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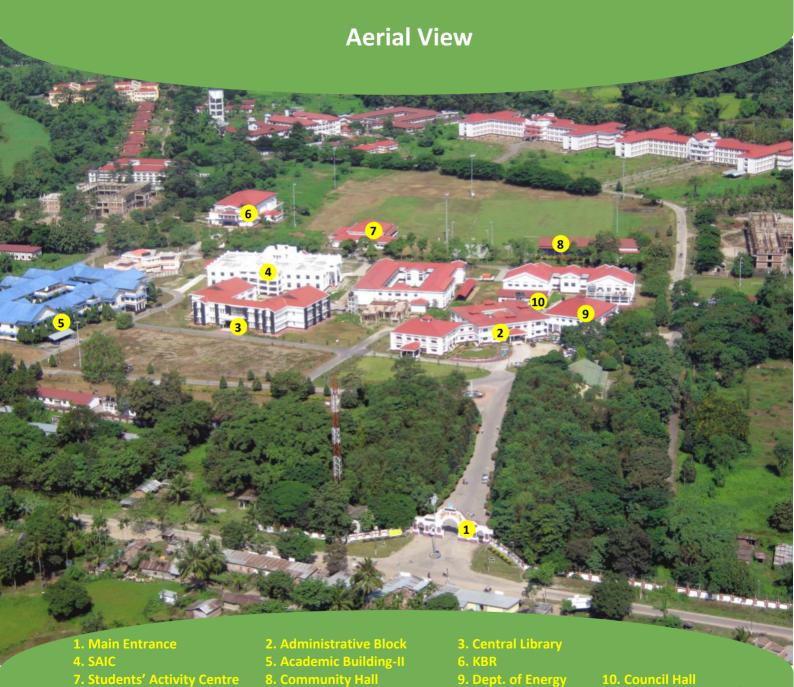


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# What to do if you are interested in

- TUEE 2020 Exam dates (TUEE) has been announced. The online application is starting from 25<sup>th</sup> February 2020.
   TUEE 2020 Application form will be available through online mode.
- Click here for admission details www.tezuadmissions.in
- No candidates will receive any application form through post or courier.
- Login to Fill/Submit/View Application Form at
- User / login id and password is required to access TUEE candidate login 2020
- Before filling the application form, candidates must also go through its eligibility norms to check if they will be
  eligible or not in the prospectus.
- Candidates will be able to apply for maximum three fields in the same application form.

## **Useful Contacts**

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### TU Entrance Examination (TUEE) Cell

Chairperson

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E-mail: tuee2020@tezu.ernet.in

## 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, PhD, Certificate & Diploma programmes) through 22 departments under 4 Schools viz, Engineering, Humanities & Social Sciences, Management, and Sciences. In addition to the aforementioned 22 departments, UGC has sanctioned three new departments, viz, Department of Foreign Languages, Department of Assamese and Department of Design to the University. The University also offers 07 programmes in open and distance mode under its Centre for Open and Distance Learning. The academic programmes offered in the University have a distinct focus on Science, Technology, and 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 90,000 documents comprising books, theses, journals/e-journals, conference proceedings, CDs, etc along with latest academic related softwares.

The university at present boasts of 33 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 57:43. The University attracts a number of students from Northeastern 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 is 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, the University was awarded the prestigious Visitor's Award in research category in 2017 & 18. Three faculty members are 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. 10th February, 2020

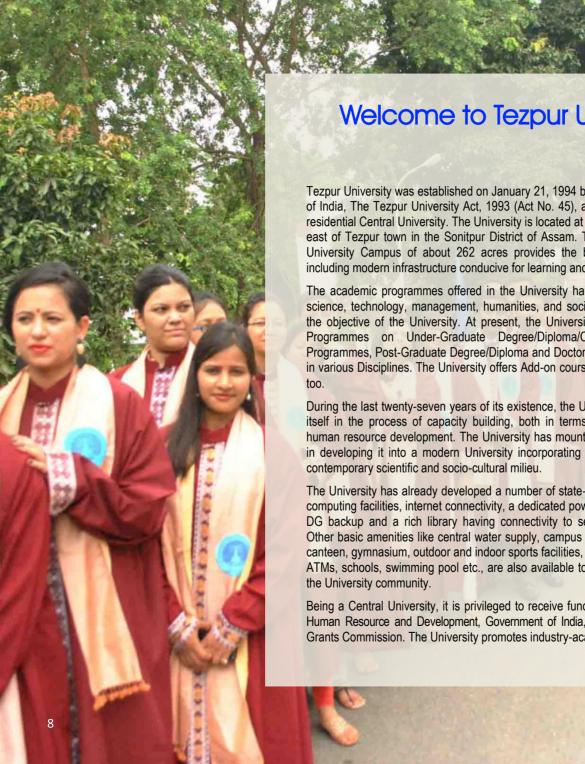
( Prof. Vinod Kumar Jain )
Vice - Chancellor

## Map of Tezpur University





SECTION I General Information



## 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

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

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, quest 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

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 multilevel 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 Computer Science and Engineering with University of Bremen, Germany.
- 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 alumni 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 'InSCIgnis' 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 57:43. Further, the University attracts a number of students from Northeastern 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 street lights are powered by solar photo-voltaic 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
0	10	Outstanding
A+	9	Excellent
А	8	Very Good
B+	7	Good
В	6	Above average
С	5	Average
Р	4	Pass
F	0	Fail

The letter Grades 'O' to 'P' are qualifying Grades, while 'F'and 'Ab'are disqualifying Grades. The 'Ab' Grade is awarded if a student remains absent in the evaluation components without any valid reason. The students, awarded with the 'F' or 'Ab' 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 left out component (s) within the first month of the next semester.
Х	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. Students are advised to visit www.ugc.ac.in or www.tezu.ernet.in for UGC Regulations on curbing the menace of

2009.

 During the study period in the University, involvement in any criminal/offensive activity, that may be punishable according to the Law of the 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 has partnered with industry by signing more than 40 MoUs. Some of the notable international collaborations are:

The University of Nottingham, UK • University of Bremen, Germany • National University of Science & Technology MISIS, Russia • Russian State University for Humanities, Moscow • Avans University of Applied Sciences, Netherlands • 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

- QS India University Rankings 2020: 35
- The QS BRICS University Rankings 2019- 146
- Times Higher Education (THE) Ranking (World's top 20 Best Small Universities 2018): 20
- THE Asia University Rankings 2018:100
- Visitor's Award in "Research" category: 2017, 2018 & 2019

- MHRD NIRF Ranking: 2016: 5, 2017- 48 (Overall), 30 (Amongst Universities), 2018 46(Overall), 29 (Amongst Universities)
   Universities), 2019- 48 (Overall), 29 (Amongst Universities)
- Times Higher Education World Young University Rankings-2017
- Visitor's Best University in 2016
- NAAC Accreditation-A Grade (2016)
- 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).



# 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 Chitralekha Udyan, the 3.02 kms long Kalia Bhomora bridge over the Brahmaputra are two spots which attract many visitors. Other important tourist spots around Tezpur include Bhalukpung (64 kms), Tipi (68 kms) which are famous for the largest orchid garden in Asia, the Nameri National Park (60 km), the Orang Sanctuary (40 km) etc. The Kaziranga National Park which is the habitat of the great Indian one horned rhinoceros is just 75 kms away from Tezpur.

## **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 a 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 destination 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. It also has a traditional fish and vegetable market. One will find a wide range of traditional hand woven Assamese silks and gifting material in this market. Shop for traditional handicrafts, in particular cane and bamboo household articles and musical instruments, bell-metal utensils like the xorai traditionally used for offering betelnut 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 iewellery.



## Historical Places

#### Da Parbatia

The ruins of the door frame of the De 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 panaromic 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**

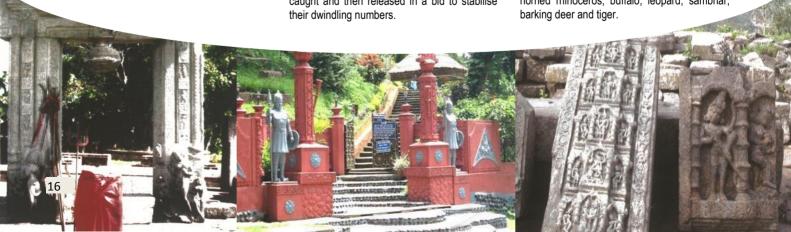
About 50 kms from Tezpur, off the road to Arunachal Pradesh, near the Jia Bhoroli river is the Eco Camp, a unique experiment by the Assam Anglers' Association and the state's Forest Department. The Camp organises exciting white river rafting, against the divine backdrop of lush forests and snow-capped mountains. Tourists can try their hand at casting for the elusive and endangered golden Mahseer 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 Bhalukpung 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 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.





## **Eating Out**

#### **Fast Food**

There are many pocket 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.

## **InSClanis**

The annual, national level science festival of Tezpur University *inSCIgnis* is organized with the initiative of Students belonging to School of

Sciences. Celebrated on the occasion of National Science Day, it is one of the largest science-fest of the North-Eastern region. It showcases an array of events ranging from experimentation and designing, innovative events, quizzes, workshops, observational events, funevents, 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) Nritvangan: 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 guiz competition regularly. There is also an active Yoga Centre under the mentorship of a faculty member to cater the need of the Students.







## **Outreach Programme**

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

## **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 Accommodation

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
- 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 Men 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

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.



## **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 Redressel Committee (Two)
- Anti-Ragging Committee (Fourteen)
- IQAC Committee (Two)

## 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 inhouse 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-ShodhSindhu 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 eresources 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:

SI.	Items	Qtv					
No.	1.0	٠.,					
1	Books		97943+				
	Journals	Print	216				
2		10360					
3	Online Databases	Online Databases					
4	E-Books (Collected)	502					
5	Back Volumes of Joi	9770					
6	Theses	706					
7	Master Dissertations	1485					
8	CDs/DVDs	2653					
9	Govt. Publications/	1025					
	Proceedings						
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-theart 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.

### Farms and Horticulture Section

The Horticulture Section of Tezpur University is entrusted to carry out landscaping and beautifi-



cation activities on the University campus. The Assistant Horticulturist employed at Horticulture Section looks after the whole horticultural/landscaping activities under the supervision of a Campus Horticultural Committee with a teacher as Coordinator.

A total of 935 seedlings of different ornamental plants/shrubs, fruit trees and medicinal plants etc. are planted in different parts of the University campus. Essential maintenance of all existing planted trees is carried out annually.

A Vermicompost Unit is running successfully and has fulfilled the need of organic manure to some extent in the University. The University has a nursery of its own, which has been the source of seedlings of ornamental and fruit trees of different types; shrubs; indoor plants and also some seasonal flowers for the use of the University

## **The Community College**

The Community College of Tezpur University started functioning from July, 2015. The primary objective of Community College is to offer demand driven vocational modular courses to impart employable skills, to facilitate skill up-gradation, multi-skilling, multi entry and exit, vertical mobility and life-long learning in a flexible manner to offer different levels of

programmes to meet demands of various target groups with provision for horizontal as well as vertical mobility, to allow recognition of prior learning skills (certification of skills acquired informally) effectively and to integrate relevant skills into the higher education system.

### Dr. Ambedkar Chair

Dr. Ambedkar Chair, Tezpur University was established by Dr. Ambedkar Foundation, Ministry of Social Justice and Empowerment. New Delhi in the year 2016, to serve as core centre for North East India furthering ideas and philosophy of Dr. B.R. Ambedkar and emancipation of the disadvantaged sections. The thrust area of the Chair is to conduct research on issues related to disadvantaged communities in the context of North East India with particular emphasis on their marginalisation, development and participation. The Chair was set up with the objectives of Teaching and research, Building a library, Conducting research projects, Organising public lectures and, Conducting awareness and skill development programmes

# 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 Malaviva National Mission on Teachers and Teaching (PMMMNMTT) 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 INSTRUMEN-TATION 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 Region, 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 into a MOU. Finally in 30th April, shaped into a permanent Centre. Since permanent the Centre has taken up a number of research projects. 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 guarterly 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.

The facility aims not only educational and research initiatives, but also vouches for Human resource development in the areas of bioinformatics by conducting Training programmes for staff, students and community at large.

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. The Centre will thrive to provide an enabling eco system, process and support system.

#### **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 PhD Programme, 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 if 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 worming days.

## **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, nonvegetarian and continental cuisines. It also facilitates 24-hour accessibility to the internet. Also, there is an annex of the Guest House with 20 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-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**

**Seminar Rooms** 

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.

#### **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**

A 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, volleySports section is accommodated in the Students 'Activity Centre building. Key facilities are as given below:

•	Playground (Football)	: 01
•	400 mtr. track cum cricket field	: 01
•	Gymnasium	: 01
•	Mini indoor stadium	: 01
•	Basketball court	: 02
•	Volleyball court	: 03
•	Lawn Tennis (Hard court)	: 01
•	Table Tennis Hall	: 01
•	Swimming Pool (Olympic Standard)	: 01

- All hostels have badminton courts
- Table tennis boards are placed in every hostel
- Net practice facility for cricket
- Archery Range adjoining with playground.
- Playgrounds and courts have night playing
- Mini indoor stadium has one badminton court



# **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. Cell 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, Cholamandalam 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 Premii Foundation, Greenwood, Ramoii 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.

- It has secured 5<sup>th</sup> rank among all the universities including technical institutes in India by NIRF for 2016.
- It has NAAC ranking with A grade.
- 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. In India it ranked

## **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.
- 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.

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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 Re-

#### **auirements**

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.

**Supports Services** 

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 (GENERAL)**

			•										
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.	PG Diploma in Translation (HINDI)	MTTM/ P. G. Diploma in Women's Studies/ PG Diploma in Child Rights & Governance	Two year B.Ed.	Master in Law (LLM)
Only once at the time of	of admiss	sion											
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	ı	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	1	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 pai	d per se	mester						
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	15000.0 0	500.00	1000.00	3500.00	1000.00	6000.00	5000.00	1200.00	10000.0 0	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

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	
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	
Charges for consumables	-	-	-	-	-	-	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)	32743.0 0	16493.00	18743.00	21243.0 0	18743.0 0	24243.0 0	29243.0 0	19443.0 0	28243.0 0	16243.0 0	23243.00	20243.0	23393.0	

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

B. Tech. in Food Engineering and Technology

Integrated M. Sc. / Integrated B.Sc. B.Ed. in Chemistry and Life Science programmes.

M. Sc. in Chemistry

M. Sc. in Molecular Biology and Biotechnology

M. Sc. in Environmental Science

M. Tech. in Food Engineering and Technology

M. Tech. in Energy Technology

# TEZPUR UNIVERSITY STATEMENT OF SEMESTER WISE FEE (GENERAL)

Particulars	1 <sup>st</sup> Semester	2 <sup>nd</sup> Se- mester	3 <sup>rd</sup> Semester	4 <sup>th</sup> Semester	5 <sup>th</sup> Semester	6 <sup>th</sup> Semester	7 <sup>th</sup> Semester	8 <sup>th</sup> Semester	9 <sup>th</sup> Semester		Refundable (included in the fees of 1st semes- ter)
Integrated M.Com (5 years)	18743.00	11443.00	11443.00	11443.00	11443.00	11443.00	11443.00	11443.00	11443.00	11443.00	5000.00
Integrated M. A. (5 years)	18743.00	11443.00	11443.00	11443.00	11443.00	11443.00	11443.00	11443.00	11443.00	11443.00	5000.00
Integrated M. Sc. (Physics, Mathematics) (5 years)	21243.00	13943.00	13943.00	13943.00	13943.00	13943.00	13943.00	13943.00	13943.00	13943.00	5000.00
Integrated M. Sc. (Chemistry, Life Sciences) (5 years)	22443.00	15143.00	15143.00	15143.00	15143.00	15143.00	15143.00	15143.00	15143.00	15143.00	5000.00
Integrated B.Sc.B.Ed. (Physics, Mathematics) (4 years)	21243.00	13943.00	13943.00	13943.00	13943.00	13943.00	13943.00	13943.00	-	-	5000.00
Integrated B.Sc.B.Ed. (Chemistry) ( 4 years)	22443.00	15143.00	15143.00	15143.00	15143.00	15143.00	15143.00	15143.00			5000.00
B. Tech. (CSE, ECE. ME, CE, EE)	32743.00	25443.00	25443.00	25443.00	25443.00	25443.00	25443.00	25443.00	-	-	5000.00
B. Tech. (FET)	33943.00	26643.00	26643.00	26643.00	26643.00	26643.00	26643.00	26643.00	-	-	5000.00
B. Tech. (Lateral Entry) (CSE, ECE. ME, CE, EE)	32743.00	25443.00	25443.00	25443.00	25443.00	25443.00	25443.00	25443.00	-	-	5000.00
B. Tech. (Lateral Entry) (FET)	33943.00	25443.00	25443.00	25443.00	25443.00	25443.00	25443.00	25443.00	-	-	5000.00
Master of Computer Application	24243.00	16943.00	16943.00	16943.00	16943.00	16943.00	-	-	-	-	5000.00
B.Ed.	21743.00	12943.00	12943.00	12943.00	-	-	-	-	-	-	5000.00
M. A. (except M.A. in Mass Communication & Journalism)	18743.00	11443.00	11443.00	11443.00	-	-	-	-	-	-	5000.00
M. Com.	18743.00	11443.00	11443.00	11443.00							5000.00
M. Sc. (Physics, Mathematics)	19443.00	12143.00	12143.00	12143.00	-	-	-	-	-	-	5000.00
M. Sc. (Chemistry, MBBT, Environmental Science)	20643.00	13343.00	13343.00	13343.00	-	-	-	-	-	-	5000.00
M. Tech. (ME, IT, ELDT, Bioelectronics, CSE)	28243.00	20943.00	20943.00	20943.00	-	-	-	-	-	-	5000.00
M. Tech. (FET, Energy Technology)	29443.00	22143.00	22143.00	22143.00	-	-	-	-	-	-	5000.00
M. A. in Mass Communication & Journalism	29243.00	20943.00	20943.00	20943.00	-	-	-	-	-	-	5000.00
Master of Tourism & Travel Management	23243.00	15943.00	15943.00	15943.00	-	-	-	-	-	-	5000.00
Master in Law (LLM)	23393.00	16093.00	16093.00	16093.00	-	-	-	-	-	-	5000.00
Certificate in Chinese	16493.00	10,193.0 0	-	-	-	-	-	-	-		5000.00
PG Diploma in Translation	16243.00	9443.00	-	-	-	-	-	-	-	-	5000.00
PG Diploma in Women's Studies	23243.00	15943.00	-	-	-	-	-	-	-	-	5000.00
PG Diploma in Child Rights & Governance	23243.00	15943.00	-	-	-	-	-	-	-	-	5000.00

<sup>\*</sup> Fee is subject to change at any time

# FEE STRUCTURE FOR Ph.D. STUDENTS TO BE ADMITTED IN AUTUMN SEMESTER, 2020

Particular Fee	Mode	Full Time (Hosteller)	Full Time (Non- hosteller)	Part Time	TU Employee
Admission	Once on admission	500	500	500	500
Registration	Once on admission	150	150	150	150
Identity card	Once on admission	50	50	50	50
Convocation	Once on admission	1000	1000	1000	1000
Provisional certificate	Once on admission	100	100	100	100
Alumni Association	Once on admission	500	500	500	500
Caution deposit (Library and Laboratory)	Once on admission	2000	2000	2000	2000
Hostel Caution deposit	Once on admission	3000			
* Hostel admission/re-admission (Single seater for Ph.D. students)	Per semester (in case of Hostel boarder)	3000			
Tuition	Per semester	1500	1500	2000	2000
Library	Per semester	400	400	400	
Students' activity	Per semester	500	500	500	500
Medical	Per Semester	300	300	300	
Transport	Per semester	1000	1000	1000	
Laboratory (including computer usage)	Per semester	1050	1050	1050	1050
Research Fee	Per semester	3000	3000	4000	4000
Infrastructure and amenity	Per semester	1100	1100	1100	1100
Fan, Electricity and Water charge	Per semester	400	400	400	400
Students' Welfare Fund	Per semester	150	150	150	150
Departmental Development Fund	Per semester	2500	2500	2500	2500
**Consumable Charge	Per semester	2000	2000	2000	2000
Menial Charge	Per Semester	1500			
*** Health Insurance	Per semester	143	143		
Total fee to be paid by the students of the MBBT//FET/ Environmental Sc. at the	•	25843	18343	19700	18000
Total fee to be paid by the students of oth time of admission.	er departments at the	23343	16343	17700	16000

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

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

<sup>\*\*\*</sup> Students above 30 years of age are not covered in this scheme.

# FEE STRUCTURE FOR INTERNATIONAL STUDENTS, AUTUMN SEMESTER, 2020 (in US Dollar)

		gtd		harge)		ple	ScBEd	ScBEd rge)		-	ple						٤.		<b>.</b>
Particulars	Mode	MA, Integtd MA, & Integtd BABEd	M Sc	MSc (with consumable charge)	MCA/M Tech	M Tech (with consumable charge)	Integtd M Sc & Integtd BScBEd	Integtd M Sc & Integtd BScBEd (with consumable charge)	MBA	B Tech	B Tech (with consumable charge)	PGDMMC	PGDTM	MCJ	Chinese	Ph D (Full Time)	Ph D (Full Time) with consumable charge	Ph D (Part Time)	Ph D (Part Time) with
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
Entrolment fee	Per semester from second semester(US\$20)														<u> </u>				
Tution 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	20	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
Annual Control of the	Once on admission	00	50	30	30	30	30	30	30	30	30	30	30	60	00	30	30	30	30
Placement brochure fee	Once on admission	30	30	30	30	30	30	20		30	30	30	20	30	30	_			
Traning & Placement fee		100						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	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 & 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	1,0		10	,,,
Hostel Advance Mess deposit	Once on admission	90	90	90	90	90	90	90	90	90	90	90	90	90	10.0	90	90	90	90
Outdoor activity fee	Per semester											50	350		_				-
Development fund fee	Per semester (For MBA Programme 1st &3rd Semesters)	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		0	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	1435	1635	1585	1785

# 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. UGC Merit Scholarship for SC/ST students pursuing PG level professional courses.
- 3. PG Indira Gandhi Scholarship for single girl child.
- UGC Merit scholarship for University rank holders.
- Ishan Uday scholarship for the students (from NE States) of UG courses.
- Inspire Scholarship.
- 7. Post Matric Scholarship for SC, ST and OBC students under different schemes of the Govt.
- 8. Merit cum-Means Based scholarship for professional and Technical courses (from Ministry of Minority Affairs).
- 9. Post Matric Scholarship from the Director of Welfare of Tea and Ex-tea garden.
- 10. AICTE scholarship for the GATE qualified students of M. Tech.
- DBT scholarship.
- 12. NEC scholarship from Director of Technical Education.
- Post Matric scholarship for students belonging to Minority communities.
- 14. Scholarship for differently abled students from National Handicapped Finance and Development Corporation and many more.
- 15. 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 Programme

### **UG Degree/Integrated/Diploma/Certificate Programme**

SI. No.	Programme	Department/Centre	School		
1	B.Tech. in Civil Engineering	Civil 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	Engineering		
5	B.Tech. in Food Engineering and Technology#	Food Engineering and Technology			
6	B.Tech. in Mechanical Engineering#	Mechanical Engineering			
-	Lateral Fator to Order and D. Tark	Electrical Engineering			
7	Lateral Entry to 2 <sup>nd</sup> year of B.Tech	Food Engineering and Technology			
8	B.Ed.	Education	Humanities and Social Sciences		
9	Certificate in Chinese	Foreign Languages	Humanities and Social Sciences		
10	Integrated M.A. in English	English			
11	Integrated M Com (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			
13	Integrated M.Sc. in Chemistry	Offernical ociences			
14	Integrated B.Sc. B.Ed. (Mathematics Major)	Mathematical Sciences			
15	Integrated M.Sc. in Mathematics	Mathematical Colonico	Sciences		
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	Physics			

<sup>#</sup> NBA accredited as Tier -I Programme

All B.Tech. Programme are AICTE Approved

# PG Degree/Diploma Programme

SI. No.	Programme	Department /Centre	School		
1	Master of Computer Application (M.C.A.)				
2	M.Tech. in Information Technology	Computer Science and Engineering			
3	M.Tech. in Computer Science & Engineering				
4	M. Tech. in Civil Engineering	Civil Engineering	Engineering		
5	M.Tech. in Bioelectronics		Linginiconing		
6	M.Tech. in Electronics Design and Technology	Electronics and Communication Engineering			
7	M. Tech. in Energy Technology	Energy			
8	M.Tech. in Food Engineering and Technology	Food Engineering and Technology			
9	M.Tech. in Mechanical Engineering	Mechanical Engineering			
10	M.A. in Cultural Studies	Cultural Studies			
11	M.A. in Education	Education			
12	M.A. in English	English			
13	M.A. in Linguistics and Language Technology	Eligiisii			
14	M.A. in Hindi	Hindi			
15	Post Graduate Diploma in Translation (Hindi)	niiu			
16	Master of Laws ( LL.M)	Law	Humanities and Social Sci-		
17	M.A. in Mass Communication and Journalism	Mass Communication and Journalism	ences		
18	M.A. in Communication for Development	Wass Communication and Journalism			
19	M.A. in Social Work	Social Work			
20	M.A. in Sociology	Sociology			
21	M.A. in Assamese	Assamese			
22	P.G. Diploma in Child Rights and Governance	Centre for Inclusive Development			
23	P.G. Diploma in Women Studies	Chandraprabha Saikiani Centre for Women Studies			
24	M.B.A.*				
25	Master of Tourism and Travel Management (MTTM)	Business Administration	Management Sciences		
26	Certificate in NCCMP#(Part Time)		_		
27	M.Com	Commerce			
28	M.Sc. in Chemistry	Chemical Sciences			
29	M.Sc. in Environmental Science	Environmental Science			
30	M.Sc. in Mathematics	Mathematical Sciences	Sciences		
31	M.Sc. in Molecular Biology and Biotechnology	Molecular Biology and Biotechnology			
32	M.Sc. in Physics	Physics			

<sup>\*</sup>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

**WELCOME:** Welcome to Tezpur University / Studying at Tezpur University / Academic Information / Important Academic Rules / Study Abroad / Tezpur Life / Historical Places / Students' Life / Student Accommodations / Teaching and Learning Facilities / Research and Development / Support and Facilities / Health Centres / Sports / Employment Prospects / International Students / Finance / **Academic Programmes** 

# Ph.D. Programmes

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



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

2.1 UG	2.1 UG Degree/ Integrated/ Certificate Programmes									
SI. No.	Programme Names	Intake	Eligibility							
1	B. Tech. in Civil Engineering+	68	10+2 Standard or equivalent examination with minimum 60% aggregate							
2	B. Tech. in Computer Science and Engineering	68	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.							
3	B. Tech. in Electrical Engineering <sub>1</sub>	38	theriff, and (5) any other oubject.							
4	B. Tech. in Electronics and Communication Engineering	68								
5	B. Tech. in Food Engineering and Technology <sup>†</sup>	56								
6	B. Tech. in Mechanical Engineering₁	68								
10	Lateral Entry to 2nd year of B.Tech in Electrical Engineering	3\$	10th 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 10th Standard) in the respective or allied Discipline.							
11	Lateral Entry to 2nd year of B.Tech in Food Engineering and Technology	3\$	Diploma in Food Engineering and Technology or Allied subjects from an AICTE approved program.  Duration of Diploma must be: 03 years after 10th (Matriculation) in conventional system 04 years after 10th (Matriculation) in modular system 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.							
13	<b>B.Ed.</b> (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†.							
14	Certificate in Chinese	49	10+2 Standard pass in any stream with minimum 45% aggregate marks†.							
15	Integrated M.A. in English	25	10+2 Standard pass in any stream with minimum 60% aggregate marks†.							
16	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†.							

