engineering+	68	10+2 Standard or equivalent examination with minimum 60% aggregate marks† and pass marks† in (1) Physics, (2) Mathematics, (3) Language, (4) Chemistry/Biology/Biotech/Technical vocational subject (any one of them), and (5) any other Subject.
2	B. Tech. in Computer Science and Engineering+	68	
3	B. Tech. in Electrical Engineering+	38	
4	B. Tech. in Electronics and Communication Engineering+	68	
5	B. Tech. in Food Engineering and Technology+	56	
6	B. Tech. in Mechanical Engineering+	68	
7	Lateral Entry to 2nd year of B.Tech. in Electrical Engineering	3\$	10 th Standard examination with minimum 60% marks† in aggregate as well as separately in Mathematics, and minimum 70% aggregate marks† in Diploma Programme (duration of minimum 3 years after 10 th Standard) in the respective or allied Discipline.
	Lateral Entry to 2nd year of B.Tech. in Food Engineering and Technology	6\$	Diploma in Food Engineering and Technology or Allied subjects from an AICTE approved program. Duration of Diploma must be: 02 years Diploma after 10+2 OR 03 years after 10 th (Matriculation) in conventional system OR 04 Year after 10 th (Matriculation) in modular system. The Candidate must have passed 10 th (Matriculation) with 60% marks† in aggregate and must have secured 60% marks in Mathematics as well as must have a minimum aggregate of 70% marks at Diploma level.
8	B.Ed. (There will be 50 % seat each for Humanities and Science Stream.)	63	B.A./B.Sc./B.Tech./B.E. Degree with minimum 55% marks†.
9	Certificate in Chinese	49	10+2 Standard pass in any stream with minimum 45% aggregate marks†.
10	Integrated M.A. in English	25	10+2 Standard pass in any stream with minimum 60% aggregate marks†.
11	Integrated M. Com. (Lateral exit after B Com module & Lateral entry in the M.Com. module)	33#	10+2 Standard pass in Science/Commerce stream with minimum 60% aggregate marks†.

Programmes, Intake & Eligibility Criteria for Admission (continued)

12	Integrated B.Sc. B.Ed. (Chemistry Major)	13	10+2 Standard pass in Science stream with minimum 60% aggregate marks† in Physics, Chemistry, Mathematics and English.
13	Integrated B.Sc. B.Ed. (Mathematics Major)	13	10+2 Standard pass in Science stream with minimum 60% aggregate marks†.
14	Integrated B.Sc. B.Ed. (Physics Major)	13	
15	Integrated M.Sc. in Chemistry	25	10+2 Standard pass with minimum 60% aggregate marks† in Physics, Chemistry and Mathematics.
16	Integrated M.Sc. in Mathematics	25	10+2 Standard pass with minimum 60% aggregate marks† in Physics, Chemistry/Statistics and Mathematics.
17	Integrated M.Sc. in Physics	25	10+2 Standard pass with minimum 60% aggregate marks† in Physics, Chemistry and Mathematics.
18	Integrated M.Sc. in Life Science	25	10+2 Standard pass with minimum 60% aggregate marks † in Biology, Chemistry, Physics and/or Mathematics.
2.2 Post Graduate Degree/Diploma Programmes			
19	M. A. in Cultural Studies	58	Bachelor's Degree in any Discipline with minimum 45% marks† in the Major/Honours Subject, or 50% aggregate marks† if not having any Major/Honours Subject.
20	M. A. in Education	38	Bachelor's Degree in any Discipline with minimum 45% marks† in the Major/Honours Subject, or 50% aggregate marks† if not having any Major/Honours Subject.
21	M.A. in English	63	Bachelor's Degree with minimum 45% marks† in Major/Honours in English, or 50% marks† in English as well as in aggregate if not having Major/Honours in English.
22	M. A. in Linguistics and Language Technology	38	Bachelor's Degree with minimum 45% marks† in Major/Honours in Linguistics/English/any other allied Subject, or 50% marks† in any of the specified Subjects as well as in aggregate if not having Major/ Honours in any of the specified Subjects.
23	M. A. in Hindi	31	Bachelor's Degree with minimum 45% marks† in Major/Honours in Hindi, or 50% marks† in Hindi as well as in aggregate if not having Major/Honours in Hindi.
24	P. G. Diploma in Translation (Hindi)	31	Bachelor's Degree in any Discipline having Hindi as the Major/ Honours or as a subsidiary Subject, or Praveen/Sahityaratna in Hindi, with minimum 45% aggregate marks†.
25	M. A. in Mass Communication and Journalism	44	Bachelor's Degree in any Discipline with minimum 45% marks† in the Major/Honours Subject, or 50% aggregate marks† if not having any Major/Honours Subject.

26	M. A. in Communication for Development	15	Bachelor's Degree in any Discipline with minimum 45% marks† in the Major/Honours Subject, or 50% aggregate marks† if not having any Major/Honours Subject.
27	M. A. in Social Work	22	Bachelor's Degree in any Discipline with minimum 45% marks† in the Major/Honours Subject, or 50% aggregate marks† if not having any Major/Honours Subject.
28	M. A. in Sociology	38	Bachelor's Degree in any Discipline with minimum 45% marks† in the Major/Honours Subject, or 50% aggregate marks† if not having any Major/Honours Subject.
29	Master of Laws (LL.M.)	25	Bachelor's Degree in Law with minimum 50% aggregate marks†.
30	M.A. in Assamese	20	Bachelors degree with at least 45% in major/honours in Assamese or Bachelor's degree with Assamese (MIL) having at least 50% in aggregate.
31	P. G. Diploma in Child Rights and Governance	25	Bachelor's Degree in any discipline with minimum 45% aggregate marks†.
32	P. G. Diploma in Women's Studies	25	
33	M. Sc. in Chemistry	25	Bachelor's Degree with minimum 45% marks† in Major/Honours in Chemistry, or 50% marks† in Chemistry as well as in aggregate if not having Major/Honours in Chemistry. Also, candidates should have Physics and Mathematics as subsidiary Subjects in Bachelor's Degree.
34	M. Sc. in Environmental Science	38	Bachelor's Degree with minimum 45% marks† in Major/Honours in Physical/Biological/Earth/Environmental Sciences, or 50% marks† 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†.
35	M. Sc. in Mathematics	53	Bachelor's Degree with minimum 45% marks† in Major/Honours in Mathematics/Statistics, or 50% marks† 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†.
36	M. Sc. in Molecular Biology and Biotechnology* (Selection is based on GAT-B conducted by Regional Center for Biotechnology, Faridabad)	30	Bachelor's Degree with minimum 45% marks† in Major/Honours in Physical/Biological/Agricultural/Veterinary/Fishery Sciences, or 50% marks† 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† in Pharmacy/ Engineering Technology/Physician Assistant Course/Medicine.
37	M. Sc. in Physics	38	Bachelor's Degree with minimum 45% marks† in Major/Honours in Physics, or 50% marks† 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.

Programmes, Intake & Eligibility Criteria for Admission (continued)

38	Master of Computer Application (MCA)	56	Bachelor's Degree in any Discipline with minimum 50% aggregate marks†. Also, candidates should have Mathematics at 10+2 Standard with pass marks†.
39	Master of Design (M.Des.)	18***	Four years Bachelor's degree or equivalent in Design/Engineering/ Architecture/ Interior Design related field with a minimum CPI/CGPA of 6.0 out of 10 or minimum 60% of marks. OR Four years Professional Diploma in Design of NID or 5-year Professional Diploma of CEPT with a minimum CPI/CGPA of 6.0 out of 10 or minimum 60% of marks.
40	M.Tech. in Civil Engineering	11**	B.E./B.Tech. Degree in Civil Engineering with minimum 50% aggregate marks†.
41	M. Tech. in Information Technology	25**	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. Degree in Computer Science/ Information Technology/ Electronics/Mathematics/ Statistics with minimum 50% aggregate marks†. Candidates selected under GATE should have a valid GATE score in Computer Science.
42	M. Tech. in Computer Science and Engineering	28**	B.E./B.Tech. or equivalent Bachelor's Degree in Computer Science and Engineering or MCA Degree with minimum 50% aggregate marks†.
43	M. Tech. in Electronics Design and Technology	35**	B.E./B.Tech. or equivalent Bachelor's Degree in Electronics/ Electrical/ Instrumentation Engineering or M.Sc. Degree in Electronics/ Instrumentation/ Physics (Electronics as specialization) with minimum 50% aggregate marks†.
44	M. Tech. in Bioelectronics	19**	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. Degree in Biotechnology/ Biochemistry/ Chemistry/ Polymer Science/ Physics/ Electronics/ Nano Science and Technology/ Instrumentation or MBBS Degree with minimum 50% aggregate marks†.
45	M. Tech. in Energy Technology	35**	B.E./B.Tech. or equivalent Bachelor's Degree in Mechanical/ Electrical/ Electronics/Instrumentation/Chemical/Agricultural/Energy Engineering or M.Sc. Degree in Physics/Chemistry with minimum 50% aggregate marks†.
46	M. Tech. in Food Engineering and Technology	23**	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†. Also, candidates must have Mathematics at 10+2 Standard with minimum 50% marks† or as a subsidiary subject in the specified Degree Programmes.

47	M. Tech. in Mechanical Engineering (Specialization: Machine Design)	23**	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†.
	M. Tech. in Mechanical Engineering (Specialization: Thermo Fluids Engineering)		B.E./B.Tech. or equivalent Bachelor's Degree in Mechanical/Energy and Power/Aerospace/Aeronautical/ Automobile Engineering or in any other relevant Engineering Discipline with minimum 50% aggregate marks†.
48	M. Com.	15#	B.Com. with minimum 50% marks† in Major/Honours. Mathematics at Degree level is desirable.
49	Master of Tourism and Travel Management (MTTM)	19	Bachelor's Degree in any Discipline with minimum 45% marks† in Major/Honours Subject or in aggregate.
50	Master of Business Administration (MBA)^	58	Bachelor's Degree in any Discipline (except Fine Arts) with minimum 50% marks† in the Major/Honours Subject or in aggregate.

Note: Intakes include EWS Quota.

+Admission to all the B. Tech. programmes shall be made through the JEE Main 2021, conducted by NTA. Out of the total seats, 60% seats are reserved for permanent residents of North East States (to be filled up through the Tezpur University Counselling) and remaining 40% seats are open for filling up through the Central Counselling conducted by CSAB/JoSAA.

† or equivalent Grade Point, where applicable.

\$ For the school of Engineering across 02 B.Tech. Programmes, a maximum of 18 seats, (5% of approved intake to existing B Tech programmes) will be admitted through *Lateral Entry to 2nd year of B.Tech.* Exact number of candidates to be admitted against each of the B. Tech. program will be notified separately through University webpage after facilitating internal sliding among continuing students.

*In M.Sc. in MBBT, 10 seats are reserved for permanent residents of any of the North Eastern States (to be filled up based on GAT-B score), and remaining 20 seats are filled up all India basis based on the GAT-B score. This is subject to latest policy changes.

Candidates having valid GATE score in the eligible disciplines will be considered against the *GATE seats* for direct admission with GATE fellowship from AICTE. GATE seats remaining vacant will be filled up through TUEE merit list. However, candidates admitted through TUEE-2021 having valid GATE score in other eligible discipline/ combination will also be recommended for GATE fellowship from AICTE. **Number of approved GATE seats for each M. Tech. programme is 18.

^Admission to the MBA programme shall be made separately on the basis of CAT/ MAT /XAT /ATMA /GMAT/ CMAT score

*** Candidates having valid score of all India Common Entrance Examination for Design (CEED) will be eligible to apply.

Actual intake may vary.

Programmes, Intake & Eligibility Criteria for Admission (continued)

2.3 Pre-Requisite and area of research for admission to various disciplines of Ph. D. programmes (Autumn Semester 2021)					
Sl. No.	School	Department		Pre-requisite	Area of Research
51	Engineering	Applied Sciences	Physics	<p>M.Sc./Integrated M.Sc. in Physics/ Astrophysics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science.</p> <p>OR</p> <p>M.Phil. M.Tech. in Solid State Material/ Material Science/ Electronics/ Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences.</p> <p>OR</p> <p>M.S Astronomy and Astrophysics.</p> <p>OR</p> <p>B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.</p>	Low-dimensional Material Physics, Optical Spectroscopy, Electron Energy Loss Spectroscopy, Scanning Transmission Electron Microscopy, Theoretical Modeling of Astrophysical Flows, Study of X-ray Binaries, X-ray Data Analysis, and Interpretation.
			Mathematical Sciences	<p>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.</p> <p>OR</p> <p>B.Tech. in Mathematics and Computing/any allied subjects with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where B.E./B.Tech. degree was obtained.</p>	Spectral Graph Theory, Application of Linear Algebra in Graph Theory, Graphs and Matrices, Operations Research, Inventory Modelling, Fuzzy Mathematics and Applications, Multi Criteria Decision Making Problems.
			Chemical Sciences	<p>M.Sc. in Chemistry/ Chemical Sciences/ Polymer Chemistry/ Polymer Science/ Physics/ Nano Science/ Material Science/ Environmental Science or allied subjects</p> <p>OR</p> <p>M.E./M.Tech in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering/ Energy etc.)</p>	Functional Organic and Metal-Organic Polymers, Energetic Materials, Materials for Energy and Environmental Applications.

52	Engineering	Civil Engineering	(a) M.E./M.Tech. /M.Sc. (Engg.) in Civil Engg. or allied areas or (b) M.Sc. in relevant discipline with minimum 70% marks in aggregate or equivalent CGPA or (c) B.E. / B.Tech. with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/University from where	Geotechnical Engineering/Environmental Engineering.
53	Engineering	Computer Science & Engineering	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.	Natural Language Processing, Speech Processing, Wireless Networks, Block chain, Elastic Optical Networks, Data Mining, Image Processing, Algorithms, Pattern Recognitions, Image Processing, Remote Sensing, Image Analysis, Bioinformatics, Cognitive Radio Network, Resource Allocation in CRN, Network Security Trust & Reputation, Machine Learning, Artificial Intelligence.
54	Engineering	Electronics & Communication Engineering	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.	Quantum image processing, Hydrogen fuel energy, solar cell, Quantum instrumentation, Biosensors and Bioelectronics, Microwave antennas, Bioelectronics devices, Power electronics, traction control of electric vehicles, Neuroengineering, Bioelectronics, Instrumentation, Health care, Image processing, Computer vision, Deep learning for Biomedical image/signal analysis, Image and video processing, Computer vision, Deep learning, Content-based image retrieval, Rehabilitation robotics. Biomedical signal processing, Nanoelectronic devices and sensors, Flexible electronics, Biosensors, SPR based photonic devices, VLSI & Microelectronics, Nanotechnology, Gas sensors, Simulation and modelling of semiconductor devices.
55	Engineering	Electrical Engineering	(a) ME/MTech. /MS/ in Electrical/ Electronics / Communication/ Power System/Power Electronics/ Instrumentation/Control/ Computer Science & Engineering/ MBBS with MD/MS and any other relevant discipline. (b) BE/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.	Sensor & Sensor Fabrication, IoT & Health Monitoring, Control & its application, Food Technology, Signal Conditioning, Energy Technology, IoT, Smart Energy Systems, Control Systems, Water Management, Smart Healthcare.

Programmes, Intake & Eligibility Criteria for Admission (continued)

56	Engineering	Energy	M.Sc. / M.E. / M.Tech. Degree in Energy Technology/ Energy Management/Energy related Engineering and Technology/ Physics/ Chemistry/Agriculture Allied subjects.	Renewable Energy, Bioenergy and Biofuels, Energy – Environment interaction, Biomass Gasification, Building Energy and Thermal Comfort, Photovoltaic Systems, Hybrid Energy Systems, Fuel Cell, Hydrogen Energy, Graphene, Energy Storage, Electrochemical Systems, Energy Conservation and Management, Instrumentation & Control, Grid Integrated System, Solar Photovoltaics system, RAC, Heat Transfer, Nanofluids, Hydrogen Energy.
57	Engineering	Food Engineering and Technology	M.Tech. / M.E. /Integrated M. Tech. in Food Engineering and Technology/Food and Dairy related other programme/Mechanical Engineering/Chemical Engineering/Bio-Process/Bio-Chemical/Biotechnology, or M.Sc. and Integrated M.Sc. in Food Engineering and Technology/Food and Dairy related other programme/Applied Microbiology/ Microbiology/Bio-Chemistry/Chemistry/ Biotechnology/Bioscience and Informatics, or, B.E./B.Tech. (in Food Engineering and Technology/Food and Dairy related other programme) with 75% marks in aggregate or equivalent CGPA with valid GATE Score). Minimum two recommendation Letters from the Institute/University from where B.E./B.Tech. degree was obtained	Food Chemistry, Food Quality of locally important fruits & vegetables. Emerging non-thermal processing; Fruits & Vegetable Processing and Machinery; Process and Food Engineering; Food Rheology; Hurdle Technology, Bioprocess Engineering, Starch/Protein modification and application.
58	Engineering	Mechanical Engineering	M.E. / M.Tech. / M.Sc. (Engg.) in Mechanical Engg. or allied areas. 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.	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. Evolutionary based optimization of Mechanical system, Solar thermal energy and storage, Drying Technology, Biomass Energy Conversion, Computational Fluid Dynamics, Fracture Mechanics and Finite Element Methods, 3D printing technology and Precision Manufacturing, Mechatronics, Artificial Intelligence based system design, CAD-CAM, Micro alloying, Thermo Mechanical Processing, Micro structural Characterization, Mechanical Metallurgy, Failure Analysis, Tribology, Creep and High Temperature Deformation Behavior, Computational Material Science, Carbon nanotubes-based composites, Fiber and Graphene-reinforced composites, Magneto-hydrodynamic power generation.

59	Humanities & Social Sciences	Cultural Studies	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	Culture and Memory Culture and Media Heritage Folklore Popular Culture Digital Culture and Heritage Comparative Literature
60	Humanities & Social Sciences	Education	Post Graduate degree in Education or in any allied discipline/subjects with 55% marks.	Language Education, Sociology of Education, Education, Educational Psychology, Educational Admini Educational Measurement and Evaluation, Teacher stration, ICT in Education, Environmental Education, Special Needs Education, Method of Teaching in Biological Science/Elementary Education.
61	Humanities & Social Sciences	English	M.A. in English (specialization may be in Literature, English Language Teaching or Linguistics), M.A. in Linguistics	Literature, ELT, Linguistics
62	Humanities & Social Sciences	Hindi	M.A. in Hindi	Bhasha Vigyan, Lok Sahitya aur Bharitiya Kavyashastra, Linguistics, Poetry & Journalism.
63	Humanities & Social Sciences	Mass Communication & Journalism	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.	Communication for Social Change, Journalism, Science Communication.
64	Humanities & Social Sciences	Sociology	Post Graduation in Sociology / Cultural Studies/ Anthropology (with specialization in Social Anthropology) / Economics / History / Political Science / Philosophy / Mass Communication / English / Law / Management/ Social Work.	Tribal Studies, Marginality Studies, Northeast India Studies, Agrarian Studies Sociology of Religion/ Sociology of Culture Sociology of Science, Sociology of Governance Sociology of Development/Migration/Environment Sociology of Health and Illness Sociology of Gender and Identity Politics Sociology of Education Sociology of Body, Gender and Sexuality
65	Humanities & Social Sciences	Social Work	MA in Social Work and allied Social Sciences such as Sociology, Psychology, Rural Development, Development Studies, Law, Public Health, Education and Management.	Ecology and Social Work, Tribal Studies, Rural Development and Livelihood, Social Work & Mental Health, Substance, Street Children, Disaster, Migration, Development issues, Gender.

Programmes, Intake & Eligibility Criteria for Admission (continued)

66	Management Sciences	Business Administration	M.B.A., M.Com., M.A. / M.Sc. in Economics, M.A. in Psychology/ Sociology/Social Work/ Cultural Studies, MCA, M.T.M. / M.T.A. FCA/ FCS/ FICWA.	Finance, HR, Accounting, Taxation, Social Development Issues, Marketing & Tourism, Operation, Project Management, Rural Development, Entrepreneurship, Tourism, Marketing.
67	Management Sciences	Commerce	1. M.Com., 2. M.A./M.Sc. in Economics, 3. FCA/ FCMA/ FCS.	Accounting, Finance, Sustainability, Corporate Governance, Development Economics
68	Sciences	Chemical Sciences	M.Sc. in all branches of Chemical Science/ Physics/Nanoscience/ Material Science/ Biotechnology/ Biochemistry/ Bioinformatics/ Environmental Science. M.E./M.Tech. in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering etc.).	Water Purification Techniques, Polymer Chemistry, Polymer Nanocomposites Electrocatalysis, Synthetic Organic Chemistry, Organic Synthesis & Catalysis, Physical Chemistry.
69	Sciences	Environmental Science	Masters in any Science/ Applied Science / Engineering discipline with at least 55% marks or equivalent CGPA. At Bachelor's level the candidate must have attended Science / Technology programme.	Atmospheric Chemistry Air Pollution, source apportionment, Forest ecology and biodiversity Conservation, Fluvial Geomorphology, riverine hazards, application of RS & GIS in atmospheric, hydro-geomorphic studies, Water and sediment geochemistry environmental pollution, Plant stress physiology sequestration and CHG emission from Agricultural and forest ecosystem, Solid waste management, Soil pollution, Soil carbon management and nuclear analysis, Plant nutrition, Botanicals as pesticides, Insect's plant, Air pollution meteorology, Climate impact modelling, Noise pollution and Deep learning, Ecology, Eco hydrology, Nanotechnology in environmental research, Indoor air pollution, human environment interactions,
70	Sciences	Mathematical Sciences	M.A. / M.Sc. in Mathematics or M.A./M.Sc. in Statistics with requisite background in Mathematics.	Number Theory, Non-parametric Statistics, Ring Theory and Finite Field Theory, Computational Fluid Dynamics, Differential Equations and Harmonic Analysis, Algebra and Graph Theory, Finite Element Method.

71	Sciences	Molecular Biology and Biotechnology	<p>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.</p> <p>B. Tech./ B. E. degree with 80% marks in aggregate or equivalent 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.</p>	<p>Molecular evolution, Impact of Asana and Food on human biochemistry, Microbial biotechnology, human molecular Genetics, Synthesis biology, Genomics and systems biology in Leishmania, Cancer biology, Inflammation biology, virology and Scrub typhus, Metabolic disease Biology, Bioinformatics, Modelling, and simulation, Plant pathogen interaction and gene regulation.</p>
72	Sciences	Physics	<p>M.Sc. in Physics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science.</p> <p>M.Phil., M.Tech. in Solid State Material/ Material Science/ Electronics/Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences.</p> <p>B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.</p>	<p>Quantum materials and phenomena, Condensed matter physics, Microwave material and devices, Soft Matter Physics and Nanotechnology, Neutrino Physics, Baryon Asymmetry and Dark Matter, Photonics, and optical sensing systems, Experimental and Computational Optics, Astro-particle Physics, Neutrino Physics, Dark matter, High Energy Physics, Astrocsmic Fluid dynamics, Plasma Physics, Nonlinear Dynamics, Experimental materials science</p>

Important Note: Students of any category seeking admission in open category seats should fulfil the requirement as needed for General category candidates.





SECTION III
Admission Procedures

SECTION III

Admission Procedures

General Admission Procedure:

- B. Tech. Programmes
- M.Tech. Programmes
- M.Sc. in MBBT
- MBA
- All other non-Ph.D. Programmes
- Ph. D. Programmes

Application Procedure

Tie-Breaking Criteria

Reservation Policy

Admission rules

Provisional Admission

Tezpur University offers a number of programmes on Under-Graduate Degree/Diploma/Certificate, Post-Graduate Degree/Diploma and Doctor of Philosophy Degree in various Disciplines. Application process for the session 2021-2022 will be in online mode.