17	Integrated B.Sc. B.Ed. (Chemistry Major)	13						
18	Integrated B.Sc. B.Ed. (Mathematics Major)	13	10+2 Standard pass in Science stream with minimum 60% aggregate marks†.					
19	Integrated B.Sc. B.Ed. (Physics Major)	13	munoj.					
20	Integrated M.Sc. in Chemistry	25	10+2 Standard pass with minimum 60% aggregate marks† in Physics, Chemistry and Mathematics.					
21	Integrated M.Sc. in Mathematics	25	10+2 Standard pass with minimum 60% aggregate marks† in Physics, Chemistry/Statistics and Mathematics .					
22	Integrated M.Sc. in Physics	25	10+2 Standard pass with minimum 60% aggregate marks† in Physics, Chemistry and Mathematics.					
23	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							
24	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.					
25	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.					
26	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.					
27	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 we as in aggregate if not having Major/onours in any of the specified Subjects.					
28	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.					
29	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†.					
30	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.					

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31	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.
32	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.
33	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.
34	Master of Laws (LL.M.)	25	Bachelor's Degree in Law with minimum 50% aggregate marks†.
35	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.
36	P. G. Diploma in Child Rights and Governance	25	Bachelor's Degree in any discipline
37	P. G. Diploma in Women's Studies	25	
38	M. Sc. in Chemistry	30#	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.
39	M. Sc. in Environmental Science	38	Bachelor's Degree with minimum 45% marks† in Major/Honours in Physical/Biological/Earth/nvironmental 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†.
40	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†.
41	M. Sc. in Molecular Biology and Biotechnology* (12 seats through TUEE, 26 seats through "All India Combined Entrance Test" conducted by DBT)	38	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.
42	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.

43	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†.
44	M.Tech. in Civil Engineering	11	B.E./B.Tech. Degree in Civil Engineering with minimum 50% aggregate marks†.
45	M. Tech. in Information Technology	35	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.
46	M. Tech. in Computer Science and Engineering	18	B.E./B.Tech. or equivalent Bachelor's Degree in Computer Science and Engineering or MCA Degree with minimum 50% aggregate marks†.
47	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†.
48	M. Tech. in Bioelectronics	19	BB.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†.
49	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†.
50	M. Tech. in Food Engineering and Technology**	23	B.E./B.Tech./M.Sc. Degree in Food Engineering/ Food Processing Engineering/Food Technology/ Agricultural Engineering/ Mechanical Engineering/Chemical Engineering/ Biotechnology or any other relevant Discipline with minimum 50% aggregate marks†. Also, candidates should have Mathematics at 10+2 Standard with minimum 50% marks† or as a subsidiary Subject in the specified Degree Programmes.

	M. Tech. in Mechanical Engineering (Specialization: Machine Design)		B.E./B.Tech. or equivalent Bachelor's Degree in Mechanical/ Aerospace/Automobile Engineering or in any other relevant Engineer- ing Discipline with minimum 50% aggregate marks†.				
51	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†.				
52	M. Com.	14	B.Com. with minimum 50% marks† in Major/Honours. Mathematics at Degree level is desirable.				
53	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.				
54	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 2020**, 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/JoSA.

\$ 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, 12 seats are reserved for permanent residents of any of the North-East-States (filled up through the Tezpur University Entrance Examinations-2020) and 26 seats are filled up through "All India Combined Entrance Test" conducted by DBT, Government of India from time to time). This is subject to latest policy changes.

<sup>\*\*</sup> Candidates having valid GATE score and with 'Food technology' as one of the optional subjects in GATE examination will only be considered against the GATE seats for direct admission with GATE fellowship from AICTE. GATE seats remaining vacant will be filled up through TUEE-2020 merit list. However, candidates admitted through TUEE-2020 having valid GATE score in other eligible discipline/ combination will also be recommended for GATE fellowship from AICTE.

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

# 2.3 Pre-Requisite and area of research for admission in to various disciplines of Ph. D. programmes (Autumn Semester 2020)

SI. No	School	Department	Pre-requisite	Area of Research
55	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 B.E./B.Tech degree was obtained.	Geotechnical Engineering, Environ- mental Engineering.
56	Engineering	Computer Science & Engineering	M.Tech. in Computer Science/ I.T./ Electronics MCA M.Sc. in Computer Science/ I.T. B.E. / B.Tech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where B.E./B.Tech degree was obtained.	Software Define Network, Bioinformatics & Network Security, Computational Linguistics, Natural Languages Processing, Speech Processing, Data Mining, Image Processing, Pattern Recognition, Machine Learning, Algorithms, Remote Sensing, Image Analysis, Computational Biology, Cognitive Radio Networks, Resource Allocation in CRN, Blockchain, Software- Defined Networking.
57	Engineering	Electronics & Communication Engineering	M.E. / M.Tech. / M.Sc. Engg. / M.S. in Electronics/ Communication/ Electronics  Design/ Electrical/ Instrumentation/ Control/ Microwave/ Biomedical/ Bioelectronics/ Bio-Technology/ Computer Science/ Information Technology.  M.Sc. in Electronics/ Physics/ Applied Mathematics.  MCA with Physics, Chemistry and Mathematics in Bachelor degree, MBBS with MD/ MS degree.  B.E. / B.Tech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score. Minimum two recommendation Letters from the Institute/ University from where B.E./ B.Tech degree was obtained.	Bio electronics, Biosensor, Bio- electronic Device, Neuro- engineering, Image Processing, Computer Vision, Biomedical Signal Processing, Robotics, CMOS Design & MOS-FET Modelling, Plasmonic Device, Sensors, MEMS, Semiconductor Devices, VLSI.

58	Engineering	Electrical Engineer- ing	(a) ME/MTech/MS/ in Electrical/Electronics/ Communication/ Power System/Power Elec- tronics/Instrumentation/Control/ Computer Science & Engineering/ MBBS with MD/MS	Measurement & Instrumentation, Sensor Technology, Nanotechnology, Health Moni- toring, Power Electronics ,Control System, Chaos in biomedical applications, fractional
			and any other relevant discipline.  (b) BE/BTech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score.  Minimum two recommendation Letters from the Institute/ University from where B.E./B.Tech degree was obtained.	order systems, waste water management
59	Engineering	Energy	M.Sc. / M.E. / M.Tech. degree in Energy Technology/ Energy Management/Energy related Engineering and Technology/ Physics/ Chemistry/Agriculture Allied subjects.	Energy Management, Renewable Energy, Biofuels, Bio-diesel, Bio- Energy, Energy Envi- ronment Interaction, Solar Photovoltaic, PV Systems, Hybrid Energy Systems, Fuel cells, Hydrogen Technology, Building Energy.
60	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./ 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.	Functional ingredients, Nano emulsions, Food Chemistry, Food Quality, Food Processing, Process modelling, Food Processing Engineering, Fruits Veg. Processing, Food Machineries, Non thermal processing, Biosensors, Microbial fuel cell, Fruits and Veg. Processing, Nanomaterial, Bioprocessing of food wastes, Starch modification and application, Food Packaging, Extraction of Bioactive components, Biopolymers, Thermal & Non-thermal Processing, Functional and Nutraceutical food, Probiotic and functional characterization of starch, Food powders.
61	Engineering	Mechanical Engineering	M.E. / M.Tech. / M.Sc. (Engg.) in Mechanical Engg. or allied areas. 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.	Thermal, Energy and Environment Engineering Optimization Energy and Thermal Engineering, Drying Technology Thermal Engineering, Computational Fluid Dynamics Machine Design, Composite Material Dual phase steels, Aluminum Alloys, Microalloying, Mechanical Properties Renewal Energy Conversion Machine Design, Theoretical and experimental residual stress.

62	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
63	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 AdminiEducational Measurement and Evaluation, Teacher stration, ICT in Education, Environmental Education, Special Needs Education, Method of Teaching in Biological Science/Elementary Education.
64	Humanities & Social Sciences	English	M.A. in English (specialization may be in Literature, English Language Teaching or Linguistics); M.A. in Linguistics (For Ph.D. in chosen areas of Linguistics)	American Literature, Critical Theory, Fiction Studies, Cultural Studies, Modernist Poetics, Indian Writing in English, British Literature, Book History, Linguistics, Cognitive Semantics, Philosophy of Language, Literary Theory, Curriculum Development, Materials Production, Language Policy, Multilingualism, Gender and Literature, New Literatures in English, Travel Writing, Contemporary British Literature, Acoustic Phonetics, Computational Linguistics, Language Documentation, English Language Education, Language Testing, SLA.
65	Humanities & Social Sciences	Hindi	M.A. in Hindi	Fiction & Modern Hindi Literature
66	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.	Journalism, Radio, PR, Corporate Communication, Acculturation, ICT, New Media, Science Communication Culture.

68	Humanities & Social Sciences  Humanities & Social Sciences	Sociology Social Work	Post-Graduation in Sociology / Cultural Studies / Anthropology (with specialization in Social Anthropology) / Economics / History / Political Science / Philosophy / Mass Communication / English / Law / Management/ Social Work / Development Studies/Public Health/Gender Studies.  Consistent good academic record with minimum 55% marks in M.A. (50% for SC/ST) in the folowing subjects:	Development, Environment, Migration, Agrarian Studies, Ethnicity, Social Movements, Urbanisation, Northeast India, Sociological Theories, Sociology of Movement, Agrarian Sociology, Sociology of Development, Sociology of Health and Illness, Sociology of Governance, Sociology of Education, Identity of Politics, Multiculturalism, Sociology of Religion, Environmental Sociology, Sociology of Music Social Work & Mental Health, Disaster Management, Street Children, Substance and Application of Social Work Methods, Rural Development, Sustain-
69	Humanities &	Chandraprabha	M.A. in Social work and allied Social Sciences (such as Sociology, Psychology, Rural developement, Developement studies, Law, Public Health, Education and Management)  Masters degree with at least 55% marks in Women Studies/ Humanities/ Social Sciences	Gender Studies, Critical Theory, Performance
	Social Sciences	Saikiani Centre for Women Studies	with consistently good academic record. Candidates with Masters degree in Humanities and Social Sciences having one course in the area of women studies will be preferred.	Studies. Women Studies, Women and Mental Health, Feminist Research Methodology
70	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	Services Marketing/Tourism Marketing, Financial Management, Financial Markets and Development Finance, Tourism, Marketing, Change Management and Human Resource Management, Organization Behavior, Business Optimization, Operations, Quality, Operation in Tourism, Rural Development, Entrepreneurship Development, Tourism, Finance, Agri Business, Rural Development, Micro Finance, Capital Market, IPR, Supply Chain Management, Community Based Tourism
71	Management Sciences	Commerce	1. M.Com., 2. M.A./M.Sc. in Economics, 3. FCA/ FCMA/ FCS.	Accounting and Auditing, Microfinance, Financial development, Econometrics, Development Economics.
72	Sciences	Chemical Sciences	M.Sc. in all branches of Chemical Science/ Physics/Nanoscience/ Material Science/ Biotechnology/ Biochemistry/ Bioinformat- ics/ Environmental Science. M.E./M.Tech. in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering etc.).	Polymer Science/Physical Chemistry, Polymer Chemistry, Inorganic/Forensic Science, Nanomaterial/Nanocomposite, Catalysis, Theoretical Chemistry, Computational Inorganic/Organometallic Chemistry, Biosensors/Chemical Sensors, Electro-catalysis, Organic Synthesis.

		Science	Engineering discipline with at least 55% marks or equivalent CGPA. At Bachelor's level the candidate must have attended Science / Technology programme.	source apportionment studies, PAHs.  River morphology and landforms, riverine hazards; Geochemistry of river basins & hydrogeochemistry.  Climate studies (Urban climate, Urban Heat Island); Coupling study between hydrogeomorphic processes and ecology, geomorphic response to climate change.  Environmental Pollution: Air, Water and Soil & Human— environment interactions, Socioenvironmental issues (Vulnerability and Risk Assessment).  Application of Remote Sensing and GIS tech-
				niques to atmospheric, hydro- geomorphic, vegetation studies and socio-environmental issues.  Ecology, Ecosystem function and dynamics, Wetland productivity. Entomology, Biodiversity conservation.
				Environmental physiology, Stress physiology & GHG emission from agricultural sector, Vermiculture, plant nutrition & soil fertility management.
				Atmospheric Processes: Air pollution Meteorology, Noise pollution monitoring and modelling, Environmental System Modelling & Urban climate. Machine learning approach to environmental system, neurofuzzy systems.
				Geostatistics, Pollution Indexing, Nanobiotechnology.
74	Sciences	Mathematical Sciences	M.A. / M.Sc. in Mathematics or M.A./ M.Sc. in Statistics with requisite back-	Number Theory, Functional Analysis and Operator Theory, Graphs and Matrices.
			ground in Mathematics.	Nonparametric Density, Distribution Function Estimation, Empirical Research in Finance, Ring Theory, Computational Fluid Dynamics, Abstract Differential Equations, Algebraic Graph Theory.

75	Sciences	Molecular Biology and Biotechnology	Masters in any branches of Life Sciences/ Physical Sciences/ Chemical Sciences/ Mathematical Sciences/ Agricultural Sciences / Veterinary or Sciences / Engineering Sciences /Medical Sciences or in any allied field. B. Tech./ B. E. degree with 80% marks in CGPA (with GATE score > 90.00 percentile) in Chemical Engineering/ Chemical Sciences/ Bioinformatics or any allied field. MBBS or BVSc. degree with at least 60% marks or equivalent CGPA. Apart from the above, candidates having consistently good academic record will be preferred.	Cancer Biology, Genetic Engineering, Microbial genetics, Microbial recombinant enzyme, Cardiovascular drugs from me- dicinal plants, Microbial Biotechnology, Molecular Plant Microbe Interactions, Snake venom, protein characterization, Scientific Validation of antimalarial and antidiabetic formulation, Phytoremediation MEOR, Plant Biotechnology, environ- mental biotechnology, Molecular Genetics, Disease Biology, Computational Biophys- ics, Non canonical function of ribosomal protein, Anti- inflammatory action of Poly- phenols, Molecular Virology and Scrup typhus, Bioinformatics, Modelling & Simu- lation, Systems Biology, Bioinformatics, Big data analytics, Plant stress response, Evolutionary genomics, Cancer genomics, Next Generation Sequencing, Plant secon- dary metabolites, Organic cultivation, Germination.
76	Sciences	Physics	M.Sc. in Physics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Science. M.Phil., M.Tech. in Solid State Material/ Material Science/ Electronics/ Energy/ Nanoscience and Technology/ Biotechnology/ Environmental Science and Chemical Sciences. B.Tech. in Engineering Physics with 80% marks in aggregate or equivalent CGPA.	Mesoscopic Physics, Quantum Systems, Condensed Matter Physics & Nanotechnology, High Energy Physics, Material Science, Microwave Material & Devices, Applied Photonics, Applied Optics & Instrumentation, Neutrino Physics & Cosmology, Plasma Physics, Condensed Matter Physics/NLD, Astro-particle Physics.

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



# SECTION- III Admission Procedure

- 1. General Admission Procedure
  - (a) B. Tech. Programmes
  - (b) M.Tech. Programmes
  - (c) M.Sc. in MBBT
  - (D) MBA
  - (e) All other non-Ph.D. Programmes
  - (f) Ph. D. Programmes
- 2. List of Entrance Examinations Centres
- 3. Application Procedure
- 4. Examination Pattern
- 5. Tie-Breaking Criteria
- 6. Reservation Policy
- 7. Admission rules
- 8. Provisional Admission

# Admission Procedure (Continued)

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. Admission to most of these programmes is held through entrance examinations conducted by the University in various centres across the country. Application process for the session 2020-2021 will be online, but examination will be offline.

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) – 2020 to be conducted by NTA, New Delhi. All admission shall be based on JEE (Main) -2020 All India Ranking/CRL.
- ii) The Candidates who appear in the **JEE (Main) 2020** have two channels for admission to the B. Tech. Programmes.
  - a. 40% of the total seats shall be made through the central counselling i.e. Central Seat Allocation Board (CSAB) based on JEE (Main)-2020. The Candidates of any lace 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 through the Tezpur University counselling. These seats are reserved for the permanent residents of North East (NE) States. The Candidates need to fill-up Tezpur University application form in addition to JEE (Main) 2020 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 2<sup>nd</sup> 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.

- Diploma holders who have completed the 03 years AICTE approved diploma after 10<sup>th</sup> (Matriculation) in conventional system of Diploma programs or who have completed 04 years AICTE approved Diploma after 10<sup>th</sup> (Matriculation) in modular system of Diploma programs, are eligible to apply.
- ii) The Candidate must have passed 10<sup>th</sup> (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.
- 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 on GATE category or based on the performance in the University entrance examinations.

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

Candidates in this Programme may seek admission either based on the performance in the University entrance examination or through the *All India Combined Entrance Test* conducted by Jawaharlal Nehru University, New Delhi, under the sponsorship of the Department of Biotechnology, Govt. of India (eligibility as decided by DBT, Govt. of India). For NE reserved seat, PRC will be required.

#### 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, admission to which is made based on the performance in the University entrance examinations, shall have to appear in the University entrance examinations to be conducted this year.

## 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.
- 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 shortlisted based on the performance in the University entrance examinations shall be called for personal interview in the respective Departments. Candidates with UGC-(NET/JRF)/UGC-CSIR(NET/JRF)/DBT-JRF/ICMR-JRF/ICAR-NET/ GATE/SLET / M.Phil. will be exempted from written test and admitted on the basis of the performance in the personal interview only.
- (iv) Candidate desiring full time Ph. D. will be given preference.

## **List of the University Entrance Examinations Centres**

Agartala	Gangtok	Kolkata
Aizwal	Goalpada	North Lakhimpur
Barpeta Road	Guwahati	Patna
Bengaluru	Hyderabad	Pune
Bhubaneswar	Imphal	Pune
Bhopal	Itanagar	Shillong
Chennai	Jorhat	Silchar
Delhi	Kanpur	Siliguri
Dibrugarh	Kohima	Т
Diphu	Kokrajhar	Tezpur

#### International Centre

Dhaka, Bangladesh
Kathmandu, Nepal
Thimpu, Bhutan

#### **Application Procedure**

Interested eligible candidates may **APPLY ONLINE** through the university website <a href="https://www.tezuadmissions.com">www.tezuadmissions.com</a> by paying a fee of Rs. **400/-** for **SC**, **ST** and **PWD** candidates, Rs. **800/-** for other categories and **\$25** 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 for 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) Admit Card for Entrance Examinations: Candidates shortlisted for appearing University entrance examinations (not for B.Tech. Programmes) will be intimated separately through e-mail/SMS in their registered e-mail IDs/mobile numbers to download their admit cards.
- f) Documents (digital/scanned copy) to be uploaded:
- Copy of the JEE (Main) 2020 admit card, if applying for the B. Tech. Programmes.

# Admission Procedure (Continued)

- 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.
- 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)

#### **Examination Pattern:**

- Duration for the TUEE for all programmes will be of 2 hours.
- The question will be of multiple choice types in general. All such questions will carry 1 mark for a correct answer and -0.25 marks for a wrong answer.
- iii) For the Departments under the School of Humanities and Social Sciences, question papers will comprise of 60 multiple choice questions and descriptive questions of 40 marks.
- iv) In case of Ph.D. programmes under the School of Humanities and Social Sciences, question papers will comprise of 40 MCQ's and descriptive questions of 60 marks.
- w) MCQ part of the question paper will be divided into 4 sections; I, II, III. and IV.

# **Tie-Breaking Criteria:**

If there is a tie, the ratio of positive marks to negative marks will be considered. Candidate having higher absolute value of the ratio will be given priority.

If tie is not resolved even after this, the following procedure will be followed

 The candidate scoring higher marks in section IV will be given priority. In case of a tie even thereafter, section III will be considered and so on.

- If there is a tie even after this criterion either graduation or 10+2 marks will be considered.
- If the resolution is not possible after this criterion, candidates will be given equal priority.

### **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:
  - Prime Minister's special scholarship scheme for candidates from Jammu and Kashmir.
  - Upto 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, it is not applicable for the programmes B.Ed. and M.Sc. in Molecular Biology and Biotechnology.
  - Preferance under Sports quota will be considered as per University rules.
  - Seats under defence quota will not be reserved for B.Tech Lateral Entry.

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:

Priority I: Widows/wards of Defence personnel killed in action. Priority II: Wards of disabled in action and boarded out from service.

Priority III: Widows/Wards of Defence personnel who die in service with death attributable to military service.

Priority IV: Wards of Defence personnel disabled in service and boarded out with disability attributable to military service. Priority V: Wards of ex-servicemen and serving personnel who are in receipt of Gallantry Awards.

Priority VI: Wards of ex-servicemen.

Priority VII: Wards of serving personnel

#### **Important Dates**

- a. Opening of the online application submission: 25th February 2020
- b. Closing of the online application submission :  $7^{\text{th}}$  April 2020
- c. Online Admit Card Generation: 20th May 2020 (tentative)
- d. Tezpur University Entrance Examinations (TUEE): 29<sup>th</sup>—31<sup>st</sup> May 2020

- e. Declaration of merit lists of provisionally selected candidates (Excluding Ph.D. programmes) : 26th June 2020 (tentative)
- f. Declaration of provisionally shortlisted candidates for personal interview for the Ph.D. programmes : 12th June, 2020 (tentative)
- g. Counselling /Admission of selected candidates: 22-25th July 2020 (tentative)
- h. Commencement of classes of the Autumn Semester: 26th July 2020

**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 bssc@tezu.ernet.in.

#### Admission

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

- Fulfilment of the eligibility criteria as specified in Eligibility Criteria for Admission
- Selection for admission to the Programme.
- c) Production of all the relevant documents such as pass certificates and marksheets of all earlier examinations with requisite percentage of marks in original and original copies of documents uploaded at the time of submission of the application form.
- Submission of a set of self-attested copy of all pass certificate, marksheets and other the relevant documents.
- Submission of the character certificate from the Head of the Institution and Migration certificate (in original) from the Board/University last attended.
- Submission of a self-attested printout of the filled-in application form.
- 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/marksheet with requisite percentage of marks within 30<sup>th</sup> October, 2020. 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 30<sup>th</sup> October, 2020. 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 meritlist.

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

- Production/submission of any false/tempered information/ document.
- ii) Failing to produce/submit any required pending document within 30th October, 2020.
- 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

# 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 internationalscene.

## **Programmes offered**

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

## **Faculty and Areas of Interest**

#### Professor:

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

#### **Associate Professor**

Kamal Uddin Ahamad,\* Ph.D. (IITG) 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.Tech. (NITS)

Structural Engineering

Arunav Chakraborty, Ph.D. (GU)

Geotechnical Engineering

### \*Recognized Ph.D Supervisor

<u>LEGENDS:</u> **GU**-Gauhati University, **P&D**— Planning and Development, **TU**-Tezpur University, **IITG**-Indian Institute of Technology Guwahati, **IITR**-Indian Institute of Technology Roorkee, **NITS**— National Institute of Technology Silchar, **GU**- Gauhati University **HoD**-Head of the Department.

#### **Facilities**

The Department has the following Laboratory facilities MatLab and Simulink R2011b, Civil FEM for Ansys, version 12.1, Plaxis 2D, ETABS Version 9, AutoCAD, Geotechnical Laboratory, Environmental Engg. Laboratory, Water Resources Laboratory, Structural Engg. & NDT Laboratory, Transportation Laboratory, Surveying Laboratory.

#### Research Activities

- No. of papers published in the year 2018-19: 8
- No of ongoing research projects: 2
- No. of current Ph.D. scholars: 8

#### 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)
- Bhaowati Biswajit & Ahamad Kamal Uddin. A review on lake eutrophication dynamics and recent developments in lake modeling. Ecohydrology & Hydrobiology.19(1) (2019)
- Chakraborty, A. and Goswami, D., Threedimensional (3D) slope stability analysis using stability charts, International Journal of Geotechnical Engineering, 2018, https:// doi.org/10.1080/19386362.2016.1172807



# 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			

# 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			
	- anomougo	Electi	ive 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	
		2		Elective V	3	
	Open Elective I	٥		Open Elective II	3	

Third Semester				Fourth Semester	
Course Code Course Title Cr.		Course Code	Course Title	Cr.	
CE 598	MTech Project (MTP) Phase-I	12	CE 599	MTech 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 Geo- synthetics	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 lanquage 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. B. Tech. in Computer Science and Engineering
- 2. Master of Computer Application (MCA)
- 3. M. Tech. in Information Technology
- 4. Ph. D.

# **Faculty and Areas of Interest**

#### **Professor**

**Dilip Kumar Saikia**, Ph.D. (IITKgp), Pro Vice-Chancellor *Networks. Mobile Computing* 

**Dhruba Kumar Bhattacharyya**, Ph.D. (TU), Dean, Academic Affairs Data Mining, Network Security, Bio-informatics

Smriti Kumar Sinha, Ph.D. (TU), Dean School of Engineering

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,<sup>§</sup> Ph.D. (TU) Cognitive Radio Network, Operating System Debojit Boro, Ph.D. (TU) Network Security

#### **Assistant Professor**

Sarangthem Ibotombi Singh, Ph.D. (TU) Trust and Reputation, Web Services, Data mining Trust and Reputation, Web Services, Data mining

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

**Nazrul Hoque**, \* Ph.D. (TU)(Guest Faculty)

Data Mining, Network Security

# Recognized Supervisor \*Recognized Associate Supervisor

<u>LEGENDS:</u> IITKgp-Indian Institute of Technology Kharagpur, TU-Tezpur University, IITG-Indian Institute of Technology Guwahati, MU-Manipur University, ISI-Indian Statistical Institute Kolkata, JU-Jadavpur University Kolkata, NITM-National Institute of Technology Meghalaya HoD-Head of the Depart-

#### **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 TFlops speed and 50TB 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 Laboratory
- Network Laboratory
- \* Malware Research Laboratory
- Computational Biology and Bioinformatics

### **Departmental Library**

The Department has a library with a collection of more than 1400 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 in addition to those at the central library. The digital libraries of ACM, IEEE, are accessible to the Department.