The general admission procedures for various Academic Programmes are outlined below:

1. B. Tech. Programmes:

- i) Candidates seeking admission to the B. Tech. Programmes are required to appear in the JEE (Main) – 2021 to be conducted by NTA, New Delhi. All admission shall be based on **JEE (Main) - 2021 All India Ranking/CRL**.
- ii) The Candidates who appear in the JEE (Main) – 2021 have two channels for admission to the B. Tech. Programmes.
 - a. 40% of the total seats shall be made available through the central counselling i.e., Central Seat Allocation Board (CSAB) based on **JEE (Main)-2021**. The candidates of any place of India can participate in –Central Counselling conducted by CSAB/ JoSSA (Online choice filling process), to get admission in Tezpur University (TU) against these 40% seats.
 - b. 60% of the total seats shall be made available through the Tezpur University counselling. These seats are reserved for the permanent residents of North East (NE) States. The Candidates need to fill-in Tezpur University application form in addition to **JEE (Main) -2021 application**. The applicants desiring a seat under the NE quota PRC (Permanent Residence Certificate) issued by the competent authority will be required.

2. Lateral entry to the 2nd year of B.Tech. Programmes:

As per the provisions of AICTE, diploma holders may apply for admission to the 2nd year of existing B. Tech. programs of the University. General eligibilities are as follows.

- i) Diploma holders who have completed the 03 years AICTE approved diploma after 10th (Matriculation) in conventional system of Diploma programmes or who have completed 04 years AICTE approved Diploma after 10th (Matriculation) in modular system of Diploma programmes, are eligible to apply.
- ii) The Candidate must have passed 10th (Matriculation) with 60% marks in aggregate and must have secured 60% marks in Mathematics, as well as must have a minimum aggregate of 70% marks at Diploma level.

- iii) Those, who are appearing for the final year of Diploma examinations, are also eligible, subject to the condition that they shall submit the provisional certificate at the time of admission, along with final grade sheet to support fulfilment of eligibility criteria.

3. M. Tech. Programmes:

Candidates applying for M.Tech. Programmes may seek admission either based on valid GATE score against GATE seats or based on the personal Interview, academic performance in qualifying examinations and other performances (such as research publication, research experience, and past academic performance) for Non-GATE seats.

4. M.Sc. Programme in Molecular Biology and Biotechnology:

The Candidates will be selected based on the GAT-B score. The examination of GAT-B is conducted by the Regional Centre for Biotechnology, Faridabad under the Department of Biotechnology (DBT), Govt. Ten seats are reserved for the candidates of NE states. PRC is mandatory for the candidates of NE states.

5. Master of Business Administration (MBA):

Candidates in the MBA Programme may seek admission on the basis of CAT/MAT/XAT/ATMA/GMAT/CMAT score and the score of the Test should be valid till the day of Personal Interaction.

6. All other Non-Ph.D. Programmes:

Applicants of other programmes may refer to the Tezpur University Admission Policy 2021-22 in the prospectus or Tezpur University Admission portal (<https://www.tezuadmissions.in/public/>) for detailed guidelines.

7. Ph. D. Programmes:

- i) 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.

Admission Procedure (continued)

- 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.
- Relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/ Differently abled and other categories of candidates as per the decision of the Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark procedures.
- ii) Department-specific further requirement for admission into Ph.D. Programme in Tezpur University is given separately.
- iii) Ph.D. candidates for Admission in Autumn 2021 will be selected based on (i) Performance in qualifying examination and past academic performance, (ii) *Statement of Purpose* (SOP), embedded with a set of questions and (iii) Personal Interview (PI) in online mode. Candidates with UGC-(NET/JRF)/UGC-CSIR(NET/JRF)/DBT-JRF/ICMR-JRF/ICAR-NET/ GATE/ SLET / M.Phil. will be selected based on the performance in the personal interview only.
- iv) Candidate desiring full time Ph. D. will be given preference.

Application Procedure

Interested eligible candidates may **APPLY ONLINE** through the University website www.tezuadmissions.in by paying a fee of Rs. 400/- for SC, ST and PWD candidates, Rs. 800/- for other categories and \$25 or equivalent amount in Rupees for foreign students. Additional bank charges may apply.

The applicants should read the available instructions carefully while filling in the online Application Form. The following major points are also to be noted:

- a) **Application 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 an Application Form will remain incomplete until the required Application Fee is transferred successfully.

- b) **Multiple Programmes:** Candidates applying for multiple Programmes must apply separately with separate Application Fee for each Programme. However, there will be one entrance test per department for Integrated dual B.Sc. & M.Sc. and Integrated B.Sc. B.Ed. programmes. Similarly, there will be one entrance test for M.Tech. (IT) and M. Tech (CSE) programmes. Students applying for integrated programmes of the same department can apply in single application form. The candidates can give their preference either for a single programme or both the programmes. The one who applies for both the programmes will be considered as applying for two programmes and will have to pay two times the application fee.
- c) **B. Tech. Programmes:** In the case of B. Tech. programmes, a candidate needs to apply in a single application form only. The selected candidates will opt for the Programme/ Department based on the availability of seats at the time of their turns during the admission process.
- d) **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.
- e) **Documents (digital/scanned copy) to be uploaded:**
 - i) B. Tech. Programmes.
 - ii) Copy of the Permanent Residence Certificate (PRC) issued by the competent authority of any North Eastern State, if applying for the B.Tech. Programmes or M.Sc. Programme in Molecular Biology and Biotechnology under the North East quota.
 - iii) Copy of the valid GATE score card, if applying for direct admission to any M.Tech. Programme.
 - iv) Copy of the relevant certificate issued by the competent authority, if seeking admission under any reserved category as mentioned.
 - v) Copy of the Sponsorship/No Objection Certificate issued by the employer if the candidate is employed.
 - vi) A passport size photograph.
 - vii) Scanned copy of the signature.
 - viii) Relevant certificate as evidence of representing State or Country in sports, if any (Not applicable for B. Tech, M. Tech and Ph.D. programme)

Tie-Breaking Criteria:

Applicants may refer to the Tezpur University Admission Policy 2021-22 in the prospectus for further information.

Reservation Policy:

- a) 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.
- b) As per the Directives of the Govt. of India, Supernumerary Seats are available in the following categories:
 1. Prime Minister's special scholarship scheme for candidates from Jammu and Kashmir.
 2. 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 program is subject to approval by the DBT, Gol.
 3. Preference under Sports quota will be considered as per University rules.
 4. Seats under defence quota will not be reserved for B.Tech. Lateral Entry.
 5. Defence quota: Seats are reserved for admission on supernumerary basis for the wards /widows/wives of Armed Forces personnel strictly in accordance with following priorities laid down by Ministry of Defence:
 6. Priority I: Widows/wards of Defence personnel killed in action.
 7. Priority II: Wards of disabled in action and boarded out from service.
 8. Priority III: Widows/Wards of Defence personnel who die in service with death attributable to military service.
 9. 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.
 10. Priority VI: Wards of ex-servicemen.
 11. Priority VII: Wards of serving personnel.

Important Dates:

- a) Opening of the online application submission: 06/07/2021
- b) Closing of the online application submission: 21/08/2021 (except B. Tech. programmes)
- c) Closing of the online application submission for B. Tech.. : 09/09/2021

The dates for the following activities will be notified separately:

- d) Declaration of merit lists of provisionally selected candidates (*Excluding Ph.D. programmes*): **TBA**
- e) Declaration of provisionally shortlisted candidates for personal interview for the Ph.D. programmes: **TBA**
- f) Counselling /Admission of selected candidates: **TBA**
- g) Commencement of classes of the Autumn Semester 2021: **TBA**

Note: All communication with candidates will be made through their registered e-mail ID/mobile number or notification in the admission portal **www.tezuadmissions.in**

No separate letter will be issued for acceptance/rejection of application form, appearing 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 need to email on **bssc2021@tezu.ac.in**.

Admission Procedure (continued)

Admission

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

- a. Fulfilment of the eligibility criteria as specified in Eligibility Criteria for Admission
- b. Selection for admission to the Programme.
- c. Production of all the relevant documents such as pass certificates and mark sheets 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.
- d. Submission of a set of self attested copy of all pass certificate, mark sheets and other the relevant documents.
- e. Submission of the character certificate from the Head of the Institution and Migration certificate (in original) from the Board/University last attended.
- f. Submission of a self attested printout of the filled-in application form.
- g. Receipt of payment of admission fee in full.

Provisional Admission

- a. If the result of the qualifying examination of a student is awaited at the time of admission, he/she must produce/submit pass certificate/ mark sheet with requisite percentage of marks within **31/12/ 2021**. 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 Institute 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.
- b. If a candidate fails to produce/submit any document (such as the completion certificate and mark sheet/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 **31/12/2021**. 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.

Admission to Ph.D. Programmes:

- i) 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 mark sheets of the qualifying examination fulfilling the eligibility criteria at the time of admission.
- ii) If a provisionally selected candidate fails to produce the mark sheet of the qualifying examination at the time of admission, the seat will be offered to the next eligible candidate from the merit list.

All admissions are provisional in nature. The admission of a student in a programme may be cancelled under the following circumstances:

- i) Production/submission of any false/tempered information/ document.
- ii) Failing to produce/submit any required pending document within 31/12/2021.
- iii) If the required percentage of marks of the qualifying examination is not fulfilled or does not meet the requirement of the eligibility criterion.





School of Engineering



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 highquality teaching of basic science subjects to engineering students. The teachers are dedicated to 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.

Programmes offered

1. Ph.D. in Mathematical Sciences
2. Ph.D. in Chemical Sciences
3. Ph.D. in Physics

Faculty and Areas of Interest

Professor

Charu Lata Mahanta*, Ph.D. (CFTRI)- HoD i/c Rice Science and Technology, Product Development, Food Quality and Nanotechnology

Assistant Professor

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

Somnath Paul*, Ph.D. (TU)

Spectral Graph Theory: Application of Linear Algebra in Graph theory, Graphs and Matrices

Saona Seth*, Ph.D. (IITK)

Functional Organic and Metal-organic Polymers, Energetic Materials, Materials for Energy and Environmental Applications.

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

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

Biplob Sarkar*, Ph.D. (IITG)

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

*Recognized Supervisor

LEGENDS: **CFTRI**-Central Food Technological Research Institute Mysore, **TU**-Tezpur University, **NITA**-National Institute of Technology Agartala, **NUS**-National University of Singapore, **IITG**-Indian Institute of Technology Guwahati, **HoD**- Head of the Department.

Facilities

The Department has the following Laboratory facilities-

- Undergraduate Physics Laboratory
- Undergraduate Chemistry Laboratory

Research Activities

- No. of papers published in the year 2019-2021: 5
- No of ongoing research projects: 2
- No. of current Ph.D. scholars: 0

Selected Publications

- Seth, S. and Jhulki, S., Porous Flexible Frameworks: Origin of Flexibility and Applications, *Materials Horizons*, doi.org/10.1039/D0MH01710H, 2021.
- Alhevaz, A., Baghipur M., Paul S., New Bounds and Extremal Graphs for Distance Signless Laplacian Spectral Radius, *Journal of Algebraic Systems*, 8 (2) (2021) 229-248.
- Saha A., Majumder P., Dutta D. and Debnath B.K., Multi-attribute decision making using q-rung orthopair fuzzy weighted fairly aggregation operators, *Journal of Ambient Intelligence and Humanized Computing*, (2020), <https://doi.org/10.1007/s12652-020-02551-5>.
- Sarkar, B. and Rao, A., Effect of magnetic flux advection on the dynamics of shock in accretion flow around a rotating black hole, *Research in Astronomy and Astrophysics*, 20(3), 40(12pp), 2020.
- Juvaed M. M., Sarkar S., Gogoi P. K., Ghosh S., Annamalai M., Lin Y.-C., Prakash S., Goswami S., Li C., Hooda S., Jani H., Breese M. B. H., Rusydi A., Pennycook S. J., Suenaga K., Rao M. S. R. & Venkatesan T. Direct Growth of Wafer-Scale, Transparent, p-Type Reduced-Graphene-Oxide-like Thin Films by Pulsed Laser Deposition. *ACS Nano*, 14, 3290-3298, 2020.

APPLIED SCIENCES (continued)

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.
AC 701	Supramolecular Chemistry	4
AC 702	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.
AM 701	Inventory Modeling	4
AM 702	Optimization Techniques	4
AM 703	Transportation problems and Soft Computing	4
AM 704	Graphs and Matrices	4
AM 705	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>

CIVIL ENGINEERING

(Year of Establishment: 2009)

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

Binanda Khungur Narzary, M.Tech. (IITG)
Transportation Engineering

Debaraj Bailung Sonowal, M.Tech. (IITR)

Structural Engineering

Shailen Deka*, Ph.D. (IITG)

Geotechnical Engineering

Jayanta Deori Bharali, M.Tech. (IITG)

Transportation Engineering

Rituraj Buragohain, M.Tech. (IITG)

Water Resources Engineering

Karabi Bharadwaj, M.E. (NITS)

Structural Engineering

Arunav Chakraborty, Ph.D. (GU)

Geotechnical Engineering

*Recognized Ph.D Supervisor

LEGENDS: **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 **HoD**- Head of the Department.

Facilities

The Department has the following Laboratory facilities

Computational Laboratory Facilities

- MatLab and Simulink R2011b
- Civil FEM for Ansys, version 12.1
- Plaxis 2D
- ETABS Version 9
- AutoCAD

Core Departmental Laboratories

- Geotechnical Engg. Laboratory-I
- Geotechnical Engg. Laboratory-II
- Structural Engg. & NDT Laboratory
- Environmental Engg. Laboratory –I

- Environmental Engg. Laboratory –II
- Transportation Engg. Laboratory
- Water Resources Laboratory
- Surveying Laboratory
- Computational Laboratory

Selected Publications

- Narzary Binanda Khungur & Ahamad Kamal Uddin. *Equivalent Modulus for Fine-Grained Subgrade Soil. Journal of Transportation Engineering*, Part B: Pavements. 146(2), (2020)
- Goswami, M and Chakraborty A., Study on the Failure Pattern of Layered Soil using Finite Element Method, *Geotechnical Engineering Journal of the SEAGS & AGS-SEA*, 51(4), December 2020 ISSN 0046-5828
- Narzary, B.K. and Ahamad, K.U., Estimation of Equivalent Modulus of Fine-Grained Subgrade Soil from Numerical Model, *Journal of Transportation Engineering*, Part B: Pavements (ASCE), 2020, Accepted for Publication.

CIVIL ENGINEERING (continued)

Courses offered in B. Tech. in Civil Engineering

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS104	Mathematics I	4	PH104	Physics II	2
PH103	Physics I	3	MS105	Mathematics II	4
CH103	Chemistry	4	CO103	Introductory Computing	3
EE103	Basic Electrical Engineering	3	ME103	Workshop Practice	2
EE104	Basic Electrical Engineering Lab	1	CE103	Engineering Graphics	3
EF103	English	3	CO104	Computing Laboratory	2
SE100	Induction Programme	0	ME102	Engineering Mechanics	4
			EC102	Basic Electronics	4

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS205	Mathematics-III	3	BT201	Biology	3
ES201	Environmental Science	0	CE 223	Fluid Mechanics	4
BA201	Economics	3	CE224	Surveying	5
CE220	Building Construction and Drawing	4	CE225	Structural Analysis-I	4
CE221	Building Materials & Technology	3	CE226	Geotechnical Engineering-I	4
CE 222	Concrete & Structure Lab	2	CE227	Geotechnical Engineering Lab	2
CE228	Engineering Geology	2			
CE229	Solid Mechanics	4			

Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LW301	Indian Constitution	0	IC361	Accounting and Financial Management	3
CE320	Structural Design-I	4	CE328	Structural Design-II	3
CE321	Hydraulics	3	CE329	Environmental Engineering-II	3
CE322	Structural Analysis-II	3	CE330	Estimating, Costing and Valuation	3
CE323	Geotechnical Engineering-II	3	CE331	Construction Management	3
CE324	Environmental Engineering-I	3	CExxx	Programme Elective-I	3
CE325	Environmental Engineering Lab.	2	XXxxx	Open Elective-I	3
CE326	Transportation Engineering-I	3			
CE327	Transportation Engineering Lab.	1			

Courses offered in B. Tech. in Civil Engineering (Continued)

Seventh Semester			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
XXxxx	HSS / Management Elective	3	CExxx	Programme Elective	3
CExxx	Programme Elective-II	3	CExxx	Programme Elective	3
CExxx	Programme Elective-III	3	XXxxx	Open Elective	3
CExxx	Programme Elective-IV	3	CE484	Project	6
XXxxx	Open Elective-II	3			
CE471	Industrial Summer Training	2			
CE483	Project-I	4			
CT465	Essentials of Indian Traditional Knowledge	0			
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			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CE501	Engineering Behaviour of Soil	4	CE 504	Advanced Foundation Engineering	4
CE 502	Geotechnical Exploration and Testing	5	CE 505	Ground Improvement Methods	3
CE 503	Strength and Compressibility of Soils	3	CE 590	Term Paper	2
	Elective I	3		Elective III	3
CE 101	Elective II	3		Elective IV	3
	Open Elective I	3		Elective V	3
				Open Elective II	3

CIVIL ENGINEERING (continued)

Courses offered in B. Tech. in Civil Engineering (Continued)

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CE 598	M. Tech Project (MTP) Phase-I	12	CE 599	M. Tech Project (MTP) Phase-II	12

Elective Courses

Semester - I			Semester - II		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CE 521	Unsaturated Soil Mechanics	3	CE 527	Slope stability and Retaining Structures	3
CE 522	Reinforced Earth and Geosynthetics	3	CE 528	Soil Dynamics and Foundation Engineering	3
CE 523	Rock Mechanics	3	CE 529	Earth and Rockfill Dams	3
CE 524	Groundwater Hydrology	3	CE 530	Geotechnical Aspects of Waste Disposal	3
CE 525	Numerical Methods in Engineering	3	CE 531	Environmental Geotechnology	3
CE 526	Analysis and Design of Pavements	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 MHRD, Government of India under FAST. The Department is also recognized by UGC under Special Assistance Programme (SAP DRS Phase II). During 2005-2009 and 2018-2022, the department received support from the Department of Science and Technology (DST), Govt. of India under its FIST - programme. The department has also been recognized as ISEA member, MeitY, Gol and BRICS-NU Member. The department has been carrying out active research in the fields of computational theory, computer networks, network security, mobile computing, soft computing and data mining, natural language processing, workflow management, qualitative spatial reasoning, web services, rehabilitation robotics, pattern recognition, computational biology and bioinformatics, image processing algorithms, speech processing, computational geometry, machine learning and remote sensing image analysis.

Programmes offered

1. Ph.D.
2. Master of Computer Application (MCA)
3. M. Tech. in 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 Kumar Saikia*, Ph.D. (IITKgp),
Networks, Mobile Computing
Dhruba Kumar Bhattacharyya*, Ph.D. (TU),
Data Mining, Network Security, Bioinformatics
Smriti Kumar Sinha*, Ph.D. (TU), Dean SoE
Workflow Automation, Web Theory
Utpal Sharma*, Ph.D. (TU)
Natural Language Processing
Nityananda Sarma*, Ph.D. (IITG)
Wireless Networks and Mobile Computing
Bhogeswar Borah*, Ph.D. (TU)-HoD
Data Mining, Image Processing
Sarat Saharia*, Ph.D. (TU)
Pattern Recognition

Associate Professor

Bhabesh Nath*, Ph.D. (TU)
Data Mining
Siddhartha Sankar Satapathy*, Ph.D. (TU)
Computational Biology and Bioinformatics,
Wireless Sensor Network
Sanjib Kumar Deka, * Ph.D. (TU)
Cognitive Radio Network, Operating System
Debojit Boro*, Ph.D. (TU)
Network Security
Sarangthem Ibotombi Singh*, Ph.D. (TU)

Assistant Professor

Service Oriented Systems, Trust and Reputation
Loitongbam Basantakumar Singh,
M.Tech. (TU)
Object Recognition, Trust and Reputation
Rosy Sarmah*, Ph.D. (TU)
Data Mining, Bioinformatics, Image Processing
Arindam Karmakar*, Ph.D. (ISI)
Algorithms, Computational Geometry
Sanghamitra Nath*, Ph.D. (TU)
Speech Processing
Swarnajyoti Patra*, Ph.D. (JU)
Pattern Recognition, Machine Learning,
Remote Sensing, Image Analysis
Shobhanjana Kalita*, Ph.D. (TU)
Knowledge Representation and Reasoning
Nabajyoti Medhi*, Ph.D. (NITM)
Software Defined Networking, Wireless Networks, Network Security, Cloud Computing, Web Technologies
Monisha Devi, M.Tech. (TU)
(Guest Faculty) *Cognitive Radio Networks*
Ram Charan Baishya, Ph.D. (TU)
(Guest faculty)
Data Mining, Network Security
***Recognized Supervisor**

LEGENDS: **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

COMPUTER SCIENCE AND ENGINEERING (continued)

Facilities

The Department has the following Laboratory facilities

The Department has several state-of-the-art computer laboratories, viz:

- Basic Programming Laboratories
- Software Engineering Laboratory
- Hardware Laboratory
- Mobile Computing Laboratory
- High Performance Computing (23 T Flops speed and 50 TB storage) centre
- IoT Laboratory

The Department houses the following 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

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 2019-2020: 29
- No. of ongoing research projects: 04
- No. of current Ph.D. scholars: 63

Selected Publications:

- Chowdhury H. A., Barah P., Bhattacharyya D. K. and Kalita J. K., Identification of potential Parkinson's disease biomarkers using computational biology approaches, *Network Modeling Analysis in Health Informatics and Bioinformatics*, 10(1), 2021.
- Mandal K, Sarmah R. and Bhattacharyya D. K., POPBic: Pathway-based Order Preserving Bicustering algorithm towards the analysis of gene expression data. *IEEE/ACM Transactions on Computa-*

tional Biology and Bioinformatics. 17(1). 2020

- Thokchom S. and Saikia D. K., Privacy preserving integrity checking of shared dynamic cloud data with user revocation. *Journal of Information Security and Applications*. 50(1).2020
- Roy A. and Sarma N., RPCP-MAC: Receiver preambuling with channel polling MAC protocol for underwater wireless sensor networks, *International Journal of Communication Systems*, 33(9), 2020.
- Borah S. and Borah B. Prediction Error Expansion (PEE) based Reversible polygon mesh watermarking scheme for regional tamper localization. *Multimedia Tools and Applications*. 79. 2020
- Bhowmick A., Saharia S., Hazarika S. M., FhVLAD: Fine-grained quantization and encoding high-order descriptor statistics for scalable image retrieval, *Multimedia Tools and Applications*, <https://doi.org/10.1007/s11042-020-10491-7>. 2021.
- Patra S. and Barman B., A novel dependency definition exploiting boundary samples in rough set theory for hyperspectral band selection, *Applied Soft Computing*, 99(1), 2021.

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



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

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CH103	Chemistry	4	PH104	Physics-II	2
PH103	Physics-I	3	MS105	Mathematics-II	4
MS104	Mathematics-I	4	CO105	Discrete Mathematics	4
EE103	Basic Electrical Engineering	3	EC102	Basic Electronics	4
EE104	Basic Electrical Engineering Lab	1	ME103	Workshop Practice	2
EF103	Communicative English	3	CO103	Introductory Computing	3
SE100	Induction Program	-	CO104	Computing Lab	2
Total -		18	CE103	Engineering Graphics	3
			Total-		24

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS205	Mathematics – III	3	BT201	Biology	3
CO202	Digital Logic Design	4	CO218	Data Communication	3
CO209	Computing Workshop	2	CO214	Computer Architecture and Organization	4
BA201	Economics	3	CO215	Computer Organization Lab	1
CO210	Data Structures	4	CO216	Formal Language and Automata	3
CO211	Data structures using Object Oriented Programming Lab	3	CO206	Design and Analysis of Algorithms	4
EC201	Signals and Systems	3	CO217	Graph Theory	3
ES201	Environmental Science	-	Total -		21
Total -		22			

Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CO309	Operating Systems	3	CO314	System Software and Compiler Design	4
CO311	Software Engineering	3	-	Elective-II (PEC02)	4
CO310	Operating Systems Lab	1	-	Open Elective-II (OEC02)	3
CO312	Database Systems	3	CO315	Computer Networks	3
CO313	Data base Systems Lab	2	CO316	Computer Networks Lab	1
CO303	Computer Graphics	4	IC361	Accounting and Financial Management	3
-	Elective-I (PEC01)	3	CO317	Project-I (using SE perspective)	2
-	Open Elective-I (OEC01)	3	Total -		20
LW301	Indian Constitution (MC- Non Credit)	-			
Total -		22			

COMPUTER SCIENCE AND ENGINEERING (continued)

Seventh Semester			Eight Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
XXxxx	* HSS/Management Elective	3	-	Elective-V (PEC05)	3
CO401	Artificial Intelligence	3	-	Open Elective-IV (OEC04)	3
-	Elective-III (PEC03)	4	CO403	Project-III	8
-	Elective-IV (PEC04)	3	Total-		
-	Open Elective-III (OEC03)	3			
CO402	Project-II	4			
CT465	Essence of Indian Traditional Knowledge (MC- Non Credit)	0			
Total -		20			

Mandatory Non-credit Courses:

S. No.	Course Code	Course Name	Schedule
1	SE100	Induction Programme	Semester I
2	CO404	Summer Internship /Industrial Training	After Semester VI
3	CO405	Comprehensive Written Exam	Semester VII/Semester VIII
4	ES201	Environmental Science	Semester III
5	LW301	Indian Constitution	Semester V
6	CT465	Essence of Indian Traditional Knowledge	Semester VI

Semester-wise Break-up:

Semester	Category-wise Credit Distribution							Total Credits
	HSMC	BSC	ESC	PCC	PEC	OEC	PCE	
I	3	11	4	0	0	0	0	18
II	0	10	14	0	0	0	0	24
III	3	3	5	11	0	0	0	22
IV	0	3	3	15	0	0	0	21
V	0	0	0	16	3	3	0	22
VI	3	0	0	8	4	3	2	20
VII	3	0	0	3	7	3	4	20
VIII	0	0	0	0	3	3	8	14
Total	12	27	26	53	17	12	14	161

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 Name	L-T-P	Credit
CO304	Principles of Programming Languages	3-0-0	3
CO318	Cryptography	3-0-0	3
CO432	Information Theory and Coding	3-0-0	3
CO319	Statistical Modelling and Applications	3-0-0	3
CO423	Web Technology	3-0-1	4
CO306	Embedded Systems	3-0-1	4
CO426	Advanced Computer Architecture	3-0-1	4
CO422	Theory of Computation	3-1-0	4
CO406	Distributed Systems	3-0-1	4
CO509	Computer Vision & Image Processing	3-0-1	4
CO512	Parallel Programming	3-0-1	4
CO513	Fundamentals of Speech Processing	3-0-1	4
CO514	Machine Learning	3-0-1	4
CO515	Knowledge Representation and Reasoning	4-0-0	4
CO516	Advanced Algorithms	4-0-0	4
CO517	Virtual and Augmented Reality	3-0-1	4
CO518	Cloud Computing	3-0-0	3
CO504	Natural Language Processing	3-0-0	3
CO519	Internet of Things	3-0-0	3
CO520	Software Defined Networking and Network Function Virtualization	3-0-0	3
CO521	Computational Geometry	3-0-0	3
CO522	Bioinformatics	3-0-0	3
CO523	Quantum Computing	3-0-0	3
CO524	Linear Optimization	3-0-0	3
CO505	Advanced Database Management System	3-0-0	3
CO503	Fuzzy Logic and Neural Networks	3-0-0	3
CO435	Mobile Computing	3-0-0	3
CO525	Data Mining	3-0-0	3
CO526	Operation Research	3-0-0	3

COMPUTER SCIENCE AND ENGINEERING (continued)

Courses offered in Master of Computer Application

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS 405	Discrete Mathematics	3	IC361	Accounting of Financial Management	3
CS 412	Data structures	4	CS413	Database Management Systems	3
EF103	Communicative English (non-credit)	0	CS513	Software Engineering	3
CS 312	Object Oriented Programing and Data Structure Lab.	2			
-	Elective-2	3	CS414	Database Management Systems Lab.	2
	Elective-3	3	CS518	Software Engineering Lab	1
	Bridge course-1	0	-	Elective-4	3
	Bridge course-2	0	-	Elective-5	3
Total -		18	Total -		18

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS519	Computer Networks	4	CS 504	Major Project	16
CS520	Networks Lab	2		Open Elective-II	3
CS516	Operating Systems	3	Total		19
CS517	Operating System Lab.	2			
CS515	Minor Project	5			
-	Elective-6	3			
-	Elective-7	3			
-	Open Elective-I	3			
Total		25			

Elective Courses						
CS525	Artificial Intelligence	3		CS601	Design & Analysis of Algorithms	3
CS424	Formal Language and Automata	3		CS609	Geographic Information Systems	3
CS421	Graph Theory	3		CS531	Object Oriented Programming & Design	5
CS529	Embedded Systems	4		IT611	Distributed Systems	3
CS621	Mobile Computing	4		IC361	Accounting & Financial Management	3
IT509	Data Mining & Data Warehousing	4		MS509	Probability & Statistics	4
IT507	Computer Security & Cryptography	3		BM504	Managerial Economics	2
CS606	Computer Architecture and Parallel Processing	3		BM501	Foundation of Management	3
CS610	Bioinformatics	3		CS204	Mathematical Foundation	3
CS533	Computational Geometry	3		CS305	Internet Concepts and Web Technology	3
CS522	Computer Graphics	4				
CS523	Enterprise Resource Planning	3				
CS524	Theory of Computation	3				
IT504	E-Commerce	3				
CS532	Compiler Design	4				
CS602	Image Processing	3				
CS422	Numerical Methods	4				

Courses offered in M.Tech. in Information Technology

First Semester			Second 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
Total		21	Total		18

COMPUTER SCIENCE AND ENGINEERING (continued)

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IT604	Term Project-I	8	IT605	Term Project-II	16
-	Elective-V	3	Total -	16	16
-	Elective-VI	3			
Total -		14			

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				Second Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
CS541	Mathematical Foundation for Computer Science	4		CS634	Computer Architecture and Parallel Processing	3
CS542	Advanced Algorithms and Data Structures	3		CS606	Advanced Programming Lab II	3
CS544	Selected Topics in Computer Networks	4		CS545	Seminar	2
CS543	Advanced Programming Lab I	3		--	Elective I	3/4
IT510	Advanced Operating Systems	4		--	Elective II	3/4
Total -		18		--	Open Elective I	3
				Total -		17/19

Third Semester				Fourth Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
-	Elective III	3/4		CS641	Term Project-II	16
-	Elective IV	3/4		Total		16
-	Open Elective II	3				
CS640	Term Project I	8				
Total		17/19				

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
CS611	Modern Compiler Design	3		CS614	Graph Theoretic Algorithms	3
IT517	Pattern Recognition	4		CS664	Parallel Algorithms	3

COMPUTER SCIENCE AND ENGINEERING (continued)

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 Network	3
CS725	Knowledge Representation and Reasoning	4		CS668	Blockchain 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 Solving	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 Applications	3		CS681	GPU Architecture and Programming	3
CS663	Randomized Algorithms	3		CS682	Multi-Core Computer Architecture - Storage and Interconnects	2
CS664	Parallel Algorithms	3		CS683	Data Analytics with Python	3
CS665	AI: Knowledge Representation and Reasoning	3		CS684	Cloud Computing and Distributed Systems	2

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 in particular, 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.

Programme offered

1. Master of Design (M. Des.)

Faculty and Areas of Interest

Associate Professor

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

Mr. Shiv Kumar Verma, M. Des. (IIITDM, Jabalpur)
Design Methods, Form Studies, Design Science, Design Education and Pedagogy

Recruitment of Faculty members for the following positions is under process:

Professor: 01

Associate Professor: 02

Assistant Professor: 01

*Recognized Ph.D. Supervisor

LEGENDS: **TU-** Tezpur University, **IIITDM-** Indian Institute of Information Technology, Design and Manufacturing.

Facilities

The Department has the following facilities:

- **Digital Prototyping Studio:** The studio have the following equipment
 - * 10 numbers of High End Computers (HP Z2 G4 Intel Core i7-9700/ 16GB/ 1TB)
 - * 2 numbers of Workstation (Dell Precision 3640)
 - * Software Packages (Solidworks, Rhino, Adobe master suit)
 - * Cintiq Pro for product styling, illustrations, and visual design
 - ✓ 01 Wacom Cintiq Pro 32 inch
 - ✓ 02 Wacom Cintiq Pro 24 inch
- **Physical Prototyping Studio:** The studio has the following equipment
 - * 3D Clay and Plastic Printer
 - * 3D Printer with Nylon, PLA, ABS, CPE and PVA Printing
- **Communication Studio:** The studio has the following equipment
 - * DSLR Camera
 - * Tripods

The department plans to develop following facility shortly:

- *Product Development Workshop* – The workshop will be equipped with heavy-duty machines required for large scale prototypes. The setup requires a larger space. It has three divisions: Woodworking machines, Metalworking machines, and Paint facility.

Selected Publications

- Verma S.K., Puneekar 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 Technologies*, Springer.
- Verma S.K., Puneekar 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., Puneekar 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-411	Design - An Introduction	3	DD-421	Design Methods	3
DD-512	Form studies	4	DD-422	Ergonomics (Industrial Ergonomics, Cognitive Ergonomics, Human factors in Interaction Design)	3
DD-413	Materials and Processes	3	DD-423	Design Project	3
DD-414	Interface Design	3	Elective (any one from the below courses)		
Elective (any one from the below courses)			DD-424	Product Semantics	3
DD-415	Sketching for Designers (Digital & Conventional methods)	3	DD-425	Graphic Design	3
DD-416	Visual Design- Principles and Applications	3	DD-426	Interaction Design	3
DD-417	Bio-Design-I	3	DD-427	Bio-Design-II	3
	CBCT	3		CBCT	3
Total Credits		19	Total Credits		15

Third Semester			Fourth Semester		
Course Code	Course Title	CR	Course Code	Course Title	CR
DD-431	Design Research Methodologies	3	DD-441	Design Research Seminar (focused on scientific writing) or Design Workshops (Lecture series by visiting faculties)	3
DD-432	Usability Engineering	3	DD-442	M. Des. Thesis Project - Stage 2	12
DD-433	M.Des. Thesis Project - Stage 1	10	Total Credits		15
Elective (any one from the below courses)					
DD-434	Sustainable Design	3			
DD-435	Semantics and Communication Theory	3			
DD-436	Product Detailing	3			
Total Credits		19			

ELECTRICAL ENGINEERING

(Year of Establishment: 2014)

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.

Programme offered

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

Faculty & Areas of Interest Professor

Soumik Roy*, Ph.D. (TU) - HoD

Neuroengineering, Healthcare system, Hydroponics, Digital System Design, Intelligent Instrumentation

Assistant Professor

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

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

Manashita Borah*, M.Tech. (NITS), Ph.D. (NITS)

Control Systems, Chaos and Fractional Order Systems, biomedical applications, wastewater management, IoT, Smart energy system.

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, 5 Optimization in Power Electronic Converters Design, Artificial Intelligence in Renewable Energy Applications

Anish Ahmad*, PhD (IITBHU)

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

*Recognized Supervisor

LEGENDS: **TU-** Tezpur University, **JMI**-Jamia Milia Islamia New Delhi, **NITS**- National Institute of Technology Silchar, **NITA**- National Institute of Technology Agartala, **IIT-BHU** - Indian Institute of Technology (BHU) Varanasi, **HoD**- Head of the Department.

Facilities

- The Department has the following Laboratory facilities.

- Basic Electrical Engineering Laboratory
- 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 Impedance 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. 576-583, Sept. 2020, doi: 10.1109/TDMR.2020.3011736.
- M. Borah and B. K. Roy, "Hidden multistability in four fractional-order memristive, meminductive and memcapacitive chaotic systems with bursting and boosting phenomena", *European Physical Journal Special Topics*, pp.1-11, 2020, Springer (accepted). (SCI, JCR IF=1.668)
- 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 structure 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, Solitons and Fractals*, vol. 131, pp. 2020, Elsevier. (SCI, JCR IF=3.764)

Courses offered in B.Tech. in Electrical Engineering (Continued)

First Semester			Second Semester		
Course Code	Course Name	Cr.	Course Code	Course Name	Cr.
CH 103	Chemistry	4	PH 104	Physics-II	2
MS 104	Mathematics-I	4	MS 105	Mathematics-II	4
EE 103	Basic Electrical Engineering	3	CE 103	Engineering Graphics	3
EE 104	Basic Electrical Engineering lab	1	ME 103	Workshop Practice	2
PH 103	Physics-I	3	CO 103	Introductory Computing / Programming for Problem Solving	3
EF 103	English	3	CO 104	Computing Lab	2
SE 100	Induction Program	-	ME 102	Engineering Mechanics	4

Third Semester			Fourth Semester		
Course Code	Course Name	Cr.	Course Code	Course Name	Cr.
MS 205	Mathematics III	3	BT 201	Biology	3
ES 201	Environmental Science	0	EE 217	Digital Electronics	3
BA 201	Economics	3	EE 218	Digital Electronics Laboratory	1
EE 211	Electrical Circuit Analysis	4	EE 219	Electrical Machines – II	3
EC 201	Electronics Devices	3	EE 220	Electrical Machines Laboratory – II	1
EC 202	Electronics Devices Lab	1	EC211	Microcontroller and Microprocessor	3
EE 214	Electrical Machines – I	3	EC212	Microcontroller Lab	1
EE 215	Electrical Machines Laboratory – I	1	EE 216	Electromagnetic Fields	4
EC 205	Signals and Systems	3		*Open Elective-1	3

Fifth Semester			Sixth Semester		
Course Code	Course Name	Cr.	Course Code	Course Name	Cr.
EE 311	Power Systems – I (Apparatus and Modelling)	3	IC 361	Accounting & Financial Management	3
EE 312	Power Systems Laboratory – I	1	EE 318	Power Systems – II (Operation and Control)	3
EE 313	Control Systems	3	EE 319	Power Systems Laboratory - II	1
EE 314	Control Systems Laboratory	1	EE 320	Measurements and Instrumentation Laboratory	4
EE 315	Power Electronics	3	EE 321	Electronics Design Laboratory	3
EE 316	Power Electronics Laboratory	1		Program Elective – 2	4
	Program Elective – 1	3		Program Elective – 3	3
	*Open Elective – 2	3		Open Elective – 3	3
LW 301	Indian Constitution	0	EE 322	Summer Internship #	0

ELECTRICAL ENGINEERING (continued)

Seventh Semester\$			Eighth Semester		
Course Code	Course Name	Cr.	Course Code	Course Name	Cr.
XX xxx	HSS / Management Elective	3		Program Elective -6	3
	Program Elective -4	3		Open Elective -6	3
	Program Elective -5	3	EE 420	Project Stage-II	10
	Open Elective – 4	3		Program Elective -6	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			

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 329	Digital Signal Processing
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 based on 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>

ELECTRONICS AND COMMUNICATION ENGINEERING

(Year of Establishment: 1997)

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, Gol

Faculties of the department have several international research collaborations including Queen's University Belfast (QUB), UK; University Technology Malaysia, Malaysia; Airlangga University, Indonesia, and University of Rio de Janeiro, 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
Jiten Chandra Dutta*, Ph.D. (JU)
Biosensors and Bioelectronics, Neurobioengineering
Satyajib Bhattacharyya*, Ph.D. (DU)
Microwave Antennas, Absorbing Materials
Santanu Sharma*, Ph.D. (TU)-HoD
Semiconductor Devices, Bioelectronic Devices, Vehicular Electronics, Power Electronics
Soumik Roy*, Ph.D. (TU)
Neuroengineering, Healthcare system, Hydroponics, Digital System Design, Intelligent Instrumentation
Bhabesh Deka*, Ph.D. (IITG)
Signal/Image Processing, Computer Vision, Deep Learning for signal and image analysis

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

Associate Professor

Nayan Moni Kakoty *, Ph.D. (TU)
Robotics, Biomedical Signal Processing
Deepika Hazarika*, Ph.D. (TU)
Image and Video Processing
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
Biplob Mondal*, Ph.D. (JU)
VLSI and MEMS Devices
Durlav Sonowal, Ph.D. (TU)
Sensors, Signal Processing
Ananya Bonjyotsna, Ph.D. (TU)
Audio Processing
Priyanka Kakoty *, Ph.D. (TU)
Intelligent Instrumentation
Rupam Goswami *, Ph.D. (NITS)
Micro/Nano-electronics and VLSI, Bio/Memristive Sensors, Charcoal Electronics

* Recognized Supervisor

LEGENDS: **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

ELECTRONICS AND COMMUNICATION ENGINEERING (continued)

Facilities

The Department has the following 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
- Laminar Air Flow Unit

- Spin coating unit
- Prism Coupler Water De-ionizer
- Thickness measurement instrument
- Stero-microscope
- GP-GPU-based High-Performance Computing server

Research Activities

- No. of papers published in the year 2019-2020: 39
- No of ongoing research projects: 10
- No. of current Ph.D. scholars: 32

Selected Publications

- D. Deka and B. Deka, "Stratification of High-Risk Hypersensitive Patients using hybrid heart-rate variability features and boosting algorithms," *IEEE Access*, vol. 9, pp. 62665 – 62675, 2021.
- E. K. Lee, R. K. Baruah, J. W. Leem, W. Park, B. H. Kim, A. Urbas, Z. Ku, Y. L. Kim, M. A. Alam, C. H. Lee, "Fractal Web Design of a Hemispherical Photodetector Array with Organic-Dye-Sensitized Graphene Hybrid Composites", *Advanced Materials*, vol. 32 (46), Art. 2004456, 2020.
- R. Narzary, S. Maity, and P. P. Sahu, "Coupled ZnO-SnO₂ Nanocomposite for Efficiency Enhancement of ZnO-SnO₂/p-Si Heterojunction Solar Cell," *IEEE Transactions on Electron Devices*, vol. 68, pp. 610 – 617, 2020.
- M. Senapati and P. P. Sahu, "Onsite fish quality monitoring using ultra-sensitive patch electrode capacitive sensor at room temperature", *Biosensors and Bioelectronics*, vol-168, Art.112570, 2020.

Patents:

- Santanu Sarma, Barnalee Sarma, Riku Chutia & Partha Pratim 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".

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

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	1	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
BA302	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		EC317	Speech and Audio processing	
EC308	Electrical machines and power protection	3	EC318	Digital image and video processing	
EC309	Intelligent instrumentation		EC319	VLSI Design	
EC310	CMOS design			Open Elective-II	3
	Open Elective-I	3	IC361	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.

ELECTRONICS AND COMMUNICATION ENGINEERING (continued)

Seventh Semester		
Course Code	Course Title	Cr.
	ECE Elective –III (any one from the subjects below)	
EC401	Information Theory & Coding	3
EC402	Embedded systems	
EC403	Satellite communication	
EC404	Digital systems and VHDL	
	ECE Elective-IV (any one from the subjects below)	
EC405	Computer Vision	3
EC406	Biomedical Signal Processing	
EC407	Antenna and propagation	
EC408	Digital control system	
	ECE Elective-V (any one from the subjects below)	
EC409	Introduction to MEMS	3
EC410	Biomedical electronics	
EC411	Fibre optic communication	
EC412	Nano-electronics	
	ECE Elective-VII (any one from the subjects below)	
EC413	Fuzzy Logic and Neural network	3
EC414	Bioneuro engineering	
EC415	Digital signal processor	
EC416	Electronics design automation	
	Open Elective -III	3
EC417	Project- Stage I	12
	* HSS/Management Elective	3
CT465	Essence of Indian Traditional Knowledge (MC- Non-Credit)	1

Eighth Semester		
Course Code	Course Title	Cr.
	ECE Elective-VI (any one from the subjects below)	
EC418	Power electronics	3
EC419	Mixed signal design	
EC420	High speed electronics	
	Open Elective-IV	3
EC421	Project- Stage II	20

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

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EL517	Physical and Industrial Design of Electronics Systems	4	EL516	Design of Fine Mechanics and Power Devices	4
EL531	Design of Digital Systems	4	EL530	VLSI Design	4
EL521	Design and Technology of Electronic Devices	4	EL538	Advanced Electronic Devices	3
EL537	Advanced Programming Language	4	EL540	Intelligent Instrumentation	4
	Open Elective I	3	BE528	MEMs and Nanotechnology	3
	Elective I	4		Open Elective II	3
				Elective II	4

Course Code	Course Title	Cr.
EL601	M. Tech. Dissertation	24
Elective I (Any one from the following courses)		
Course	Course Title	Cr.
EL 533	Data Communication & Networks	4
EL 535	Information Systems	4
Elective II (Any one from the following courses)		
Course Code	Course Title	Cr.
EL 546	Modeling and Simulation of Digital Sytems	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	4	EL 540	Sensor & Sensor Intelligence	4
	Open Elective I	3		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	24			
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/>

ENERGY

(Year of Establishment: 1996)

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, One year Post Graduate Diploma in Renewable Energy and Energy Management (under distance education mode through CDOE) 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 a number of international collaborative research projects and has on-going international collaborative projects like Indo-Brazil, Indo-Hungary, Indo- UK. The Department also has fifteen on-going research projects.

Programmes Offered

- Ph.D.
- M.Tech. in Energy Technology
- Post Graduate Diploma in Renewable Energy and Energy Management (through CDOE)

Faculty and Areas of Interest

Professor

Debendra Chandra Baruah*, Ph.D.
(PAU)-HoD

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

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

Associate 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.

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

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

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

*Recognized Supervisor

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**

Facilities

The Department has the following facilities:

Laboratory

The Department is equipped with various equipment such as Gas Chromatograph, Computerized power meter, Bomb Calorimeter, Electrochemical Analyzer, Fuel cell, Solar PV grid integration system, Biomass gasifier system, Solar radiation measuring equipment, Wind speed direction measuring equipment, Wind electric generator, Briquetting Press, Single cylinder 4-stroke petrol engine Test Rig with electrical Dynamometer, Fibertech apparatus, Toxic 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, Dual Fuel Engine, Vacuum Distillation Apparatus, Microhydel test set-up, Research Radiometer, Solar thermal collector test set-up, Solar Dryer, Peristaltic Pump, Ultrasonicator, Programmable Muffle Furnace, Biodiesel Plant and various renewable energy systems.

Departmental Library

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

Scholarship

MHRD fellowships are available for GATE qualified candidates. NEC fellowships are available for the students from North East regions. ONGC also offers scholarship to M. Tech. students of the Department.