#### **Research Activities**

- No. of papers published in the year 2019-2020: 53
- No. of ongoing research projects:07
- No. of current Ph.D. scholars: 52

#### **Selected Publications:**

- Pallabi Patowary, Rosy Sarmah, Dhruba K Bhattacharyya, "Developing an effective biclustering technique using an enhanced proximity measure", Network Modeling Analysis in Health Informatics and Bioinformatics, volume 9, issue 1, pp. 1-17, 2020.
- K Ray, S Shil, S Saharia, N Sarma, NS Karabasanavar, "Detection and Identification of Parasite Eggs from Microscopic Images of Fecal Samples", In: Das A., Nayak J., Naik B., Pati S., Pelusi D. (eds) Computational Intelligence in Pattern Rec-

- ognition. Advances in Intelligent Systems and Computing, vol 999. Springer, Singapore, pp 45-55, 2020.
- S Borah, B Borah, "Prediction Error Expansion (PEE) based Reversible polygon mesh watermarking scheme for regional tamper localization", Multimedia Tools and Applications, 2020, pp 1-22, January 2020.
- Nabajyoti Medhi, Dilip Kumar Saikia, "OpenFlow-Based Multi-controller Model for Fault-Tolerant and Reliable Control Plane, Smart Computing Paradigms: New Progresses and Challenges", Springer, Singapore, pp. 61-73, 2020.
- Kaushal Bhardwaj, Arundhati Das, Swarnajyoti Patra, "Spectral–Spatial Active Learning with Attribute Profile for Hyper-spectral Image Classification", International Conference on Intelligent Computing and Smart Communication 2019, pp. 1219-1229, 2020.
- Carynthia Kharkongor, B Nath, "Bit Representation for Candidate Itemset Generation", International Conference on Intelligent Computing and Smart Communication 2019, pp. 1259-1268, 2020.



# 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	ME102	Workshop Practice	2		
EF103	Communicative English	3	CO103	Introductory Computing	3		
SE100	Induction Program	-	CO104	Computing Lab	2		
	Total -	18	CE103	Engineering Graphics Total -	3 <b>24</b>		

	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	-		T-4-1		24
	Total -				Total -	21

	Fifth Semester			Sixth Semester			
Course Code	Course Title	CR	Cours Code		CR		
CO309	Operating Systems	3	CO31	System Software and Compiler Design	4		
CO311	Software Engineering	3		Elective-II (PEC02)	3		
CO310	Operating Systems Lab	1		Open Elective-II (OEC02)	3		
CO312	Database Systems	3	CO31	5 Computer Networks	3		
CO313	Data base Systems Lab	2	CO31	6 Computer Networks Lab	1		
CO303	Computer Graphics	4	IC361	Accounting and Financial Management	3		
	Elective-I (PEC01)	4	CO31	7 Project-I (using SE perspective)	2		
	Open Elective-I (OEC01)	3					
LW301	Indian Constitution (MC- Non Credit)	-		Total -	19		
	Total -	23					

	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				
	Open Elective-III (OEC03)	3				
CO402	Project-II	4				14
CT465	Essence of Indian Traditional Knowledge (MC- Non Credit)	0		Total-		
	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

# **Professional Elective Courses (PEC)**

Group	Course Name	L-T-P	Credit
PEC01	Web Technology	3-0-1	4
PECUI	Embedded Systems	3-0-1	4
	Parallel Programming	3-0-1	4
	Principles of Programming Languages	3-0-0	3
PEC02	Network Management and Security	3-0-0	3
	Cryptography	3-0-0	3
	Logic in Computer Science	3-0-0	3
	Theory of Computations	3-0-0	3

# COMPUTER SCIENCE AND ENGINEERING (Continued)

# **Seventh Semester:**

Group	Course Name	L-T-P	Credit
	Machine Learning	3-0-1	4
PEC03	Distributed Systems	3-0-1	4
	Computer Vision & Image Processing	3-0-1	4
	Cloud Computing	3-0-0	3
	Quantum Computing	3-0-0	3
	Statistical Modelling and Applications	3-0-0	3
PEC04	Internet of Things	3-0-0	3
	Software Defined Networking and Network Function Virtualization	3-0-0	3
	Geometric Algorithms	3-0-0	3
	Bioinformatics	3-0-0	3

# **Eight Semester:**

Group	Course Name	L-T-P	Credit
	Natural Language Processing	3-0-0	3
	Linear Optimization	3-0-0	3
	Advanced Database Management Systems	3-0-0	3
DECOS	Fuzzy Logic and Neural Networks	3-0-0	3
PEC05	Mobile Computing	4-0-0	4
	Knowledge Representation and Reasoning	4-0-0	4
	Advanced Algorithms	4-0-0	4
	Data Mining	3-0-0	3
	Computer Architecture Parallel Processing	3-0-0	3
	Operation Research	3-0-0	3

# **Courses offered in Master of Computer Application**

	First Semester			Second Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
CS 404	Programming and Problem Solving	5		CS 403	File Structures	2
CS 405	Discrete Mathematics	3		CS 408	Data Structures	5
CS 406	Digital Logic	4		CS 409	Computer Organization and Architecture	5
CS 407	Information and Communication Technology	4			Elective	-
	Elective	3			Elective	-
					Open Elective-I	3

	Third Semester		
Course Code	Course Title	Cr.	Cours
CS 502	System Software	3	CS
CS 508	Database Management	5	CS
CS 509	Data Communication	4	CS
	Elective	-	
	Elective	-	
	Open Flective-II	3	

Fourth Semester						
Course Code Course Title						
CS 504	Operating System	4				
CS 505	Software Engineering	4				
CS 507	Computer Networks	4				
	Elective	-				
	Elective	-				
	Elective/Open Elective-III	3				

Fifth Semester					
Course Code Course Title					
Minor Project	8				
Elective	-				
Elective	-				
Elective	-				
Elective/Open Elective-III					
(if three Open Electives are not yet	-				
taken)					
	Course Title  Minor Project  Elective  Elective  Elective  Elective/Open Elective-III  (if three Open Electives are not yet				

Sixth Semester						
Course Code	Course Title	Cr.				
CS 515	Major Project	16				

Elective Courses								
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.			
CS 421	Graph Theory	3	CS 525	Artificial Intelligence	3			
CS 422	Numerical Methods	4	CO 504	Natural Language Processing	3			
CS 424	Formal Language and Automata	3	CS 529	Embedded Systems	4			
CS 522	Computer Graphics	4						
CS 523	Enterprise Resource Planning	3	CS 531	Object Oriented Programming and Design	5			
CS 524	Theory of Computation	3	CS 532	Compiler Design	4			
CS 538	Computational Geometry	3	CO 503	Fuzzy Logic and Neural Network	3			
CS 601	Design and Analysis of Algorithms	3	IT 504	E-Commerce	3			
CS 602	Image Processing	3	IT 507	Computer Security and Cryptography	3			
CS 606	Computer Architecture and Parallel Process-	3	IT 509	Data Mining and Data Warehousing	4			
	ing		IT 517	Pattern Recognition	4			
CS 609	Geographic Information Systems	3	IT 611	Distributed Systems	3			
CS 610	Bioinformatics	3	BM 421	Accounting and Financial Management	3			
CS 621	Mobile Computing	4	BM 501	Foundation of Management	3			
CS 625	Web Technology	4	BM 504	Managerial Economics	2			
CS 725	Knowledge Representation and Reasoning	4	MS 509	Probability and Statistics	4			

# COMPUTER SCIENCE AND ENGINEERING (Continued)

# Courses offered in M.Tech. in Information Technology

	First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
CS 531	Object Oriented Programming and Design	5	IT 610	Advanced Database System	4	
CS 601	Design Analysis of Algorithms	3		Elective 2	3	
CS 634	Selected Topics in Computer Networks	4		Elective 3	3	
CS 543	Advanced Programming Lab I			Elective 4	3	
	Elective 1	3	CS 545	Seminar	2	
	Open Elective 1	3		Open Elective 2	3	

	Third Semester				Fourth Semester	
Course Code	Course Title	Cr.		Course Code	Course Title	C
IT 604	Term Project I	8		IT 605	Term Project-II	1
	Elective 5	3				
	Elective 6	3				

Elective Courses								
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.			
CS 424	Formal Language and Automata	3	CS 607	Optimization Technique	3			
CS 502	System Software	3	CS 610	Bioinformatics	3			
CO 504	Natural Language Processing	3	CS 621	Mobile Computing	4			
CS 505	Software Engineering	4	CS 625	Web Technology	4			
CS 507	Computer Networks	4	CS 725	Knowledge Representation and Reasoning	4			
CS 508	Database Management Systems	5	CS 731	Data Mining in Security	4			
CS 509	Data Communication	4	IT 503	Multimedia Systems	4			
CS 522	Computer Graphics	4	IT 504	E-Commerce	3			
CS 523	Enterprise Resource Planning	3	IT 506	Logic Programming	3			
CS 524	Theory of Computation	3	IT 507	Computer Security and Cryptography	3			
CS 525	Artificial Intelligence	3	IT 509	Data Mining and Data Warehousing	4			
CS 529	Embedded Systems	4	IT 510	Advanced Operating Systems	4			
CS 532	Compiler Design	4	IT 517	Pattern Recognition	4			
CS 538	Computational Geometry	3	IT 518	Graph Theory	3			
CS 602	Image Processing	3	IT 523	Discrete Mathematics	3			
CS 606	Computer Architecture and Parallel Processing	3	IT 611	Distributed Systems	3			

# Courses offered in M.Tech. in Computer Science and Engineering The curriculum structure is subject to the approval of BoS/SB.

First Semester			Second Semester			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
CS 541	Mathematical Foundation for Computer Science	4	CS 634	Selected Topics in Computer Networks	4	
CS 542	Advanced Algorithms and Data Structures	3	CS 544	Advanced Programming Lab II	3	
CS 606	Computer Architecture and Parallel Processing	3	CS 545	Seminar Presentation	2	
CS543	Advanced Programming Lab I	3	-	Elective-I	3/4	
IT510	Advanced Operating Systems	4	-	Elective-II	3/4	
				Open Elective I	3	

Third Semester		Fourth Semester			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
-	Elective III	3/4	CS 641	Term Project-II	16
-	Elective IV	3/4		· ·	
-	Open Elective II	3			
CS 640	Term Project I	8			

Elective I							
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.		
IT 610	Advanced Database System	4	IT 507	Computer Security and Cryptography	3		
CS 525	Artificial Intelligence	3	CS 664	Parallel Algorithms	3		
CS622	Modern Compiler Design	3	CS 613	Image Processing and Computer Vision			
CS659	An Introduction to Probability in Computing	3	CS 638	Software Defined Networking and Network Function Virtualization	3		

Elective II							
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.	
IT 611	Distributed Systems	3		CS 610	Bioinformatics	3	
CS 602	Image Processing	3		CS 614	Graph Theoretic Algorithms	3	
CS 616	Machine Learning	3		CS 618	Information Theory and Coding	3	
CS 619	Privacy and Security in Online Social Network	3	1	IT 517	Pattern Recognition	4	

# COMPUTER SCIENCE AND ENGINEERING (Continued)

Elective III	Elective III								
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.			
CS 621	Mobile Computing	4		IT 509	Data Mining and Data Warehousing	4			
CS 725	Knowledge Representation and Reasoning			CS 668	Blockchain Architecture and Use cases	3			
CS 529	Embedded Systems	4		CS 617	VLSI Design	3			
CS 653	Introduction to Internet of Things			CS 504	Natural Language Processing	3			
CS 538	Computational Geometry	3		CS 524	Theory of Computation	3			

Elective IV								
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.		
CS 612	Advanced Computer Graphics	3		CS 615	Robotics	3		
IT 503	Multimedia Systems	4		CS 620	Data Science	3		
CS 663	Randomized Algorithms	3		CS 607	Optimization Techniques	3		
CS 637	Topics on Cognitive Radio and Networks	4		CO 503	Fuzzy Logic and Neural Networks	3		

	Additional Elective Courses (from SWAYAM MOOCs courses of UGC)									
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.					
CS 650	Introduction to Machine Learning	2	CS 666	Embedded System Design with ARM	2					
CS 651	Al: Search Methods for Problem Solving	3	CS 667	Introduction to Soft Computing	2					
CS 652	Privacy and Security in Online Social Media	2	CS 668	Blockchain Architecture and Use Cases	3					
CS 653	Introduction to Internet of Things	2	CS 669	Introduction to Industry 4.0 and Industrial Internet of Things	3					
CS 654	Programming, Data Structures and Algorithms using Python	2	CS 670	Deep Learning	3					
CS 655	Scalable Data Science	2	CS 671	Reinforcement Learning	3					
CS 656	Introduction to R Software	2	CS 672	Ethical Hacking	3					
CS 657	Cloud Computing	2	CS 673	Demystifying Networking	1					
CS 658	Social Networks	3	CS 674	Theory of Computation	2					
CS 659	An Introduction to Probability in Computing	3	CS 675	Practical Machine Learning with Tensorflow	2					
CS 660	Programming in Java	3	CS 676	Human Computer Interactions	2					
CS 661	Data Science for Engineers	2	CS 677	Introduction to Machine Learning	3					
CS 662	Machine Learning for Engineering and Science Applications	3	CS 678	GPU Architectures and Programming	3					
CS 663	Randomized Algorithms	3	CS 679	Multi-Core Computer Architecture – Storage and Interconnects	2					
CS 664	Parallel Algorithms	3	CS 680	Data Analytics with Python	3					
CS 665	Al: Knowledge Representation and Reasoning	3	CS 681	Cloud Computing and Distributed Systems	2					

# 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, Bioelectronics, Biosensors, Microwave Engineering, Communication Engineering and Microelectronics. The department is supported by - DST-FIST. DeitY - MIT. UGC-SAP (DRS-I).

#### **Programmes offered**

- B. Tech. in Electronics and Communication Engineering
- 2. M.Tech. in Electronics Design and Technology
- 3. M.Tech. in Bioelectronics

Ph.D.

#### **Faculty and Areas of Interest**

#### **Professor**

Manabendra Bhuyan,\* Ph.D. (GU) Sensor Design, Intelligent Instrumentation, Signal Processing

Partha Pratim Sahu,\* Ph.D. (JU)-HoD Optical Networks and its Components, Clinical Instrumentation, Micro-fabrication

**Jiten Chandra Dutta**,\* Ph.D. (JU) Biosensors and Bio-electronics, Neuorobioenaineering.

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

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

**Soumik Roy,\*** Ph.D. (TU) *Neuroengineering.* 

Bhabesh Deka,\* Ph.D. (IITG)
Image Processing, Computer Vision,
Compressive Sensing MRI, Biomedical Signal
Processing

**Vijay Kumar Nath,**\* Ph.D. (IITG) *Image and Video Processing* 

#### **Associate Professor**

Nayan Moni Kakoty \*, Ph.D. (TU)

Robotics, Biomedical Signal Processing Deepika Hazarika\*, Ph.D. (TU) Image Processing

Ratul Kumar Baruah \*,Ph.D. (IITG) Nanoelectronics, VLSI, MEMS

#### **Assistant Professor**

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

Biplob Mondal\*, Ph.D. (JU) CMOS VLSI, Sensors, MEMS, nanomaterials and devices

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

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

**Priyanka Kakoty**, Ph.D. (TU) *Intelligent Instrumentation* 

#### \* Recognized Supervisor

<u>LEGENDS</u>: **GU**-Gauhati University, Guwahati; **JU**-Jadavpur University, Jadavpur; **DU**- University of Delhi; **TU**-Tezpur University, Tezpur **IITG**-Indian Institute of Technology Guwahati, **AEC**-Assam Engineering College Guwahati, **NITY**- National Institute of Technology, Yupia Arunachal Pradesh, **HoD**-Head of the Department.

#### **Facilities**

The Department has several state-of-the-art laboratories, viz - Basic Electrical Engineering

Laboratory, Basic Electronics Laboratory, Design and Prototyping Laboratory, M.Tech. Project Laboratory, Software Simulation Laboratory, Communication Laboratory, Microwave Laboratory, DSP Laboratory, Computer Vision and Image Processing Laboratory, Instrumentation Laboratory, Bioelectronics Laboratory, Neuroengineering Laboratory, Optical Fibre Laboratory, Micro fabrication/MEMS Facility.

#### **Research Laboratories:**

In addition to the above facilities, there are a number of laboratories exclusively for research scholars. These are -

- Power Electronics Laboratory (Vehicular Electronics)
- Microwave Engineering Laboratory
- Wireless Communication Engineering Laboratory
- E-nose Laboratory
- Computer Vision and Image Processing Laboratory

#### **Research Activities**

- No. of papers published in the year 2018-19:
   22
- No. of ongoing research projects: 7
- No. of current Ph. D scholars: 35

#### Selected Publications

Sahu P.P. Thermooptic Two Mode interference device for reconfigurable Quantum optic circuits. Quantum information process-

- ing, 17, 2018.
- Sumit Datta & Deka Bhabesh. An Efficient Interpolated Compressed Sensing Reconstruction Scheme for 3D MRI. IET Image Processing. 12. 2018.
- Dutta J C & Thakur H R. High performance Dual-Gate Carbon Nanotube Ion-Sensitive Field Effect Transistor with high-κ top gate and low-κ bottom gate dielectrics. IEEE Sensors Journal. 19 (14). 2019
- Hazarika Anil, Dutta Lachit, Barthakur Mausumi, Bhuyan Manabendra. A Multiview Discriminant Feature Fusion-Based Nonlinear Process Assessment and Diagnosis: Application to Medical Diagnosis, IEEE Transactions on Instrumentation and Measurement, 68, 2018.
- Borgohain Rashi, Das Reema, Mondal Biplob, Yordsri Visittapong, Thanachayanont Chanchana & Baruah Sunandan. ZnO/ZnS core-shell nanostructures for low concentration NO2 sensing at room temperature. IEEE Sensors Journal, 18, 2018
- Hazarika C, Sarma D, Puzari P, Medhi T & Sharma S. Use of Cytochrome P450 enzyme isolated from *Bacillus streto-spericus sp.* as recognition element in designing Schottky based ISFET Biosensor for hydrocarbon detection. IEEE Sensor Journal. 18. 2018.



### 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					

<sup>##</sup> 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 & COMMUNICATION ENGINEERING (Continued)

	Seventh Semester	
Course Code	Course Title	Cr.
	ECE Elective –III(any one from the sub-	
	jects 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 sub-	
	jects below)	_ ا
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
	Essence of Indian Traditional Knowledge	<b>l</b> .
CT465	(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.
EL 517	Physical and Industrial Design of Electronics Systems	4		EL 516	Design of Fine Mechanics and Power Devices	4
EL 531	Design of Digital Systems	4		EL 530	VLSI Design	4
EL521	Design and Technology of Electronic Devices	4		EL 538	Advanced Electronic Devices	3
EL537	Advanced Programming Language	4		EL540	Intelligent Instrumentation	4
	Open Elective I	3		BE 528	MEMs and Nanotechnology	3
	Elective I	4			Open Elective II	3
					Elective II	4

	Third semester and Fourth Semester							
Course Code	Course Title	Cr.						
EL601	M. Tech. Dissertation	24						

Elective I (Any one from the following courses)		Elective II (Any one from the following courses)			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EL 533	Data Communication & Networks	4	EL 534	Modeling and Simulation	4
EL 535	Information Systems	4	EL 536	Application Software	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	Intelligent Instrumentation	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 (A	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)

Founded in 1996, the Department of Energy has been a vibrant academic platform, engaging itself with an academic mandate to produce manpower pool in the field of energy, development of new and efficient energy technologies. and R & D and extension activities in diverse areas of energy. The department offers a twovear (four semesters) AICTE approved M. Tech. programme in Energy Technology, and a Ph. D. programme in energy related areas. The Department is also offering a B.Voc. programme in Renewable Energy Management under the UGC scheme on skill Development based higher education. Academic assistance is also provided to the Post Graduate Diploma programme in Renewable Energy and Energy Management offered by the University's Centre for Open and Distance Learning. The thrust areas of research are Biomass energy. Climate Responsive Buildings, Energy Conservation and Management, Energy Efficiency, Energy-Environment interface, Fuel Cell, Hydrogen Energy, Rural Hybrid Energy, and Solar energy. Apart from teaching and research, the department also organizes training programmes, workshops and seminars in the relevant areas of energy. The Faculty of Department has successfully completed a number of international collaborative research projects, notable among them are, 1) Indo-UKIERI. 2) Indo-European Union and 3) Indo-Finland, Currently, the Department has six ongoing international collaborative research projects.

#### **Programmes Offered**

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

# 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, Hybrid Energy Systems, Instrumentation and Control

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

Electrolyzer, Fuel Cell, Hydrogen Technology, Redox Flow Battery, Graphene, and Nanocatalyst Nabin Sarmah,\* Ph.D. (HWU) Solar Energy, Photovoltaic, Energy Systems

Vikas Verma, Ph.D. (IITR)

Thermal Engineering, Solar Thermal Energy, Heat Transfer

**Bibha Boro**, M.Tech. (TU) *Electrical Engineering* 

#### \*Recognized Supervisor

<u>LEGENDS</u>: **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 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, Duel 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 sub-

scribed 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 paper published in the year 2018-19: 20
- No. of ongoing research projects:09
- No of current Ph.D. scholars:21

#### **Selected Publications**

- Hiloidhari M., Baruah D.C., Kumari M., Kumari S. &Thakur I.S., Prospect and potential of biomass power to mitigate climate change: A case study in India, Journal of Cleaner Production, 2019, 220, 931-944.
- Dev Choudhury, N., 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 (accepted), 2020

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



# 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	2	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	2	-	CBCT-II	3			
-	CBCT-I	3	-	CBCT -III	3			

Third Semester			Fourth Semester			
Course Code	Course Title	Cr.	Course Code Course Title			
EN 539	Project (Part-I)	8	EN 540 Project (Part-II)		16	

Elective –I (Ar	ny 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		

# **ELECTRICAL ENGINEERING**

(Year of Establishment: 1996)

The Electrical Engineering Department was established in 2016 under the School of Engineering for offering B.Tech. programme in Electrical Engineering (this B.Tech. Programme was originally started in the year 2014 under the Department of Electronics and Communication Engineering). 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, Bio-electronics and Neuro Engineering.

#### **Programme offered**

1.B.Tech. in Electrical Engineering 2.PhD in Electrical Engineering

#### **Faculty and Areas of Interest**

#### **Professor**

Manabendra Bhuyan\*, Ph.D. (GU)- HoD Intelligent Instrumentation, Sensor signal processing, Biomedical instrumentation

#### **Assistant Professor**

Rahat Mahboob\*, PhD (JMI)

Sensors and Sensing Technology; Electronics Instrumentation; Wireless Sensor

Manashita Borah\*, M.Tech. (NITS)

Control Systems , Chaos in biomedical applications, Nanotechnology, Fractional Order Systems, Waste water management

#### 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 (IIT(BHU)

Converter and Inverter topologies, design, and modeling; Hybrid converters for Microgrid and EV; Digital control in Power Electronics; Motor drives control for EV

#### **Recognized Supervisor**

<u>LEGENDS:</u>JU- Jadavpur University West Bengal, JMI-Jamia Milia Islamia, NITS- National Institute of Technology Silchar, AEC-Assam Engineering College Guwahati, NITA-National Institute of Technology Agartala, HoD-Head of the Department.

#### **Facilities**

- a) Basic Electrical Engineering Laboratory: Laboratory experiments conducted in this lab are based on fundamentals of electrical engineering, Kirchoff's law's, Thevenin's theorem, Nortons theorem, maximum power transfer theorem, superposition theorem, calibration experiments, power factor measurement. The lab is all the necessary equipment's for successful completion of the experiments.
- b) Network Laboratory: Laboratory experiments conducted in this lab are based upon Realization of Current Source and Voltage Source, study application of Thevenin's Theorem, Norton's Theorem, Superposition Theorem, Maximum Power Transfer Theorem, the step response of RL, RC & RLC circuits., Calculation and Verification of Z, Y, ABCD parameters of a Two-port Network., Design and frequency response of Passive Filter circuit., Ladders and Bridges, Multi DC Mesh Analysis. The lab is equipped with number DMM, analog voltmeters and ammeters, DSO, CRO,

Function generator and various trainer kits

- c) Measurement and Instrumentation Laboratory: Laboratory experiments conducted in this lab are based upon potentiometers, a.c. bridges, Maxwell's bridge, Anderson's bridge, Kelvin's bridge, single phase and three phase power measurements, synchronizing of loads.
- d) Electrical Machine Laboratory: This laboratory is sponsored under the AICTE-NEQIP Scheme. Laboratory experiments conducted in this lab are based upon application of dc machines, speed control of dc motors, characteristics of generators. transformer- open circuit, short circuit tests, regulation tests, Swinburne test, synchronous machine tests, and tests on three phase induction motors. The laboratory is well stocked with ammeters, voltmeters, power factor meters, wattmeters, tachometers, single phase and three phase resistive as well as mechanical loads for successful completion of the experiments.
- e) Power Systems Laboratory: Laboratory experiments conducted in this lab are based upon application of transmission line parameters evaluation, transformer testing, breakdown voltage evaluation of transformers, radial and ring distribution systems, differential relay protection, determination of xd and xq parameters of machines. The equipment's in the laboratory are protected for use and are state of the art in terms of laboratory testing and experimentation.
- f) In addition to these laboratories, the department also offers its students experience in laboratory with the assistance from Electronics and Communication Engineering Department which include Basic Electronics Laboratory, Computer Laboratory (Software), Communication Laboratory,

DSP Laboratory, Image Processing Laboratory and Hardware Laboratory.