Research Activities

- Number of papers published in the year 2019-20: 30
- No. of ongoing research projects: 15
- No of current Ph.D. scholars: 35

Selected Publications

- Brahma, B., Narzary, R. and Baruah, D.C., Acetamide for latent heat storage: Thermal stability and metal corrosivity with varying thermal cycles. *Renewable Energy*, 145: 1932-1940, 2020.
- Gohain, M., Laskar, K., Phukon, H., Bora, U., Kalita, D., and Deka, D. Towards sustainable biodiesel and chemical production: multifunctional use of heterogeneous catalyst from littered *Tectonagrandis* leaves. *Waste Management*, 102, 212-221, 2020.

- Choudhury, N. D., Bhuyan, N., Bordoloi, N., Saikia, N., and Kataki, R. Production of bio-oil from coir pith via pyrolysis: kinetics, thermodynamics, and optimization using response surface methodology. *Biomass Conversion and Biorefinery*, 1-18, 2020.

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



ENERGY (continued)

Courses offered in M. Tech. in Energy Technology

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

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

FOOD ENGINEERING AND TECHNOLOGY

(Year of Establishment: 2006)

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 in order to cater to the needs of the rapidly growing food processing sector. Since its inception the Department has been imparting Post Graduate education in the area of 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) pro-

gramme 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 and Meghalaya under the PM-FME scheme (PM Formalisation of Micro food processing Enterprises Scheme) of Ministry of Food Processing Industries (MoFPI), Gol, 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

- Ph.D.
- M. Tech. in Food Engineering and Technology.
- B. Tech. in Food Engineering and Technology.

Faculty and Areas of Interest

Professor
Charu Lata Mahanta*, Ph.D. (CFTRI)
Rice Science and Technology, Product Development and Food Quality
Sankar Chandra Deka*, Ph.D. (HAU)
Food Biochemistry and Food Quality, Fermented Foods
Manuj Kumar Hazarika*, Ph.D. (IITKgp)
Food Materials Engineering, Food Industrial Engineering, Food Design.

Brijesh Srivastava*, Ph.D. (IITKgp)
Emerging non-thermal processing, Fruits & Vegetable Processing and Machineries, Food Rheology, Hurdle Technology
Nandan Sit*, Ph.D. (TU)-HoD
Food Engineering, Biochemical Engineering, Food Biotechnology

Associate Professor

Poonam Mishra*, Ph.D. (TU)
Nano Composite, Fruits and Vegetable Technology, Function Food, Biosensors.
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
Nishant Rachayya Swami Hulle*, Ph.D. (IITKgp)
Food Process Technology, Non-Thermal Processing, Product Development.

* Recognized Supervisor

LEGENDS: **CFTRI**-Central Food Technological Research Institute Mysore, **HAU**-Haryana Agricultural University Hisar, **IITKgp**-Indian Institute of Technology Kharagpur, **TU**-Tezpur University, **IITG**-Indian Institute of Technology Guwahati, **HoD**- Head of the Department

Facilities

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

FOOD ENGINEERING AND TECHNOLOGY (continued)

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, Photofluorometer, Biohazard Safety Cabinet, Packaging Equipment, Laminar Flow, Fruit Crusher, etc.

Research Activities

- Number of papers published in the year 2019-20: 50
- Number of ongoing research projects: 10
- Number of current Ph.D. scholars: 48

Selected Publications

- Akasapu, K., Ojah, N., Gupta, A. K., Choudhury, A. J., and Mishra, P. An innovative approach for iron fortification of rice using cold plasma. *Food Research International*, 136, 109599, 2020.
- Devi, L. S., & Das, A. B. Effect of ionic liquid on sol-gel phase transition, kinetics and rheological properties of high amylose starch. *International Journal of Biological Macromolecules*, 162, 685-692, 2020.
- Gautam, G., Duary, R.K., Gupta, K., and Mahanta, C.L., Inhibition mechanism of 3-hydroxy-3-methyl-glutaryl-CoA reductase by tocotrienol-rich rice bran fraction optimally extracted with ultrasonic energy, *International Journal of Biological Macromolecules*, 164, 1328-1341, 2020.
- Borah, P. K., Das, A. S., Mukhopadhyay, R., Sarkar, A., and Duary, R. K. Macromolecular design of folic acid functionalized amylopectin-albumin core-shell nanogels for improved physiological stability and colon cancer cell targeted delivery of curcumin. *Journal of Colloid and Interface Science*, 580, 561-572, 2020.
- Arafat, Y., Altemimi, A., Ibrahim, S. A., & Badwaik, L. S. Valorization of Sweet Lime Peel for the Extraction of Essential Oil by Solvent Free Microwave Extraction Enhanced with Ultrasound Pretreatment. *Molecules*, 25(18), 4072, 2020.

For more information one



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

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS 104	Mathematics-I	4	PH 104	Physics-II	2
PH 103	Physics-I	3	MS 105	Mathematics-II	4
CH 103	Chemistry	4	CO 103	Introductory Computing	3
EE 103	Basic Electrical Engineering	3	ME 103	Workshop Practice	2
EE 104	Basic Electrical Engineering Lab	1	CE 103	Engineering Graphics	3
EF 103	English	3	CO 104	Computing Laboratory	2
SE 100	Induction Programme	-	ME 102	Engineering Mechanics	4
			FE 101	Introduction to Food Engineering & Technology	4
Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS 205	Mathematics III	3	FE 205	Food Chemistry	4
BA 201	Economics	3	FE 206	Transport Phenomena	4
FE 201	Biochemistry and Nutrition	4	FE 207	Principles of Food Processing & Preservation	2
FE 202	Process Thermodynamics & Reaction Kinetics	4	FE 208	Mechanical Operations & Material Handling	3
FE 203	Fluid Mechanics	4	FE 209	Food Process Calculations	2
FE 204	Basic & Food Microbiology	4	FE 210	Food Material Science & Engineering	3
ES 201	Environmental Science	0		Open Elective I	3
Fifth Semester			Sixth Semester #		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
FE 301	Instrumentation & Process Control in Food Industry	4	IC 361	Accounting & Financial Management	3
FE 302	Thermal Operations in Food Processing	4	FE 306	Food Packaging Technology	3
FE 303	Separation Techniques in Food Processing	3	FE 307	Food Process Equipment Design	3
FE 304	Grains and Oilseeds Processing Technology	3	FE 308	Fruits and Vegetables Processing Technology	3
FE 305	Food Analysis & Quality Control	4	FE 309	Biochemical Engineering	3
LW301	Indian Constitution	0	FE 350	Credit seminar	1
	Elective I	3		Elective II	3
	Open elective II	3		Open elective III	3

FOOD ENGINEERING AND TECHNOLOGY (continued)

Seventh Semester			Eight Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
FE 401	Dairy Products Technology	3	FE 480	Comprehensive viva-voce	0
FE 402	Plantation Products & Spices Processing Technology	3	FE 482	Project-II	8
FE 471	Industrial Summer Training#	2		Open elective IV	3
FE 481	Project-I	4			
CT 430	Essence of Indian Traditional Knowledge	0			
	HSS/Management Elective	3			
	Elective III	3			
	Elective IV	3			

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			

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.

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

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
FT 511	Research Methodology	3	FT 516	Emerging Food Processing Technologies	3
FT 512	Transport Phenomena in Food Engineering	4	FT 517	Food Equipment and Plant Design	3
FT 513	Engineering Properties of Biological Materials	3	FT 518	Recent Trends in Food Product Development and Packaging	3
-	Elective- I	3	FT 519	Food Process Modeling and Simulation	3
-	Elective- II	3	FT 571	Seminar	1
-	Elective -III	3	-	Elective- IV	3
-	Open elective- I	3	-	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		FT550	Recent Trend in Enzyme Technology	3
Group-III			FT 551	Valorization of Food Byproduct	3
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			

MECHANICAL ENGINEERING

(Year of Establishment: 2006)

The Department of Mechanical Engineering was established in the year 2006 under the 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 cutting-edge 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)
 - 2.1. M.Tech. in Thermal and Fluid Engineering
 - 2.2. M.Tech. in Machine Design
3. B.Tech. in Mechanical Engineering

Faculty and Areas of Interest Professor

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

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

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

Assistant Professor

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

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

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

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

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

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

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

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

Rakesh Bhadra, M.E. (BESUS)
(On study leave)
Manufacturing, Production Engineering

Barnali Chowdhury, M.E. (AEC)
Mechanical Engineering

Seikh Mustafa Kamal*, Ph.D. (IITG)
(on Lien) *Machine Design*

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

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

*Recognized Supervisor

LEGENDS: **IITK**-Indian Institute of Technology Kanpur, **TU**-Tezpur University, **IITG**-Indian Institute of Technology Guwahati, **GU**-Gauhati University, **UA**-University of Alberta, Canada, **AIT**- Asian Institute of Technology, Bangkok, **BESUS**-Bengal Engineering and Science University, West Bengal, **AEC**- Assam Engineering College, Guwahati, **NITS** - National Institute of Technology, Silchar, **HoD**- Head of the Department.

Facilities

The Department has the following Laboratory facilities

The Department has several state-of-the-art computer laboratories such as:

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

Central Workshop

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

Research Activities

- Number of paper published in the year 2019-20: 18
- Number of ongoing research projects: 01
- Number of current Ph.D. scholars: 15

Selected Publications

- 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
- Nondy J. and Gogoi T. K. A comparative study of metaheuristic techniques for the thermoenvionomic optimization of a gas turbine based benchmark combined heat and power system. ASME J. of Energy Resources Technology, 143(6) (2021) 062104.
- Kalita Z., Datta D., Bi-objective corridor allocation problem using a permutation-based genetic algorithm hybridized with a local search technique, Soft Computing, 23 (3) (2019) 961-986
- Deka A., Datta D. Multi-objective optimization of annular fin array subject to thermal load. Journal of Thermophysics and Heat Transfer, 33(1) (2019), 254-263
- 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, 2020, DOI: 10.1108/HFF-08-2019-0627

Courses offered in B.Tech. in Mechanical Engineering

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CH103	Chemistry	4	PH 104	Physics -II	2
MS104	Mathematics -I	4	MS 105	Mathematics -II	4
PH103	Physics -I	3	EC 102	Basic Electronics	4
EE103	Basic Electrical Engineering	3	ME 102	Engineering Mechanics	4
EE104	Basic Electrical Engineering Lab	1	ME103	Workshop Practice	2
EF103	English	3	CO103	Introductory Computing	3
SE100	Induction Program	-	CO104	Computing Laboratory	2
			CE103	Engineering Graphics	3
Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS 205	Mathematics- III	3	BT 201	Biology	3
BA 201	Economics	3	ME 205	Thermodynamics	4
ME 201	Solid Mechanics	4	ME 209	Fluid Mechanics- II	3
ME 202	Fluid Mechanics- I	3	ME 214	Kinematics of Machinery	3
ME 203	Material Science	3	ME 215	Mechanical Measurements and Instrumentation	3
ME 208	Manufacturing Technology- I	3	ME 216	Manufacturing Technology- II	3
ME 217	ME Lab (Design)-I	2			
ES 201*	Environmental Science	0			

MECHANICAL ENGINEERING (continued)

Fifth Semester			Sixth Semester #		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ME 308	Heat and Mass Transfer	4	IC 316	Accounting and Finance Management	3
ME 311	Machine Design -II	3	ME 312	Machine Design II	3
ME 313	Dynamics of Machinery	3	ME 316	Computer-Aided Engineering	3
ME 314	Applied Thermodynamics	4	ME 317	ME Lab (Thermal) III	2
ME 315	ME Lab (Manufacturing)-II	2	ME 318	Mini Project	2
-	ME-Elective I	3	-	ME-Elective II	3
-	Open Elective I	3	-	ME-Elective III	3
LW 301*	Indian Constitution	0		Open Elective II	3

Seventh Semester \$			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
XXxxx	HSS/Management Elective	3	-	ME Elective VI	3
ME 401	Industrial System Engineering	3	-	Open Elective IV	3
ME 471**	Industrial Summer Training #	2	ME 484	Project II	8
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			

*ES201, LW301 and CT465 are Mandatory-Non-Credit courses as per the revised-AICTE guideline. The lectures and laboratory classes 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 considered 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.

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 Heat-Transfer	3		ME 622	Communication Skills for Scientists and Engineers	3
ME 605	Hybrid Electric Vehicles	3				
ME 701	Advance Heat Transfer	3				

MECHANICAL ENGINEERING (continued)

*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 based on 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 Solid Mechanics	4	ME 530	Numerical Methods	4
ME 541	Advanced Fluid Mechanics	4	ME 548	Convection 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 Automation	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>





HUMANITIES AND SOCIAL SCIENCES



DEPARTMENT OF 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 post-graduate degree programme in Assamese, will incorporate courses in textual criticism/text-critical studies and digital humanities. Textual criticism/textcritical studies and digital humanities have also been identified as the thrust areas in research.

Programme offered

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

Sanjib Deka, Ph.D. (GU)

Study of Assamese Language, Medieval Assamese Language, Assamese Morphology, Nineteenth Century Assam, Printing History, Creative Writing.

Jyotishman Das, M.Phil. (DU)

Sociology of Assamese Literature, Assamese Novel, Assamese Mass Media, Creative Writing

LEGENDS: **GU**-Gauhati University, **RGU**-Rajiv Gandhi University, **DU**-Dibrugarh University, **HoD**- Head of the Department

Facilities:

- Digital Library
- Departmental Library

Research Activities

- No. of papers published in the year 2019-20: 08.
- No. of ongoing research projects: NIL
- No. of current Ph.D. scholars: NIL

Selected Publications:

1. Subrat Jyoti Neog:

- Aamis: A Surrealist Film in Satsari, January 2020. (UGC Care listed Journal)
- Contemporary Indian Regional Films in Satsari, March 2020. (UGC Care listed Journal)
- Assamese Film Literature in Gariyashi, September 2020. (UGC Care listed Journal)

- Contemporary Assamese Drama: A Study in the light of Green-Studies in Satsari, Dec 2020. (UGC Care listed Journal)

2. Juri Dutta:

- Literature at the Time of Crisis and the Relevance of Studying Literature in Satsari, vol. no. 16, Issue no. 2, September 2020. (UGC Care listed Journal)
- New Historicism and its Relevance in Satsari, Vol. No. 15, Issue No. 8, February 2020. (UGC Care listed Journal)

3. Sanjib Deka:

- Barmajhili, Short Story Collection in Assamese, Published by Panchajanya, Guwahati, 2020. (Book)
- Hemprabha Das Racana Sambhar, edited with an Introduction, Published by Assam Publishing Company, 2020 (Book).

3. Jyotishman Das:

- Padmanath: The Pioneer of Assamese Society in Satsari, October 2020. (UGC Care listed Journal)
- Radha Govinda Baruah (1900-1977): The Architect of Modern Assam and his Times in International Journal of Management, November 2020. (UGC Care listed Journal).

ASSAMESE (continued)

Courses offered in M.A. in Assamese

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
AS401	History of Assamese Language	4	AS406	Structure of Assamese Language	4
AS402	History of Assamese Literature	4	AS407	Assamese Culture	4
AS403	Assamese Poetry	4	AS408	Assamese Drama	4
AS404	Historiography of Assamese Literature	4	AS409	Assamese Novel	4
AS405	Literary Theory and Criticism	4	AS410	Creative Writing, Editing and Assamese DTP	2
			OE	To be chosen from other Departments	3

*OE-Open Elective

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
AS411	Textual Criticism and Assamese Script	4	AS418	Assamese Short Story	4
AS412	Introduction to Digital Humanities	4	AS419	Non-fictional Writings from Assamese Periodicals	4
AS413	Assamese Prose	4	AS420	Women's Writings in Assamese: Non-Fictional Prose	4
AS414	Introduction to Linguistics (EC)	3	AS421	Sanskrit Literature (EC)	3
AS415	Introduction to Translation Studies (EC)	3	AS422	World Literature in English/Assamese Translation (EC)	3
AS416	History of Assamese Book (EC)	3	AS423	Introduction to Applied Linguistics (EC)	3
AS417	Comparative Literature (EC)	3	AS424	Tibeto Burman Languages of Assam (EC)	3
OE	To be chosen from other Departments	3	AS425	Film and Literature (EC)	3
			Project		6

*EC - Elective Course (Anyone)

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

CULTURAL STUDIES

(Year of Establishment: 1996)

Established in 1996, the Department of Cultural Studies of Tezpur University took the lead in the establishment of the UGC's prestigious 'Centre with Potential for Excellence in Particular Area' at Tezpur University in 2016. With faculty members from the country and abroad, the department engages in an analysis of society, culture and expressive 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 in order 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)
On Lien Sanskrit Poetics, Indian Classical Performing Arts
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
Jayanta Vishnu Das*, Ph.D. (TU)
Cultural Communication, Development Communication, Epistemology of Communication Studies
Mandakini Baruah*, Ph.D. (TU)
Gender Studies, Folklore Studies, Paremiology
Hashik, N.K*, Ph.D. (UoH)
Performance Studies, Community Studies, Research Methodology
Moushumi Kandali*, Ph.D. (UB)
Contemporary Visual Culture, Literary Cultures of India, Gender Studies, Translation and Creative Writing

Adjunct Faculty

Alison East, MPhEd (Otago)
Dance Ethnography, Somatic Education & Movement Philosophies

*Recognized Supervisor

LEGENDS: **RGU**-Rajiv Gandhi University Arunachal Pradesh, **TU**-Tezpur University, **DU**-Dibrugarh University, **UoH**-University of Hyderabad, **UB**-University of Baroda Gujarat, **HoD**-Head of the Department.

Facilities

The Department has well-equipped seminar-cum-conference hall, 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 Neelpawan Baruah

Research Activities

- No. of papers published in the year 2019-20: 15.
- No. of ongoing research projects: 03
- No. of current Ph.D. scholars: 33

Selected Publications:

- P. Dutta (ed). A Catalogue of Traditional Craft Objects of North East India. Tezpur University Publication. 2019.
- Das J. V. History of Press in Assam: An analysis of Pre and post Agitation Period. International Journal of Research in Social Science. 9 (6). 2019.
- D. P. Nath, M. M. Sarma and G. K. Borah. (Ed.) The Call of the Pherengadao: Translation of Select Writings of Bishnu Prasad Rava. Katha Publications Guwahati, 2019.

CULTURAL STUDIES (continued)

Courses offered in M.A. in Cultural Studies

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CT420	Introduction to Cultural Studies (Foundation Course)	4	CT425	Introduction to Popular Culture	4
CT421	Cultural Theory: Key Concepts (Foundation Course)	4	CT426	Culture and Heritage	4
CT422	Folklore and Culture I (Foundation Course)	3	CT428	Folklore and Culture II	3
CT423	Exploring North East India (Foundation Course)	4	CT429	Reading Culture: Perspectives from the West	3
CT424	Society and Culture	3	CT531	Cultural Documentation (skill-based)	3
CT521	Methods and Methodology	3	-	Open elective	3

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CT520	Digital Culture	4	CT 146	Dissertation	6
CT522	Mapping the Contemporary: Reading through Visual Cultural Expressions	4	-	Elective –I (Any two)	6
CT523	Gender and Culture	4	--	Elective –II (Any three)	9
CT427	Cultural Policy	3			
CT527	Reading India through the Cinematic Lens	3			
-	Open elective	3			

Elective Courses I (Any two from the following courses)			Elective Courses II (Any two from the following courses)		
Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CT524	Fundamentals of Photography and Documentary Production (skill-based)	4	CT532	Culture for Social Change (skill-based)	3
CT526	Cultural Industries (skill-based)	3	CT533	Contemporary Cultural Phenomena: Spectacles and Infotainment	3
CT528	Performance & Culture	3	CT534	Reading Culture: Perspectives from Assam	3
CT529	Cultural Memory	3	CT535	Intercultural Communication (skill-based)	3
CT530	Culture, Science and Society	3	CT536	Tapping the Transitions: Folk and Tribal Art in Contemporary time	3
-			CT537	Cross Cultural Studies: North East India and South East Asia	3
			CT538	Bhakti Aesthetics	3

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

EDUCATION

(Year of Establishment: 2014)

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

- Ph. D.
- M.A. in Education
- 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
R.D. Padmavathy, Ph.D. (PU)
Mathematics Education, Educational Psychology, Educational Technology, e-content Development, Research Methodology and Statistics in Education, Guidance and Counselling, Environmental Education

Hitesh Sharma*, Ph.D. (DAV)
Method of Teaching Physical Science and Biological Science, Educational Psychology, ICT in Education, Educational Administration, Guidance and Counselling, Early Childhood Education

Sashapra Chakrawarty*, Ph.D. (BHU)
Biological Science, Educational Psychology, Teacher Education, Elementary Education, Special Education, Guidance and Counselling
Pratima Pallai*, Ph.D. (LU)
Social Science Teaching, ICT in Education,

Guidance and Counselling, Measurement and Evaluation, Educational Psychology
Mohammad Asif, M. Ed. (JMI)

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

Sradhanjali Pradhan, Ph.D. (UU)
Pedagogy of Physical Science, Educational Technology and ICT in Education, Measurement and Evaluation

Rajinder Singh*, Ph.D. (PU)
Educational Technology, Educational Research, Special Education, ICT in Education, Language Education, Environment Education, Educational Guidance and Counselling

Sanghamitra Das, Ph.D. (NUEPA)
Gender and Education Sociology of Education, Pedagogy of Social Sciences, Teacher Education, Community Participation in School Education

Gopal Singh, Ph.D. (MDSU)
Science Education, Learning & Teaching, Constructivism and Thinking Skills, Measurement & Evaluation

*Recognized Supervisor

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

Facilities

The teaching support infrastructure includes a Psychological Laboratory and Education Technology Laboratory, Science and Mathematics resource centre, art, and craft resource centre, ICT and Language Laboratory

Research Activities

- No. of paper published in the year 2019–20: 10.
- No. of ongoing research projects: 3
- 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, (Indexed by scopus)
- 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 (UGC CARE), ISSN: 2278-2435, Vol-10, Issue -1, February 2021, PP-55-70
- Singh, A & Pallai, P. (2021). Preparing teachers for Inclusive classroom: Reconceptualizing Elementary Teacher Education program in Assam, Education India Journal: A Quarterly Refereed Journal of Dialogues on Education, (UGC CARE) 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) (UGC CARE)
- 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 (UGC CARE list)
- 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 (UGC CARE list)

Courses offered in B.Ed.

First Semester			Second Semester*		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BD 401	Childhood and Growing up	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 -Part I/ 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
			BD 510	Assessment and Evaluation of Learning	3
-	Open Elective- I	3	BD 511	Drama and Art in Education	2
Third Semester*			BD 512	Pre-Internship	4
Course Code	Course Title	Cr.	-	Open Elective- II	3
BD 550/ BD 551/ BD 552	Teaching of Assamese -Part II/ Teaching of English -Part II/ Teaching of Hindi -Part II	3	Fourth Semester		
BD 555/ BD 556	Teaching of Mathematics -Part II/ Teaching of Biological Science- Part II	3	Course Code	Course Title	Cr.
BD 553/ BD 554	Teaching of Social Science -Part II/ Teaching of Physical Science-Part II	3	BD 575	Gender, School and Society	3
BD 557	School Internship	16	BD 576	Knowledge and Curriculum -Part II	3
			BD 577	Creating an Inclusive School	3
			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.