#### **Research Activities**

- Number of papers published in the year 2018-2019: 12
- Number of ongoing research projects: Nil
- Number of current Ph.D. scholars: Nil

#### **Selected Publications**

- Manashita Borah and B. K. Roy, "Systematic construction of high dimensional fractional-order hyperchaotic systems", Chaos, Solitons and Fractals, 2019, 109539 (in press), Elsevier.
- Kharan Shiluveru, Akash 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, 2019, (In press) DOI:10.1109/ TPEL.2019.2960268
- Anish Ahmad, R. K. Singh and A. R. Beig, "Switched-Capacitor Based Modified Extended High Gain Switched Boost-Z-Source Inverters" IEEE Access, vol. 7, pp. 179918-179928, 2019.
- Anish Ahmad, and R. K. Singh, "Embedded Dual Switched-Capacitor Based Continuous Input Current Switched-Inverter for Renewable Energy Application", IET Power Electronics, vol. 12, no. 5, p. 1263-1273, 2019.
- Manashita Borah, "On Coexistence of Fractional-order Hidden attractors", Journal of Computational and Nonlinear Dynamics, vol. 13, pp. 090906-(11 pages) 2018, American Society of Mechanical Engineers (ASME).
- Manashita Borah and B. K. Roy, "Fractional-order systems with diverse dynamical behaviour and their switching-

- parameter hybrid-synchronisation", European Physical Journal Special Topics, vol 226, pp. 3747-3773, 2018, Springer.
- Manashita Borah, P. Roy and Binoy K. Roy, "Enhanced Performance in Trajectory Tracking of a Ball and Plate System using Fractional Order Controller", IETE Journal of Research, vol. 64, no. 1, pp. 76–86, 2018, Taylor & Francis.
- M. R Mahboob, M. Manas, M. N Anwar, A. Sinha and S. Sharma "A Novel approach for IoT based Wearable Health Monitoring and Messaging System" Journal of Ambient Intelligence and Humanized Computing, (Accepted) August 2018, Springer.
- B. J Saharia, H. Brahma, N. Sarmah "A review of algorithms for control and optimization for energy management of hybrid renewable energy systems" Journal of Renewable and Sustainable Energy,vol.10, pp. 053502, 2018, doi: 10.1063/1.5032146
   American Institute of Physics (AIP).
- Anish Ahmad, B. Vinod Kumar, R. K. Singh and R. Mahanty, "Switched-Boost Modified Z-Source Inverter Topologies with Improved Voltage Gain Capability", IEEE Journal of Emerging and Selected Topics in Power Electronics, vol. 6, no. 4, pp. 2227-2244. Dec. 2018.
- V K Bussa, Anish Ahmad, R. K. Singh and R. Mahanty, "Interleaved Hybrid Converter with Simultaneous DC and AC Outputs for DC Microgrid Applications", IEEE Transactions on Industry Applications, vol. 54, no. 3, pp. 2763-2772, May/June 2018.
- Vinod Kumar Bussa, Anish Ahmad, R. K. Singh and R. Mahanty, "Single-phase high voltage gain switched LC Z-source inverters", IET Power Electronics, vol. 11, no. 5, pp. 796-807, 2018.

### Courses offered in B.Tech. in Electrical Engineering (prior to 2018)

	First Semester			Second Semester				
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.			
MS 101	Mathematics -I	4	MS 103	Mathematics -II	4			
PH 101	Physics -I	4	PH 102	Physics -II	4			
CH 101	Chemistry	4	ME 102	Engineering Mechanics	4			
EL 101	Basic Electrical Engineering	4	EL 102	Basic Electronics	5			
CE 101	Engineering Graphics	3	CO 101	Introductory Computing	3			
ME103	Workshop Practice	2	CO 102	Computing Laboratory	2			
	Humanities Elective			Science Elective	•			
EG101/	Communicative English/ Sociology/		BT 101/	Elements of Modern Biology/				
SO101/	Elementary Economics	3	ES 101/ CH	Environmental Science/ Introductory Mate-	4			
BM 101	·		102	rial Science				
	Third Semester			Fourth Semester				
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.			
MS 201	Mathematics-III	3	EE 203	Measurement and Instrumentation	4			
EE 201	Network Theory	3	EE 204	Electrical Machines -I	3			
EE 202	Network Laboratory	2	EE 205	Electrical Machines Laboratory -I	2			
EL 201	Switching Circuits and Digital Logic	4	EL 205	Integrated Circuit	4			
EL 203	Analog Electronic Devices and Circuits	4	EL 206	Principles of Communication	4			
EL 204	Signals and Systems	3	EL 208	Engineering Electromagnetic	3			
CO 212	Computer Architecture and Organi-	5	CO 221	Data Structures and Object Oriented Pro-	4			
	zation			gramming				
	Fifth Semester			Sixth Semester				
Course Code	Course Title	Cr.	Course Code	Course Title	Cr			
EE 301	Power Systems-I	5	EE 304	Power Systems-II	5			
EE 302	Electrical Machines -II	3	EE 305	Advanced Control System Engineering	4			

	Fifth Semester			Sixth Semester			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.		
EE 301	Power Systems-I	5	EE 304	Power Systems-II	5		
EE 302	Electrical Machines -II	3	EE 305	Advanced Control System Engineering	4		
EE 303	Electrical Machines Laboratory -II	2	EE 306	Power Electronics and Drives	3		
EL 302	Microprocessors and Interfacing	4	EE 307	Power Electronics and Drives Laboratory	2		
EL 303	Digital Signal Processing	4	BM 322	Social Responsibility and	3		
				Professional Ethics in Engineering			
EL 304	Control System Engineering	4	- EE Elective - I		3		
BM 321	Fundamentals of Management	3	-	Open Elective - I*	3		
	Seventh Semester\$		Eight Semester				
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.		
EE 401	Computer Aided Power System Analysis	5	EE 404	Project- II	12		
EE 402	Industrial Summer Training #	2	-	EE Elective - IV	3		
EE 403	Project -I	6	-	Open Elective -III*	3		
-	EE Elective - II	3					
-	EE Elective - III	3					
-	Open Elective -II*	3					

#### **ELECTRICAL ENGINEERING (Continued)**

	Elective Courses									
Course Code Course Title				Course Code	Course Title	Cr.				
EE 308	Nonconventional Energy Sources	3		EE 408	High Voltage Engineering	3				
EE 309	Utilization and Conservation of Electrical Energy	3		EE 409	Industrial Drives and Control	3				
EE 310	Embeded Systems	3		EE 411	Power System Interconnection and Control	3				
EE 405	Industrial Automation Systems	3		EL 426	Fuzzy Logic and Neural Networks	3				
EE 407	Advanced Power Electronics and Drives	3				•				

<sup>\*</sup>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 one can visit the departmental website http://www.tezu.ernet.in/dee

#### Courses offered in B.Tech. in Electrical Engineering (since 2018)

\*Minimum credits: 160

Maximum credits: 165

Students from 5th semester onwards may opt for inter-departmental courses in conformity with the work force requirements in the industries within the credit range.

Students may also opt for Massive Open Online Courses (MOOCs) for 20% of the total credit range in conformity with the concept of digital education.

For Open Elective courses: Students may opt for any course offered by the University from the preferable subjects enlisted in Table A. and recommended by the department, as per AICTE guidelines.

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

#### Semester-I

SI. No.	Course Type Code	Course Name	L	Т	Р	CR	СН
1	CH 103	Chemistry	3	0	1	4	5
2	MS 104	Mathematics-I	3	1	0	4	4
3	EE 103	Basic Electrical Engineering	3	0	0	3	3
4	EE 104	Basic Electrical Engineering lab	0	0	1	1	2
5	PH 103	Physics-I	2	0	1	3	4
6	EF 103	English	2	0	1	3	4
7	SE 100	Induction Program	-	-	-	-	8
		Total	13	1	4	18	22

#### Semester-II

SI. No.	Course Type Code	Course Name	L	T	Р	CR	CH
1	PH 104	Physics-II	2	0	0	2	2
2	MS 105	Mathematics-II	3	1	0	4	4
3	CE 103	Engineering Graphics	1	0	2	3	5
4	ME 103	Workshop Practice	0	0	2	2	4
5	CO 103	Introductory Computing / Programming for Problem Solving	3	0	0	3	3
6	CO 104	Computing Lab	0	0	2	2	4
7	ME 102	Engineering Mechanics	3	1	0	4	4
		Total	12	2	6	20	26

#### Semester-III

SI. No.	Course Type Code	Course Name	L	T	Р	CR	СН
1	MS 205	Mathematics III	3	0	0	3	3
2	ES 201	Environmental Science	1	0	1	0	3
3	BA 201	Economics	3	0	0	3	3
4	EE-211	Electrical Circuit Analysis	3	1	0	4	4
5	EC-201	Electronics Devices	3	0	0	3	3
6	EC-202	Electronics Devices Lab	0	0	1	1	2
7	EE-214	Electrical Machines – I	3	0	0	3	3
8	EE-215	Electrical Machines Laboratory – I	0	0	1	1	2
9	EC 205	Signals and Systems	3	0	0	3	3
		Total	21	1	3	21	26

# ELECTRICAL ENGINEERING (Continued)

#### Semester-IV

SI. No.	Course Type Code	Course Name	L	T	Р	CR	CH
1	BT 201	Biology	3	0	0	3	3
2	EE-217	Digital Electronics	3	0	0	3	3
3	EE-218	Digital Electronics Laboratory	0	0	1	1	2
4	EE-219	Electrical Machines – II	3	0	0	3	3
5	EE-220	Electrical Machines Laboratory – II	0	0	1	1	2
6	EC211	Microcontroller and Microprocessor	3	0	0	3	3
7	EC212	Microcontroller Lab	0	0	1	1	2
8	EE-216	Electromagnetic Fields	3	1	0	4	4
9		*Open Elective-1	3	0	0	3	3
		Total	18	1	3	22	25

#### Semester-V

SI. No.	Course Type Code	Course Name	L	T	P	CR	CH
1	EE 311	Power Systems – I (Apparatus and Modelling)	3	0	0	3	3
2		Power Systems					
	EE 312	Laboratory – I	0	0	1	1	2
3	EE 313	Control Systems	3	0	0	3	3
4	EE 314	Control Systems Laboratory	0	0	1	1	2
5	EE 315	Power Electronics	3	0	0	3	3
6	EE 316	Power Electronics Laboratory	0	0	1	1	2
7		Program Elective – 1	3	0	0	3	3
8		*Open Elective – 2	3	0	0	3	3
	LW 301	Indian Constitution	1	0	0	0	1
		Total	16	0	3	18	22

For Program Elective – 1
PEC-EE 317 Electric Electrical Machine Design

#### Semester-VI

SI. No.	Course Type Code	Course Name	L	T	Р	CR	СН
1	IC 361	Accounting & Financial Management	3	0	0	3	3
2	EE 318	Power Systems – II (Operation and Control)	3	0	0	3	3
3	EE 319	Power Systems Laboratory - II	0	0	1	1	2
4	EE 320	Measurements and Instrumentation Laboratory	2	0	2	4	6
5	EE 321	Electronics Design Laboratory	1	0	2	3	5
6		Program Elective – 2	3	0	1	4	5
7		Program Elective – 3	3	0	0	3	3
8		Open Elective – 3	3	0	0	3	3
9	EE-322	Summer Internship	0	0	0	0	0
		Total	18	0	6	24	30

### 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

#### Semester-VII

SI. No.	Course Type Code	Course Name	L	T	Р	CR	СН
1	XX xxx	HSS / Management Elective	3	0	0	3	3
2		Program Elective -4	3	0	0	3	3
3		Program Elective -5	3	0	0	3	3
4		Open Elective – 4	3	0	0	3	3
5		Open Elective – 5	3	0	0	3	3
6	EE 412	Project Stage-I	0	1	5	6	11
7	CT 430	Essence of Indian Traditional Knowledge	1	0	0	0	1
		Total	16	0	5	21	27

### For Program Elective – 4 and Program Elective – 5

EE 413	Wind and Solar Energy Systems
EE 414	Electrical and Hybrid Vehicles
EE 415	Power System Protection
EE 416	HVDC Transmission Systems
EE 417	Power Quality and FACTS
EE 418	Power System Dynamics and Control

# ELECTRICAL ENGINEERING (Continued)

#### Semester-VIII

SI. No.	Course Type Code	Course Name	L	Т	Р	CR	СН
1		Program Elective -6	3	0	0	3	3
2		Open Elective -6	3	0	0	3	3
3	EE 420	Project Stage-II	0	0	10	10	20
		Total	6	0	10	16	26

### For Program Elective – 6

EE 419	Advanced Electric Drives	
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### Table A. OPEN ELECTIVE COURSES of ELECTRICAL ENGINEERING (This is only an indicative list and not exhaustive)

SI. No	Code No.	Subject	Credits
01	OEC-EE01	Electronic Devices	3
02	OEC-EE02	Data Structures and Algorithms	3
03	OEC-EE03	Analog and Digital Communication	3
04	OEC-EE04	Computer Networks	3
05	OEC-EE05	Embedded Systems	3
06	OEC-EE06	VLSI circuits	3
07	OEC-EE07	Image Processing	3
08	OEC-EE08	Wavelet Transforms	3
09	OEC-EE09	Power Plant Engineering	3
10	OEC-EE10	Thermal and Fluid Engineering	3
11	OEC-EE11	Strength of Materials	3
12	OEC-EE12	Fluid Machinery	3
13	OEC-EE13	Automobile Engineering	3
14	OEC-EE14	Electrical Materials	3
15	OEC-EE15	Modern Manufacturing Processes	3
16	OEC-EE16	Internet of Things	3
17	OEC-EE17	Big Data Analysis	3

#### Courses for Phd. in Electrical Engineering

(Prior to submission of plan of Research minimum 16 credits to be completed)

Code	Course name	L	Т	Р	CR	СН
EE 700	Seminar	0	0	1	1	2
Offered by ECE/ CSE /ME/EE	Doctoral Research Methodology	4	0	0	4	4
EE 7XX	Elective-I				4	
EE 7XX/#	Elective-II/ Open Elective-I				4	
EE 7XX/#	Elective-III/ Open Elective-II				4/3	
	Mandatory Credit				16	
EE 710	Ph. D. Research work and Thesis					

**#Open Elective** :At least Post graduate level open elective course as per the recommendation of the Doctoral committee **Elective courses** (i.e Elective-I, Elective-II)

Code	Course name	L	T	Р	CR	СН
EE 700	Seminar	0	0	1	1	2
EE 702	Nonlinear Dynamics and Chaos	2	1	1	4	5
EE 703	Fractional Order Control System	2	1	1	4	5
EE 704	Transducer and Sensor Technology	2	1	1	4	5
EE 705	Embedded System and IOT	2	1	1	4	5

#### **Open Elective courses**

Code	Course name	L	T	Р	CR	СН
EL 703	Biomedical Signal Processing	3	0	0	3	3
BE 708	Neuro-Fuzzy Systems	3	0	0	3	3
BE 705	Advanced Bioelectronics Devices	3	0	0	3	3
EL 710	Analog and Digital Circuits	4	0	0	4	4
EL 714	Signals and Circuits	3	0	0	3	3
FT 710	Engineering Properties of Food and Biomaterials	2	1	1	4	5
CO503	Fuzzy Logic and Neural Networks	3	0	0	3	3

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

# 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 engineering. The B. Tech. programme in Food Engineering and Technology (FET), which was started in the year 2010, has the accreditation of the National Board of Accreditation (NBA) as a Tier-I programme. The Department also offers Ph. D. in Food Engineering and Technology.

The B Tech and M Tech programs of the Department are approved by the All India Council for Technical Education (AICTE). AICTE offers PG Scholarship to GATE qualified students joining the M.Tech. programme of the Department. Students from the department have been benefited from MHRD'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.

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 from the the Department of Science and Technology (DST), grant under the UGC-SAP (DRS-I) programme of the University Grant

Commission, and grant under the NEQIP Scheme of the AICTE. With its expertise in food quality testing, and with the support from the MoFPI, the Department has established one NABL accredited Food Quality Control Laboratory to facilitate the entrepreneurs and various organizations.

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 have also been patented by the faculties.

Workshops 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**

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

### **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) Process and Food Engineering, Fruits and Vegetable Processing and Machineries, Non-Thermal Processing, Unit Operations in Food

Nandan Sit,\* Ph.D. (TU)-HoD Food Engineering, Biochemical Engineering, Oils and Fats. Food and Biotechnology

#### Associate Professor

Engineering

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, Osmotic Dehydration

#### **Assistant Professor**

Dibyakanta Seth, Ph.D. (TU)

Dairy and Food Engineering, Dairy Technology, Unit Operations in Food Engineering, Emerging Trends in Food Process Engineering

Raj Kumar Duary,\* Ph.D. (NDRI) Probiotic Food Formulation and Development, Neutraceutical and Functional Foods, delivery system for Biomolecules, Dairy Technology.

#### Amit Baran Das,\* M.S. (IITKgp)

Food Process Modeling, Optimization in Food Engineering, Product Technology Development

#### Nishant Rachayya Swami Hulle,

Ph.D. (IITKgp)

Food Process Technology, Non-Thermal Processing, Product Development

**Sourav Chakraborty**, M.Tech. (TU) Food Engineering, Food Process Simulation and Modelina

#### \* Recognized Supervisor

<u>LEGENDS:</u> **CFTRI**-Central Food Technological Research Institute Mysore, HAU-Haryana Agricultural University Hisar, **IITKgp**-Indian Institute of Technology Kharagpur, **TU**-Tezpur University, **NDRI**-National Dairy Research Institute Haryana, HoD-Head of the Department

#### **Facilities**

The Department is well equipped with processing and analytical equipment and is in the process of strengthening it with the state-of-the art facilities. Great emphasis is laid on the

practical aspects for processing of foods and quality assurance. List of some major equipment available with department are as follows: HPLC, Atomic Absorption Spectrometer (AAS), GC-MS, Supercritical fluid extractor, Texture Analyser, Dynamic Rheometer, Rapid Visco Analyser. Hunter Lab Color Spectrophotometer, UV-Vis Spectrophotometer, Water activity meter, Freeze Dryer, Lyophilizer, Lab. Scale Spray Drier, Tray Drier, Drum Drier, Fluidized Bed Drier, Laboratory Pasteurizer. Canning Unit. Baking Oven. Basic Engineering Equipment in heat transfer and fluid mechanics. Hammer Mill. Ball mill. Paddy Huller, Paddy Sheller, Binocular Microscope, BOD Incubator, Rotary Vacuum Evaporator. Photoflurometer. Biohazard Safety Cabinet, Packaging Equipment, Laminar Flow. Fruit Crusher, etc.

#### **Research Activities**

- Number of papers published in the year 2018-19: 42
- Number of ongoing research projects: 14

# Number of current Ph.D. scholars: 54 Selected Publications

- Basumatary, B., Bhattacharya, S., & Das, A. B. 2020. Olive (*Elaeagnus latifolia*) pulp and leather: Characterization after thermal treatment and interrelations among quality attributes. Journal of Food Engineering, 109948.
- Borah, P.K., Sarkar A., Duary, R. K., 2019. Water-soluble vitamins for controlling starch digestion: Conformational scrambling and inhibition mechanism of human pancreatic α-amylase by ascorbic acid and folic acid. Food Chemistry, 288: 395-404.
- Chutia, H., Kalita, D., Mahanta, C.L., Ojha, N., Choudhry, A.J. 2019. Kinetics of inactivation of peroxidase and plypheno; oxidase in tender coconut water by dielectric barrier discharge plasma. LWT-Food Science and Technology.101, 625-629
- Lalnunthari, C., Devi, L. M., Amami, E., & Badwaik, L. S. 2019. Valorisation of pumpkin seeds and peels into biodegradable packaging films. Food and Bioproducts Processing. 118, 58-66.



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

	First Semester		Second Semester				
Course Code	Course Title	Cr.	<b>Course Code</b>	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	I.			Sixth Semester	l l
<b>Course Code</b>	Course Title	Cr.	i	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
	FE Elective I	3			FE Elective II	3
	Open elective II	3			Open elective III	3
LW 301	Indian Constitution	0		FE 350	Credit seminar	1
	Seventh Semesters				Eight Semester	"
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
	HSS//Management Elective	3			Open elective IV	3
FE 401	Dairy Products Technology	3		FE 480	Comprehensive viva-voce	0
FE 402	Plantation Products & Spices Processing Technol-	3		FE 482	Project-II	8

	Seventh Semester\$			Eight Semester		
Course Code	Course Title	Cr.	1	Course Code	Course Title	Cr.
	HSS//Management Elective	3			Open elective IV	3
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 Elective III	3				'
	FE Elective IV	3				
FE 471	Industrial Summer Training	2				
FE 481	Project-I	4				
CT 430	Essence of Indian Traditional Knowledge	0				

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

# FOOD ENGINEERING AND TECHNOLOGY (Continued)

### 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	Advanced Food Engineering	4		FT 517	Food Equipment and Plant Design	3
FT 513	Engineering Propertiesof Biologi- cal Materials	3		FT 518	Recent Trends in Food Product develop- ment 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
-	CBCT-I (Open elective)	3		-	Elective- V	3
				-	CBCT-II (Open elective)	3
	Third Semester				Fourth Semester	
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
FT 681	Project Seminar	12		FT 682	Project	12
		Elec	tive	Courses		
	Group-I				Group-II	
<b>Course Code</b>	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	3		FT 548	Nano Technology in Food	3

	First Semester			Second Semester	
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
	Confectionary			Applications	
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
			FT 551	Valorization of food byproduct	3
	Group-III				
Course Code	Course Title	Cr.			
FT 552	Recent trend in drying and dehydration	3			
FT 553	Food microstructure and texture	3			
FT 554	Novel separation process	3			
FT 555	Food supply chain management case study	3			

# 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 con-ducting 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. B. Tech in Mechanical Engineering
- 2. M. Tech in Mechanical Engineering (Two Specializations)
- 2a. M. Tech in Thermal and Fluid Engineering2b. M. Tech in Machine Design
- 3. Ph.D. in Mechanical Engineering

#### **Faculty and Areas of Interest**

#### **Professor**

Tapan Kumar Gogoi,\* Ph.D. (TU)-HoD Thermal, Energy and Environment Engineering 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

Monoi 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)

Manufacturing, Production Engineering

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

Seikh Mustafa Kamal, Ph.D. (IITG)

Machine Design

Vivek Kumar Mehta, Ph.D. (IITK)

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

Shikha Bhuyan, M. Tech. (NITS)

Thermal Engineering

Kalpajyoti Borah Ph.D. (IITG)

Aerospace Engineering, Navel Architecture (Guest Faculty)

#### \*Recognized Supervisor

<u>LEGENDS</u>: IITK-Indian Institute of Technology Kanpur, TU-Tezpur University, IITG-Indian Institute of Technology Guwahati, GU-Gauhati University, BESUS-Bengal Engineering and Science University, West Bengal, AEC- Assam Engineering College, Guwahati, NITS - National Institute of Technology, Silchar, HoD- Head of the Department

# Facilities CAD Laboratory

This laboratory is equipped with computers having server based installed software such as ANSYS -FLUENT combo, FLUENT 6.3

teaching version, Pro-E Wildfire 3.0 version, NI Lab. View Software, COMSOL Multiphysics, MATLAB and CATIAV5. At present the laboratory has two servers and 25 computers for use of both students and academic staff.

#### Fluid Mechanics Laboratory

This laboratory is equipped with hydraulic bench, discharge through orifice apparatus, Bernoulli's apparatus, flow meter apparatus, impact of jet apparatus, discharge over weir and notch attachments, energy losses in pipelines, Reynolds apparatus, and Multi-function measuring instrument (pressure, temperature, velocity, relative humidity, CO, CO2 concentration) with relevant sensors.

#### **Theory of Machine Laboratory**

This laboratory is equipped with universal governor apparatus, static and dynamic balancing equipment, whirling of shaft apparatus, apparatus for influence of inertia upon velocity and acceleration, and gyroscope apparatus.

#### **Engineering Mechanics**

This laboratory is equipped with Bell crank lever apparatus, Cantilever beam apparatus, Combined coil and flat belt friction apparatus, Compound lever, Deflection of beam apparatus, Fly wheel, Hook's Law, Jib crane, Law of moments apparatus, Link polygon apparatus, Parallel forces apparatus, Screw jack, Torsion apparatus, Triangle and parallelogram law of forces and Universal force table apparatus.

#### **Strength of Materials Laboratory**

This laboratory is equipped with Rockwell hardness tester, Brinell hardness tester, Vickers hardness tester, impact testing machine, universal testing machine with computer interfacing, digital torsion testing machine, rotating fatigue machine, creep machine, thin cylinder testing machine, metallurgical polishing ma-

chine and digital LCD micro-scope.

# Thermal Science Laboratory (Refrigeration and Air Conditioning/Heat Transfer)

This laboratory is equipped with Vapour Absorption refrigeration system, Standard vapour compression refrigeration system, Air conditioning and Cooling tower, Concentric tube heat exchanger, Critical heat flux apparatus, double pipe heat exchanger, Drop and film condensation apparatus, Emissivity measurement apparatus, Heat transfer in natural convection, Shell and tube heat exchanger apparatus, Thermal conductivity of liquids, Heat transfer through lagged pipe, Heat pipe demonstrator, Heat transfer in forced convection, Heat transfer through composite wall, Stef-an Boltzmann apparatus, Thermal conductivity of insulating slab.

#### **Material Science Laboratory**

This laboratory is equipped with metal melting furnace, metallographic cutting machine, metallographic sample mounting machine, metallographic automatic polishing machine, injection molding machine, optical microscope, muffle furnace, and hot air oven.

#### **IC Engine/Automobile Laboratory**

This laboratory has three setups - computerized single cylinder 4 stroke diesel engine, diesel smoke-meter, and a gasoline car (Model ESTEEM), Variable compression ratio spark ignition engine, Computerized Single Cylinder Gasoline Engine Test Rig, Diesel Engine Vehicle etc.

#### **Kinematics Laboratory**

In this laboratory, there are various types of models of different mechanisms, like shaper model, clutch model, Old-ham coupling model, gear drive, belt drive, chain drive, etc.

#### **Turbo-Machinery Laboratory**

One centrifugal pump unit and one plunger pump unit with computer interface has been installed in this laboratory.

One turbine service unit and a Francis turbine with computer interface have also been in-

stalled recently.

#### **Vibration Laboratory**

This laboratory has one universal vibration apparatus which can be used for performing thirteen numbers of experiments.

#### **Metrology laboratory**

Instruments such as plunger type dial indicator, lever type dial indicator, external micrometre, universal bevel pro-tractor, Vernier calliper, sine vice, slip gauge, surface plate, surface roughness tester, digital micrometres of different types of various ranges, depth gauge, filler gauge, pitch gauge, and radius gauge are available in this laboratory.

#### **Renewable Energy Laboratory**

The equipment available in this laboratory are biodiesel manufacturing unit, bomb calorimeter, viscometer, density meter, flash and fire point apparatus, distillation apparatus, carbon residue apparatus, pour point and cloud point apparatus, copper strip corrosion apparatus, various cut section models (diesel engine, gear box, differential gear, steam engine models, pneumatic cylinder model), fixed bed pyrolysis oil production set-up (under installation), biomass gasifier, 100% producer gas engine generator test rig, gas chromatograph, hot wire anemometer, micro-manometer, fluidized bed dryer, pitot tube, and different energy efficient solar air heater

#### **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 2018-19: 21
- Number of ongoing research projects: 1
- Number of current Ph.D. scholars: 10

#### **Selected Publications**

- Gogoi T. K., Saikia S., Performance analysis of a solar heat driven organic Rankine cycle and absorption cooling system, Thermal Science and Engineering Progress, 13 (2019) 100372
- D. Konwar, T. K. Gogoi, A.J. Das, Multiobjective optimization of double effect series and parallel flow water-lithium chloride and water-lithium bromide absorption refrigeration systems, Energy Conversion and Management 180 (2019) 425–441
- Kalita P., Sarmah S. A new diffusionregulated flux splitting method for compressible flows, Computers & Fluids, 192 (2019), 104264
- Kalita Z., Datta D., Bi-objective corridor allocation problem using a permutationbased 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
- Kamal S.M., Perl M. and Bharali D., Generalized Plane Strain Study of Rotational Autofrettage of Thick-walled Cylinders: Part I

   Theoretical Analysis, ASME Journal of Pressure Vessel Technology, 141(5) (2019) 051201
- Sharma A., Dutta P.P. Scientific and technological aspects of tea drying and withering: a review, Agricultural Engineering International, 20(4) (2018), 210-220

# Courses offered in B.Tech. in Mechanical Engineering

	First Semester			Second Semester	
Course Code	Course Title	Cr	Course Code	Course Title	Cr.
MS 101	Mathematics -I	4	MS 103	Mathematics -II	4
PH 101	Physics -I	4	PH 102	Physics -II	4
CH 101	Chemistry	4	ME 102	Engineering Mechanics	4
EL 101	Basic Electrical Engineering	4	EL 102	Basic Electronics	5
CE 101	Engineering Graphics	3	CO 101	Introductory Computing	3
ME 103	Workshop Practice	2	CO 102	Computing Laboratory	2
	Humanities Elective	<u> </u>		Science Elective	
EG101/	Communicative English/Sociology/		BT 101/		
SO101/ BM 101	Elementary Economics	3	ES 101/ CH 102	ence/Introductory Material Science	4
	Third Semester	l l		Fourth Semester	l l
Course Code	Course Title	Cr	Course Code	Course Title	Cr.
MS 201	Mathematics- III	3	ME 204	Machine Drawing	2
ME 201	Solid Mechanics	4	ME 207	Theory ofMechanismsand Machines	4
ME 202	Fluid Mechanics- I	3	ME 208	Manufacturing Technology- I	3
ME 203	Material Science	3	ME 209	Fluid Mechanics- II	3
ME 211	Basic Thermodynamics	3	ME 210	Mechanical Engineering Laboratory- II	3
ME 206	Mechanical Engineering Laboratory- I	3	ME 212	PDE and Numerical Methods	4
EL 202	Electrical Technology	4	CO 221	Data StructuresandObject Oriented Programming	4
	Fifth Semester	-		Sixth Semester	
Course Code	Course Title	Cr	Course Code	Course Title	Cr.
ME 301	Dynamics and Vibration of Machinery	3	ME 306	Advanced Workshop Practice	3
ME 302	Mechanical Measurements and Instrumentation	3	ME 307	Applied Thermodynamics- II	3
ME 303	Manufacturing Technology- II	3	ME 308	Heat and Mass Transfer	4
ME 304	Applied Thermodynamics- I	3	ME 309	Systems and Control	3
ME 310	Mechanical Engineering Laboratory- III	3	ME 312	Machine Design -II	3
ME 311	Mechanical Design-I	3	BM 322	Social Responsibility and Professional Ethics in Engineering	3
BM 321	Fundamentals of Management	3	-	Open Elective- I*	3

# MECHANICAL ENGINEERING (Continued)

	Seventh Semester				Eighth Semester	
Course Code	Course Title	Cr		Course Code	Course Title	Cr.
ME 402	Industrial Engineering and Operation Research	4		ME 482	Project- II	1 2
ME 471	Industrial Summer Training#	2		-	ME Elective- III	3
ME 481	Project- I	6		-	ME Elective- IV	3
-	ME Elective- I	3		-	Open Elective- III*	3
-	ME Elective- II	3			•	<b>"</b>
-	Open Elective- II*	3				

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ME 421	Computer Graphics and Solid Modeling	3	ME 435	Machine Tool Design	3
ME 422	Optimization Methods in Engineering	3	ME 436	Combustion Engineering	3
ME 423	Mechanical Vibration	3	ME 437	Tea Machineries	3
ME 424	Theory of Elasticity	3	ME 438	Petroleum and Drilling Technology	3
ME 425	Machine Tools and Machining	3	ME 439	Refrigeration and Air Conditioning	3
ME 426	Reliability Engineering	3	ME 440	Advanced Mechanics of Solids	3
ME 427	Productivity Improvement Techniques	3	ME 503	Mechanics of Composite Materials	4
ME 428	Finite Element Methods in Engineering	3	ME 504	Failure Analysis of Materials	3
ME 429	Gas Turbine and Compressor	3	ME 505	Advanced Dynamics	4
ME 430	Value Engineering	3	ME 506	Theory of Elasticity and Plasticity	3
ME 431	Fracture and Fatigue	3	ME 507	Theory of Plates and Shells	3
ME 432	Engineering Optimization	3	ME 508	Continuum Mechanics	3
ME 433	Experimental Stress Analysis	3	ME 521	Robotics	3
ME 434	Composite Materials	3	ME 522	Quality Engineering	3
ME 523	Non-Conventional Energy	3	ME 539	Optimization Techniques in Engineering	3
ME 524	Operations Management	3	ME 540	Evolutionary Algorithms for Optimum Design	3
ME 525	Tribology	3	ME 542	Computational Fluid Dynamics	4
ME 526	Modern Control System	3	ME 543	Compressible Flow	4

ME 527	CAD-CAM	3	ME 544	Turbulent Shear Flow	3
ME 528	Energy Conservation and Waste Heat Recovery	3	ME 545	Viscous Fluid Flow	3
ME 529	Artificial Intelligence in Engineering	3	ME 546	Fluid Transportation Systems	3
ME 531	Project Management	3	ME 547	Two Phase Flow	3
ME 532	Power Plant Engineering	3	ME 601	Automobile Engineering	3
ME 533	Energy Management	3	ME 602	Computational Fluid Dynamics and Heat Transfer	3
ME 534	Mechatronics	3	ME 605	Hybrid Electric Vehicles	3
ME 535	Advanced Engineering Thermodynamics	3	ME 622	Communication Skills for Scientists and Engineers	3
ME 537	Applied Computational Methods	4	ME 701	Advance Heat Transfer	3
ME 538	Computer-Aided-Design in Engineering	4		•	•

<sup>\*</sup>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			
Specializa	ation: Applied Mechanics		Specialization: Applied Mechanics				
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.		
ME 501	Advanced Solid Mechanics	4	ME 502	Finite Element Methods	4		
ME 541	Advanced Fluid Mechanics	4	ME 572	Advanced Engineering Materials	3		
ME 561	Experimental Methods for Solid and Fluids	5	ME 592	Term Paper	2		
-	Open Elective I	3	-	Open Elective II	3		
-	Elective I	3/4	-	Elective III	3		
-	Elective II	3/4	-	Elective IV	3/4		
. <u> </u>			-	Elective V	3/4		

# MECHANICAL ENGINEERING (Continued)

Specializa	tion: Thermo and fluids Engineering		Specialization: Thermo and Fluids Engineering		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ME 535	Advanced Engineering Thermodynamics	3	ME 530	Numerical methods	4
ME 541	Advanced Fluid Mechanics	4	ME 548	Convective Heat and Mass Transfer	3
ME 562	Experimental Methods for Solid and Fluid Engineering	5	ME 593	Seminar	2
-	Open Elective I	3	-	Open Elective II	3
-	Elective I	3	-	Elective III	3
-	Elective II	3	-	Elective IV	3
		•	-	Elective V	3

Specializa	tion: Machine Design		Specializat	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 509	Advanced Dynamics and Vibration	4	ME 510	Engineering Design Laboratory	3	
ME 623	Mathematical Methods for Engineers	3	ME 592	Term Paper	2	
-	Open Elective I	3	-	Open Elective II	3	
-	Elective I	3*	-	Elective III	3*	
-	Elective II	3*	-	Elective IV	3*	
	•		-	Elective V	3*	

	Third and Fourth Semester							
Specializa	tion: Applied Mechanics			Specializa	tion: Thermal and Fluid Engineering			
Course Code	Course Title	Cr		Course Code	Course Title		Cr.	
ME 615	M. Tech. Thesis	12		ME 611	M. Tech. Thesis		12	
ME 616	M. Tech. Thesis	12		ME 612	M. Tech. Thesis		12	
		Special	ization	: Machine Do	esign	•		
ME 613	M. Tech. Thesis	12		ME 614	M. Tech. Thesis		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		•	1

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





School of Humanities and Social Sciences

# **CULTURAL STUDIES**

(Year of Establishment: 1996)

Established in 1996, the Department of Cultural Studies is one of the few Departments in the country devoted exclusively to the academic pursuit of Cultural Studies, Cultural Studies has evolved into a vibrant interdisciplinary approach in the understanding of society, culture and expressive forms associated with human behavior across a wide range of disciplinary engagements. India is fast emerging as an important location where methods evolved in Cultural Studies are used to interrogate disciplinary approaches in an attempt to promote an understanding of various issues like ethnicity, migration, national and nationalistic assertion, gender and society, media generated cultural forms, environment and development and emerging lifestyle patterns. The Department of Cultural Studies at Tezpur University mediates global concerns and theoretical approaches of the discipline with issues that are of local importance and promotes an understanding of the rich cultural heritage and the ingrained plural nature of the region, the folk and oral inheritance and ethnic and cultural assertions. The department is supported by UGC-SAP (DRS-II). The Department of Cultural Studies along with the Department of Foreign Languages and the Centre for Assamese Studies is the recipient of the Centre with Potential for Excellence in Particular Areas

#### **Programmes offered**

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

# Faculty and Areas of Interest Professor

Debarshi Prasad Nath, Ph.D. (RGU) Gender Studies, Comparative Literature, Translation, Critical Theory Associate Professor Madhurima Goswami, #Ph.D. (TU)-On Lien Sanskrit Poetics, Indian Classical Performing Arts

**Parasmoni Dutta,** Ph.D. (TU)-HoD Heritage Studies, Folklore Studies, New Museology

#### **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

#### **Facilities**

The Department has a well-equipped seminar cum conference hall 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 museum.

#### **Research Activities**

- No. of papers published in the year 2018-19: 13
- No. of ongoing research projects: 04
- No. of current Ph.D. scholars: 19

#### Selected Publications

- Dutta P. A Catalogue of Traditional Craft Objects of North East India(ed). Tezpur University Publication, ISBN: 978-81-037452-1-2, 2019.
- Nath, D P, Sarma M. M and Borah G. K. The Call of the Pherengadao: Translation of Select Writings of Bishnuprasad Rava. Guwahati: Katha Publications. 2019
- Goswami M. "Staging of Rituals: Role of a Ritual Priestess, The North-east Indian Women: Issues of Displacement, Violence, Media and Law," Olympia Prakashan.2018. ISBN-978-93-87035-23
- Das J. V. Protests, Resistance and Violence: The collective Performance of Everyday Images in Manipur in Performative Communication: Culture and Politics in South Asia. Pathak, Dev and Sasank Perreira (eds.). Routledge: New Delhi. 2018
- Konwar J. G and Borah T. "Indian Food Advertisements through a Gendered Lens", Literary Insight, 9, January 2018, pp. 106-112. ISSN 0975-6248
- Kandali M. "The Patkai Tales: An interpenetration of folk/tribal/avant-garde art, The Chitralekha". Journal of Art and Design. India. International e journal. March 2018.
- Hazarika P and Nath D. P. "Reflection of Nationalist and Social Consciousness in Literature: A Study on Select Plays of Bishnuprasad Rabha". International Journal of Innovative Studies in Sociology and Humanities. Volume 3, Issue: 7, pp. 7-11. July 2018
- Hazarika, P and Nath D. P. "The Rise of Assamese Nationalism: An Overview of the Times of Jyotiprasad Agarwala". International Journal of Research in Social Sciences. Volume 8. Issue: 8. August 2018.

# Courses offered in M.A in Cultural Studies

ı	First Semester			Second Semester						
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.					
CT 420	Introduction to Cultural Studies	4	CT 425	Introduction to Popular Culture	4					
CT 421	Cultural Theory: Key Concepts	4	CT 426	Culture and Heritage	4					
CT 422	Folklore and Culture I	3	CT 428	Folklore and Culture II	3					
CT 423	Exploring North East India	4	CT 429	Reading Culture: Perspectives from the West	3					
CT 424	Society and Culture	3	CT 531	Cultural Documentation (skill-based)	3					
CT 521	Methods and Methodology	3		CBCS/Open Elective	3					
	Third Semester			Fourth Semester						
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.					
CT 520	Digital Culture	4	CT525	Dissertation	6					
	Mapping the Contemporary: Reading through Visual Cultural Expressions	4		Elective –I (Any two)	6					
CT 523	Gender and Culture	4		Elective –II (Any three)	9					
CT 524	Fundamentals of Photography and Documentary Production (Skill Based)	4								
	CBCS/Open Elective	3								
	Elective	e Course	s offered in the Fo	urth Semester						
(Two course	DURSES - I s from among CT 427, CT 526, CT 527, C CT 529, CT 530)	T 528,	(Three cours	DURSES -II es from among CT 532, CT 533, CT 534, CT 535, CT 53 CT 537)	6 and					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.					
CT 427	Cultural Policy	3	CT 532	Culture for Social Change (skill-based)	3					
CT 526	Cultural Industries (skill-based)	3	CT 533	Contemporary Cultural Phenomena: Spectacles and Infotainment	3					
CT 527	Reading India through the Cinematic Lens	3	CT 534	Reading Culture: Perspectives from Assam	3					
CT 528	Performance & Culture	3	CT 535	Intercultural Communication (skill-based)	3					
CT 529	Cultural Memory	3	CT 536	Tapping the Transitions : Folk and Tribal Art in Contemporary time	3					
CT 530	Culture, Science and Society	3	CT 537	Cross Cultural Studies: North East India and South East Asia	3					
			CT 538	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**

1. B.Ed.

2. M.A. in Education

3. Ph. D.

# **Faculty and Areas of Interest**

## **Professor**

Nil Ratan Roy,\* Ph.D. (AUS)-HoD Measurement and Evaluation in Education, Research Methodology, Educational Planning and Management, Curriculum Development.

#### **Associate Professor**

#### Mohammed Shaheeer Siddiqui

Indian Spiritual Traditions & Sufism Islamic Philosophy of Education, Education for Sustainable Development, Philosophy & Economics of Education.

#### **Assistant Professor**

**Yeasmin Sultana**,\*Ph.D. (AUS) 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,

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

**Dr. Gopal Singh,** Ph.D. (MDSU) Learning and Teaching, Science, Education, Constructivism and Thinking Skills, Guidance and Counselling

#### \*Recognized Supervisor

<u>LEGENDS:</u>**AUS**-Assam University Silchar, **PU**-Pondicherry University, **DAV**-Devi Ahilya Vishwavid-

yalaya Indore, **BHU**-Banaras Hindu University Varanasi, **LU**-Lucknow University, **JMI**- Jamia Millai IslamiaNew Delhi, **JU**- Utkal University Odisha, **PU**^- Panjab University, **HoD**-Head of the Department, MJPRU-MJP Rohikhand University Bareily; 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 2018–19:
   21
- No. of ongoing research projects: 0
- No. of current Ph.D. scholars: 21

#### **Selected Publications**

- Paul, Rajkumar & Roy, Nil Ratan (2019). "Development and implementation of Competency based Curriculum in Higher Education Level-A Utopia?", IJRARInternational Journal of Research and Analytical Reviews, Vol-6, Issue-2, pp: 251x254x, ISSN NO: 2348-1269, Impact Factor: 4.236.
- Siddiqui, M.S. (2019).Sufism: The Education of Heart . 24by7 Publishers, Kolkatta, ISBN: 978-93-88467-40-7
- Chakrawathy, S., Pallai, P. & Sultana, Y. Students' perspective of effective teaching in higher education, *Indian Journal of Psy*chometry and Education, 48(2), 2017.
- Padmavathy, R.D. Gender Equality in Education: Empower Women, International Journal of Multidisciplinary Educational Research, 6(7). 24-39, 2017.

# Courses offered in B.Ed.

	First Semester			Second Semester	
Course Code	Course Title	Cr.	Course Code	Course Title	
BD 401	Human Growth and Development	5	BD 501	Teaching Learning and Management	4
			BD 502/ BD 503/ BD 504	Teaching of Assamese -Part I/ Teaching of English -Part I/ Teaching of Hindi -Part I	3
BD 402	Contemporary Indian Education	5	BD 507/ BD 508	Teaching of Mathematics -Part I/ Teaching of Biological Science- Part I	
			BD 505/ BD 506	Teaching of Social Science -Part I/ Teaching of Physical Science-Part I	3
BD 403	Language Across the Curriculum	4	BD 509	Knowledge and Curriculum -Part I	3
BD 404	Understanding Disciplines	4	BD 510	Assessment and Evaluation of Learning	4
BD 405	Reading and Reflecting on Texts	2	BD 511	Drama and Art in Education	2
			BD 512	Pre-Internship	4
-	Open Elective- I	3	-	Open Elective- II	3

	Third Semester				Fourth Semester				
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.			
BD 550/	Teaching of Assamese -Part I/			BD 575	Gender, School and Society	3			
BD 551/ BD 552	Teaching of English -Part I/ Teaching of Hindi -Part I	3		BD 576	Knowledge and Curriculum -Part II	3			
BD 555/ BD 556	Teaching of Mathematics -Part I/ Teaching of Biological Science- Part I			BD 577	Creating an Inclusive School	3			
BD 553/ BD	Teaching of Social Science -Part I/			BD 578	Guidance and Counselling	3			
554	Teaching of Physical Science-Part I	3		BD 579/ BD 580	Peace Education/ Environmental Education	3			
BD 557	School Internship	16		BD 581	Critical Understanding of ICT	4			
		1		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 Prospective	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 (called The Department of and Foreign Languages until 5 December 2019), was established in 1994. The Department provides instruction and carries out research in English Literature, American Literature, Critical Theory, English Language Teaching, Indian Literature in English, Linguistics, New Literatures in English and Gender and Literature. The Department is supported by the UGC under the Special Assistance Programme-Departmental Research Support (Phase II).

# **Programme offered**

- 1. Integrated dual B.A. & M.A. in English
- 2. M.A. in English
- 3. M.A. in Linguistics and Language Technology
- 4. Ph. D.

# **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, Literary Theory

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

## **Associate Professor**

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

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

Sanjib Sahoo,\* Ph.D. (TU) Indian Writing in English, Travel Writing, Contemporary British Literature

#### **Assistant Professor**

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

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

**Bashabi Gogoi,** Ph.D. (GU) *Critical Theory, Adaptation Studies* 

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

Language Typology, Morphology, Language

Endangerment, Multilingualism, Sociolinguistics

**Bipasha Patgiri**, M.Phil. (JNU) *Phonology (Prosody, Dialectology, Language Typology and Syntax)* 

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

Amalesh Gope,\* Ph.D. (IITG)

Acoustic Phonetics with special interest in Tone, Psychoacoustics, Computational Linguistics, Intonational Phonology and Language Documentation

Sarat Kr. Doley,\* Ph.D. (EFLU, Shillong) English Language Education, Language Testing, Psychology of SLA, Social Context of SLA

# \* Recognized Supervisor

LEGENDS: DU-Dibrugarh University, UU-Utkal University Odisha, GU-Gauhati University, HSS- Humanities and Social Sciences, TU-Tezpur University, NTNU-Norweign University of Science and Technology Norway, 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**

Digital Language Laboratory: The Department has a digital multimedia, multipurpose language laboratory with fifteen booths. Students can improve their pronunciation of English and Foreign Languages (Chinese and French) and develop interactive language skills by utilizing the software and other facilities available in the Laboratory.

# **ENGLISH** (Continued)

**Smart Class Room:** The Department has four smart classrooms for augmented teaching learning facilities.

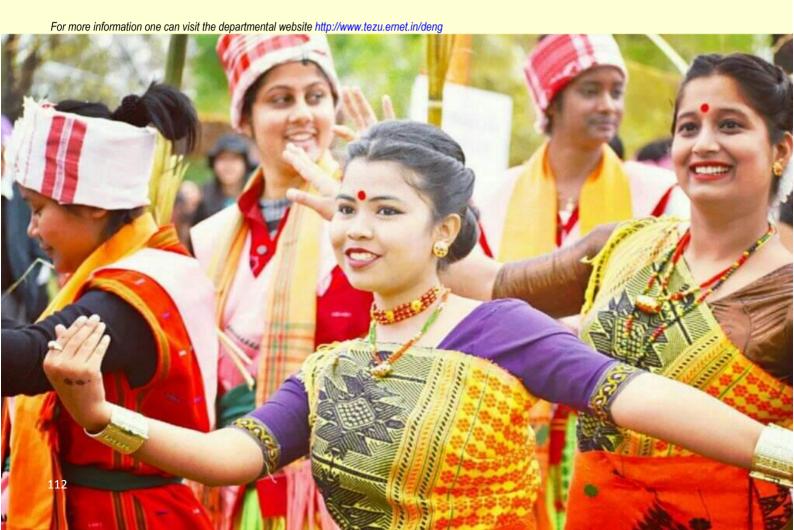
Departmental Library: Selected books and photocopied materials relating to literature, linguistics and ELT are available in the Departmental Library. The Department also has a collection of audio cassette of EnglishPronunciation and spoken English and number of Video CDs on library texts. The Department has a small Computer Laboratory for the use of students and research scholars

#### **Research Activities**

- No. of papers published in the year 2019-2020: 08
- No. of ongoing research projects :03
- No. of current Ph.D. scholars: 55

#### Selected Publications

- Daimari Esther. (2017). "Scarred and Ruined Landscapes in Romesh Gunesekera's Heaven's Edge." Assonance: A Journal of Russian and Comparative Literary Studies, Vol- 17, pp- 144-154, ISSN: 2394-7853.
- Mahanta, Shakuntala and Gope, Amalesh. 2018. "Tonal polarity in Sylheti in the context of noun faithfulness". *Language Sciences*. Volume 69, Pages 80-97, Elsevier (ISSN 0388-0001). https://doi.org/10.1016/ i.langsci.2018.06.010



# Courses offered in Integrated M. A. in English

	First Semester						
Course Code	Course Title	Cr.					
EG111	Reading Literature	4					
EG112	English for Communication	3					
CS101	CS101 Basics in Computer Application						
	MIL (ANY ONE)						
AS101	MIL Assamese: Poetry (Early and Modern)	3					
HN101	Madhyakalin aur Adhunik Kabya (in Hindi)	3					
EG106	Alternative English -I	3					
OP	TIONAL COURSES (ANY TWO)						
SO102	Introduction to Sociology	2					
CT161	Basic Concepts in Cultural Studies -I	2					
MC101	Introduction to Communication	2					

Second Semester						
Course Code	Course Title	Cr.				
EG113	History of English Literature	4				
EG114	English Poetry I: Chaucer to Dryden	3				
ES102	Elements of Environmental Science	3				
NS102	NSS/NCC	2				
MIL (ANY ONE)						
AS102	Assamese : Drama	3				
HN102	Kahani aur Upanyas (in Hindi)	3				
EG109	Alternative English-II	3				
Ol	PTIONAL COURSES (ANY TWO)					
SO103	Introduction to Sociological Thought	2				
CT162	Introduction to Folklore Studies	2				
MC201	Journalism	2				

Third Semester						
Course Code	Course Title	Cr.				
EG211	British Drama I: Beginning to Shakespeare	4				
EG212	English Fiction-I	3				
EG213	English Poetry-II: Pope to Romantics	4				
To be chosen by students	Open Elective	3				
	MIL (ANY ONE)					
AS201	MIL (Assamese): Short Story and Novel	2				
EG209	Alternative English -III	2				
HN201	Natak Aur Ekanki (Hindi)	2				
OF	TIONAL COURSES (ANY TWO)	1				
SO201	Society in India	2				
CT163	Basic Concepts in Cultural Studies-II	2				
MC301	Advertising and Public Relations	2				

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

# ENGLISH (Continued)

Fifth Semester				Sixth Semester			
Course Code	Course Title	Cr.	Course C	ode 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	Open Elective	3	To be cho	sen Open Elective	3		
by students			by student	s			

	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		
EG417	Academic and Critical Writing in English	3		EG460	Fundamentals of Research	4		
				To be chosen by students	Open Elective	3		

Ninth Semester			Tenth Semester			
Course Code	Course Title C		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 students	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	

# Courses offered in M. A. in English

	First Semester			Second 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			
EG417	Academic and Critical Writing in English	3	EG460	Fundamentals of Research	4			
			To be chosen by students	Open Elective	3			
	Third Semester			Fourth 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 Non FictionalProse	4			
EG503	Modern Fiction	4	EG506	Postcolonial Literatures in English	4			
-	Elective- I	4	-	Elective- II	4			
To be chosen by students	Open Elective	3	EG519	Term Paper	3			

Elective –I (Any One from the following Courses)						
Course Code	Course Title	Cr.				
EG507	Translation-I	4				
EG509	Gender and Literature-I	4				
EG511	American Literature-I	4				
EG513	Indian Writing in English-I	4				
EG515	ELT-I	4				

Elective -II (A	Elective –II (Any One from the following Courses)							
Course Code Course Title								
EG508	Translation-II	4						
EG510	Gender and Literature-II	4						
EG512	American Literature-II	4						
EG514	Indian Writing in English-II	4						
EG516	ELT-II	4						

# 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	ĺ	LG427	Syntax	3
LG423	Morphology	4	ĺ	LG428	Semantics	3
LG424	Basic Syntax	4	ĺ	LG429	Field Linguistics	3
LG425	Introduction to Computational Linguistics	3		LG430	Cognitive Linguistics	4
				To be chosen by students	Open Elective	3

# ENGLISH (Continued)

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 students	Open Elective	3	LG518	Introduction to Psycholinguistics	3	

Elective -I (An	y 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: 2020)

Tezpur University has been offering Chinese since 2003. German since 2001, and French since 2007 as foreign language courses under the Department of English and Foreign Languages. Chinese language courses have also been introduced in the University to meet specific requirements of Indian armed forces personnel. The Department of Foreign Languages is a new department, introduced this year (2020), with the objective of offering instruction in learning differing languages and cultures across the globe and to encourage constructive attitudes towards speakers of other languages. The department is committed to foster professionals with competent skills in languages, intercultural communication, international affairs and cultural understanding from various nuanced perspectives. Initially, the department hopes to promote intensive language programmes in Chinese, German, and French at various levels. It also hopes to offer a wide choice of modules and scholarly engagements, across literature, translation, history, contemporary politics, and culture and comparative studies.