EDUCATION (continued)

Courses offered in M.A. in Education

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MA 101	Philosophy of Education	4	MA 201	Sociology of Education	4
MA 102	Psychology of Education	4	MA 202	Measurement and Evaluation in Education	4
MA 103	Methodology of Educational Research	4	MA 203	History and Contemporary Issues in Indian Education	4
MA 104	Educational Technology	4	MA 204	Education Administration, Planning and Financing	3
-	Open Elective- I	3	MA 205	Education for Special Needs Children	3
			-	Open Elective- II	3
Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MA 301	Curriculum Studies	4	MA 401	Comparative Education: National and International Perspective	4
MA 302	Statistics in Education	4	MA 402	Principles and Techniques of Teaching	4
MA 303	Teacher Education	4	MA 403	Practical Work	4
MA 304	Educational Guidance and Counselling	4	MA 404	Dissertation	8
MA 305	Open and Distance Learning	4	-	-	-

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

ENGLISH

(Year of Establishment: 1994)

The Department of English was restructured in 2019 with the separation of the Department EFL (established in 1994), into the Department in English and the Department of Foreign Languages. The Department provides instruction and carries out research in American Literature, Critical Theory, English Literature, English Language Teaching, and Indian Literature in English, Linguistics, 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. M.A. in Linguistics and Language Technology
4. Integrated M.A. in English

Faculty and Areas of Interest

Professor

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

Farheena Danta*, Ph.D. (DU)
American Literature, Cultural Studies, Modernist Poetics

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

Madhumita Barbora*, Ph.D. (TU)
Linguistics (Syntax, Psycholinguistics), Field Linguistics, Documentation

Gautam Kumar Borah*, Ph.D. (NTNU)
Linguistics, Cognitive Semantics, Philosophy of Language.

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

Associate Professor

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

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

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

Assistant Professor

Reetamoni Narzari, Ph.D. (TU)
Indian Writing in English, Postcolonial Studies
Pallavi Jha, Ph.D. (UoH)
Children's Literature, Postcolonial Writing

Bashabi Gogoi, Ph.D. (GU)
British Literature, Adaptation Studies

Arup Kumar Nath*, Ph.D. (JNU)
Language Typology, Morphology, Sociolinguistics
Bipasha Patgiri, M.Phil. (JNU)
Phonology

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

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

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

* Recognized Supervisor

LEGENDS: **DU**-Dibrugarh University, **UU**-Utkal University Odisha, **GU**-Gauhati University, **HSS**- Humanities and Social Sciences, **TU**-Tezpur University, **NTNU**-Norwegian University of Science and Technology Nor-

way, **EFLU**- English and Foreign Language University, **NEHU**- North Eastern Hill University **DU**- Delhi University, **JNU**- Jawaharlal Nehru University New Delhi, **UoH**-University of Hyderabad, **IITG**- Indian Institute of Technology Guwahati, **HoD**-Head of the Department.

Facilities Departmental Library

Select books relating to literature, linguistics 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. The Department has a small Computer Laboratory for the use of students and research scholars.

Research Activities

- No. of papers published in the year 2018-2019: 14 (J-04, Conf. P- 07, BC-02 and Book- 01)
- No. of ongoing research projects:03
- No. of current Ph.D. scholars:55

ENGLISH (continued)

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	ES102	Elements of Environmental Science	3
			NS102	NSS/NCC	2
	MIL (ANYONE)			MIL (ANYONE)	
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			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EG211	British Drama I: Beginning to Shakespeare	4	EG214	Literary Criticism-I	4
EG212	English Fiction-I	3	EG215	Drama-II: Jacobean to Eighteenth Century	4
EG213	English Poetry-II: Pope to Romantics	4	EG216	Fiction-II: Victorian to Modern	4
To be chosen by students	CBCT-I/Open Elective	3	To be chosen by students	CBCT-II/Open Elective	3
	MIL (ANYONE)			MIL (ANYONE)	
AS201	MIL (Assamese): Short Story and Novel	2	AS202	MIL (Assamese) Essay, Structure of Assamese	2
EG209	Alternative English –III	2	EG211	Alternative English –IV	2
HN201	Natak Aur Ekanki (Hindi)	2	HN202	Nibandh Aur Hindi Bhasa Ki Bhasik San-Grachana	2
	OPTIONAL COURSES (ANY TWO)			OPTIONAL COURSES (ANY TWO)	
SO201	Society in India	2	SO202	Social Research Method	2
CT163	Basic Concepts in Cultural Studies-II	2	CT164	Cultural Studies: Its Development and Trends	2
MC301	Advertising and Public Relations	2	MC401	Electronic Media	2

Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EG311	Poetry-III: Victorian to Modern	4	EG315	Literary Criticism-II	4
EG312	Non-Fictional Prose	4	EG316	Introduction to Postcolonial Literature	4
EG313	Drama-III: Shaw to Beckett	4	EG317	Introduction to Children's Literature	3
EG314	Phonetics of English and ELT	4	EG318	Introduction to South Asian Writing	3
To be chosen by students	CBCT-III/ Open Elective	3	To be chosen by students	CBCT-IV/Open Elective	3

Seventh Semester			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EG451	Literary and Critical Theory-I	4	EG455	Language and Language Education	4
EG452	English Literature from Chaucer to Marlowe	4	EG456	Puritan to Eighteenth Century Literature (Poetry and Drama)	4
EG453	Shakespearean Drama	4	EG457	Romantic Poetry and Prose	4
EG454	Fiction-I (Early to Jane)	4	EG458	Fiction-II (Nineteenth Century)	4
			EG460	Fundamentals of Research	4
EG417	Academic and Critical Writing in English	3	To be chosen by	CBCT-V	3

Ninth Semester			Tenth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EG501	Literary and Critical Theory -II	4	EG504	Modern Poetry	4
EG502	Modern Drama	4	EG505	Modern Prose	4
EG503	Modern Fiction	4	EG506	Postcolonial Literatures in English	4
-	Elective- I	4	-	Elective- II	4
To be chosen by	CBCT-VII/ Open Elective	3	EG519	Term Paper	4

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.
EG507	Translation-I	4	EG508	Translation-II	4
EG509	Gender and Literature-I	4	EG510	Gender and Literature-II	4
EG511	American Literature-I	4	EG512	American Literature-II	4
EG513	Indian Writing in English-I	4	EG514	Indian Writing in English-II	4
EG515	ELT-I	4	EG516	ELT-II	4

ENGLISH (continued)

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

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LG421	Philosophy of Linguistics	4	LG426	Phonetics and Phonology -II	3
LG422	Phonetics and Phonology -I	4	LG427	Syntax	3
LG423	Morphology	4	LG428	Semantics	3
LG424	Basic Syntax	4	LG429	Field Linguistics	3
LG425	Introduction to Computational Linguistics	3	LG430	Cognitive Linguistics	4
			To be chosen by students	CBCT-I/ Open Elective	3
Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LG501	Language Typology and Language Universals	4	LG509	Historical Linguistics	4
LG502	Sociolinguistics	4	LG510	Advanced Computational Linguistics	4
LG503	Natural Language processing	4	LG511	Research Methodology	4
-	Elective- I	4	-	Elective- II	4
To be chosen by students	CBCT-III/ Open Elective	3	LG518	Introduction to Psycholinguistics	3
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.
LG504	Advanced Phonology	4	LG512	Minimalist Syntax	4
LG505	Advanced Cognitive Linguistics -I	4	LG513	Advanced Cognitive Linguistics-II	4
LG506	Generative Syntax	4	LG514	Advanced Field Linguistics (TBL)	4
LG507	Lexicography	4	LG515	Experimental Phonology	4
LG508	Acoustic Phonetics: Instrumental Techniques and Data Analysis	4	LG516	Formal Semantics	4
LG517	Language Documentation and Grammar Writing	4	LG519	Ethnolinguistics and Language Endangerment	4

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LG501	Language Typology and Language Universals	4	LG509	Historical Linguistics	4
LG502	Sociolinguistics	4	LG510	Advanced Computational Linguistics	4
LG503	Natural Language processing	4	LG511	Research Methodology	4
LG511	Research Methodology	3	LG521	Dissertation	6
-	Elective- I	4	-	Elective- II	4
To be chosen by	Open Elective	3	LG518	Introduction to Psycholinguistics	3

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.
LG504	Advanced Phonology	4	LG512	Minimalist Syntax	4
LG505	Advanced Cognitive Linguistics -I	4	LG513	Advanced Cognitive Linguistics-II	4
LG506	Generative Syntax	4	LG514	Advanced Field Linguistics (TBL)	4
LG507	Lexicography	4	LG515	Experimental Phonology	4
LG508	Acoustic Phonetics: Instrumental Techniques and Data Analysis	4	LG516	Formal Semantics	4
LG517	Language Documentation and Grammar Writing	4	LG519	Ethnolinguistics and Language Endangerment	4

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

FOREIGN LANGUAGES

(Year of Establishment: 2019)

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, PhD (GU) (HoD i/c)
Dean, School of Humanities & Social Science
Indian Writing in English, Literatures in English, Book History

Courses offered in One Year Certificate Course in Chinese

First Semester		
Course Code	Course Title	Cr.
CL 110	Read and Write Chinese-I	3
CL 112	Chinese Comprehension	3
CL 114	Speaking Chinese-I	3
CL 116	China in Brief-I	3

Assistant Professor

Rathijit Chakraborty, M.Phil.

(Chinese Studies), (JNU)

Chinese Language and Literature

Daveirou Lanamai, M. A.

(Chinese Studies) (JNU)

Chinese Language, Literature & Culture, Folklore & Folk Literature, Intercultural Studies

Pallavi, Ph.D. (German Studies), (JNU)

German Literature, Partition Literature, Literature, Gender and Emotions, Comparative Studies

LEGENDS: **JNU-** Jawaharlal Nehru University
New Delhi, **GU-**Gauhati University

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 PhD scholars: Nil

Selected Publications

- Prasanta Das, "A Nineteenth Century 'Act East' Policy: The Shan Mission of the American Baptist Missionaries", Aitihya The Heritage, Vol XI, Issue 2, 2020. (UGC -CARE listed)
- Pallavi, "The Role of Emotions in Identity Formations of Female Literary Characters in Partition-Narratives", Shodh Sarita, Vol. 7, issue 8, October-December 2020 (UGC -CARE listed)
- Daveirou Lanamai, "Name as Pointers: A Cultural Comparison of Chinese Naming Patterns with Selected Nationalities". Man, and Society: A Journal of North East Studies. (UGC-CARE listed)
- 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 (SCOPUS)

HINDI

(Year of Establishment: 2010)

The Department of Hindi, which was established in January 2010, offers a Ph.D. programme (in Hindi Literature/language), M.A. Programme in Hindi, Post Graduate Diploma Programme in Translation (Hindi), CBCT and Modern Indian Language (MIL) for integrated B.A. B.Ed. Programme. The Department also offers a Certificate Course in Official Hindi (Level-1) to the employees of the University in order to help them to develop their skill and self-confidence in speaking and writing in Hindi Language.

Programmes offered

1. Ph.D.
2. M.A.
3. Post Graduate Diploma in Translation (Hindi)
4. Certificate Course in Official Hindi

Faculty and Areas of Interest Professor

S. Tripathi *, Ph.D. (BHU)

Applied Linguistics, Indian Poetics and Folkloristic

Associate Professor

Anju Lata*, Ph. D. (TU)-HoD

Fiction

Assistant Professor

Anushabda*, Ph.D. (DU)

Poetry, Poetics, Media, and Linguistics

Pramod Kumar Sharma, Ph.D. (UoH)

Medieval Poetry

Shipra Shukla, M. Phil. (Delhi)

Adhunik Hindi Sahitya, Hindi Sahitya ka Itihas

*Recognized Supervisor

LEGENDS: **BHU**- Banaras Hindu University, **TU**- Tezpur University, **DU**- Delhi University, **HoD**-Head of the Department.

Facilities

The Department has a small departmental library.

Selected Publications:

- Tripathi, S. Ganesh Chauth (Book), Vishwavidyalay Prakashan, Varanasi: 2015.
- Tripathi, S. Lok ka Awalokan (Book), Arya Prakashan, Gandhi Nagar, New Delhi, 2013
- Anju Lata, Dalit Sahitya Lekhan aur Yatharthwad, ISSN 978-93- 80845-26-5. Ananga Prakashan. Delhi- 2015.
- Anju Lata, Stri Lakhan, ISSN 2349 -134X, New Delhi-2015.
- Anju Lata, Chayavad Aur Swakchandtawad, ISSN 2349 -134X, New Delhi-2015.
- Anju Lata: Pachapan Kambhe Laal Divare: Ek Mulyankan. ISSN 2349- 154X. link: Vle.du.ac.in, New Delhi-2015.
- Anushabda, : Hindi: Pratrakarita: Rupak Banam Mithak, Vani Prakashan, Delhi- 2014.



HINDI (continued)

Courses offered in PG Diploma in Translation (Hindi)

Course Code	Title	Cr.	Course Code	Title	Cr.
HN 411	Prayojanmulak Hindi, Bhasha Prayukti Aur Anuvad	4	HN 421	Anuvad Ka Vyavaharik Paksh	4
HN 412	Hindi Bhasha Ki Sanvaidhanik Sthiti Aur Anuvad	4	HN 422	Janasansar Madhyam Aur Anuvad	4
HN 413	Anuvad Vigyan Aur Uska Sidhanta	4	HN 423	Paribhashik Shabdavalee, Kosh Vigyan Aur Anuvad	4
HN414	Karyalayee Hindi Aur Anuvad	4	HN 424	Pariyojana Karya-II	6
HN415	Pariyojana Karya-I	6			

Courses offered in M.A.

प्रथम-सत्र (First Semester)			द्वितीय-सत्र (Second Semester)		
Course Code	Course Name	CR	Course Code	Course Name	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	हिन्दी साहित्य का इतिहास : आदिकाल और मध्यकाल	04	HN 437	हिन्दी साहित्य का इतिहास : आधुनिक काल	04
HN 433	भारतीय काव्यशास्त्र	04	HN 438	हिन्दी भाषा एवं लिपि	04
HN 434	पाश्चात्य काव्यशास्त्र	04	Open elective		03

तृतीय-सत्र (Third Semester)		
Course Code	Course Name	CR
HN 540	हिन्दी कथा साहित्य : उपन्यास एवं कहानी	04
HN 541	हिन्दी नाटक और निबंध	04
HN 542	भाषा विज्ञान	04
HN 543	हिन्दी आलोचना	04
Open elective		03

चतुर्थ-सत्र (Fourth Semester)					
वैकल्पिक-पत्र (Elective Course)					
(A) प्रयोजनमूलक हिन्दी (Prayojanmoolak Hindi)			(B) आधुनिक हिन्दी साहित्य (Adhunik Hindi Sahitya)		
Course Code	Course Name	CR	Course Code	Course Name	CR
HN 544	प्रयोजनमूलक हिन्दी : सिद्धांत-संदर्भ	04	HN 549	प्रेमचंद	04
HN 545	राजभाषा हिन्दी: संवैधानिक स्थिति एवं उसका अनुप्रयोगात्मक पक्ष	04	HN 550	जयशंकर प्रसाद	04
HN 546	हिन्दी 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
(C) अनुप्रयुक्त भाषा विज्ञान (Anuprayukt Bhasha vigyan)			(D) तुलनात्मक साहित्य (Tulnatmak Sahitya)		
Course Code	Course Name	CR	Course Code	Course Name	CR
HN 554	भाषा शिक्षण	04	HN 559	तुलनात्मक साहित्य:स्वरूप, उद्भव 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
(E) लोक साहित्य (Lok Sahitya)			(F) विमर्शमूलक अध्ययन (Vimarshmoolak adhyayan)		
Course Code	Course Name	CR	Course Code	Course Name	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	03	HN 572	आदिवासीमूलक विमर्श	04
HN 568	लघु शोध-प्रबंध / परियोजना कार्य	06	HN 573	लघु शोध-प्रबंध / परियोजना कार्य	06

(G) सिनेमा, साहित्य और समाज (Cinema, Sahitya aur Samaj)		
Course Code	Course Name	CR
HN 574	सिनेमा, साहित्य और समाज का अन्तः संबंध	04
HN 575	साहित्य का सिनेमाई रूपांतरण	04
HN 576	हिन्दी सिनेमा और अस्मितामूलक विमर्श	04
HN 577	साहित्य और सिनेमा का भाषाई एवं सामाजिक परिप्रेक्ष्य	04
HN 578	लघु शोध-प्रबंध / परियोजना कार्य	06

LAW

(Year of Establishment: 2016)

The Department of Law was established in the year 2016-17 under the school of Humanities and Social Sciences with a vision to produce legal luminaries who will add value in the field of teaching, judiciary, law making, law enforcement officers and more importantly work for the society as a good citizen. Presently, the department is offering two-year Master of Laws (LL.M.) programme. The objective of the programme is to make the department as a vibrant centre of legal education and research and give an opportunity to all aspirants who want to be a good academician, researcher, and work for social transformation. The first batches got admitted from the academic session 2018-19 and have completed their programs by the end of spring semester 2020. The department is making progress with existing four young and energetic permanent faculties along with Guest and Visiting faculties who are giving meaning to the designed curriculum not only from theoretical aspects but also teaching inter-disciplinary aspects.

Moreover, it is the department's priority to inculcate among students, teaching methods & ethics and promote inter-disciplinary research and inspire students for competitive examinations. It is proposed to start subsequently the five-year B.A.LL.B.(Honours); PG Diploma in Law and Ph.D. programs.

Programme Offered

Two-Year Master of Laws (LL.M.) with the following specializations:

1. Criminology and Criminal Law
2. Human Rights, International Humanitarian Law and Law Relating to Migrants #

Faculty and Areas of Interest

Associate Professor

Dr. Priya Ranjan Kumar, Ph.D. (GU) - HOD
Constitutional Law, Administrative Law, Contract & Corporate Law

Assistant Professor

Angel Habamon Syiem, LL.M. (SIU)

Human rights, International Law and Tribal Issues

Madhumita Acharjee, LL.M. (AU)

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

Debajit Kumar Sarmah, LL.M. (IP)

Criminology and Criminal Law

LEGENDS: **GU-** Gauhati University, **SIU-** Symbiosis International (Deemed) University, **AU-** Assam University, **IP-** Guru Gobind Singh Indraprastha University, **HoD-** Head of the Department.



Courses offered in Master of Laws*

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LW 401	Indian Constitutional Law and Emerging Challenges	4	LW 420	Judicial Process	4
LW 402	Research Methodology	4	-	ELECTIVE FROM GROUP A-1 or A-2	4
	ELECTIVE FROM GROUP A-1 or A-2		LW421 LW422	General Principles of Criminal Law OR International Human Rights Law	4
LW403 LW404	Criminology, Penology and Victimology OR Human Rights Jurisprudence	4	LW423 LW424	Law Relating to Cyber Crime OR Protection and Enforcement of Human Rights	4
LW 405	Interpretation of statutes (Audit Course)	NIL	LW 425	Project- II	4
LW 406	Project- I	4	-	Open Elective (to be chosen from other departments)	3
LW 407	Jurisprudence	4			
-	Open Elective (to be chosen from other departments)	3			

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
	ELECTIVE FROM GROUP B-1 OR B-2		LW 520	Law and Social Transformation	4
LW501 LW502	Correctional Laws and Administration in India OR International Humanitarian Law	4	LW 521	Pedagogy in Law	4
LW503 LW504	Socio Economic Offences OR Law Relating to Crimes Against Humanity	4	LW 522	Dissertation & Viva- Voce	8
LW505 LW506	Comparative Criminal Procedure OR International Migration Law	4	-	Open Elective (to be chosen from other departments)	3
LW 507	Project- III	4			
-	Open Elective (to be chosen from other departments)	3			

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

Nomenclature of Specialization will be 'Human Rights Laws' subject to approval of Competent Authority of new syllabus based on LOCF
* New syllabus based on LOCF will be implemented from academic session 2021-22 subject to approval of Competent Authority

MASS COMMUNICATION AND JOURNALISM

(Year of Establishment: 2001)

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

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

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

professional competency that is much demanded in an ever-changing communication environment.

Programme offered

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

Faculty and Areas of Interest

Professor

Sunil Kanta Behera, Ph.D. (BU)

Communication Theory and Research, Gender and Media

Abhijit Bora*, Ph.D. (GU)

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

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

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

Associate Professor

Perumal Anbarasan*, Ph.D. (JNU)

Media Studies, Cultural and Subaltern Studies, International Communication, Film Studies

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

ICT Implications on Society, Science Communication, Film Studies, Media Analysis.

Assistant Professor

Anjuman Borah, Ph.D. (TU)

Development Communication, Television and Traditional Media

Perosh Jimmy Daimari, Ph.D. (TU)

Film Studies, Development Communication

Kapou Malakar, Ph.D. (TU)

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

Manoj Deori*, Ph.D. (BU)

Online Journalism, Multimedia Productions, Media and Disaster Management

Junali Deka*, Ph.D. (AU)

Cultural Studies, Visual Communication, New Media and Society

*Recognized Supervisor

LEGENDS: **BU**- Berhampur University Odisha, **GU**- Gauhati University, **JNU**-Jawaharlal Nehru University New Delhi, **UoH**-University of Hyderabad, Telangana **JMI**-Jamia Millia Islamia New Delhi, **TU**-Tezpur University, **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 suites, all in broadcast quality. Students get hands-on experience in multi-camera production

in the well-equipped studio. An exclusive multimedia lab with latest software enables students to gather expertise in the nuances of different media productions. A very good screening room with a 100+ seat capacity is available for screening and discussion.

Research Activities

1. Number of papers published in the year 2019-20: 10
2. Number of ongoing research projects :2
3. 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, A. (2018). A resurgent print media: regional languages to the fore. Media 360. Special publication of Indian Institute of Mass Communication, Dhenkanal (pp. 27 – 31).

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



MASS COMMUNICATION AND JOURNALISM (continued)

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

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MC 572	Communication Theories	3	MC 578	Writing for media	4
MC 573	Principles of Journalism	4	MC 579	Photojournalism	3
MC 574	Advertising	4	MC 580	Broadcast Media: Television	3
MC 575	Broadcast media: Radio	4	MC 581	PR & Corporate communication	4
MC 576	New Media: Evolution, principles & theory	4	MC 582	Portfolio preparation and Comprehensive Viva-Voce-I	2
MC 577	Media in Northeast India	3	Elective I		4
			CBCS		3

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MC 588	Communication research methods	4	MC 599	Understanding cinema	3
MC 589	Communication for social change and development	3	MC 600	Science Communication	4
MC 590	Media law and ethics	3	MC 601	Political and International Communication	3
MC 591	Internship	4	MC 602	Communication research project	4
Elective II		3	MC 603	Portfolio preparation and Comprehensive Viva-Voce-II	2
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			

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

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

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 semester-long communication campaign.		
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 <http://www.tezu.ernet.in/dmass>

SOCIAL WORK

(Year of Establishment: 2014)

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

Programme offered

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

Faculty and Areas of Interest Professor

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

Development, Environment, Urbanisation, Migration, Agrarian Studies, Ethnicity, Social Movements, Society and Politics 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

Rajesh Kalarivayil*, Ph.D. (JNU)

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

Namami Sharma, Ph.D. (DU)

Environment and Ecology, Tribal Studies, Community development

Prerana Banik, M.Phil. (TISS)

Gender and livelihood, Community Organisation & social development, Development administration and governance.