# **Programmes offered**

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

# **Faculty and Areas of Interest**

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

Literature

Daveirou Lanamai, M. A. (Chinese Studies) (JNU) Chinese Language, Literature & Culture, Folklore & Folk Literature, Intercultural Studies Pallavi, M. Phil. (German Studies), (JNU German Literature and Language, Literature and Emotions, Holocaust Literature, Post-War

LEGENDS: JNU- Jawaharlal Nehru University New

#### **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.

#### Courses offered in One Year Certificate Course in Chinese

First Semester				Second Semester			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.		
CL 110	Read and Write Chinese-I	3	CL 111	Read and Write Chinese-II	3		
CL 112	Chinese Comprehension	3	CL 113	Chinese Composition	3		
CL 114	Speaking Chinese-I	3	CL 115	Speaking Chinese-II	3		
CL 116	China in Brief-I	3	CL 117	China in Brief-II	3		

# 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** 

- Certificate Course in Official Hindi
- 2. Post Graduate Diploma in Translation (Hindi)

# **Faculty and Areas of Interest**

#### **Associate Professor**

Survakanta Tripathi,\* Ph.D. (BHU) Applied Linguistics, Indian Poetics and Folkloristic

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\*, (DU)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 li-

## 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 Sahitaya 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.



# Courses offered in PG Diploma in Translation (Hindi)

CODE	Title	Cr.	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 Sabdavalee, Kosh Vigyan Aur Anuvad	4
HN414	Karyalayee Hindi Aur Anuvad	4	HN 424	Pariyojana Karya	4

# Courses offered in M.A.

First Semester				Second Semester		
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
HN 430	आदिकालीन एवं निर्गुण काव्य	4		HN 435	सगुण भक्ति एवं रीति काव्य	4
HN 431	छायावादी काव्य	4		HN 436	छायावादोत्तर काव्य	4
HN 432	हिन्दी साहित्य का इतिहास : आदिकाल	4		HN 437	हिन्दी साहित्य का इतिहास : आधुनिक	4
	और मध्यकाल				काल	
HN 433	भारतीय काव्यशास्त्र	4		HN 438	हिन्दी भाषा एवं लिपि	4
HN 434	पाश्चात्य काव्यशास्त्र	4		Open elective		3

	Third Semester				Fourth Semester (Elective Courses)		
				प्रयोजनमूलक हिन्दी (Prayojanmoolak Hindi)			
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.	
HN 540	हिन्दी कथा साहित्य : उपन्यास एवं कहानी	4		HN 544	प्रयोजनमूलक हिन्दी : सिद्धांत-संदर्भ	04	
HN 541	हिन्दी नाटक और निबंध	4		HN 545	राजभाषा हिन्दी: संवैधानिक स्थिति एवं उसका अन्प्रयोगात्मक पक्ष	04	
HN 542	भाषा विज्ञान	4		HN 546	हिन्दी पत्रकारिता और जनसंचार	04	
HN 543	हिन्दी आलोचना	4		HN 547	अनुवाद विज्ञान : सिद्धान्त एवं अनुप्रयोग	04	
Open elective		3		HN 548	लघु शोध-प्रबंध / परियोजना कार्य	06	

Fourth Semester (Elective Courses) Optional II (आधुनिक हिन्दी साहित्य (Adhunik Hindi Sahitya)					
Course Course Title					
HN 549	प्रेमचंद	04			
HN 550	जयशंकर प्रसाद	04			
HN 551	सूर्यकांत त्रिपाठी 'निराला'	04			
HN 552	सच्चिदानंद हीरानंद वात्सायन 'अज्ञेय'	04			
HN 553	लघ् शोध-प्रबंध / परियोजना कार्य	06			

Fourth Semester (Elective Courses) Optional III अनुप्रयुक्त भाषा विज्ञान (Anuprayukt Bhasha vi-							
optional ili अनुप्रयुक्त भाषा ।वजान (Anuprayukt Bhasha vi-							
Course	Course Course Title Cr.						
Code	Gourse True	GI.					
HN 554	भाषा शिक्षण	04					
HN 555	शैलीविज्ञान	04					
HN 556	समाज भाषाविज्ञान	04					
HN 557	कोश विज्ञान	04					
HN 558	लघु शोध-प्रबंध / परियोजना कार्य	06					

Fourt	Fourth Semester (Elective Courses)				Fourth Semester (Elective Courses)			
Optional	IV तुलनात्मक साहित्य (Tulnatmak Sahitya	1)			Optional V लोक  साहित्य (Lok Sahitya)			
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.		
HN 559	तुलनात्मक साहित्यःस्वरूप, उदभव और	04		HN 564	लोक साहित्य : सिद्धांत-संदर्भ	04		
	विकास							
HN 560	भारतीय साहित्य : अवधारणा और	04		HN 565	लोकगीत और लोकगाथा	04		
	विशेषताएँ							
HN 561	पूर्वोत्तर की संस्कृति और साहित्य	04		HN 566	लोक कथा एवं लोक नाटक	04		
HN 562	असम की संस्कृति और साहित्य	04		HN 567	लोक सुभाषित	04		
HN 563	लघु शोध-प्रबंध / परियोजना कार्य	06		HN 568	लघु शोध-प्रबंध / परियोजना कार्य	06		

Four	Fourth Semester (Elective Courses) Optional VI विमर्शमूलक अध्ययन (Vimarshmoolak			Fourth Semester (Elective Courses) Optional VII) सिनेमा, साहित्य और समाज (Cinema, Sa-				
Ор								
adl	hayan)		hitya a	nur Samaj)				
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.			
HN 569	अस्मितामूलक विमर्श	04	HN 574	सिनेमा, साहित्य और समाज का अन्तः	04			
				संबंध				
HN 570	स्त्रीमूलक विमर्श	04	HN 575	साहित्य का सिनेमाई रूपांतरण	04			
HN 571	दलितमूलक विमर्श	04	HN 576	हिन्दी सिनेमा और अस्मितामूलक विमर्श	04			
HN 572	आदिवासीमूलक विमर्श	04	HN 577	साहित्य और सिनेमा का भाषाई एवं	04			
				सामाजिक परिप्रेक्ष्य				
HN 573	लघु शोध-प्रबंध / परियोजना कार्य	06	HN 578	लघु शोध-प्रबंध / परियोजना कार्य	06			

# 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.

Campus recruitment: The campus recruitment scenario for the department has been looking up with encouraging CTC packages as there were 18 offers of placement in the campus itself for the year 2019-20

# **Programme offered**

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

# **Faculty and Areas of Interest**

#### **Professor**

Sunil Kanta Behera, Ph.D. (BU) Professor of Eminence Communication Theory and Research, Gender and Media

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

Print Journalism, Media Writing, Specialized Reporting, Science Communication, Media Literacy, Media of North-East,

#### **Associate Professor**

**Perumal Anbarasan\***, Ph.D. (JNU) Media Studies, Cultural and Subaltern Studies, International Communication, Film Studies

Joya Chakraborty\*, Ph.D. (UoH)-HoD ICT for Development, Communication for Social Change, Women and Media, Alternative and Community Media Uttam Kumar Pegu\*, Ph.D. (JMI)
ICT Implications, Political Communication,
Culture and Communication, Media and the
Marginalized and Social History etc.

#### **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

<u>LEGENDS</u>: **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.

# MASS COMMUNICATION AND JOURNALISM (Continued)

#### **Facilities**

The Department has a spacious exclusive threestory 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 he nuances of different media productions. A very good screening room with a 100+ seat capacity is available for screening and discussion.

#### Research Activities

- Number of papers published in the year 2018-19: 25
- Number of ongoing research projects: 2
- Number of current Ph.D. scholars:20

#### Selected Publications

- Pegu, Uttam (2017). Media in Conflict Transformation and Peace Process: An Academic Inquest in Mizoram University Journal of Literature and Cultural Studies. June 2017, P. 250-264.
- Chakraborty, Joya (2017). Communication for social change: Course, curriculum and development, in Dutta, A., Bharali, B. and Lahkar Goswami, A. (Eds) Decoding Communication for Development in India's North East. Pp. 26-38. Published byDept. of Communication andJournalism Gauhati University in association with Communication for Development Section, UNICEF, Assam, India. ISBN 978-81-933588-3-2.
- Deori, Manoj (2017). Technology Mediated Media Education: A Case Study of E -Learning Initiatives in India. International Journal of Communication Research 7. no. 2.
- Bora, Abhijit (2018). A resurgent print media: regional languages to the fore. Media 360. Special publication of Indian Institute of Mass Communication, Dhenkanal (pa 27 - 31).



# 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 526	Communication Theories	3	MC 562	Writing for media	4	
MC 558	Principles of Journalism	4	MC 533	Photo Journalism	3	
MC 559	Advertising	4	MC 534	Broadcast Media : Television	3	
MC 560	Broadcast media: Radio	4	MC 563	PR & Corporate communication	4	
MC 561	New Media: Evolution, principles & theory	4		Elective I	4	
MC 531	Media in Northeast India	3		Open Elective	3	

Third Semester				Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
MC 567	Communication research methods	4	MC 549	Understanding cinema	3	
MC 542	Communication for social change and development	3	MC 569	Science Communication	4	
MC 543	Media law and ethics	3	MC 553	Political and International Communication	3	
MC 568	Internship	4	MC 570	Communication research project	4	
-	Elective II	3		Elective III	4	
	Open Elective	3				

Electives I (One to be chosen)			Electives II (One to be chosen)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MC 564	Media Management	4	MC 545	Media Culture and Society	3
MC 565	Graphic design for media	4	MC 546	Television Program Production	3
MC 566	Health Communication	4	MC 547	Folk and Community Media	3

Electives III (One to be chosen)					
Course Code	Course Title	Cr.			
MC 555	New media production	4			
MC 556	Documentary production	4			
MC 557	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 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/i governmental development agencies/International Organization to c				
CD 427	New Media for Development	4					
CD 428	NGO participation and Management	3	out semester-lon	g communication campaign.			
CD 414	Internship						
	CBCS	3					

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

# 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 toward nurturing competent and socially sensitive graduates through rigorous teaching and research activities. The faculty members of the department have a wide range of interests and expertise and are currently engaged in research in areas such as Development, Education, Environment, Ethnic Conflicts, Governance, Health, Migration, Social Movements, Science Studies, etc. The curriculum lays emphasis on teaching and learning of general concerns of sociology as well as issues of sociological significance in northeastern India which constitute a special focus of the teaching and research of the department. The students pursuing their Masters in the department not only have to learn 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. M. A. in Sociology
- 2. Ph. D.

# **Faculty and Areas of Interest**

## **Professor**

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

Chandan Kumar Sharma\*, Ph.D. (DU^) Development, Environment, Migration, Agrarian Studies, Ethnicity, Social Movements, Northeast India

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
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, M.A. (JNU)

Ritual Studies, Kinship, Sociological Theories

# \* Recognized Supervisor

<u>LEGENDS</u>: 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 New Delhi, **HoD**-Head of the Department.

#### **Facilities**

The department has a library with selected books and photocopied materials. The class-rooms are enabled with ICT facilities.

## **Research Activities**

- No. of papers published in the year 2018-19: 09
- No. of ongoing research projects:05
- No of current Ph.D. scholars:33

#### Selected Publications

- Das, A.K (with D. N Pathak) (Ed) Investigating Developmentalism: Notions of Development in the Social Sphere, New York, Palgrave Macmillan, 2019
- Sarmah, C.K (with B. Borgohain). The New Land Settlement Act in Arunachal Pradesh: Road to Empowerment or Dispossession?, Economic and Political Weekly, 54(23), pages 17-20, 2019.
- Deka, Rabin (with Thepfusalie Theunuo), Some Observations on Land Relations in Traditional Angami Society, The Eastern Anthropologist, (Forthcoming), 2020

# 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	
			SC458	Social Stratification		
SC454 Sociology of India – I	Sociology of India – I	4		Elective - I	3	
· <del></del>	CBCT	3		СВСТ	3	

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

	Elect	tive courses off	fered by the Depar	rtment	
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SC471	Social Statistics	3	SC575	Sociology of Mass Media	3
SC472	Population and Society	3	SC576	Sociology of Governance	3
SC571	Gender and Society	3	SC577	Sociology of Education	3
SC572	Industrial Sociology	3	SC578	Identity and Violence	3
SC573	Sociology of Health and Illness	3	SC579	Sociology of Science	3
SC574	Environmental Sociology	3	SC580	Urban Sociology	3
			SC581	Body, Gender and Sexuality	3

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

# **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.

# **Programme offered**

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

# **Faculty and Areas of Interest**

# **Professor**

**Chandan Kumar Sharma,**\* Ph.D. (DU^)-HoDDevelopment, Environment, Migration, Agrarian Studies, Ethnicity, Social Movements, Northeast India

#### **Assistant Professor**

Veda Yumnam, Ph.D. (JNU) Health Systems Research, Epidemiology of HIV / AIDS and Social Determinants of Health

Rajesh Kalarivayil, Ph.D. (JNU) Biomedical Governance, Innovation Studies, Science and Technology in Rural Development

Apurba Saha, Ph.D. (NIMHANS) Social Work and Mental Health, Psychosocial Care in Disaster Management, Street Children and Application of Social Work Methods

Namami Sharma, Ph.D. (DU) Environment and Ecology, Tribal Studies

# Prerana Banik, M.Phil. (TISS)

Food Security, Gender and Livelihood, Labour rights, Inclusive policies and development, Marginalised group and social development LEGENDS:DU^-Delhi Uiversity, 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.

#### **Research Activities**

- No. of papers published in the year 2018-19:
- No. of ongoing research projects: 3
- No of current Ph.D. scholars: 2

#### **Selected Publications**

- Banik P. Floods in Assam: a Post-Disaster Impact on Women and Livelihood, Journal of Exclusion Studies, 8(1), 2018.
- 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. 2, 2018.



# Courses offered in M.A in Social Work

First Semester				Second Semester				
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.			
SW401	Understanding Society	2	SW431	Social Work Method: Work with groups	2			
SW402	Human Behaviour and Social Environment	2	SW432	Social Work methods: Work with communities	2			
SW403	Political Economy: State, Society and Development	3	SW433	Research and Statistics	4			
SW411	Social work profession	2	SW434	Development Administration and Governance	2			
SW412	Social Work methods: working with individuals and families	2	-	Open Elective	3			
SW430	Field Work	8	SW450	Field Work	8			
-	Elective I	2	-	Elective III	2			
-	Elective II	2	-	Elective IV	2			
Elective-I and	d Elective-II are to be chosen from the following	3	Elective-I and	Elective-I and Elective-II are to be chosen from the following courses				
courses								
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.			
SW421	Community Health	2	SW441	Gender, Women and Development	4			
SW422	Social Work with Children	2	SW442	Environment and Ecology	4			
SW423	Literacy and Education	2	SW443	Work with Older Persons	4			
	Third Semester			Fourth Semester				
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.			
SW501	Management of Non-Profit Organizations	2	SW551	Social Advocacy and Social Action	2			
	Social Policy and Planning	2	SW598	Continued Dissertation	4			
SW549	Dissertation	2	SW541	Personality Development	3			
SW550	Field Work	8	SW599	Field Work	8			
-	Elective A/B/C	2+2	-	Elective A/B/C	2+2			
-	Elective D	2	-	Elective D	2+2			
	Open Elective	3						

		Elective group Are Courses for the		any one course from Elective group D ester (Any two)	
	Elective (A)			Elective (B)	
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SW511	Social Work and Mental Health	2	SW521	Urban Community Development	2
SW512	HIV and Social Work Practice	2	SW522	Rural and Tribal Community Development	2
	Elective (C)			Elective (D)	
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SW531	Occupational Social Work	2	SW541	Development Communication	2
SW532	OrganisationalBehaviour	2	SW543	Human Rights	2

School of Humanities: Cultural Studies / Education / English / Foreign Languages / Hindi / Mass Communication and Journalism / Sociology / Social Work / Law / Centre for Assamese Studies / Centre for Endangered Languages / Centre for Inclusive Development / Chandraprabha Saikiani Centre for Women Studies

	Elective (A)			Elective (B)	
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SW561	Therapeutic Counseling	2	SW571	Disaster Management	2
SW562	Hospital Administration	2	SW572	Peace education and Conflict Resolution	2
	Elective (C)			Elective (D)	
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SW581	Labour legislation	2	SW591	Criminology and Correctional Administration	2
SW582	H.R. Practices	2	SW592	Disability	2
			SW593	Corporate Social Responsibility	2

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

# LAW

(Year of Establishment: 2016)

The Department of Law was established in the vear 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 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 batch got admitted from the academic session 2018-19 and will soon complete their programme 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 student's teaching methods & ethics, and promote inter-disciplinary research and inspire students for competitive examinations.

#### **Programme Offered**

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

- 1. Criminology and CriminalLaw
- 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

<u>LEGENDS</u>::**GU**-Gauhati University, **SI**U-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
			LW421	General Principles of Criminal Law OR	
	ELECTIVE FROM GROUP A-1 or A-2		LW422	International Human Rights Law	4
LW403	Criminology, Penology and Victimology OR		LW423	Law Relating to Cyber Crime OR	
LW404	Human Rights Jurisprudence	4	LW424	Protection and Enforcement of Human Rights	4
LW 405	Jurisprudence	3	LW 425	Research Project- II	4
LW 406	Research Project- I	4	-	Open Elective (to be chosen from other departments)	3
-	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	Correctional Laws and Administration in India OR	4	LW 521	Pedagogy in Law	4
LW502	International Humanitarian Law				
LW503	Socio Economic Offences OR	4	LW 522	Dissertation & Viva- Voce	6 2
LW504	Law Relating to Crimes Against Humanity				
LW505	Comparative criminal procedure OR	4	-	Open Elective (to be chosen from other departments)	3
LW506	International Migration Law				
LW 507	Research Project- III	4			
-	Open Elective (to be chosen from other departments)	3			

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

# DEPARTMENT OF ASSAMESE

(Year of Establishment: 2020)

The Department of Assamese, established in 2020, 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/text-critical studies and digital humanities have also been identified as the thrust areas in research.

# **Programme offered**

- 1. M.A in Assamese
- 2. CBCS (Communicative Assamese)

# **Faculty and Areas of Interest**

#### **Associate Professor**

**Subrat Jyoti Neog**, PhD (GU) Assamese Literature, Film Studies, Stylistics

## **Assistant Professor**

Juri Dutta, PhD (RGU)

Regional Literatures, Comparative Literature and Translation, Creative Writing

## Sanjib Pol Deka, PhD (GU)

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

# Jyotishman Das, M.A. (DU)

Sociology of Assamese Literature, Assamese Novel, Assamese Mass Media, Creative Writing LEGENDS: **GU**-Gauhati University, **RGU**-Rajiv Gandhi University, **DU**-Dibrugarh University

## **Facilities**

The Department is in the process of creating Information and Communication Technology facilities. It has a digital archive of Assamese manuscripts, books, and important documents.

#### **Research Activities**

The Department will be offering its research fellowship named after Dr. Bhupen Hazarika. Currently there are two Bhupen Hazarika research fellows (previously attached to the Centre for Assamese Studies).

# Course offered in M.A Programme in Assamese

First Semester			Second Semester			
Course code	Course Title	Cr	Course code	Course Title	Cr	
AS400	Social History Of Assamese Literature	4	AS404	Structure Of Assamese Language	4	
AS401	History of Assamese Language	4	AS405	Study of Culture of Assam	4	
AS402	Study of Assamese Poetry	4	AS406	Study of Assamese Prose	4	
AS403	Historiography: Making of Assamese Literary History	4	AS407	Study of Assamese Drama	4	
As404	Literary Theory and Criticism (Eastern and Western)	4	OE(Open Elective)		4	

# 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.

# **Programmes offered**

 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

Monali Longmailai, Ph.D. (NEHU)

Morphology, Syntax, Typology, Historical Linguistics, Areal Linguistics and Tibeto-Burman Languages

<u>LEGENDS</u>: **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 Headphone Amplifier; Video Camera full HD recording (MODEL: HTC- MDH2M); Video Camera (MODEL: HC-X1000); Camera (MODEL: COOLPIX P900); Recorder Olympus LS-100 &Mobile Samsung
- The Centre has two laboratories for variouspurposes
- Phonetic Lab (With 20 seatcapacity)
- Documentation Lab (Recording and EditingSuite)
- The Centre has three smart class rooms and a Multipurpose Hall, well equipped for Workshops, Seminars and Conferences etc.

The Centre has number of books available for use for the Masters and Ph.D. students for references.

#### Research Activities

 No. of papers published in the year 2018–2019: 7

# **Selected Publications**

- The Centre published the Second volume (2017-18) and Third volume (2018-19) of Annual Technical Report.
- 6 Learners books on the endangered languages published.
- 3 volumes on Phonology, Morphology and Syntax (of these 7 endangered languages) are forthcoming.
- Proceedings of HLS23 are in the process of printing.

# Outreach activities of the Centre as research work:

The faculty, research associates and field assistants of the Centre are divided into seven (7) groups for collection of data from some of the endangered languages of the Northeast Region. Till date seven (7) field works have been conducted by the 7 groups. The staff went for field work to Manipur, Nagaland and Dima Hasao Area Assam for collection of data. The table below shows the details:

# CENTRE FOR ENDANGERED LANGUAGES (Continued)

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

- ⇒ 6 Learner's Book written for the Biate, Khelma, Hrangkhol, Onaeme, Purum, and Liangmai in2017.
- ⇒ Phonetic analysis, sound segmentation, language description and grammar are in process of completion.
- ⇒ Publication of books and dictionaries are underprocess.

# 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/

# CENTRE FOR INCLUSIVE DEVELOPMENT

(Year of Establishment: 2014)

As enshrined in the Tezpur University Act 1993, one of the prime objectives of the University is "to pay special attention to the improvement of the social and economic conditions and welfare of the people". Further, the Eleventh Plan Document of the Planning Commission emphasizes how institutes of higher education ought to extend its resources and services towards community development. Towards achieving this, Tezpur University has established The Centre for Inclusive Development (CID) as an umbrella organization comprising the Equal Opportunity Cell. ST/SC Cell, and the which have a good deal of functional commonality. It is envisioned that an invigorated approach to this purpose would be achieved by consolidating the activities and collating the humane and intellectual resources of these three cells. Headed by its Director, the Centre is intended to act as a catalyst to holistic development of students and an interface between Higher Education and Community Development.

# **Programmes Offered**

P.G. Diploma in Child Rights and Governance (in collaboration with UNICEF)

# Faculty and Areas of Interest Director

Rajeev Doley, Ph.D. (IITG) Sociolinguistics Assistant Professor Subhrangshu Dhar, Ph.D. (VB) Child Rights, Human Rights

# Krishna Mani Bordoloi, LL.M. Visiting Fellow (Guest Faculty) Human Rights. Law

<u>LEGENDS:</u> **IITG-** Indian Institute of Technology Guwahati, **DU**-Dibrugarh University, **VB**- Vivsa-Bharatai Santiniketan

#### **Facilities**

The Centre has well-equipped class rooms 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.

#### Research Activities

No. of papers published in the year 2017–2018:1

# Courses offered in P.G. Diploma in Child Rights and Governance

First Semester				Second Semester				
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.		
CG 401	Understanding Childhood	4		CG 406	Governance and Social Policy	4		
CG 402	Child Rights as Human Rights- Paper I	4		CG 407	Child Rights as Human Rights- Paper II	4		
CG 403	Exclusion and Vulnerabilities of Children with special focus on North East	4		CG 408	Research in Child Rights	4		
CG 404	Governance and Child Rights	4		CG 409	Project/Internship	4		
CG 405	Communication Skills (English)	4						

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

# CHANDRAPRABHA SAIKIANI CENTRE FOR WOMEN STUDIES

(Year of Establishment: 2009)

Chandraprabha Saikiani Centre for Women Studies (CSCWS), Tezpur University was established in the year 2009. The University Grants Commission (UGC). New Delhi approved the proposal no. F.No7-1/2012(WS) dated 6th of March 2012 for continuation of Women Study Centre (WSC) at Tezpur University. The UGC has also revised the pattern of positions and financial assistance for WSC. Tezpur University. The centre supports redistribution of women power and control of resources in favour of women. The vision of Chandraprabha Saikiani Centre for Women Studies, Tezpur University is to provide a platform and promote studies on women belonging to the diverse socio-cultural milieu of 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

- P.G. Diploma in Women Studies
- 2. Ph.D. in Women Studies

# Faculty and Areas of Interest Associate Professor

Madhurima Goswami, Ph.D. (TU)- HoD Gender Studies, Critical Theory, Performance Studies

#### **Assistant Professor**

Mousumi Mahanta., Ph.D. (TU)
Women Studies, Women and Mental Health,
Feminist Research Methodology
<u>LEGENDS</u>: **TU**- Tezpur University, **HoD** -Head of
the Department

#### **Research Activities**

- No. of papers published in the year 2017– 2018: 10
- . No. of ongoing research projects: 1

#### **Selected Publications**

- Goswami, Madhurima. (2018), Food Culture: A Space for Creativity, Protest and Negotiation, International Journal of Economics and Social Sciences, ISSN 2249-7382.
- Goswami, Madhurima (2018), The Northeast Indian Women: Issues of Displacement, Violence, Media and Law, CSCWS, Tezpur University. ISBN- 978-93-87035-23
- Goswami, Madhurima (2018), Staging of Rituals: Role of a Ritual Priestess, The Northeast Indian Women: Issues of Displacement, Violence, Media and Law, CSCWS, Tezpur University. ISBN- 978-93 - 87035-23
- Mahanta, Mousumi. (2018), Women and Mental Health, The Northeast Indian Women: Issues of Displacement.

- Violence, Media and Law, edited by Madhurima Goswami, CSCWS, Tezpur University. ISBN- 978-93-87035-23
- Daimary Ivy. (2018), Bodo Women in Conflict Situation, The Northeast Indian Women: Issues of Displacement, Violence, Media and Law, edited by MadhurimaGoswami, CSCWS, Tezpur University. ISBN-978-93-87035-23
- Boro, Sonali, (2018) Women Trade in Assam: An Analysis, The Northeast Indian Women: Issues of Displacement, Violence, Media and Law, edited by Madhurima Goswami, CSCWS, Tezpur University. ISBN- 978-93-87035-23
- Mahanta. Mousumi, Boro. Sonali, (2018) Panchayati Raj and Women of Rural Assam, Desh Vikas, ISSN-2394-1782, Vol -4 Issue-4
- Boro. Sonali, (2018) Women's Participation in Agriculture and The Urbanization
  Process of North East India, Mahila
  Pratishtha, ISSN- 2494-7891 Vol-3 Issue-3
- Boro. Sonali, (2018) Power game of Witch Hunting in Assam: An Analysis, International Journal for research in Social Science and Humanities, ISSN-2208-2107 Vol 4 Issue 2.
- Goswami, Madhurima (2017), Hegemonic Masculinity: Rethinking of the Concept in Art. Indian Journal of Arts, ISSN 2320-6659, 7(21), 59-64

# 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





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

# **Programmes offered**

- 1. 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 has started a short term certificate course on National Stock Exchange Certified Capital Market Professional (NCCMP) Programme from autumn semester 2017

# **Faculty and Areas of Interest**

#### **Professor**

**Mrinmoy Kumar Sarma\***, Ph.D. (TU) 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*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, Rural Economics, Tourism Management, Entrepreneurship

**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

<u>LEGENDS:</u> **TU**-Tezpur University, **GU**-Gauhati University, **CODL**-Centre for Open and Distance Learning, **SoMS**-School of Management Sciences, **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 2018 -2019: 08
- No. of ongoing research projects: 02
- No. of current Ph.D. scholars: 28

# Selected Publications (2017)

- Goswami, C(handana). & Kakati, S. (2019). Factors and Motivation of Fraud in the Corporate Sector: "A Literature Review" Journal of Commerce & Accounting Research, 8 (3) 2019, 86-96 [http://publishingindia.com/jcar/]
- Das,D.(2019). Disruptive Technology Regime and Future of Indian Banking,

- IIBM Digest (A Journal of IIBM), Issue: June,3-9
- Saikia, A. A. and Goswami, C. (2018). Estimating Peoples' Willingness to Pay for Ecotourism Resources Using Contingent Valuation Method: Review of Existing Literature. Assam Economic Review, 11, 233-249
- Bharali, P. and Goswami, C. (2018). Brand Switching in Telecom Sector: An Insight into Switching Behaviour and Switching Factors. Abhigyan: Quest for Excellence, Vol. 36 No. 3, [ISSN 0970-2385]

# **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 BA 637	General Elective Operation Research / Supply Chain Management	3	BA 646	International Business and International Finance	3			
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			

# **BUSINESS ADMINISTRATION** (Continued)

BA 639	Business Ethics and Social Responsibility	2	BA 648	Comprehensive Viva	2
	CBCS (Optional MOOCS)	3	BA 649 BA 650 BA 651	General Elective Business Analytics/ Knowledge Management / Project Management	3 3 3

# **SPECIALISATION COURSES (Third and Fourth Semesters)**

(Students are to take any two specializations from the areas mentioned below. Students can choose the total credit requirement out of the basket of papers offered within a specialization in a particular Semester)

AREA-1: FINANCE
(Total of 12 Credits Spread over Semester 3 & 4)

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	
BA 674	Services Marketing	3
BA 675	Social Marketing	3
BA 676	Digital Marketing	
BA 677	Integrated Marketing Communication	3
BA 678	Contemporary Retailing	3
BA 679	Relationship Marketing and Salesmanship	3
BA 680	Product and Brand Management	
BA 681	Rural Marketing	3

#### **AREA-4: OPERATIONS MANAGEMENT**

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

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

	First Semester		Second Semester			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
TM 501	Fundamentals of Tourism	3	TM 541	Finance and Accounting for Tourism	3	
TM 502	Destination Geography, History and Heritage	3	TM 542	Marketing in Tourism	3	
TM 503	Fundamentals of Management	3	TM 543	Human Resource Management	3	
TM 504	Tourism and Travel Industry	3	TM 544	Travel Agency and Tour Operation	3	
TM511/ TM 512	Department Centric Elective -I	3	TM 561 / TM 562	Department Centric Elective -II	3	
-	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/ TM662/ 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			D	epartment 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			Depa	rtment 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

	Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
BA 601	Management Information System	3	BA 606	Strategic Management	3	
BA 602	Summer Internship Project	3	BA 607	Business Ethics and Corporate Social Responsibility	2	
-	Specialization A-III	3	BA 608	Entrepreneurship Development	2	
-	Specialization A-IV	3	-	CBCT	3	
-	Specialization B-III	3	-	CBCT	3	
-	Specialization B-IV	3	-	Elective-IV	3	
-	CBCT	3				
-	Elective-III	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.	
BA 508	Financial Accounting	3	BA 512	Systems Analysis and Design	3	
BA 509	Information Technology Management	3	BA 513	Managerial Communication	3	
			BA 514	Cost and Management Accounting	3	
	Elective-III (Any one from the following Courses)		(A	Elective-IV Any one from the following Courses)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
BA 603	International Business Environment	3	BA 609	Project Management	3	
BA 604	Operations Research	3	BA 610	Knowledge Management	3	
BA 605	Business Online Basics	3	BA 611	Supply Chain Management	3	
			BA 612	Organization Effectiveness and Change	3	

### Special papers

(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.)

	SEMESTER -II (Total Credit - 6)	SEMESTER -III (Total Credit - 6)			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BA 524	Consumer Analysis	3	BA 613	Promotional Strategies	3
BA 525	Sales and Distribution Management	3	BA 614	Brand Management	3
BA 526	Digital Marketing	3	BA 615	Retail Management	3
BA 527	Services Marketing	3	BA 616	Rural Marketing	3
			BA 617	Advanced Marketing Research	3

AREA -II:	: HUMAN RESOURCE MANAGEMENT (Total	of 12 Credits	Spread over Sem	ester II and Semester III)	
SEMESTER -II (Total Credit - 6)				SEMESTER -III (Total Credit - 6)	
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BA 528	Human Resource Development	3	BA 618	Industrial Relations	3
BA 529	Labour Law	3	BA 619	Cross Culture and International HRM	3
BA 530	Social and Industrial Psychology	3	BA 620	Compensation Management	3

## AREA -III: INFORMATION TECHNOLOGY (Total of 12 Credits Spread over Semester II and Semester III)

SEMESTER -II (Total Credit - 6)			SEMESTER -III (Total Credit - 6)			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
BA 531	Database Management System	3	BA 621	Operating Systems	3	
BA 532	Object Oriented Analysis and Design	3	BA 622	Networking and Communication	3	
BA 533	Software Engineering	3	BA 623	Data Mining	3	
BA 534	Web Designing	3	BA 624	Business Software System Design and De-	3	
				velopment		

# **AREA –IV:** OPERATIONS MANAGEMENT (Total of 12 Credits Spread over Semester II and Semester III) (Nomenclature Industrial Management is changed to Operations Management as per experts recommendation.)

SEMESTER -II (Total Credit - 6)				SEMESTER -III (Total Credit - 6)	
<b>Course Code</b>	Course Title	Cr.	Course Code	Course Title	Cr.
BA 536	Quality Management	3	BA 625	Advanced Operation Research and Optimization	3
BA 537	Material Management and Inventory Control	3	BA 626	Logistics and Transportation Management	3
			BA 627	Process Certification	3
			BA 628	Management of Technology	3

## Area V: FINANCE (Total of 12 credits spread over Semester II and Semester III.)

	SEMESTER -II (Total Credit - 6)			SEMESTER -III (Total Credit - 6)			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.		
BA 521	Security Analysis and Investment Management	3	BA 629	Financial Engineering	3		
BA 522	Financial Institutions and Financial Services	3	BA 630	Management Control System	3		
BA 523	Corporate Taxation	3	BA 631	Trends and Innovations in Financial Sector	3		
			BA 632	Advanced Financial Management	3		
			BA 633	International Finance	3		
			BA 634	Treasury, Forex and Risk Management	3		

## Courses offered in Master of Tourism and Travel Management (M.T.T.M.)

	First Semester				Second Semester	
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
TM 501	Fundamentals of Tourism	3		TM 541	Finance and Accounting for Tourism	3
TM 502	Destination Geography, History and Heritage	3		TM 542	Marketing in Tourism	3
TM 503	Fundamentals of Management	3		TM 543	Human Resource Management	3
TM 504	Tourism and Travel Industry	3		TM 544	Travel Agency and Tour Operation	3
TM511/ TM 512	Department Centric Elective -I	3		TM 561 / TM 562	Department Centric Elective -II	3
-	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/ TM662/ 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			•

Dep	partment Centric Elective –I		D	epartment Centric Elective –II	
<b>Course Code</b>	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

De	epartment Centric Elective –III		Depa	artment 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: 2013)

The Department of Commerce was established in the year 2013 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 Professor

Subhrangshu Sekhar Sarkar, Ph.D. (TU)- HoD (i/c)

Accounting, Taxation, Social Development Issues

#### **Associate Professor**

Santi Gopal Maji, Ph.D (BU) Banking and Finance S. Rameshkumar, Ph.D (MKU) Banking and Finance

#### **Assistant Professor**

Reshma Tiwari, Ph.D (GU)

Accounting, Financial Inclusion and Microfinance

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)

Corporate Finance, Corporate Governance, Capital Market. Microfinance.

#### **Guest / Visiting Faculty**

**CS Amitava Banerjee**, NFCG, New Delhi Corporate Governance

**Prof. Gautam Dutta**, IIFT, Kolkata *International Business* 

**Anjan Choudhury**, Indian Skills Academy, Guwahati

Inter-personal Skills

## From the Department of Bussiness Administration

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

Prof. Debabrata Das, Ph.D. (RGU)

Financial Management, Financial Markets and Development Finance

Prof. Papori Baruah, Ph.D. (TU)

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

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

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

Economics, Rural Economics, Tourism Management and Entrepreneurship

Dr. Arup Roy, Ph. D. (TU)

Microfinance, Stock Market, Development Finance. Social Entrepreneurship.

Dr.Heera Barpujary, Ph.D. (TU)

Knowledge Management, Web Technology **Dr.Mridul Dutta**, Ph.D. (GU)

Community Based Tourism, Intellectual Property Rights

Mr. Prayash Baruah, B.Tech (TU)

MBA (Symbiosis)

Supply Chain Management, Logistics, Transportation

<u>LEGENDS</u>: TU: Tezpur University, GU: Gauhati University, DU: Dibrugarh University, DU<sup>^</sup>: Delhi University, RGU: Rajiv Gandhi University, BU: Burdwan University, MKU: Madurai Kamaraj University, NEHU: North East Hill University.

#### **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.

#### **Research Activities**

- No. of paper published in the year 2018-2019: 06
- No. of ongoing research projects: 01
   Selected Publications
- Hussain F, Kumar M & Goswami R,"Banking Efficiency Determinants in India: A Two-stage Analysis", published in Margin—The Journal of Applied Economic Research, Volume 13 Issue 4,November 2019)
- 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. 1 -17"
- Ghose, B., "Firm Profitability and Adjustment of Capital Structure: Indian Evidence; Vision: The Journal of Business Perspective; Vol.23, No. 3 (2019), pp: 297-308, (Co- Authors- Prof. K. C. Kabra) (Published by- Sage Publishing Group; Indexed in Scopus; UGC CARE-A)."
- Ghose, B., "Does Legal Status Affect Performance of Microfinance Institutions? Empirical Evidence from India; Vision: The Journal of Business Perspective, Vol.2, No. 3 (2018), pp. 316-328, (Co-Authors-S. J. Paliar & L. Mena) (Published by-Sage Publishing Group; Indexed in Scopus; UGC CARE-A)."

## 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	
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	Computer and Its Application in Accounting and Taxation@	4
IC 304	Income Tax – Law and Practice	4	IC 341	Computer and Its Application in Banking and Finance@	
IC 307	Entrepreneurship	4	IC 327	Auditing and Assurance	3
IC 308	Business Finance	4	or IC 342	Indian Financial Market and Financial System	
IC 309	Corporate Accounting-III	5	IC 323	Management Accounting	4
	Open Elective	3	or IC 343	Financial Services	
		•	IC 324	Public Finance	4
			or IC 344	Banking Regulatory Framework	
			IC 325 or	Tax Planning and Procedures	4
			IC 347	Capital Market Operations	
			IC 326 or	Dissertation (Accounting, Taxation Area)	3
			IC 346	Dissertation (Banking, Finance Area)	

## 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				

	mester (Integrated M.Com) /Third Sem Com)	ester		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	G	ROUP '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
GR	OUP '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 633	Project Planning and Control	4

<sup>@</sup> Students opting for "Accounting/Taxation" are provided trainings on TALLY whereas those opting for "Banking/Finance" are trained on FINA-CLE.

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

## 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 optional 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 CODL of Tezpur University.

### **Faculty and Areas of Interest**

#### **Assistant Professor**

**Dipak Nath**, Ph. D. (GU)
Disaster Risk Assessment and Risk Mitigation
Approaches

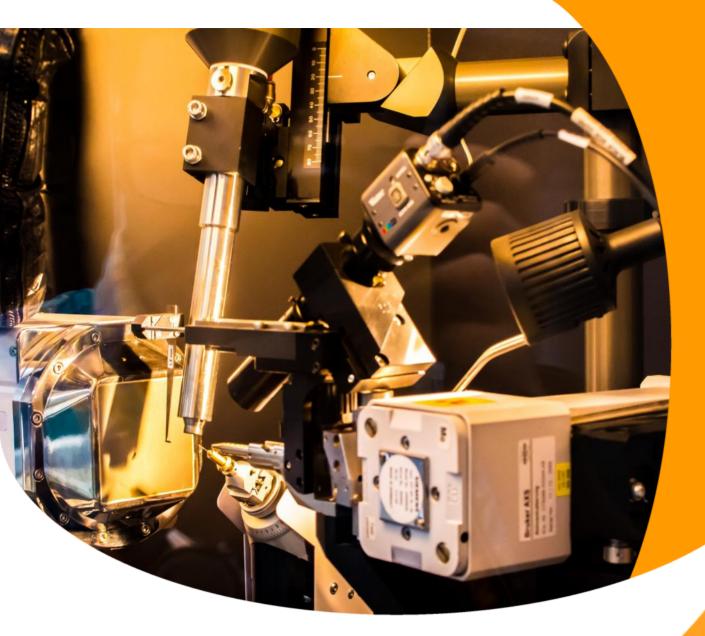
LEGENDS: GU-Gauhati University

#### Selected Publications

- Nath, R. D. and Nath, D, Women's Movement for Human Rights in India and Bangladesh: A Sociological Analasis, Intellection: a bi-annual interdisciplinary research journal, 3(1), 2015.
- Nath, R. D. and Nath, D, Comprehensive model for Health Risk Assesment with a case study on Three Rural Communities of Chachar District, Assam, India, Journal of International Academic Research for Multidisiplinary, 4(2),224-239, 2016.
- Deb Nath, R. and 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).

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





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, theoretical chemistry and green chemistry. Apart from externally funded projects (National and International), consultancy projects are also run by faculty members of the Department. The Department has received financial assistance under UGC-SAP and DST-FIST special grants for strengthening teaching, research, outreach programmes and training.

### **Programmes Offered**

- 1. Integrated B.Sc. B.Ed. (Chemistry Major)
- 2. Integrated M.Sc. in Chemistry
- 3. M.Sc. in Chemistry
- 4. Ph.D.

### **Faculty and Areas of Interest**

#### **Professor**

M. Lakshmi Kantam, Adjunct Professor, Ph.D. (KU)

Homogeneous/ Heterogeneous Catalysis

Swapan Kumar Dolui, Ph.D. (IITKgp) Fibre Reinforced Plastic, Self-Reinforced Plastic, Water Based Coating and Adhesive, Diffusion of Small Molecule Through Plastic Nashreen Islam, Ph.D. (NEHU)

Synthetic Inorganic Chemistry and Biomimetic Chemistry of Transition Metals, Catalysis

Tarun Kumar Maji, Ph.D. (CU)

Grafting of Fibres, Rubber Processing, Reaction Engineering, Emulsion Polymer, Textile Finishing

**Robin Kumar Dutta,** Ph.D. (NEHU) Surfactants and Micelles, Water Purification

Niranjan Karak, Ph.D. (IITKgp) Synthesis of Advanced Polymers, Polymer Nanocomposites and Nanomate -rials

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

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

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

**Ruli Borah,** Ph.D. (NEIST)- HoD Synthesis of Bioactive Molecule, Development of Green Methodologies for Organic Transformation

#### **Associate Professor**

PanchananPuzari, Ph.D. (IITG) Physical Chemistry, Biosensor Utpal Bora, Ph.D. (NEIST) Synthetic Organic Chemistry

#### **Assistant Professor**

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

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

NayanmoniGogoi, Ph.D. (IITB)

Molecular Magnet, Functional Metal Organic

Framework

BipulSarma, Ph.D. (UoH) Solid State Chemistry, Supramolecular Chemistry and Crystallography

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

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

Inorganic Chemistry, Organometallic Chemistry

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 spectrophotometer, CHN Analyzer, Thermal analyzer, UV-Visible spectrophotometer, Universal testing machine (UTM), Atomic absorption spectrophotometer, Polarizing microscope, Computational facilities etc. Besides these, the University has central instrumentation facilities of Scanning electron microscope, 400 MHz Nuclear Magnetic Resonance spectrophotometer, TEM, SEM, Raman spectrophotometer, Single crystal X-ray instrument, GC-MS, ICP-AES, GPC, HPLC, GC etc.

#### **Award**

The highest scorer among the students of M.Tech. in Polymer Science and Technology programme is awarded with the Polymer Science Award that carries a cash prize.

#### **Research Activities**

- No. of papers published in the year 2019-20: 92
- No. of ongoing research projects: 28
- No. of current Ph.D. scholars: 86.

#### **Selected Publications**

 Dey, M., Mudoi, P. P., Choudhury, A., Sarma, B., and Gogoi, N. Deciphering the influence of structural distortions on the uniaxial magnetic anisotropy of pentagonal bipyramidal Ni (II) complexes . Chemical Communications, 55(77):11547 -11550, 2019.  Sarmah, K., Mukhopadhyay, S., Maji, T. K., and Pratihar, S. Switchable Bifunctional Bistate Reusable ZnO-Cu for Selective Oxidation and Reduction Reaction. ACS Catalysis, 9(1):732-745, 2019.

Sharma, M., Das, B., Baruah, M. J., Biswas, S., Roy, S., Hazarika, A., Bhargava, S. K., and Bania, K. K. Pd-Au-Y as Efficient Catalyst for C-C Coupling Reactions, Benzylic C-H Bond Activation, and Oxidation of Ethanol for Synthesis of Cinnamaldehydes. ACS Catalysis, 2019:5860-5875, 2019.



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

## 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	4		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 101	Education: An Evolutionary Perspective	3		ES 103	Environmental Science	4		
ED 101	Communicative English (Language Proficiency)	3		ED 102	Education and Development	3		
ED 105	Basics in Computer Applications	3		NS 106	National Service Scheme	2		
				CD108	Chemistry Laboratory (non-major)	3		

	Third Semester		Fourth Semester			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
CD 201	Physical Chemistry-I	3	CD 202	Physical Chemistry-II	3	
CD 203	Organic Chemistry-I	3			3	
CD 205	Inorganic Chemistry-I	3	CD 204	Organic Chemistry-II	3	
CD 209	Chemistry Lab-III	3			4	
MD 211	Numerical methods and integrals	3	CD 206	Inorganic Chemistry-II	3	
PI 211	Quantum Physics	3			3	
ED 201	Environmental Education	3	CD 208	Chemistry Laboratory-IV	3	

	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	Principles of Spectroscopy	3		
CD 309	Quantum Chemistry	3	CD 308	Inorganic Chemistry-IV	3		
CD 311	Chemistry Laboratory-V	4	CD 310	Chemistry Laboratory-VI	4		
ED 301	Teaching Approaches and Strategies	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		

	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	12	
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	3					
CD409	Chemistry laboratory –VII	3					

## Courses offered in Integrated dual B.Sc. & 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	Polymer Chemistry	3			
CI 313	Industrial Chemistry	3	CI 314	Seminar	2			

## CHEMICAL SCIENCES (Continued)

	Seventh Semester	Eighth Semester			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CI 401	Principles of Inorganic Chemistry	3	CI 406	Organic Reactions and Mechanism	3
CI 403	Chemical and Statistical Thermodynamics	3	CI 408	Chemistry of Transition Elements	3
CI 407	Principles of Organic Chemistry	3	CI 410	Chemical Dynamics and Electrochemistry	3
CI 409	Quantum Chemistry and Chemical Bonding-I	3	CI 414	Quantum Chemistry and Chemical Bonding-II	3
CI 411	Principles and Applications of Spectroscopy	3	CI 412	Laboratory Course in Inorganic Chemistry	6
CI 405	Laboratory Course in Organic Chemistry	6	CI 416	History of Chemistry	3

		Ninth Semes	ter					Tenth Semester	
Course		Course	Title			Cr.	Course	Course Title	Cr.
Code						Code			
CI 501	Bio-Organic Chemistry			3	CI	Elective I	3		
		-					506/508		
							/ 528		
CI 503	CI 503 Special Topics in Inorganic Chemistry		3	CI	Elective II	3			
					512/514				
							/516/51		
							8/520		
CI 519	Physical	Chemistry	of	Surface	and	3	CI	Elective III	3
	Condense	d Systems					522/524		
		-					/526		
CI 521	Analytical I	Methods in Cher	nistry			3	CI 528	Project Work*	10
CI 523	Chemical 7	Chemical Technology and Society				3			
CI525		tallic Chemistry				3			
CI 505	Laboratory	Course in Phys	ical Ch	nemistry		6			

Note: 1. CBCT-I to CBCT -VI are to be chosen from the list of CBCT courses given below
2. CBCT -VII to CBCT -IX are to be chosen from the general list of CBCT courses available for that particular semester.

Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS 535	Introduction to Scientific Computing	3	CL 121	Basic Chinese-I	3
EG 101	Communicative English-I	3	CL 122	Basic Chinese- II	3
EG 102	Communicative English-II	3	FL 101	Basic French-I	3
ES 102	Elementary Environmental Science	3	FL 102	Basic French-II	3
ES 542	Laboratory Guidance and Safety	3	GL 101	Basic German-I	3
SC 102	Basic Sociology	3	GL 102	Basic German-II	3
BM101	Elementary Economics	3	DM 301	Disaster Management	3

Electiv	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 (Physical)	3		CI 512	Chemistry of Materials	3	
CI 528	Special Topics in Inorganic Chemistry (Inorganic)	3		CI 514	Biomolecular Chemistry	3	
CI 508	Methods in Organic Synthesis (Organic)	3			Computational Chemistry and Numerical Analysis	3	
					Organic Solid States Chemistry	3	
				CI 520	Environmental and Green Chemistry	3	

Elective III: Any one from the following group						
Course Code	Course Title	Cr.				
CI 522	Polymer Chemistry (Physical)	3				
CI 524	Heterocyclic Compounds and medicinal Applications (Organic)	3				
CI 526	Bio-inorganic Chemistry (Inorganic)	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 406	Organic Re	Organic Reactions and Mechanism			
CH 403	Chemical and Statistical Thermodynamics	3	CH 408	Chemistry	of Transition Elements	3		
CH 407	Principles of Organic Chemistry	3	CH 410	Chemical [	Dynamics and Electrochemistry	3		
CH 409	Quantum Chemistry and Chemical Bonding-I	3	CH 414	Quantum (	Chemistry and Chemical Bonding-II	3		
CH 411	Principles and Applications of Spectroscopy	3	CH 412	Laboratory	Course in Inorganic Chemistry	6		
CH 405	Laboratory Course in Organic Chemistry	6	CH 416	History of 0	Chemistry/ Chemistry in Everyday Life	3		
	Third Semester	1		Fourth Semester				
Course Code	Course Title	Cr.	Course Code		Course Title	Cr.		
CH 501	Bio-Organic Chemistry	3	CH 506/508/52	28	Elective I	3		
CH 503	Special Topics in Inorganic Chemistry	3	CH 512/514/51	6/518/520	Elective II	3		
CH 519	Physical Chemistry of Surface and Condensed Systems	3	CH 522/524/52	26	Elective III	3		
CH 521	Analytical Methods in Chemistry	3	CH 528		Project Work*	10		
CH 523	Chemical Technology and Society	3						
CH 525	Organometallic Chemistry	3						
CH 505	Laboratory Course in Physical Chemistry	6						

## CHEMICAL SCIENCES (Continued)

Elective I:	Any one from the following group	Elective II	Elective II: Any one from the following group			
Course Code	Course Title	Cr.	Course Code	Course Title	Γ	
CH 506	Catalysis (Physical)	3	CH 512	Chemistry of Materials	Г	
CH 528	Special Topics in Inorganic Chemistry (Inorganic)	3	CH 514	Biomolecular Chemistry		
CH 508	Methods in Organic Synthesis (Organic)	3	CH 516	Computational Chemistry and Numerical Analysis	Ī	
			CH 518	Organic Solid States Chemistry	Γ	
			CH 520	Environmental and Green Chemistry	Ī	

Cr.

3

3

3

3

3

Elective III: Any one from the following group							
Course Code	Course Title	Cr.					
CH 522	Polymer Chemistry (Physical)	3					
CH 524	Heterocyclic Compounds and Medicinal Applications (Organic)	3					
CH 526	Bio-inorganic Chemistry (Inorganic)	3					

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

## **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. Ecosystem dynamics. C Sequestration Riverine Hazards, Geomorphology, Climate Atmospheric Processes. Vulnerability and Adaption, Hydrogeochemistry, 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.
- PG Diploma in Environment and Disaster Management (through CODL

#### **Faculty and Areas of Interest**

#### Professor

Kali Prasad Sarma,\* Ph.D. (NEHU) Water and Soil Pollution, Hydro-geochemistry, Remediation of Toxic Substances Raza Rafiqul Hoque,\* Ph.D. (JNU) Atmospheric chemistry, Organic pollutants, Environmental Monitoring

Apurba Kumar Das,\* Ph.D. (JNU)Fluvial Geomorphology, River morphology and landforms, Riverine hazards. Climate studies, Application of Remote Sensing and GIS techniques to atmospheric, urban climate, hydro- geomorphic, LULC, phyto-geographic studies, and socioenvironmental issues.

#### **Associate Professor**

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

#### **Assistant Professor**

Nirmali Gogoi,\* Ph.D. (DU)

Stress Physiology & Biochemistry. Plant Abiotic Stress, GHG emission from Agro ecosystem and soil C sequestration

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

Vermiculture, Plant Nutrition and Soil Fertility Management,

Soil C management, Plant products & Nano fertilizers, Solid waste management

Sumi Handique,\* Ph.D. (TU)

Geochemistry of River Basins & Hydrogeochemistry, Water pollution and remediation

Amit Prakash,\* Ph.D. (JNU)

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

Nayanmoni Gogoi,\* Ph.D. (IITG)

Environmental System Modelling, Air Pollution Meterology, Climate Impact Modelling, Extreme Events analysis, Machine Learning Technique for Environmental Systems, Neurofuzzy Systems, Nonstationary Stochastic System and Noise Pollution

Ecosystem functions, Wetland Productivity,

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 All the faculty members of the department are recognized supervisors

#### \* 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, 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, GIS laboratory and Plant Culture House.

#### **Research Activities**

- No. of papers published in the year 2019-2020:21
- No. of ongoing research projects: 08
- No of current Ph.D. scholars: 40

#### Selected Publications

 Bharadwaj, N., Barthakur, S., Biswas, A.K., Das, M.K., Kour, M., Ramteke, A., Gogoi, N.

### **ENVIRONMENTAL SCIENCE** (Continued)

Transcript expression profiling in two contrasting cultivars and molecular cloning of a SKP-1 like gene, a component of SCF-ubiquitin proteasome system from mungbean *Vigna radiate* L., *Scientific Reports*. 9:8103, 2019.