LEGENDS: **DU**-University of Delhi, **JNU**-Jawaharlal

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

Selected Publications

- Prerana Banik. Implication of Social Work and Women's Livelihood in India. Published in The Asian Man. Volume 14, Issue 1, ISSN 0974-6366, 2020.
- Prerana Banik. Social Work intervention and Women empowerment through micro finance in India published in Perspectives in Social Work. Volume 34, Number 1, ISSN 0974-5114, 2019.
- Nair S S. and Kalarivayil R. Has India's Surrogacy Bill Failed Women Who Become Surrogates? *ANTYAJA: Indian Journal of Women and Social Change*, 3 (1), 2018.
- Saha A. Substance Abuse among Street Children: School Risk and Protective Factors, *Social Defence Journal*, National Institute of Social Defence, Ministry of Social Justice & empowerment, Government of India, VI. no.-02, ISSN no.00377716, 2018.
- 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 Psichiatria*- pISSN 0391-1772 eISSN 1827-1731, 2020.

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 Development	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		TOTAL CREDITS	21
SW 458	Field Work	6	Open Elective Course offered by the Department		
	TOTAL CREDITS	22	SW 462	Engaging with Communities	3

*1 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 Movements	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	529	BLOCK FIELD WORK	6
SW 525	FIELD WORK	5+1*	530	Dissertation	4
SW 526	Dissertation	2		TOTAL CREDITS	20
	Open Elective	3			
	TOTAL CREDITS	23			

*1 Credit is for Urban Camp

Internship non-credited but mandatory

SOCIAL WORK (continued)

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 Work with Persons with Disability	2	SW578	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)

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 north-eastern 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 critical approaches and perspectives in the classroom, but are also encouraged to participate in short field visits during vacations as part of their mandatory research projects. The department also makes an effort to expose the students to the prevailing social realities through activities such as outreach programmes, regular film screening, seminars and other programmes in collaboration with other social organizations. The department was awarded the UGC-SAP (DRS-I) of University Grants Commission in 2016.

Programme offered

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

Faculty and Areas of Interest

Professor

Chandan Kumar Sharma*, Ph.D. (DU[^])
Development, Environment, Migration, Agrarian Studies, Identity Politics, Social Movements, Urbanisation

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

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

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

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

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

A.S. Shimreiwung*, Ph.D. (JNU)
Sociology of Religion, Environmental Sociology, Sociology of Music

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

* Recognized Supervisor

LEGENDS: **IITK**– Indian Institute of Technology Kanpur **DU[^]**–Delhi University, **NEHU**–North Eastern

Hill University Shillong, DU–Dibrugarh University, TU–Tezpur University, UK–University of Kerala, JNU –Jawaharlal Nehru University, GU– Gauhati University New Delhi, HoD–Head of the Department.

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.
- Television.

Research Activities

- No. of papers published in the year 2019-20: 10.
- No. of ongoing research projects: 04
- No. of current Ph.D. scholars: 35

Selected Publications

- Ray Subhadeepta 2021 "The Virality of Pandemics: Reassembling the Social in the Anthropocene" *Society and Culture in South Asia* 7(1): 16-31.
- Deka, R., Borah, P. P., and Bhuyan, A. J. (2020). Ethnicity and fragmented identity: diverse forms of identity formation among the Misings of Assam. *Asian Ethnicity*. DOI: 10.1080/14631369.2020.1757403.
- Kikhi, K. (2020). The Naga homeland movement: Historical trajectory and contemporary relevance. *Economic and Political Weekly (EPW)*. 55(23). 43-48.
- Borah H.O., and Das, S. (2020). Paid and unpaid work during the Covid-19 pandemic: a study of the gendered division of domestic responsibilities during lockdown. *Journal of Gender Studies*. <https://doi.org/10.1080/09589236.2020.1863202>

SOCIOLOGY (continued)

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>



SCHOOL of MANAGEMENT SCIENCES



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 Bureau of Education 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. Master of Business Administration (MBA).
2. Master in Tourism and Travel Management (MTTM).
3. Post Graduate Diploma in Human Resource Management (Distance Mode)
4. Ph.D.

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

Chandana Goswami*, Ph.D. (GU)

Financial Management, General Management

Subhrangshu Sekhar Sarkar*, Ph.D (TU)

Accounting, Taxation, Social Development Issues

Debabrata Das*, Ph.D. (RGU), Director, CODL (On lien)

Financial Management, Financial Markets and Development Finance

Chandan Goswami*, Ph.D. (TU)-HoD

Marketing and Promotional Strategies, Consumer Behaviour, Tourism

Papori Baruah*, Ph.D. (TU- Dean, SoMS)

Human Resource Management, Organization Behaviour, Change Management, Rural Development, NGOs

Associate Professor

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

Operations Management, Project Management, Tourism

Anjan Bhuyan*, Ph.D. (TU)

Economics

Arup Roy*, Ph. D. (TU)

Microfinance, Stock Market, Development Finance, Social Entrepreneurship

Assistant Professor

Heera Barpujary, Ph.D. (TU)

Knowledge Management, Web Technology

Kakali Mahanta, Ph.D. (DU)

Human Resource Management, Organization Behaviour

Runumi Das*, Ph.D. (GU)

Marketing, Rural Marketing, Human Resource Management

Mridul Dutta*, Ph.D. (GU)

Community Based Tourism, Intellectual Property Rights

Prayash Baruah, MBA (SIU)

Supply Chain Management, Logistics, Transportation

*Recognized Supervisor

LEGENDS: IIMA- Indian Institute of Management Ahmadabad **TU**-Tezpur University, **GU**- Gauhati University, **CODL**-Centre for Open and Distance Learning, **SoMS**-School of Management Sciences, **AA**-Academic Affairs, **RGU**-Rajiv Gandhi University Itanagar, **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 2019 -2020: 12
- No. of ongoing research projects: 05
- No. of current Ph.D. scholars: 28

BUSINESS ADMINISTRATION (continued)

Selected Publications

- Bhatia, R & Baruah, P.(2020). Exclusive talent management and its consequences: a review literature. Asian Journal of Business Ethics, Springer.
- 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

- Dutta, M. (2020). Impact of Customary Laws in Sustaining Collective Resources-Community Conservation Practices from North East India. Global Ecological Change jour

Courses offered in Master of Business Administration

First Semester			Second Semester		
Course Code	Course Title	Cr.	Couse 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			Finance	
	/ Supply Chain Management				
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	General Elective	3
			BA 650	Business Analytics/	3
			BA 651	Knowledge Management / Project Management	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)

Code	Course Name	Cr.
BA 655	Security Analysis & Portfolio Management	3
BA 656	Advanced Financial Management	3
BA 657	Taxation	3
BA 658	Financial Engineering	3
BA 659	Financial Institutions & Financial Services	3
BA 660	Management of Banking Operations	3

AREA-2: HUMAN RESOURCE MANAGEMENT

(Total of 12 Credits Spread over Semester 3 & 4)

Code	Name of the Papers	Cr.
BA 664	Human Resource Development	3
BA 665	Labour Law	3
BA 666	Industrial Relations	3
BA 667	Social and Industrial Psychology	3
BA 668	Talent Acquisition and Management	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)

Code	Name of the Papers	Cr.
BA 673	Understanding Consumers	3
BA 674	Services Marketing	3
BA 675	Social Marketing	3
BA 676	Digital Marketing	3
BA 677	Integrated Marketing Communication	3
BA 678	Contemporary Retailing	3
BA 679	Relationship Marketing and Salesmanship	3
BA 680	Product and Brand Management	3
BA 681	Rural Marketing	3

BUSINESS ADMINISTRATION (continued)

AREA-4: OPERATIONS MANAGEMENT

(Total of 12 Credits Spread over Semester 3 & 4)

Code	Course Name	Cr.
BA 682	Material Management & Inventory Control	3
BA 683	Quality Management	3
BA 684	Logistics and Transportation Management	3
BA 685	Process Certification	3
BA 686	Advanced Operation Research & Optimization	3
BA 687	Technology and Innovation Management	3

AREA-5: INFORMATION TECHNOLOGY

(Total of 12 Credits Spread over Semester 3 & 4)

Code	Course Name	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 (MTTM)

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	3	TM 561 /	Department Centric Elective -II	3
			TM 562		
-	Open Elective- IT Base	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 662/ TM 663/ TM 644	Department Centric Elective -IV	3
TM 605	Summer Internship	3	-	Department Centric Elective-V	3
TM 611/ TM 612	Department Centric Elective - III	3	-	Open Elective	3
-	Open Elective- Foreign Language Base	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)

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

Programme Offered

1. Integrated M.Com.
2. Master of Commerce.
3. Ph.D. in Commerce

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

Farah Hussain, Ph. D. (DU)

Econometrics, Mathematical Economics

Manish Kumar, M. Com (DU[^])

Corporate Finance, Accounting

Dhritabrata Jyoti Bharadwaz, M.Phil. (DU)

Accounting and Finance, Micro Finance and Risk Management

Biswajit Ghose *, Ph.D. (NEHU)

Accounting and Finance.

Guest / Visiting Faculty

CS Amitava Banerjee, NFCG, New Delhi
Corporate Governance

Anjan Choudhury, Indian Skills Academy, Guwahati.

Inter-personal Skills

Shobhan Singh Khanka,

Marketing Management, Human Resource Management, Entrepreneurship

Tejinderpal Singh

Marketing Management, Human Resource Management.

Anand Thakur

Marketing of Financial Services.

CA Rajkumar Nahata

Indirect Taxes

Shivani Tyagi

Marketing Management, Human Resource Management

Jitendra Ladha

Tally.

CA Kamal Mour

Auditing

K. Ramesha

Retail Banking

Manoj Khaund

Marketing

Rupjyoti Saha

Finance

LEGENDS: UB: University of Burdwan, GU: Gauhati University, DU: Dibrugarh University, DU[^]: Delhi University, NEHU—North Eastern Hill University Shillong, NFCG- National Foundation for Corporate Governance New Delhi

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. ProwessIQ corporate database for conducting research.

Research Activities

1. No. of paper published in the year 2019-2020: 16
2. No. of ongoing research projects: 01
3. No. of current Ph.D scholar: 03

Selected Publications

- 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.
- Maji, S.G. (2019). Disclosure Pattern of Labour practices and Decent Work and its Impact on Corporate Financial Performance: Evidence from Asia. *Global Business Review (Online)*, DOI: 10.1177/0972150919876523.
- Tiwari, R.K. & Debnath J. (Accepted for Publication). Forensic Accounting and Non-Audit Services: Indian Context. *Finance India*, 37 (1).
- Debnath, J. & Tiwari, R.K. (2020). Research and Teaching in Higher Education: The Trade Off. *Research and Reflection on Education*, 18(2) 1-7.
- Goswami, R., Hussain, F. & Kumar, M. (2019). Banking Efficiency Determinants in India: A Two-stage Analysis", *Margin—The Journal of Applied Economic Research*, 13 (4), 361-380.
- Raut, R. K. & Kumar, M. (2019). The mechanism and influence of herding effect in investment decision making: case of enculturated actors. *International Journal of Indian Culture and Business Management*, 19(4), 418–433.
- Ghose, B. G. & Kabra, K. C. (2020). Does Growth Affect Firms' Leverage Adjustment Speed? A Study of Indian Firms. *Business Perspective and Research*, 2, 139.
- Ghose, B.G. & Kabra, K.C. (2019). *Firm Profitability and Adjustment of Capital Structure: Indian Evidence. Vision: The Journal of Business Perspective*, 23(3), 297-308.

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 Taxation Computer and Its Application in Banking and Finance	4
IC 304	Income Tax – Law and Practice	4	IC 327 Or IC 342	Auditing and Assurance Indian Financial Market and Financial System	3
IC 307	Entrepreneurship	4	IC 323 or IC 343	Management Accounting Financial Services	4
IC 308	Business Finance	4	IC 324 or IC 344	Public Finance Banking Regulatory Framework	4
IC 309	Corporate Accounting-III	5	IC 325 Or IC 347	Tax Planning and Procedures Capital Market Operations	4
	Open Elective	3	IC 326 or IC 346	Dissertation (Accounting, Taxation Area) Dissertation (Banking, Finance Area)	3

COMMERCE (continued)

Seventh Semester (Integrated M.Com.) / First Semester (M.Com.)			Eighth Semester (Integrated M.Com.) /Second Semester (M.Com.)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IC 501	Organizational Theory and Behaviour	4	IC 521	Human Resource Management	3
IC 502	Financial Statement Analysis	4	IC 522	Marketing Management	3
IC 503	Statistics for Business Decisions	4	IC 523	Managerial Economics	4
IC 504	Corporate Governance and Business Ethics	3	IC 524	Operations Research	4
IC 505	International Business	3	IC 525	Methodology for Business Research	4
				Open Elective	3

Ninth Semester (Integrated M.Com.) /Third Semester (M.Com.)			Tenth Semester (Integrated M.Com.) /Fourth Semester (M.Com.)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IC 602	Management Information System	4	IC 625	Strategic Financial Management	4
IC 605	Project Work	4		GROUP 'A': Accounting And Taxation	
IC 608	Strategic Management	4	IC 622	Strategic Cost & Management Accounting	3
	Open Elective	3	IC 624	Corporate Tax Management	4
	GROUP 'A': Accounting And Taxation		IC 631	Advanced Auditing	4
IC 603	Corporate Financial Reporting	4	IC 633	Project Planning and Control	4
IC 604	Business Valuation	3		GROUP 'B': Banking and Finance	
	GROUP 'B': Banking and Finance		IC 626	Security Analysis and Portfolio Management	4
IC 606	Retail Banking	4	IC 627	International Finance	3
IC 607	Insurance Management	3	IC 634	Marketing of Financial Services	4
			IC 632 or IC 633	Credit and Risk Management or Project Planning and Control	4

Courses offered in Ph.D. in Commerce

Course Code	Course Title	Cr.
RP 799	Research and Publication Ethics	2
IC 701	Research Methodology in Commerce	4
IC 702	Quantitative Modelling	2
IC 703	Term Paper	4
IC 704 (Open Elective)	Trends in Business and Economics Research	4

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



SCHOOL of SCIENCES



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

M. Lakshmi Kantam*, Adjunct Professor
Ph.D. (KU)
Homogeneous/ Heterogeneous Catalysis

Swapan Kumar Dolui*, Ph.D. (IITKgp)
Hydrogel, Electroactive Polymer, Polymers from Vegetable oil, Solar Cell

Nashreen Islam*, Ph.D. (NEHU)
Synthetic Inorganic Chemistry and Biomimetic Chemistry of Transition Metals, Catalysis

Tarun Kumar Maji*, Ph.D. (CU)
Polymer composite, Drug delivery

Robin Kumar Dutta*, Ph.D. (NEHU)
Drinking water and traditional manuscripts writing and paintings

Niranjan Karak*, Ph.D. (IITKgp) Dean R&D
Synthesis of Advanced Polymers, Polymer Nanocomposites and Nanomaterials

Ramesh Chandra Deka*, Ph.D. (NCL),
Theoretical Chemistry, Catalysis and Drug Design

Ashim Jyoti Thakur*, Ph.D. (NEIST)
Heterocyclic Chemistry, Organic Synthesis and Molecular Container Chemistry

Ashwini Kumar Phukan*, Ph.D. (UoHyd)
Theoretical Inorganic and Organometallic Chemistry

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

Utpal Bora*, Ph.D. (NEIST)
Synthetic Organic Chemistry

Assistant Professor

Kusum Kumar Bania*, Ph.D. (TU)
Heterogeneous Catalysis, Fuel Cell and Photocatalysis

Pankaj Bharali*, Ph.D. (IICT)
Inorganic Materials, Heterogeneous Catalysis, Electrocatalysis

Nayanmoni Gogoi*, Ph.D. (IITB)
Molecular Magnet, Functional Metal Organic Framework

Bipul Sarma*, Ph.D. (UoH)
Pharmaceutical crystallization, Porous materials

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

Sanjeev Pran Mahanta*, Ph.D. (UoHyd)
Physical Chemistry, Molecular Engineering and Molecular Recognition

* Recognized Supervisor

LEGENDS: **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, **HoD**-Head of the Department.

Facilities

In addition to the laboratory facilities required for undergraduate and post graduate level studies in Chemical Sciences, the Department is equipped with sophisticated instrumentation facilities, like FT-IR spectrophotom-

CHEMICAL SCIENCES (continued)

eter, 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, GC etc.

Research Activities

1. No. of papers published in the year 2020-21: 91
2. No. of ongoing research projects : 17
3. No. of current Ph.D. scholars: 86

Selected Publications

- Biswakarma N, Sarma P. J, Baruah S. D. Gour N. K. and Deka R. C. (2020). Catalytic oxidation of NO on [Au-M]– (M = Pd and Pt) bimetallic dimers: An insight from density functional theory approach. The Journal of Physical Chemistry C, 124, 3059-3068.
- Das A. J, Borgohain H, Sarma B. and Das S. K. (2020). Switching of regioselectivity in base-mediated diastereoselective annulation of 2, 3-epoxy tosylates and their N-tosylaziridine analogs with 2-mercaptobenzimidazole. Organic & Biomolecular Chemistry, 18, 7401-7413.
- Sharma M, Das B, Baruah M. J, Bhattacharyya P. K, Saikia L. and Bania K. K. (2020). Pd–NiO–Y/CNT Nanofoam: A Zeolite–Carbon nanotube conjugate exhibiting high durability in methanol oxidation. Chemical Communications, 56, 375-378.



Courses offered in Integrated B.Sc. B.Ed. in Chemistry

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CD 101	Chemistry-I	3	CD 102	Chemistry-II	3
PD 101	Physics-I	3	PD 102	Physics-II	3
MD101	Mathematics-I	3	MD 102	Mathematics-II	3
CD 103	Chemistry Lab-1	3	CD 104	Chemistry Lab-II	3
ED 106	Education: An Evolutionary Perspective	3	ES 103	Environmental Science	4
ED 104	Communicative English (Language Proficiency)	3	ED 107	Education and Development	3
ED 105	Basics in Computer Applications	3	NS 106	National Service Scheme	2
			PD 197	Physics Lab	3
			CD108	Chemistry Laboratory (non-major)	3

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CD 201	Chemistry-III	3	CD 204	Physical Chemistry-II	3
CD 203	Physical Chemistry-I	3	CD 206	Organic Chemistry-II	3
CD 205	Organic Chemistry-I	3	CD 208	Inorganic Chemistry-II	3
CD 207	Inorganic Chemistry-I	3	CD 212	Chemistry Laboratory-IV	4
CD 209	Chemistry Lab-III	3	CD 214	IT Skills for Chemists	3
MD 219	Mathematics-III	3	ED 203	Contemporary Issues in Education	3
PD 201	Physics-III	3	ED 204	Assessment and Evaluation	3
ED 205	Environmental Education	3			
ED 202	Learner and Learning				

Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CD 301	Physical Chemistry-III	3	CD 302	Physical Chemistry-IV	3
CD303	Organic Chemistry-III	3	CD 304	Organic Chemistry-IV	3
CD 305	Inorganic Chemistry-III	3	CD 306	Inorganic Chemistry-IV	3
CD 307	Quantum Chemistry	3	CD 308	Principles of Spectroscopy	3
CD 309	Chemistry Laboratory-V	4	CD 310	Chemistry Laboratory-VI	4
ED 301	Teaching Approaches and Learning Resources	3	ED 308	Pedagogy A: Physical Science I	3
ED 302	Classroom Organization and Management	3	ED 307 Or, ED 309	Pedagogy B: Mathematics I Or, Pedagogy B: Bio Science I	3
			ED303	School Education in NE India	2

CHEMICAL SCIENCES (continued)

Seventh Semester			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CD 401	Principles of Inorganic Chemistry	3	CD 402	Chemistry Laboratory-VIII	4
CD 407	Principles of Organic Chemistry	3	ED405	School Internship-II	16
ED408	Pedagogy A: Physical Science II	3	CD 416	History of Chemistry	3
ED 407 Or ED 409	Pedagogy B: Mathematics II Or Pedagogy B: Bio Science II	3			
ED404	Initial School Experience/ School Internship-I	4			
CD409	Chemistry laboratory –VII	3			

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	3	CI 204	Physical Chemistry-II	3
PI 201	Physics-III	3	CI 206	Organic Chemistry-II	3
MI 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 Electrochemistry	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.

CHEMICAL SCIENCES (continued)

Elective I: Any one from the following group				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 group		
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

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 Electrochemistry	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				Fourth Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
CH 501	Bio-Organic Chemistry	3		CH 506/508/ 528/532	Elective I	3
CH 519	Physical Chemistry of Surface and Condensed Systems	3		CH 514 /516/518/520/534	Elective II	3
CH 521	Analytical Methods in Chemistry	3		CH 522/524/ 526/536	Elective III	3
CH 523	Chemical Technology and Society	3		CH 530	Project Work*	8
CH 525	Organometallic Chemistry	3				
CH 505	Laboratory Course in Physical Chemistry	6				

Elective I: Any one from the following group			Elective II: Any one from the following group		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CH 506	Catalysis	3	CH 514	Biomolecular Chemistry	3
CH 508	Methods in Organic Synthesis	3	CH 516	Computational Chemistry and Numerical Analysis	3
CH 528	Special Topics in Inorganic Chemistry	3	CH 518	Organic Solid States Chemistry	3
CH 532	Chemistry of Paints and Surface Coating	3	CH 520	Environmental and Green Chemistry	3
			CH 534	Industrial Polymer	3

Elective III: Any one from the following group		
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.

Programme offered

1. M. Sc. in Environmental Science
2. Ph. D.
3. PG Diploma in Environment and Disaster Management (through CDOE)

Faculty and Areas of Interest

Professor
Raza Rafiqul Hoque*, Ph.D. (JNU)-HoD
Atmospheric chemistry, Air pollution source apportionment and transport, Environmental PAHs

Apurba Kumar Das*, Ph.D. (JNU)
Geomorphology & Regional Climate

Associate Professor

Ashalata Devi*, Ph.D. (NEHU)
Forest Ecology, Ecosystem Dynamics, & Wildlife and Biodiversity Conservation

Assistant Professor

Nirmali Gogoi*, Ph.D. (DU)
Stress Physiology & Biochemistry.
Satya Sundar Bhattacharya*, Ph.D. (VB)
Vermiculture, Plant Nutrition and Soil Fertility Management, Soil C management, Plant products & Nano fertilizers.
Sumi Handique*, Ph.D. (TU)
Geochemistry of River Basins & Hydrogeochemistry.

Amit Prakash*, Ph.D. (JNU)
Air pollution Meteorology, Noise Pollution Monitoring and Modelling, Environmental System Modelling & Urban Climate

Nayanmoni Gogoi*, Ph.D. (IITG)
Ecohydrology, ecosystem functions, nanotechnology in environmental research

Santa Kalita*, Ph.D. (GU)
Entomology & Environmental Physiology
Pratibha Deka*, Ph.D. (TU)
Environmental Pollution– Air, Water & Soil; Human– Environment Interactions

Recognized Supervisor

LEGENDS: **NEHU** -North Eastern Hill University, **JNU**-Jawaharlal Nehru University, **DU**-Dibrugarh University, **TU**– Tezpur University, **VB**-Visva Bharati Santiniketan, **IARI**-Indian Agricultural Research Institute, **IITG**-Indian Institute of Technology Guwahati, **GU**– Gauhati University, **HoD**- Head of the Department.

Facilities

The Department has a sophisticated instrumentation laboratory to facilitate research and other academic activities. The laboratory has equipment, like ICP-OES, ICP-MS, HPLC, CHNS, Laser Leaf Area Meter with Root Measurement Attachment, Light Meter, Portable Photosynthesis Systems, Gas Chromatographs, Ion Chromatograph, TOC Analyzer,

Continuous Air Pollution Monitoring Station, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler and Flame Photometer. The department also has GIS laboratory and Plant experimental site/shed.