- Basumatary, H., Sah, R.K., Das, A.K., Analyzing Area Dynamics on a Protected Floodplain Using Long-Term Sequential Data:
   The Case of Kaziranga National Park, Journal of the Indian Society of Remote sensing. 47(9):1557–1566, 2019.
- Ghosh, M., Devi, A. Assessment of crop growth, soil properties and crop yield in an upland acidic soil with inorganic fertilizer blended with organic amendments in sum-

- mer rice cropping seasons, International Journal of Recycling of Organic Waste in Agriculture.2019 https://doi.org/10.1007/ s40093-019-0252-z
- Paul, S., Choudhury, M., Deb, U., Pegu, R., Das, S., Bhattacharya, S.S. Assessing the ecological impacts of ageing on hazard potential of solid waste landfills: A green approach through vermitechnology, *Journal of Cleaner Production*. 236: 117643, 2019.
- Devi, U., Taki, K., Shukla, T., Sarma, K.P., Hoque, R.R., Kumar, M. Microzonation, ecological risk and attributes of metals in highway road dust traversing through the Kaziranga National Park, Northeast India:

implication for confining metal pollution in the national forest, *Environmental geochemistry and health*. 41 (3): 1387-1403, 2019.

#### 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	ClimatologyandMeteorology	2
ES553	Ecology and Ecosystem Dynamics	3	ES558	EnvironmentalBiology	3
ES554	Earth Processes and Natural Hazards	3	ES559	EnvironmentalPhysics	3
ES555	Environmental Chemistry and Toxicology	3	ES560	GIS-Remote Sensing and application	2
			ES572	Natural Resource and Biodiversity Conservation	3
	·		ES576	Environmental System Analysis	3
			-	*Open elective (one course)	3
			-	Departmental Elective (one course of 2 credit to be chooses from offered courses)	2

	Third Semester		Fourth Se	emester	
Course	Course Title		Course	Course Title	
Code		Cr.	Code		Cr.
ES5 62	AnalyticalMethods	3	ES563	Environmental Impact Assessment	2
ES5 64	Agriculture and Environmental Sustainability	2	ES569	Energy and Environment	2
ES5 65	Environmental Pollution and Management	3	ES550	Project	14

	Third Semester			Fourth Semester	
ES5 66	Soil Science	3	-	Departmental Elective (one course of 2	2
ES5 67	Environmental Plant Physiology and Biochemistry	3		credit to be chooses from offered courses)	
ES5 68	Hydrogeochemical Processes	2			
ES5 73	Environmental Extension and Field	1			
	Survey				
-	*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.

Discip	ine 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
ES575	Atmospheric Chemistry	2	ES 578	Environmental Pollution	3
ES570	Environmental Laws and Policies	2	ES 579	Plant Diversity and Taxonomy	3
ES571	Climate Change and Its Impacts	2			

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

## 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 23 batches of students have successfully completed their M.Sc. in Mathematics. and 5 batches of students have successfully completed their Integrated M. Sc. in Mathematics from the department. Besides this, 44 scholars have done their Ph.D. in Mathematics from the department. The Department carries out research in the areas of Number theory (Algebraic and Analytic), 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**

- Integrated B.Sc. B.Ed. in Mathematics (Major- Mathematics)
- 2. Integrated M.Sc. in Mathematics
- 3. M.Sc. in Mathematics
- Ph.D.

## Faculty and Areas of Interest Professor

Nayandeep Deka Baruah, Ph.D. (TU) Number Theory, Ramanujan's Mathematics Debajit Hazarika, Ph.D. (JMI) General Topology, Fuzzy Sets and Applications Munmun Hazarika, Ph.D. (TU)-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

## All the faculty members of the department are Recognized Supervisor

<u>LEGENDS</u>: 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, **HoD-** head of the Department

#### **Facilities**

The Department has a computer laboratory established with financial assistance from the DST and UGC. Various Mathematical software are 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. The laboratory is being fully upgraded under DST-FIST grant.

#### **Research Activities**

- No. of papers published in the year 2017-2018: 25
- No. of ongoing research projects: 05
- No of current Ph.D. scholars: 25

#### Selected Publications

- Baruah, N. D. and Kaur, M. Some results on vanishing coefficients in infinite product expansions, The Ramanujan Journal, (2019), to appear.
- Basnet, D. K. and Dutta, J Some bounds for commuting probability of finite rings, Proc. Indian Acad. Sci.(Math. Sci.),121 (2019), no.1, <a href="https://doi.org/10.1007/s12044-018-0448-6">https://doi.org/10.1007/s12044-018-0448-6</a>.
- Chutia, D. and Haloi, R. Approximate controllability of quasilinear functional differential equations, Electronic Journal of Differential Equations, 2019 (2019), no. 63, 1-14.

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

## 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 102	Education and Development	3
ED 101	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
EG 110	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 211	Physics-III	3	1	MD 222	Co-ordinate Geometry	4	
CD 201	Chemistry-III	3	1	MD 224	Numerical Methods and Boolean Algebra	4	
ED 201	Environmental Education	3		ED 203	Contemporary Issues in Education	3	
ED 202	Learner and Learning	3	1	ED 204	Assessment and Evaluation	3	
DM 101	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	ED 308	Pedagogy A: Physical Science-I	3	
ED 301	Teaching Approaches Strategies and	3	ED 307/ ED 309	Pedagogy B: Mathematics I/ Pedagogy B: Biological Science I	3	
ED 302	Classroom Organization Management and Management	3	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	12
MD 421	Computer Lab	2		·	
ED 408	Pedagogy A: Physical Science-II	3			
ED 407/409	Pedagogy B: Mathematics II/ Pedagogy B: Biological Science II	3			
ED 404	Initial School Experience/ School Internship-I	3			
	Open Elective I#	3			

## Courses offered in Integrated dual B.Sc. & M.Sc. in Mathematics

	First Semester				Second Semester		
Course Code	Course Title	Cr.	(	Course Code	Course Title	Cr.	
PI 101	Physics-I	3	F	PI 102	Physics-II	3	
CI 101	Chemistry-I	3	F	PI 197	Physics-Lab	3	
CI 107	Chemistry-Lab	3		CI 102	Chemistry-II	3	
BI 101	Biology-I	3	E	BI 107	Biology-Lab	3	
MI 103	Foundation of Mathematics	3	N	MI 104	Real Analysis-II	3	
MI 105	Real Analysis-I	3	N	MI 106	Group Theory	3	
EG 110	Communicative English	3	E	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 101	Disaster Management	3
NS 102	National Service Scheme	2			

	Fifth Semester			Sixth Semester	
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MI 311	Calculus-II	4	MI 312	Ring Theory	3
MI 313	Programming, Algorithm and Mathematical Software	4	MI 314	Elementary Number Theory	4
MI 315	Statics and Dynamics	4	MI 316	Introduction to Optimization	4
MI 317	Elementary Complex Analysis	4	MI 318	Elementary Integral Transforms and Special Functions	4
MI 319	Graph Theory	4	MI 322	Seminar	4
			MI 320	Elementary Coding and Information Theory	4

	Seventh Semester			Eighth Semester					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.				
MI 412	Abstract Algebra	4	MI 408	Complex Analysis	4				
MI 417	Linear Algebra-II	4	MI 418	Theory of Ordinary Differential Equations	4				
MI 413	Real Analysis-III	4	MI 419	Topology	4				
MI 414	Computer Programming+	4	MI 416	Numerical Analysis+	4				
MI 415	Lebesgue Measure and Integration	4	MI 424	Computer Lab	2				
MI 421	Computer Lab	2		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 509	Classical Mechanics	4	MI 508	Mathematical Methods	4
MI 510	Functional Analysis	4		DSE-II	4
	DSE-I	4		DSE-III	4
	Open Elective II#	3	MI 517	Project	8
MI 517	Project (to be continued to 10th semester)	0			

<sup>+</sup> Course for which there is a separate practical unit assigned as Computer Laboratory Note: # List to be notified by the CoE from time to time.

	Department Specific Elec	tives (DSI	E) to	be offered fro	m 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	3 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	1	MI 597	Numerical Solutions of PDE	4
MI 567	Continuum Mechanics	4	1	MI 598	Algebraic Geometry	4
MI 567	Continuum Mechanics	4		MI 598	Algebraic Geometry	

## 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	2			
MS 421	Computer Lab	2		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 501	Classical Mechanics	4	MS 508	Mathematical Methods	4			
MS 510	Functional Analysis	4		DSE-II	4			
	DSE-I	4		DSE-III	4			
	Open Elective II#	3	MS 517	Project(continuation of semester III)	8			
MS 517	Project (to be continued to semester IV)	0		·				

<sup>#</sup> List to be notified by the CoE from time to time

<sup>+</sup>Course for which there is a separate practical unit assigned as Computer Laboratory

	Department Specific Elec	tives (DS	E) 1	to be offered fro	om 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	AdvancedNumerical 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	İ	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	1			

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 establishment in the year of 1997 with the objectives to create quality human resource and to engage in quality research work in the challenging and frontier area of modern biotechnology. The Department has close linkage with the industry and academic institute of the country and is supported by UGC -SAP (DRS-II) and DST-FIST. Department also houses ONGC-CPBT, which is a part of successful industry academia collaboration.

The current research activities in the Department include molecular genetic analysis of various human diseases/disorders, microbial, environmental and petroleum biotechnology, snake venom biochemistry, enzymology and enzyme technology, medicinal plants, immunology, immune genetics and evolutionary genetics, computational biology, nano biotechnology, plant microbe interactions, cancer genetics and chemoprevention, and molecular virology.

### **Programmes offered**

- 1. Integrated M. Sc. in Life Science
- 2. M. Sc. in Molecular Biology and Biotechnology
- 3. Ph. D.

### **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), Snake Venom Biochemistry and Microbial Biotechnology

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

Suvendra Kumar Ray,\* Ph. D. (CCMB)

Molecular Plant -Microbe Interactions, Molecular

Evolution

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

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

#### **Associate Professor**

Robin Doley,\* Ph.D. (TU) Anti-haemostatic Proteins from Snake Venom and Hematophagus Insect

#### **Assistant Professor**

**Tapas Medhi,\*** Ph.D. (IITKgp) Enzymology and Bioprocess Engineering,Petroleum Biotechnology and Traditional Medicine system

**EeshanKalita,\*** Ph.D. (NIPGR-GU)*Plant pathogen interactions, Nanobiotechnology, Environmental Engineering* 

**Surya Prakash G. Ponnam,**\*Ph.D. (LVPEI-UoH)

Molecular Genetics, Synthetic Biology and Disease Biology of Various Human Diseases/ Disorders

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

Rupak Mukhopadhyay, \* Ph.D. (IACS-JU) Cellular and Molecular Biology (Sub Areas: Inflammation, Cardiovascular Disease), Microbial Biotechnology

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 Sciences, Seed Germination, Production of anticancer compounds using plant tissue culture

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

Pankaj Barah\*, Ph.D. (NUST) Evolutionary Genomics , Systems Biology , Big-data in Biology , Structural Systems Biology , Systems Medicine

## MOLECULAR BIOLOGY AND BIOTECHNOLOGY (Continued)

#### \* 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, IITKap-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-VisvaBharatiSantiniketan, IITG-Indian Institute of Technology Guwahati, NUST- Norwegian University of Science and Technology Norway. HoD-Head of the Department.

#### **Facilities**

The Department has several sophisticated instruments like, Automated DNA sequencer, UHPLC, FPLC, HPLC systems, Real Time PCR 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 2018-2019 :61
- No. of ongoing research projects: 35
- No of current Ph.D. Scholars: 83

#### **Selected Publications**

- Kalita, B., Patra, A., Das, A., & Mukherjee, A. K. (2018). Proteomic analysis and immuno-profiling of eastern India Russell's viper (*Daboia russelli*) venom: Correlation between RVV composition and clinical manifestations post RV bite. *Journal of Proteome Research*, 17(8), 2819-2833.
- Singh, N., Phukan, T., Sharma, P. L., Kabyashree, K., Barman, A., Kumar, R., Sonti, R. V., Genin, S., Ray, S. K. (2018). An Innovative Root Inoculation Method to Study Ralstonia solanacearum Pathogenicity in Tomato Seedlings. *Phytopathology*, 108:436-442.



For more information one can visit the departmental website <a href="http://www.tezu.ernet.in/dmbbt">http://www.tezu.ernet.in/dmbbt</a>

## **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, Guwahati. CAT Indore. VECC Kolkata. SAMEER Mumbai. University of Southampton UK, Queen's University Belfast, University of Tokyo Japan, Max Planck Institute Germany and others. The Department of Physics is a UGC-SAP. DST-FIST and ISRO supported Department. The department provides a conducive and rigorous research environment.

#### Programmes offered

- Integrated B.Sc.B.Ed. in Physics (Major- Physics)
- 2. Integrated M. Sc. in Physics
- 3. M. Sc. in Physics
- 4. Ph. D.

#### Faculty and Areas of Interest Professor

**Ashok Kumar\***, Ph.D. (IITK) Condensed Matter Physics, Solid State Ionics

Jayanta Kumar Sarma\*, Ph.D. (GU) Theoretical High Energy Physics, Particle Physics

#### Nidhi Saxena Bhattacharyya\*, Ph.D. (DU^) Microwave Devices, Antennas and EMI Materials

Nilakshi Das\*, Ph.D. (GU)-HoD Dusty Plasma Physics, Laser-Plasma Interaction

Pritam Deb\*, Ph.D. (JU)
Nanoscience and Nano Technology, Physics
of Materials

Mrinal Kumar Das\*, Ph.D. (GU) Theoretical High Energy Physics, Physics Beyond Standard Model, Neutrino Physics, BAU, Dark Matter

Pabitra Nath\*, Ph.D. (GU) Photonics

#### Associate Professor Gazi Ameen Ahmed\*, Ph.D. (GU) Laser Physics, Optoelectronics

Dambarudhar Mohanta\*, Ph.D. (TU) Condensed MatterPhysics, 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
Physic,s Neutrino Physics UHE Cosmic Rays
and Extensive Air Showers Detector
Instrumentation and Data Acquisition

## Recognized Supervisor # Recognized Co-supervisor

<u>LEGENDS:</u>,IITK-Indian Institute of Technology Kanpur, GU-Gauhati University, DU^-Delhi University, JU-Jadavpur University West Bengal, TU-Tezpur University,DU-Dibrugarh University, IISc-Indian Institute of ScienceBangalore,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

### PHYSICS (Continued)

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 depart-

mental library. The department also offers its facilities to the students of other institutes and other departments within the University.

The research activities in the department is supported by University's Sophisticated Instrument and Analytical Centre (SAIC) and the University Library.

#### **Research Activities**

- Number of papers published in the year 2018-2019: 93
- Number. of ongoing research projects: 21
- Number of current Ph.D. scholars: 60

#### Selected Publications

- Lalung, M., Phukan, P. and Sarma, J. K., On phenomenological study of the solution of nonlinear GLR-MQ evolution equation beyond leading order, Nuclear Physics A (2019).
- Lahan, H., and Das, S. K., Al3+ ion intercalation in MoO3 for aqueous aluminum-ion battery, Journal of Power Sources (2019).



## 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
CD 101	Chemistry-I	3	CD 102	Chemistry-II	3
MD101	Mathematics-I	3	MD 102	Mathematics-II	3
PD 197	Physics Lab-1	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	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			

	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	Pedagogy B: Mathematics I or	3			
			Or ED 309	Pedagogy B: Bio Science I				
PD 399	Physics Lab-V	3	ED 303	School Education in NE India	2			
ED 301	Teaching Approaches and Strategies	4	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	PD 314	Measurement Physics	3
ED 407 or	Pedagogy B: Mathematics II or	3	ED 405	School Internship	15
ED 409	Pedagogy B: Bio Science II				
ED 404	Initial School Experience/School	3			
	Internship-I				
PD 308	Laser Physics	3			
PD 400	Laboratory-VII	4			
	Open Elective-II	3			

## Courses offered in Integrated dual B.Sc. & 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			
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		DM 101	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

	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	1			

	Elective Courses offere	d by t	he Department in	Semester IX and X	
Course Code	Course Title	Cr.	Course Code		Cr.
PI 412	Plasma and Astrophysics	3	PI 518	General Theory of Relativity	3
PI 501	Quantum Field Theory	3	PI 519	Surface Science	3
PI 502	Quantum Electrodynamics	3	PI 520	Nanostructures	3
PI 505	Basic Astronomy and Astrophysics	3	PI 521	Fundamentals of Plasma Physics	3
PI 506	Introduction to Cosmology	3	PI 524	Plasma Generation and Application	3
PI 507	Digital Signal Processing	3	PI 525	Non-linear Plasma Physics	3
PI 508	Digital Communication Systems	3	PI 546	Fourier Optics and Holography	3
PI 509	Fiber Optics and Optoelectronics	3	PI 554	Soft Condensed Matter Physics	3
PI 510	Advanced Material Science	3	PI 555	Particle Physics - I	3
PI 511	Superconductivity and Critical Phenomena	3	PI 556	Particle Physics - II	3
PI 513	Physics of Thin Films	3	PI 557	Photonics	3
PI 514	Physics of Solid State Devices	3	PI 558	Quantum Electronics	3
PI 515	High Energy and Extragalactic Astrophysics	3	PI 559	Nanophotonics	3
PI 516	Microprocessors and Digital Signal Processing Based Systems	3	PI 560	Nanobiophysics	3
PI 517	Microwave Systems and Antenna Propagation	3	PI 561	Nanomagnetism	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	1
PH 498	Physics Lab-I	4	PH 499	Physics Lab-II	4

## PHYSICS (Continued)

	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 D	epart	ment in Semes	ster III and Semester IV	
Course Code	Course Title	Cr.		Course Code	Course Title	Cr.
PH 506	Physics of Thin Films	3	1 [	PH 541	Plasma and Astrophysics	3
PH 510	Fiber Optics and Optoelectronics	3	1 [	PH 542	Nanostructures	3
PH 514	Superconductivity and Critical Phenomena	3		PH 543	Surface Science	3
PH 517	Physics of Solid State Devices	3	1 [	PH 545	Fundamentals of Plasma Physics	3
PH 519	Quantum Field Theory	3		PH 546	Plasma Generation and Application	3
PH 522	Communication Systems	3		PH 547	Nonlinear Plasma Physics	3
PH 523	Microwave systems and Antenna Propagation	3		PH 548	Nanobiophysics	3
PH 524	Digital Signal Processing	3		PH 549	Nanomagnetism	3
PH 525	Microprocessors and Digital Signal Processing Based Systems	3		PH 554	Soft Condensed Matter Physics	3
PH 532	Quantum Electrodynamics	3	1 [	PH 555	Particle Physics-I	3
PH 533	General Theory of Relativity	3		PH 556	Particle Physics-II	3
PH 536	Basic Astronomy and Astrophysics	3	1 [	PH 557	Photonics	3
PH 537	High Energy and Extragalactic Astrophysics	3		PH 558	Quantum Electronics	3
PH 538	Introduction to Cosmology	3		PH 559	Nanophotonics	3
PH 539	Advanced Condensed Matter Physics and Material Science	3		PH 603	Fourier Optics and Holography	3

For more information one can visit the departmental website <a href="http://www.tezu.ernet.in/dphy">http://www.tezu.ernet.in/dphy</a>



TEACHING LEARNING CENTRE

## TEACHING LEARNING CENTRE

(Year of Establishment: 2016)

The Teaching Learning Centre (TLC), Tezpur University was inaugurated in January, 2016 as a Centre of Excellence for Curriculum and Pedagogy under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) scheme. The scheme is funded by Department of Higher Education, 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-in-Charge** 

Prof. M. K. Sarma, PhD (TU)

Research Methodology, Services Marketing,

**Tourism Marketing** 

#### **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

<u>LEGENDS:</u> **TU**-Tezpur University, **DU**-Dibrugarh University, DU\*- Delhi University, GU- Gauhati University

Major facility: One ICT Lab. Well equipped class-

Teachers trained: Total 1812



### 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

Shri	is to certify that /Smt./Kum	
Son/	/Daughter of Shri/S	mt
of Vi	illage/ Town	District/Division
in th	e	
i) ii) iii) iv)	Resolution No. 120 Resolution No. 120 Resolution No. 120	112 / 68 / 93BCC(C) dated 10 / 09 / 93 published in the Gazette of India Extra ordinary Part I Section I No.186 dated 13 / 09 / 93 012 / 9 / 94BCC dated 19 / 10 / 94 published in the Gazette of India Extra ordinary Part I Section I No. 163 dated 20 / 10 / 94. 012 / 7 / 95 BCC dated 24 / 05 / 95 published in the Gazette of India Extra ordinary Part I Section-INo.88dated25/05/95. 112 / 96 / 94BCC dated 9 / 03 / 96.
v) vi) vii)	Resolution No. 120	112 / 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. 112 / 13 / 97BCC dated 03 / 12 / 97. (vii)Resolution No. 12012 / 99 / 94BCC dated 11 / 12 / 97. 112 / 68 / 98BCC dated 27 / 10 / 99.
viii) ix) x)	Resolution No. 1201 Resolution No. 120 21 / 09 /2000.	12 / 88 / 98BCC dated 06 / 12 / 99 published in the Gazette of India Extraordinary Part-I Section-I No. 270 dated 06 / 12 / 99. 2 / 36 / 99BCC dated 04 / 04 / 2000 published in the Gazette of India Extraordinary Part-I Section-I No. 71 dated 04 / 04 / 2000. 112 / 44 / 99BCC dated 21 / 09 / 2000 published in the Gazette of India Extraordinary Part-I Section-I No. 210 dated
xi) xii) xiii)	Resolution No. 120 Resolution No. 120	11 5 / 9 / 2000BCC dated 06 / 09 / 2001. 12 / 1 / 2001BCC dated 19 / 06 / 2003. 12 / 4 / 2002BCC dated 13 / 01 / 2004.
xiv)	Resolution No. 120 dated 16 / 01 / 2006	012 / 9 / 2004-BCC dated 16 / 01 / 2006 published in the Gazette of India Extra ordinary Part I Section I No. 210 6.
Shri/	/Smt./Kum	and/or his family ordinarily reside(s
that	he/she does not bel	District/Division of
Date	ed:	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:
  - District Magistrate/Additional Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/ Deputy Collector/1stClass Stipendiary Magistrate/SubDivisional Magistrate/Taluka Magistrate/Executive Magistrate/Extra Assistant Commissioner (not below the rank of 1stClass 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	
0.1		
Sub:	Sponsorship/ No objection Certification of Mr./ Msfor Pl	h.D. programme at Tezpur University.
Dear S	Sir/Madam,	
time/fu	Mr./MsHas been working in this This organization has no objection to his/her being admitted to g fromas a part time/full time candidate.  The employee will be relieved of his/her duties in the organization ull time candidate (not applicable to project fellow). The part time can be work (only for part time candidate)	on to join in the Ph.D. programme if he/she is selected as part
Date:		Signature
Place:		Name
		Official Seal of the employer
Na 2. Re Na Ch He	erified by: Signature	

# (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 pos	t ofas regular/temporary employee
He / She has been working in this Department sincetill	date.
This is to certify that we have no objection to Shri/Smt	
Place	Signature of Officer
Date	Office
	Office Seal

## (Prescribed format for EWS certificate)

#### Government of.....

(Name & Address of the authority issuing the certificate)

#### INCOME & ASSET CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS

	Certificate No			Date:
		VALID FOR TH	HE YEAR	
Thi	s is to certify tha	it Shri/Smt./Kumari	son / daughter / wife of	
per	manent resident of_	Village/Street	Post Office	District
_		in the State/Union Territory	Pin Code whose	photograph is at-
only	y) for the financially /Her family does not 5 acres of agricult Residential flat of Residential plot of			
Shr	ri/Smt./Kumari	belongs to the	caste which is no	ot recognized as a
Sch	neduled Caste, Sche	duled Tribe and Other Backward Classes (Central	List)	
	Recent Passport size		Signature with Seal of Office	
a	attested photograph of the applicant		Name	
	η τιο αρμισαπι		Designation	

<sup>\*</sup>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

<sup>\*\*\*</sup>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

РНОТО
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### PERMANENT RESIDENCE CERTIFICATE

son/daughter of and	under Mauza/Circle	of Village/Path
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 2019, the concern Department/Centre may be contacted on the following contact number/E-mail ID:

Department/Office	Office Number*	Mobile Number** (HoD)	E-mail ID
Business Administration	275000	94353-80862	hod_ba@tezu.ernet.in
Centre for Assamese Studies	273240	94350-82113	cas@tezu.ernet.in
Centre for Inclusive Development	273252	99544-49475	rkdoley@tezu.ernet.in
Centre for Open and Distance Learning	275350	94350-15074	codl@tezu.ernet.in
Chandraprabha Saikiani Centre for Women's Studies	273235	98542-64780	wsctu@tezu.ernet.in
Chemical Sciences	275050	94351-81464	hod_chem@tezu.ernet.in
Civil Engineering	275950	98640-60200	hod_civil@tezu.ernet.in
Commerce	273290	94350-81446	hod_com@tezu.ernet.in
Computer Science and Engineering	275100	94350-84063	hod_cse@tezu.ernet.in
Cultural Studies	275150	94351-85424	hod_cul@tezu.ernet.in
Education	275650	70762-96461	hod_edu@tezu.ernet.in
Electrical Engineering	275256	99547-07774	jitend@tezu.ernet.in
Electronics and Communication Engineering	275250	90851-80623	hod_ece@tezu.ernet.in
Energy	275300	94353-80921	hod_ene@tezu.ernet.in
English and Foreign Languages	275200	94016-40135	hod_efl@tezu.ernet.in
Environmental Science	275600	94357-49354	hod_env@tezu.ernet.in
Food Engineering and Technology	275700	94351-81352	hod_fet@tezu.ernet.in
Hindi	275750	94353-84799	hod_hin@tezu.ernet.in
Law	275780	94350-12901	bkcy@tezu.ernet.in
Mass Communication and Journalism	275450	98640-72390	hod_mcj@tezu.ernet.in
Mathematical Sciences	275500	94351-80666	hod_ms@tezu.ernet.in
Mechanical Engineering	275850	96784-01587	hod_mech@tezu.ernet.in
Molecular Biology and Biotechnology	275400	99546-78888	hod_mbbt@tezu.ernet.in
Physics	275550	94350-45696	hod_phy@tezu.ernet.in
Social Work	275830	94351-44482	hod_sw@tezu.ernet.in
Sociology	275800	94351-44482	hod_soc@tezu.ernet.in
Teaching and Learning Centre	275680	94350-80384	tlc@tezu.ernet.in

<sup>\*</sup> Contact must be made during Office hours only.

\*\* Mobile Number should be used during Office hours and in case of emergency only



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