Research Activities

1. No. of papers published in the year 2019-2020: 39
2. No. of ongoing research projects: 12
3. No of current Ph.D. scholars: 47

Selected Publications

- 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.
- Sarma Bora, M., Devi, U., Bharadwaj, N., Sharma, P., Kalita, S., Baruah, S. & Sarma, K. P. (2021). Pollution and health risk assessment of toxic metals in solid waste dumping site soil and its impact on groundwater: a case study. *International Journal of Environmental Analytical Chemistry*, 1-21.
- Datta, M.G. & Devi, A. (2020). Prospect of Application of Amendments in a Summer Rice Field: Upholding Soil Properties via Inorganic Blended Amendments. *Communications in Soil Science and Plant Analysis*, 51, 1991–2000.
- Gohain, M. & Deka, P. (2020). Trace metals in indoor dust from a University campus in Northeast India: implication for health risk. *Environmental Monitoring and Assessment*, 192(11), 1-14.
- Bhuyan, P., Ahmed, M.S., Hopke, P.K. & Hoque, R.R. (2020). Understanding the Chemistry and Sources of Precipitation Ions in the mid-Brahmaputra Valley of Northeastern India. *Aerosol and Air Quality Research* 20, 2690–2704.

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.

Discipline Centric Elective Courses			Open Elective Courses		
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
			-	*Open elective (one course) from other department by each student	

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

MATHEMATICAL SCIENCES

(Year of Establishment: 1994)

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. So far 25 batches of students have successfully completed their M.Sc. in Mathematics, 7 batches of students have successfully completed their Integrated M. Sc. in Mathematics and 2 batches of students have successfully completed their Integrated B. Sc. B.Ed. (Major in Mathematics) from the department. Besides this, 60 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 and Ring Theory), Computational Fluid Dynamics, Probability Distributions, Coding Theory etc. The Department is currently supported by the UGC under its SAP (DRS-II) scheme 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
Debajit Hazarika*, Ph.D. (JMI)
Dean, School of Sciences
General Topology, Fuzzy Sets and Applications

Munmun Hazarika*, Ph.D. (TU)-HoD
Functional Analysis, Operator Theory
Milan Nath*, Ph.D. (IITG)
Ordinary Graph Spectra, Inverse Eigen Value Problem
Santanu Dutta*, Ph.D. (TU)
Statistics (Non-parametric)
Dhiren Kumar Basnet*, Ph.D. (DU)
Algebra

Associate Professor

Bhim Prasad Sarmah*, Ph.D. (GU)
High Energy Astrophysics, Relativity
Shuvam Sen*, Ph.D. (IITG)
Computational Fluid Dynamics
Rajib Haloi*, Ph.D. (IITK)
Abstract Differential Equations

Assistant Professor

Bipul Kumar Sarmah*, Ph.D. (TU)
Theory of Partition, Ramanujan's Mathematics
Rajat Kanti Nath*, Ph.D. (NEHU)
Theory of Finite Groups
Debajit Kalita*, Ph.D. (IITG)
Algebraic Graph Theory
Deepjyoti Goswami*, Ph.D. (IITB)
Finite Element Method
Pankaj Kumar Das*, Ph.D. (DU[^])
Coding Theory
Jayanta Borah*, Ph.D. (IITG)
Abstract Fractional Differential Equations, Mathematical Control theory

* Recognized Supervisors

LEGENDS: **TU**-Tezpur University, **JMI**-Jamia Millia Islamia New Delhi, **IITG**-Indian Institute of Technology Guwahati, **GU**- Gauhati University, **DU**-Dibrugarh University, **IITK**-Indian Institute of Technology Kanpur, **NEHU**- North Eastern Hill University

Shillong, **IITB**-Indian Institute of Technology Bombay, **DU[^]**-Delhi University

Facilities

The Department has a computer laboratory established with financial assistance from the DST and UGC. Various Mathematical software 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.

Research Activities

- No. of papers published in the year 2019-2020: 30
- No. of ongoing research projects: 07
- No of current Ph.D. scholars: 23

Selected Publications

- Baruah, N. D., and Kaur M. (2020). A Note on Some Recent Results of Da Silva and Sellers on Congruences for k-regular Partitions With Designated Summands. *Integers*, 20(A74), 1-6.
- Bhowal, P., Nongsiang, D., and Nath, R.K. (2020). Solvable graphs of finite groups. *Hacettepe Journal of Mathematics and Statistics*, 49 (6), 1955-64.
- Hazarika, M., and Marik S. (2020). Reducing and minimal reducing subspaces of slant Toeplitz operators. *Advances in Operator Theory*, 5, 336-346.
- Pal, S. and Haloi R. (2019) On Solution to the Navier-Stokes Equations with Navier Slip Boundary Condition for Three-Dimensional Incompressible Fluid. *Acta Mathematica Scientia*, 39 (6), 1628-1638.

Courses offered in Integrated B.Sc. B.Ed. in Mathematics

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PD 101	Physics-I	3	PD 102	Physics-II	3
CD 101	Chemistry-I	3	PD 197	Physics-Lab	3
CD 107	Chemistry-Lab	3	CD 102	Chemistry-II	3
ED 105	Basics in Computer Applications	3	ED 107	Education and Development	3
ED 106	Education: An Evolutionary Perspective	3	MD 104	Real Analysis-II	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	4	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	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 Mathematical Software and	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 Strategies and	3	ED 308	Pedagogy A: Physical Science-I	3
ED 302	Classroom Organization Management and Management	3	ED 307/	Pedagogy B: Mathematics I/ Pedagogy B:	3
			ED 309	Biological Science I	
			ED 303	School Education in North East India	2

MATHEMATICAL SCIENCES (continued)

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	4			
	Internship-I				
-	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	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 317	Elementary Complex Analysis	4	MI 316	Introduction to Optimization	4
MI 319	Graph Theory	4	MI 318	Elementary Integral Transforms and Special Functions	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.
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	4			
	Internship-I				
-	Open Elective I #	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
			MI509	Classical Mechanics	4
	DSE-I	4		DSE-II	4
	Open Elective II#	3		DSE-III	4
MI 517	Project	4			

Course for which there is a separate practical unit assigned as Computer Labora- tory Note: # List to be notified by the CoE from time to time.

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 568	Theory of Distribution and Sobolev Spaces	4
MI 539	Advanced Numerical Analysis	4	MI 569	Coding Theory-I	4
MI 541	Fluid Mechanics	4	MI 570	Coding Theory-II	4
MI 543	Relativity	4	MI 572	Operator Theory –II	4
MI 544	Operations Research	4	MI 573	Analytic Number Theory	4
MI 545	Elliptic Curves	4	MI 574	Galois Theory	4
MI 546	Algebraic Number Theory	4	MI 581	Stochastic Processes –II	4
MI 547	Numerical Linear Algebra	4	MI 585	Fuzzy Sets and Applications-II	4
MI 551	Introduction to Category Theory	4	MI 587	Finite Element Method	4
MI 552	Operator Theory-I	4	MI 588	Applied Matrix Theory	4
MI 554	Commutative Algebra	4	MI 591	Computational Fluid Dynamics	4
MI 558	General Theory of Relativity	4	MI 594	Advanced Topology-I	4
MI 561	Stochastic processes-I	4	MI 595	Numerical Solutions of ODE	4
MI 565	Fuzzy Sets and Applications-I	4	MI 596	Advanced Topology-II	4
MI 566	Fourier Analysis	4	MI 597	Numerical Solutions of PDE	4
MI 567	Continuum Mechanics	4	MI 598	Algebraic Geometry	4

MATHEMATICAL SCIENCES (continued)

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

Department Specific Electives (DSE) to be offered from the following units					
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 544	Operations Research	4	MS 573	Analytic Number Theory	4
MS 545	Elliptic Curves	4	MS 574	Galois Theory	4
MS 546	Algebraic Number Theory	4	MS 581	Stochastic Processes –II	4
MS 547	Numerical Linear Algebra	4	MS 585	Fuzzy Sets and Applications-II	4
MS 549	Graph Theory	4	MS 587	Finite Element Method	4
MS 551	Introduction to Category Theory	4	MS 588	Applied Matrix Theory	4
MS 552	Operator Theory-I	4	MS 591	Computational Fluid Dynamics	4
MS 554	Commutative Algebra	4	MS 594	Advanced Topology-I	4
MS 558	General Theory of Relativity	4	MS 595	Numerical Solutions of ODE	4
MS 561	Stochastic processes-I	4	MS 596	Advanced Topology-II	4
MS 565	Fuzzy Sets and Applications-I	4	MS 597	Numerical Solutions of PDE	4
MS 566	Fourier Analysis	4	MS 598	Algebraic Geometry	4
MS 567	Continuum Mechanics	4			

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

MOLECULAR 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

Ashis Kumar Mukherjee*, Ph.D. (BU), D.Sc. (Calcutta University)
(On deputation) *Snake Venom Biochemistry and Microbial Biotechnology*

Shashi Baruah*, Ph.D. (PGIMER)
Innate Immunity and Immunogenetics (Heterogeneity and Evolution of Immune Responses)

Anand Ramteke*, Ph.D. (JNU)
Cancer Genetics and Chemoprevention

Suvendra Kumar Ray*, Ph. D. (CCMB-JNU)
Molecular Plant -Microbe Interactions, Molecular Evolution, Food and Activities on Human Health

Manabendra Mandal*, Ph.D. (IGIB)
Probiotics and Nutrition, Microbial Biofilm, Bioenergy

Robin Doley*, Ph.D. (TU)-HoD
Snake venomomics and antivenomics

Assistant Professor

Eeshan Kalita*, Ph.D. (NIPGR-GU)
(On Lien)
Nanobiotechnology and Plant Functional Biology

Surya Prakash G. Ponnamm*, Ph.D. (LVPEI-UoH)
Molecular Genetics and Synthetic biology

Anupam Nath Jha*, Ph.D. (IISc)
Computational Biophysics, Bioinformatics, Systems Biology

Rupak Mukhopadhyay*, Ph.D. (IACS-JU)
Inflammation, Cancer Biology

Nima D. Namsa*, Ph.D. (IISc)
Molecular Biology of Rotavirus

Suman Dasgupta*, Ph.D. (VB)
Insulin Resistance and Type 2 Diabetes

Mattaparthi V. Satish Kumar*, Ph.D. (IITG)
Computational Biotechnology and Bioinformatics

Jyoti Prasad Saikia*, Ph. D (TU)
Plant Biotechnology

Aditya Kumar*, Ph.D. (IISc)
Computational Biophysics, Genomics and Bioinformatics

Pankaj Barah*, Ph.D. (NTNU)
Geonomics, System Biology, Big data in Biology, Molecular evolution

* Recognized Supervisor

LEGENDS: **IC**-Imperial College London, **DU**-Dibrugarh University, **BU**-Burdwan University West Bengal, **PGIMER**-Post Graduate Institute of Medical Education and Research Chandigarh, **CCMB**-Centre for Cellular and Molecular Biology Hyderabad, **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.

MOLECULAR BIOLOGY AND BIOTECHNOLOGY(continued)

Facilities

The Department has several sophisticated instruments like, Automated DNA sequencer, UHPLC, FPLC, HPLC systems, Real Time PCR Bioanalyzer, Spectrofluorimeter, Immunofluorescence Microscope, GC mass spectrometer 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 2019-2020 :58
- No. of ongoing research projects: 32
- No of current Ph.D. Scholars: 79

Selected Publications

- Sahu, A., Das, A., Saikia, K. & Barah, P. (2020). Temperature differentially modulates the transcriptome response in *Oryza sativa* to *Xanthomonas oryzaepv. oryzae* infection. *Genomics*, 112 (6),4842-4852.
- Deka, A., Sharma, M., Mukhopadhyay, R., Devi, A. & Doley, R. (2020). *Naja kaouthia* venom protein, Nk-CRISP, upregulates inflammatory gene expression in human macrophages. *International Journal of Biological Macromolecules*, 160: 602-611.

Book Published

Konwar, B. K. (2021). *Bacterial Biosurfactant (in process)*. Apple Academic Press, Inc., (CRC Press, Taylor & Francis Gr), New Jersey, USA and Ontario, Canada.



Courses offered in Integrated M.Sc. in Life Science

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LI 101	Biology Major I (Biodiversity, Microbes, Algae, Fungi and Archegoniate)	3	LI 102	Biology Major II (Animal Diversity)	3
LI 103	Biology Major I Lab	3	LI 104	Biology Major II Lab	3
PI 101	Physics I	3	PI 102	Physics II	3
CI 101	Chemistry I	3	CI 102	Chemistry II	3
MI 101	Mathematics I	3	MI 102	Mathematics II	3
PI 197	Physics I Lab	3	CI 107	Chemistry I Lab	3
EG 101	Communicative English	3	ES 103	Environmental Studies	4
Non-Biology			LI 106	Biology II (GE for Non-Bio)	3
LI 105	Biology I	3	LI 107	Biology I Lab (for Chem, Math)	3
LI 107	Biology I Lab	3			
Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LI 201	Plant Ecology and Taxonomy	3	LI 202	Genetics and Evolutionary Biology	3
LI 203	Comparative anatomy of vertebrates	3	LI 204	Microbiology	3
LI 205	Plant Anatomy and Embryology	3	LI 206	Cell Biology-I	3
LI 207	Biology Major III Lab (Anatomy: Plant and animal)	3	LI 208	Biochemistry I	3
LI 209	Introduction to computing	3	LI 210	Biology Lab-IV (Biochemistry)	3
PI 201	Physics III	3	LI 212	Biology lab V(Cell Biology)	3
CI 201	Chemistry III	3	LI 214	Seminar	1
NS 201	NSS	2	DM 101	Disaster Management	3
Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LI 301	Plant Physiology	3	LI 302	Immunology I	3
LI 303	Animal Physiology	3	LI 304	Biocomputing and Biostatistics	3
LI 305	Basic Bioinformatics	3	LI 306	Developmental Biology	3
LI 307	Molecular Biology	3	LI 308	Analytical Techniques	4
LI 309	Biology lab VI (Physiology)	3	LI 310	Mini Project	8
LI 311	Biology lab VII (Molecular Biology)	3			
LI 313	Public Health and Hygiene	3			

MOLECULAR BIOLOGY AND BIOTECHNOLOGY (continued)

Seventh Semester			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LI 401	Biochemistry – II	3	LI 402	Biophysics & Structural Biology	3
LI 403	Molecular Genetics	3	LI 404	Genetic Engineering	3
LI 405	Immunology II	3	LI 406	Applied Microbiology and Bioprocess Engineering	3
LI 407	Biological Database Management System	3	LI 408	Computational Biology	3
LI 409	Cell Biology II	3	LI 410	Cell and Tissue culture	3
LI 411	Biology Lab VIII (Biochemistry)	3	LI 412	Biology Lab X (Genetic Engineering)	3
LI 413	Biology Lab –IX (Immunology)	3	LI 414	Biology Lab XI (Applied Microbiology)	3

Ninth Semester			Tenth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LI 501	Genomics and Proteomics	3	LI 502	Project – I (Dissertation/Project)	15
LI 503	Bioinformatics Software and Algorithm	3	Elective (s) for Option I (DSE)		
LI 505	Lab on Advanced programming	2	LI522	Evolutionary Biology	3
LI 507	Biosafety and IPR	2	LI524	Ethnomedicine and Herbal Technology	3
Option I			LI526	Plant metabolism & secondary metabolites	3
LI 509	Plant Biotechnology	3	LI528	System Biology	3
LI 511	Economic Botany	3	Elective(s) for Option II (DSE)		
LI 513	Biology Lab XII (Plant Sciences)	4	LI530	Wildlife and Animal Behaviour	3
Option II			LI532	Fish Biology	3
LI 515	Animal Biotechnology	3	LI534	Cancer Biology	3
LI 517	Economic Zoology	3	LI536	Psychoneuro immunology	3
LI 519	Biology Lab XII (Animal Science)	4	LI538	Insect vector and Diseases	3
			LI540	Immunotechnology	3
			LI542	Computer aided drug designing	3

Courses offered in M. Sc. in Molecular Biology and Biotechnology

First Semester			Second 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	Elective-I Plant Biotechnology	3			
BT 465	Animal Biotechnology				
BT467	Microbial Biotechnology				
BT 477	Computational Biology				
BT 479	Nanobiotechnology				
BT 499	Environmental Biotechnology				
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, please visit the departmental website <http://www.tezu.ernet.in/dmbbt>

PHYSICS

(Year of Establishment: 1998)

Department of Physics was established in 1998. It offers studies in various fields of physics leading to postgraduate and doctoral degree. The research interests of the faculty falls in various areas of condensed matter physics, photonics, high energy physics, microwaves, plasma physics, astrophysics, neutrino physics and nanoscience & technology. The Department is also working in association with other institutes like IUCAA Pune, CMACS Bangalore, IIT Guwahati, CAT Indore, VECC Kolkata, SAMEER Mumbai, IASST Guwahati, India based Neutrino observatory, University of Southampton UK, Queen's University Belfast, Hyper- Kamiokande Japan, University of Tokyo Japan, Max Planck Institute Germany and others. The Department of Physics is 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. 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

Nidhi Saxena Bhattacharyya*, Ph.D. (DU^A)

Microwave Devices, Antennas and EMI Materials

Nilakshi Das*, Ph.D. (GU)

Dusty Plasma Physics, Laser-Plasma Interaction

Pritam Deb*, Ph.D. (JU)

Nanoscience and Nano Technology, Physics of Materials

Mrinal Kumar Das*, Ph.D. (GU)-HoD

Theoretical High Energy Physics, Physics Beyond Standard Model, Neutrino Physics, BAU, Dark Matter

Pabitra Nath*, Ph.D. (GU)

Photonics

Associate Professor

Gazi Ameen Ahmed*, Ph.D. (GU)

Laser Physics, Optoelectronics

Dambarudhar Mohanta*, Ph.D. (TU)

Condensed Matter Physics, Nanoscience

Pralay Kumar Karmakar*, Ph.D. (GU)

Plasma Physics, Astrophysics, Nonlinear Dynamics

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

Rupjyoti Gogoi*, Ph.D. (GU)

Astrophysics

Shyamal Kumar Das*, Ph.D. (IISc)

Material Science

Ritupan Sarmah*, Ph.D. (IISc)

Computational Material Science

Moon Moon Devi*, Ph.D. (TIFR)

Experimental High Energy and Astro -particle

Physics Neutrino Physics UHE Cosmic Rays and Extensive Air Showers, Detector Instrumentation and Data Acquisition

*Recognized Supervisor

LEGENDS: GU-Gauhati University, DU^A-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, 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, 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 in addition to a departmental library. The department also offers its facilities to the students of other institutes and other departments within the University.

Research Activities

- Number of papers published in the year 2020-2021: 75
- Number of ongoing research projects: 25
- Number of current Ph.D. scholars: 70

Selected Publications

- Boruah, B. S., Biswas, R., Ojah, N. (2020). Bio-inspired localized surface plasmon resonance enhanced Sensing of Mercury through Green synthesized Silver nanoparticle; Journal of Lightwave Tech-

nology, 38, 2086-2091.

- Gautam, N. and Das, M.K. (2020). Phenomenology of keV scale sterile neutrino dark matter with S4 flavor symmetry; Journal of High Energy Physics 01, 098-130.
- M. Talukdar, O. Nath and P. Deb (2021), Enhancing barrier properties of biodegradable film by reinforcing with 2D heterostructure; Applied Surface Science 541 (2021) 148464. DOI: <https://doi.org/10.1016/j.apsusc.2020.148464>.

Courses offered in Integrated B.Sc. B.Ed. in Physics

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PD 101	Physics-I	3	PD 102	Physics-II	3
PD 103	General Physics-I	3	PD 104	General Physics-II	3
CD 101	Chemistry-I	3	CD 102	Chemistry-II	3
MD101	Mathematics-I	3	MD 102	Mathematics-II	3
PD 197	Physics Lab-I	3	PD 198	Physics Lab-II	3
ED 106	Education: An Evolutionary Perspective	3	CD 107	Chemistry Laboratory	3
ED 104	Communicative English (Language Proficiency)	3	ES 103	Environmental Studies	4
ED 105	Basics in Computer Applications	3	ED 102	Education and Development	3
			NS 106	National Service Scheme	2

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PD 203	Classical Mechanics	3	PD 205	Electromagnetism	3
PD 301	Mathematical Physics-I	3	PD 214	Electronics	3
CD 201	Chemistry-III	3	PD 218	Modern Physics	3
ED 201	Environmental Education	3	PD 216	Thermodynamics and Statistical Physics	3
ED 202	Learner and Learning	3	ED 203	Contemporary Issues in Education	3
MD219	Mathematics-III	3	ED 204	Assessment and Evaluation	3
PD 297	Physics Lab-III	4	PD 298	Physics Lab-IV	4
PD 201	Physics III (for non-major)	3			
-	Open Elective-I	3			

PHYSICS (continued)

Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PD 303	Physical and Geometrical Optics	3	PD 307	Basic Material Science	3
PD 202	Introductory QM	3	PD 317	Basic Computation Techniques	3
PD 315	Mathematical Physics II	3	PD 311	Waves and Acoustics	3
PD 309	Analog Electronics and Communications	3	ED 308	Pedagogy A: Physical Science I	3
PD 204	Atomic and Nuclear Physics	4	ED 307 or ED 309	Pedagogy B: Mathematics I or Pedagogy B: Bio Science I	3
PD 399	Physics Lab-V	3	ED 303	School Education in NE India	2
ED 301	Teaching Approaches and Strategies	3	PD 300	Physics Lab-VI	4
ED 302	Classroom Organization and Management	3	-	Elective I	3

Seventh Semester			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ED 408	Pedagogy A: Physical Science II	3	PD314	Measurement Physics	3
ED 407 or ED 409	Pedagogy B: Mathematics II or Pedagogy B: Bio Science II	3	ED405	School Internship	15
ED 404	Initial School Experience/School Internship-I	4			
PD 308	Laser Physics	3			
PD 400	Laboratory-VII	4			
-	Open Elective-II	3			

Courses offered in Integrated M. Sc. in Physics

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PI 101	Physics-I	3	PI 102	Physics-II	3
PI 103	General Physics-I	3	PI 104	General Physics-II	3
CI 101	Chemistry-I	3	CI 102	Chemistry-II	3
MI 101	Mathematics-I	3	BI 102	Biology-II	3
BI 101	Biology-I	3	MI 102	Mathematics-II	3
PI 197	Physics Lab -I	3	PI 198	Physics Lab-II	3
BI 107	Biology Laboratory	3	CI 105	Chemistry Lab	3
EG 110	Communicative English	3	ES 103	Environmental Studies	4

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PI 203	Classical Mechanics	3	PI 205	Electromagnetism	3
PI 217	Mathematical Physics-I	3	PI 214	Electronics	4
CI 201	Chemistry III	3	PI 325	Thermodynamics and Statistical Physics	3
MI 201	Mathematics III	3	PI 218	Modern Physics	3
PI 297	Physics Lab-III	4	PI 298	Physics Lab-IV	4
NS 106	NSS	2	-	Elective I	3
CS 535	Introduction to Scientific Computing	3	DM101	Disaster Management	3
PI 201	Physics III (for Non-major)	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

PHYSICS (continued)

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

Courses offered in M. Sc. in Physics

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PH 405	Semiconductor Devices	3	PH 411	Statistical Physics	3
PH 408	Electromagnetic Theory I	3	PH 412	Analog and Digital Electronics	4
PH 416	Condensed Matter Physics and Material Science	3	PH 417	Advanced Mathematical Physics	3
PH 417	Advanced Classical Mechanics	3	PH 551	Electromagnetic Theory II	3
PH 418	Quantum Mechanics-I	3	PH 552	Quantum Mechanics-II	3
PH 400	Physics and Computational Lab	4	PH 455	Seminar	2
PH 498	Physics Lab-I	4	PH 499	Physics Lab-II	4

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PH 500	Project I	6	PH 599	Project-II	10
PH 415	Nuclear and Particle Physics	3	-	Elective III	3
PH 553	Atomic and Molecular Spectroscopy	3	-	Elective IV	3
-	Elective I	3	-	Open Elective II	3
-	Elective II	3			
-	Open Elective-I	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, please visit the departmental website <http://www.tezu.ernet.in/dphy/>



CENTRAL LIBRARY



CHANDRAPRABHA SAIKIANI
(1901-1972)
PRIDE OF ASSAM
PIONEER OF THE WOMEN'S MOVEMENT

CENTRES



CENTRE FOR DISASTER MANAGEMENT

(Year of Establishment: 1997)

The Centre for Disaster Management was established in 1997 under the Central Sector Scheme of NDM Division, Ministry of Agriculture and Cooperation, Government of India. The scheme has subsequently been transferred to the Ministry of Home Affairs, Government of India during 2002. At present the Centre is functioning under Tezpur University. The Centre is involved in conducting training, workshops, and conferences on different aspects of Disaster Management for different target groups. The Centre is also offering open elective courses on Disaster Management at UG and PG levels. One Post Graduate 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

- Post Graduate Diploma Programme in Environment and Disaster Management

Faculty and Areas of Interest

Assistant Professor & Head

Dipak Nath, Ph. D. (GU)

Disaster Risk Assessment and Risk Mitigation Approaches

LEGENDS: GU-Gauhati University

Selected Publications

- Deb Nath, R. & Nath, D. (2018) Status of Tribal Women: A Case Study on Barman Women of Dhanipur Village, Cachar, Assam, *Intellection: A bi-annual interdisciplinary research journal*, Vol. VI, No. I (ISSN: 2319-8192).
- Nath, R. D. & Nath, D. (2016) Comprehensive model for Health Risk Assessment with a case study on Three Rural Communities of Chachar District, Assam, India, *Journal of International Academic Research for Multidisciplinary*, 4(2),224-239.
- Nath, R. D. & Nath, D. (2015) Women's Movement for Human Rights in India and Bangladesh: A Sociological Analysis, *Intellection: a bi-annual interdisciplinary research journal*, 3(1).



CENTRE FOR ENDANGERED LANGUAGES

(Year of Establishment: 2014)

The University was awarded with the Centre for Endangered Languages by the Ministry of Human Resource Development in 2014. This is the nodal centre for the consortium of North East India comprising Tezpur University, Rajiv Gandhi University and Sikkim University. Since the Department of English and Foreign Languages offers MA in Linguistics and Language Technology, the Centre has been attached to the Department.

Programme offered

1. Certificate programme in Endangered Languages

Faculty and Areas of Interest

Coordinator

Madhumita Barbora *, Ph.D. (TU)
Linguistics (Syntax, Psycholinguistics), Field Linguistics, Documentation

Assistant Professor

Bobita Sarangthem, Ph.D. (MU)
Phonetics and phonology, Field Linguistics and Socio- linguistics

LEGENDS: **TU**– Tezpur University, **MU**–Manipur University, **NEHU**– North Eastern Hill University Shillong

Facilities

The Centre has the following equipment available with them to be used for the research work:

- Apple iMac Workstation for Recording & Editing; YAMAHA 12XU 12 Channel Professional Mixing Console; Denon DN -4SOR Professional Grade Installed Recording Device; Presonus Audiobox i2 Soundcard; PresonusHP4 Head-phone Amplifier; Video Camera full HD recording (MODEL: HTC-MDH2M); Video Camera (MODEL: HC-X1000); Camera (MODEL: COOLPIX P900); Recorder - Olympus LS-100 & Mobile – Samsung;
- 1. The Centre has two laboratories for various purposes
 - Phonetic Lab (With 20 seat capacity)
 - Documentation Lab (Recording and Editing Suite)

The Centre has three smart classrooms and a Multipurpose Hall, well equipped for Workshops, Seminars and Conferences etc. The Centre has number of books available for use for the Master's and Ph.D. students for references.

Research Activities

- No. of papers published in the year 2017–2018: 5

Selected Publications

- First volume of Annual Technical Report, released by Professor Mihir Kanti Chaudhri, Former Vice Chancellor, Tezpur University on 16 May 2017.
- Second volume of Annual Technical report 2018-19, released by Prof. V.K. Jain.
- 6 Learners book on the endangered languages that the staff have been working on, are in press.
- 3 volumes on Phonology, Morphology and Syntax (of these 7 endangered languages) are forthcoming.

Outreach activities of the Centre as research work:

The faculty, research associates and field assistants of the Centre are divided into six (6) 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 6 groups. 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:

Sl. No.	State		Groups	Chosen Endangered Language
1	Assam	1.	Dima Hasao Areas	Biate
		2.	Dima Hasao Areas	Khelma
		3.	Dima Hasao Areas	Hrangkhol
2	Manipur	4.	Senapati District	Onaeme
		5.	Kangpokpi District	Purum
3	Nagaland	6.	Tening, Peren District	Liangmai
		7.	Tuensang District	Yimchunger

- 6 Learner's Book written for the Biate, Khelma, Hrangkhol, Onaeme, Purum, and Liangmai in 2017.
- Phonetic analysis, sound segmentation, language description and grammar are in process of completion.
- Publication of books and dictionaries are under process.

Courses offered by Centre for Endangered Languages, Tezpur University

Open Elective:

LE 223 Language, Society and Endangerment

LE 224 Language Policy, Education and Revitalization

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

CENTRE FOR INCLUSIVE DEVELOPMENT

(Year of Establishment: 2013)

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 of the University, particularly, in the academia and intellectual sphere, through education, training & engagement and counsellings. 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 contribution to the society by developing professional human resource in relevant areas. At present, the thrust area of academic programme is child

and Governance. The current programme is designed in consonance with the belief that the University as an Institution of higher education must endeavour 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 north-east India, in future.

Programmes Offered

1. P.G. Diploma in Child Rights and Governance (in collaboration with UNICEF)
2. P.G. Diploma in Child Rights and Governance (Distance Mode)

Faculty and Areas of Interest

Director

Rajeev Doley, Ph.D. (IITG)
Sociolinguistics

Assistant Professor

Subhrangshu Dhar, Ph.D. (VB)

Child Rights, Human Rights

Krishna Moni Bordoloi, LL.M. (DU)

Child Rights, Human Rights, International Law

LEGENDS: **IITG**– Indian Institute of Technology Guwahati, **DU**–Dibrugarh University, **VB**–Vivsa-Bharatai Santiniketan

Facilities

The Centre has well-equipped classrooms and a computer laboratory with internet connection 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) Total Credit offer: 40.

Open Elective (Optional): 3

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CG 401	Understanding Childhood	4	CG 406	Social Policies for Children	4
CG 402	Child Rights as Human Rights- Paper I	4	CG 407	Child Rights as Human Rights- Paper II	4
CG 403	Vulnerabilities of Children in North East	4	CG 408	Governance and Child Rights	4
CG 404	Field Work/ Observational Field Visit	4	CG 409	Research in Child Rights	4
CG 405	Communication Skills (English)	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 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
Inclusive Development
Child rights and governance
Communication skills

Faculty and Areas of Interest

Associate Professor (Additional Charge)

1 Sanjib Sahoo*, Ph.D. (TU)
English (Indian Writing in English, Eco Criticism)

Assistant Professor

1. **Suchibrata Goswami**, Ph.D. (DU)
English (American Literature, Post-Colonial Writing)
2. **Mridusmita Baruah**, Ph. D (TU)
Mass Communication (Advertising and Public Relation)

3. **Dhriti Sonowal**, M.A. (JNU)
Sociology.

Programme Coordinators

1. **Uttam Pegu***, Ph.D. (JMI)
Programme: M.A. in Mass Communication
2. **Amiya Kumar Das***, Ph.D. (TU)
Programme: M.A. Sociology
3. **Pallavi Jha**, M.A. (UoH), Ph.D. (UoH), M. Phil. (UoH)
Programme: M.A. English
4. **Suryakant Tripathi***, Ph.D. (BHU)
Programme: P.G. Diploma in Functional Hindi
5. **Runumi Das***, Ph.D. (GU)
Programme: P.G. Diploma in Human Resource Management
6. **Dipak Nath**, Ph.D. (GU)
Programme: P.G. Diploma in Environmental and Disaster Management
7. **Nirmali Gogoi***, Ph.D. (DU)
Programme: P.G. Diploma in Environmental and Disaster Management
8. **Shuvam Sen***, Ph.D. (IITG)
Programme: M.A./ M.Sc. in Mathematics
9. **Sadhan Mahapatra**, Ph.D. (IISc.)
Programme: P.G. Diploma in Renewable Energy and Energy Management
10. **Subhragshu Dhar**, Ph. D. (Visva- Bharati, W.B).
Programme: P.G. Diploma in Child Rights and Governance

Administrative Officer

Partha Pratim Kalita, MBA (TU)
(Assistant Registrar)

*Recognized Supervisor

LEGENDS: **RGU-Rajiv Gandhi University** Arunachal Pradesh, **TU-** Tezpur University, **JMI**-Jamia Millia Islamia New Delhi, **UoH-** University of Hyderabad, **BHU-** Banaras Hindu University Uttar Pradesh, **GU-** Gauhati University, **DU**-Dibrugarh University, **IITG-** Indian Institute of Technology Guwahati, **IISc-** Indian Institute of Science Bangalore

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 Open and Distance Learning (CODL) 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 Open and Distance Learning 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.

CENTRE FOR DISTANCE AND ONLINE EDUCATION (continued)

Study Centre of CDOE

Tezpur

CDOE

Tezpur University

Napaam, Sonitpur - 784028

Contact: 03712 – 275350/57 Mobile: 7002247087

Degree and Diploma Programmes offered by CDOE

Sl. No.	Programme	Eligibility	Department and School	Fees in Rupees (Under revision)	Duration (Number of semesters)	
					Min	Max
1	M.A. in Mass Communication and Journalism	Bachelor's degree in any discipline	Mass Communication and Journalism (School of Humanities and Social Sciences)	16,950/-	4	8
2	M.A. in English	Bachelor's degree in any discipline	English and Foreign Languages (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	P.G. Diploma in Human Resource Management	Bachelor's degree in any discipline	Business Administration (School of Management Sciences)	10,450/-	2	4
5	P.G. Diploma in Renewable Energy and Energy Management	BE/ B. Tech or MSc in Physics or Chemistry	Energy (School of Engineering)	11,800/-	2	4
6	P.G. 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
7	P.G. 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

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 (PMMNMTT) scheme. The scheme is funded by Department of Higher Education, MHRD, Gol. TLC envisages developing and promoting a responsive and relevant teaching-learning system for higher education communities and contributing to excellence in teaching and learning as an innovative and resourceful Centre through the optimal use of technology.

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

Assistant Professors

Swapnarani Bora, PhD (DU)
Folklore, Sociolinguistics, Assamese Studies
Ikbal Hussain Ahmed, M.Phil. (DU*)
Evolutionary Ethics, Environmental Ethics, Symbolic Logic, Philosophy of Education

Research Associate

Bhushita Patowari, PhD (GU)
Survey Sampling & Statistical Epidemiology
LEGENDS: TU-Tezpur University, **DU**-Dibrugarh University, **DU***- Delhi University, **GU**- Gauhati University

Major facility: One ICT Lab.
Teachers trained: Total: 61

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(W.S) 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 North-East 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's Studies
2. Ph.D.

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

LEGENDS: **TU**- Tezpur University, **HoD** - Head of the Department

* Recognized Supervisor

Research Activities

- No. of papers published in the year 2017–2018: 9
- No. of current Ph. D. scholars: 03

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			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
WS 103	Women's Movement in India	4	WS 107	Women's Studies and Research Methodology	4
WS 104	Introducing Women's Studies	4	WS 108	Women and Law	3
WS 105	Women in Media	4	WS 109	Women and Development	3
WS 106	Women and Health	4	WS 110	Project Work/Dissertation	6

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

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./Kum.....

Son/Daughter of Shri/Smt.....

of Village/ TownDistrict/Division.....

in the.....Community which is recognized as a backward class under:

- i) Resolution No. 12012 / 68 / 93BCC(C) dated 10 / 09 / 93 published in the Gazette of India Extra ordinary Part I Section I No.186 dated 13 / 09 / 93.
- ii) Resolution No. 12012 / 9 / 94BCC dated 19 / 10 / 94 published in the Gazette of India Extra ordinary Part I Section I No. 163 dated 20 / 10 / 94.
- iii) Resolution No. 12012 / 7 / 95 BCC dated 24 / 05 / 95 published in the Gazette of India Extra ordinary Part I Section-I No.88dated25/05/95.
- iv) Resolution No. 12012 / 96 / 94BCC dated 9 / 03 / 96.
- v) Resolution No. 12012 / 44 / 96 BCC dated 6 / 12 / 96 published in the Gazette of India Extra ordinary Part I Section I No. 210 dated 11 / 12 / 96.
- vi) Resolution No. 12012 / 13 / 97BCC dated 03 / 12 / 97. (vii)Resolution No. 12012 / 99 / 94BCC dated 11 / 12 / 97.
- vii) Resolution No. 12012 / 68 / 98BCC dated 27 / 10 / 99.
- viii) Resolution No. 12012 / 88 / 98BCC dated 06 / 12 / 99 published in the Gazette of India Extraordinary Part-I Section-I No. 270 dated 06 / 12 / 99.
- ix) Resolution No. 12012 / 36 / 99BCC dated 04 / 04 / 2000 published in the Gazette of India Extraordinary Part-I Section-I No. 71 dated 04 / 04 / 2000.
- x) Resolution No. 12012 / 44 / 99BCC dated 21 / 09 / 2000 published in the Gazette of India Extraordinary 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.36012/22/93Estt.(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 Stipendiary Magistrate/Sub Divisional Magistrate/Taluka Magistrate/Executive Magistrate/Extra Assistant Commissioner (not below the rank of 1st Class Stipendiary Magistrate)
 - ii) Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate.
 - 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 programmein Tezpur
University as a full time candidate. In the event of his/her selection for the said programme Shri/Smt
shall be relieved from his/her duties.

Place
Date

Signature of Officer
Office
Office Seal

(Prescribed format for EWS certificate)
Government of.....
(Name & Address of the authority issuing the certificate)

INCOME & ASSET CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS

Certificate No.____

Date:_____

VALID FOR THE YEAR_____

This is to certify that Shri/Smt./Kumari_____ son / daughter / wife of _____
permanent resident of _____ Village/Street _____ Post Office _____ District
_____ in the State/Union Territory _____ Pin Code _____ whose photograph is attest-
ed below belongs to Economically Weaker Sections, since the gross annual income* of his/her "family"*** is below Rs. 8 lakh (Rupees Eight Lakh only)
for the financially year_____.

His/Her family does not own or possess any of the following assets***:

- i. 5 acres of agricultural land and above;
- ii. Residential flat of 1000sq. ft. and above;
- iii. Residential plot of 100 sq. yards and above in notified municipalities;
- iv. Residential plot of 200 sq. yards and above in areas other than the notified municipalities.

Shri/Smt./Kumari_____ belongs to the _____ caste which is not recognized as a
Scheduled Caste, Scheduled Tribe and Other Backward Classes (Central List)

Recent Passport size
attested photograph
of the applicant

Signature with Seal of Office _____

Name _____

Designation _____

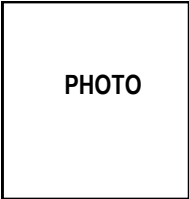
*Note 1: Income covered all sources i.e. salary, agriculture, business, profession, etc.

**Note 2: The term "Family" for this purpose include the person, who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years

***Note 3: The property held by a "Family" in different locations or different places/cities have been clubbed while applying the land or property holding test to determine EWS status.

Prescribed Format of PRC/As per Government Format

**GOVT. OF ASSAM
OFFICE OF THE DEPUTY COMMISSIONER**



Seal of the issuing office

Ref Petition No.

Date.

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

For any query related to the admission to an Academic Programme in 2021, the concerned Department/Centre may be contacted on the following contact number/E-mail ID:

Department/Office	Office Number*	Mobile Number** (HoD)	E-mail ID
Applied Sciences	273500	9435092658	charu@tezu.ernet.in
Business Administration	275000	9435080776	hod_ba@tezu.ernet.in
Centre for Assamese Studies	273240	8486776391	hod_assamese@tezu.ernet.in
Centre for Inclusive Development	263251/57	9954449475	rkdoley@tezu.ernet.in
Center for Distance and Online Education	275350	9954449475	cdoe@tezu.ernet.in
Chandraprabha Saikiani Centre for Women Studies	267007	9476677622	hodwsc@tezu.ernet.in
Chemical Sciences	265050	9435380377	hod_chem@tezu.ernet.in
Civil Engineering	275950	9864060200	hod_civil@tezu.ernet.in
Commerce	273290	9434030244	hod_com@tezu.ernet.in
Computer Science and Engineering	275100	9435084063	hod_cse@tezu.ernet.in
Cultural Studies	275150	9435381337	hod_cul@tezu.ernet.in
Design	273503	8135823686	hod_design@tezu.ernet.in
Education	275650	70762-96461	hod_edu@tezu.ernet.in
Electrical Engineering	273451	9864182681	hod_ee@tezu.ernet.in
Electronics and Communication Engineering	275251/57	8876342920	hod_ece@tezu.ernet.in
Energy	275300	9435508563	hod_ene@tezu.ernet.in
English and Foreign Languages	275203	9435082113	hod_fl@tezu.ernet.in
Environmental Science	275620	9854035039	hod_env@tezu.ernet.in
Food Engineering and Technology	267007	9864362377	nandan@tezu.ernet.in
Hindi	275750	94353-84799	hod_hin@tezu.ernet.in
Law	275781	9957777781	hod_law@tezu.ernet.in
Mass Communication and Journalism	275451	9435749345	hod_mcj@tezu.ernet.in
Mathematical Sciences	275058	9435180666	hod_ms@tezu.ernet.in
Mechanical Engineering	275851	9435471300	hod_mech@tezu.ernet.in
Molecular Biology and Biotechnology	275401	9435507394	hod_mbbt@tezu.ernet.in
Physics	275550	9706980913	hod_phy@tezu.ernet.in
Social Work	275830	9435144482	hod_sw@tezu.ernet.in
Sociology	275800	9435711002	rdeka@tezu.ernet.in
Teaching and Learning Centre	275680	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.

Guidelines for filling in Online Application form for Admissions to UG / PG/ Ph. D/ Integrated/ Diploma/ Certificate Programmes

Applicants are advised to read the instructions carefully before filling in the online Application Form. The following major points are to be noted at the time of filling in the Application Form:

1. Multiple Programmes :

- Candidate applying for multiple Programmes must apply separately with separate Application fee for each of the Programmes they apply for.
- Candidates applying for integrated Programmes under the same Department can apply in single application form. Here, candidates can select their preferences either for a single programme or for both the programmes.
- However, candidates need to pay single application fee for Integrated M.Sc. and Integrated B.Sc. B.Ed. programmes under the same Department. Similarly, there will be single application fee for M.Tech. (IT) and M. Tech. (CSE) programmes.

2. B. Tech. Programmes:

In case of B. Tech. programmes, a candidate needs to apply in single application form only. The selected candidates can opt for the preferred Branch of Engineering based on the availability of seats at the time of their turns during the admission process.

3. Candidates yet to obtain the last qualifying Degree/Diploma/Certificate:

Candidates who have already completed/appeared their qualifying Degree / Diploma/ Certificate examinations or expected to complete the qualifying examinations with all the components, including practical, viva-voce (if any), and courses of earlier semesters may also apply.

4. Mandatory Documents:

Please keep the following documents (as mentioned under heading MANDATORY DOCUMENTS) handy for online submission before filling in the application form. Scan and store the following documents as separate files as they will need to be uploaded during the 'Online Application' process.

Copy of the JEE (Main) 2021 admit card, if applying for the B. Tech. Programmes; copy of the Permanent Residence Certificate (PRC) issued by the competent authority of any North-Eastern (NE) State, if applying for the B.Tech. Programmes or M.Sc. Programme in Molecular Biology and Biotechnology under the North-East (NE) quota; copy of the valid GATE score card, if applying for direct admission to any M. Tech. Programme; copy of the valid GAT-B (Graduate Aptitude Test - Biotechnology) score card, if applying for M.Sc. in MBBT Programme; copy of the relevant category certificate issued by the competent authority, if seeking admission under any reserved category as mentioned; copy of the Sponsorship/No Objection Certificate (NOC) issued by the employer, if the candidate is employed; relevant certificate as evidence of representing State or Country in sports, if any; undertaking (available under News and Updates Section at <https://www.tezuadmissions.in/public/>); passport size photo (PNG/JPEG/JPG) (height: 250 | Width: 200 Pixels) (100 KB); scanned signature (PNG/JPEG/JPG) (height: 150 | Width: 200 Pixels) (100 KB)

STEPS TO COMPLETE THE ONLINE APPLICATION FORM

Step A: Register using the "Sign Up" process. The email ID and mobile number used for registration must be valid and functional and should belong to the applicant.

Communications will be done only to the registered email address or mobile number.

Step B: Click "Apply Now" in your dashboard to proceed with the application form fill-in process.

Step C: Select programme:

Note: When you are going to apply for two integrated programmes under the same Department [for example: Integrated B.Sc. B.Ed. in Chemistry (8 semesters) and Integrated M.Sc. in Chemistry (with provision of lateral exit)], YOU HAVE TO SELECT THE PREFERENCE Numbers as 1 and 2, depending upon your preference between the programmes. However, in case of applying for only one integrated programme under the same Department, you should select 1 as the preference number.

Check eligibility and click next

Step D:

Step 1 - Enter the Personal Information

Step 2 - Enter Address and Contact Information

Step 3 - Enter Academic Details -

Step 4 - Upload the following (against Document1, Document2, etc.), accept declaration and then submit

- (1) Undertaking for Category/ Caste Certificate (for all programmes)
- (2) Undertaking for (Passed/Appeared) (for all programmes)
- (3) Passport Size Photo
- (4) Scanned copy of Signature
- (5) GATE Score card (If applicable)
- (6) GAT-B Score card (If applicable)
- (7) NET Score card (If applicable)
- (8) SLET score card (If applicable)
- (9) Category Certificate (If applicable), and
- (10) Additional Documents (if applicable)

Step E: Click "Upload Documents (Compulsory)" and upload all necessary documents from Class X onwards as per instruction and submit

Step F: Click "Check Eligibility" and enter marks and percentage in the respective fields and check your eligibility

Step G: Click "Payment and Final Submission", pay the prescribed fee for online registration using the online payment gateway.

Step H: Take a printout of the information submitted. This printout will be required along with the other original documents at the time of admission.

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). Sufficient number of options (fields) have been provided in the web-portal for uploading of your documents.

3. In spite of 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.

6. How do I know my eligibility criteria for a program?

Ans: You may carefully read the prospectus TUEE 2021 and confirm the same, while filling in the online application 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 North-Eastern states.

8. What should I do if I do not get the link for email verification?

Ans: Check if you have entered valid email id. Also check spam folder of your mail box.

9. 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

10. 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 tuee2021@gmail.com and a copy to asktuee@tezu.ernet.in with a screenshot.

11. 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.

12. 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.

13. 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.



Photo Credit: All photos are clicked by Tezpur University Students. Special thanks to Hrishikesh Dutta and Tezpur University Photography Club.



Tezpur University
Napaam 784028
Website: tezu.ernet.in



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