



TEZPUR UNIVERSITY



PROSPECTUS

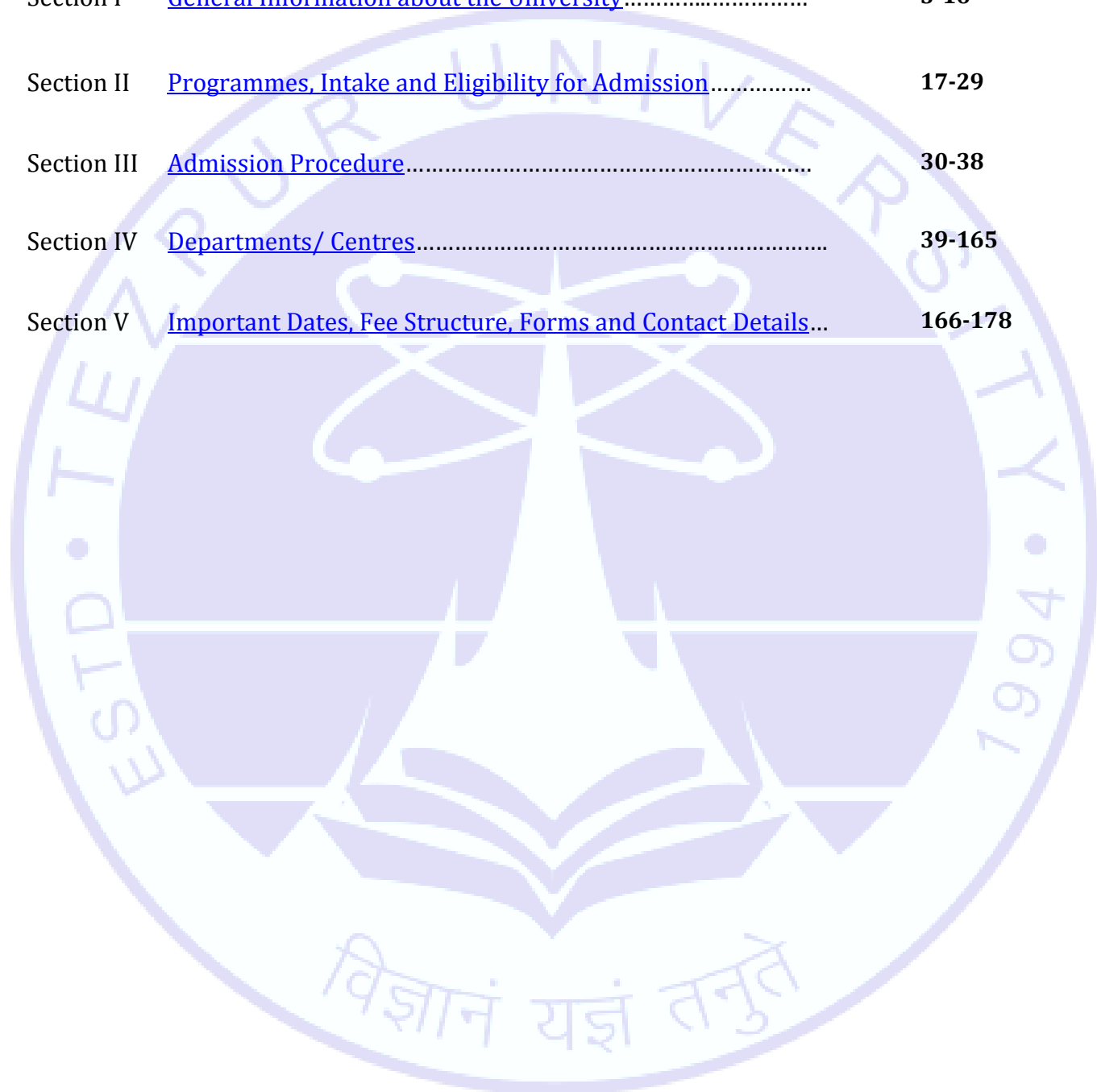
Autumn 2019

Tezpur University

Napaam, Sonitpur
Assam, INDIA 784028

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SECTION- I

General Information about the University

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GENERAL INFORMATION ABOUT THE UNIVERSITY

1.1 : Introduction

Tezpur University was established on January 21, 1994 by an Act of Parliament of India, *The Tezpur University Act, 1993 (Act No. 45 of 1993)*, 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 an excellent 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 objectives of the University. At present, the University offers a number of Programmes of Under-Graduate Degree/Diploma/Certificate, Integrated Programmes, Post-Graduate Degree/Diploma and Doctor of Philosophy Degree in various Disciplines. The University offers Add-on courses on Yoga and Violin too.

During the last 25 years of its existence, the University has engaged itself in the process of capacity building, both in terms of infrastructure and human resource development. The University has mounted tremendous efforts in developing it into a modern University incorporating all elements from the contemporary scientific and socio-cultural milieu.

The University has already developed a number of state-of-the-art laboratories, computing facilities, internet connectivity, a dedicated power supply system with DG backup and a rich library having connectivity to several digital libraries. While students' accommodation is provided in 15 well-designed hostels (including transit hostels), sufficient number of residential quarters is available for the accommodation of teaching and non-teaching staff. Other basic amenities like central water supply, campus security, guest house, canteen, gymnasium, outdoor and indoor sports facilities, post office, banks with ATMs, schools, swimming pool etc., are also available to cater to the needs of the University community.

Being a Central University, it is privileged to receive funds from the Ministry of Human Resource Development, Government of India, through the University Grants Commission. Faculty members of different academic Departments have been able to receive a large number of research grants amounting to crores of rupees from different funding agencies/organizations. The University promotes industry-academy alliance. The existence of prestigious industry sponsored projects in the University bears testimony to this.

1.2: Awards/Accolades

The University, established in the year 1994, and already completed glorious 25 years has succeeded in achieving a number of prestigious accolades and awards. The National Assessment and Accreditation Council (NAAC), an autonomous Institution of UGC, accredited the University with 'A' Grade for the next five years. The University was accorded the *Visitor's Best University Award* for the year 2016 by the President of India. The University was also ranked 30th among India's top 100 Universities in an assessment conducted by the Ministry of Human Resource Development (MHRD), Govt. of India, through the National Institutional Ranking Framework (NIRF) in 2017. Further, the University is placed in the top 601-800 Universities in the World University Rankings conducted by the Times Higher Education (THE) in 2017. The QS (Quacquarelli Symonds) BRICS University Rankings 2018 which feature 300 top Universities from

Brazil, Russia, India, China and South Africa (BRICS) placed Tezpur University in 146th rank. Tezpur University secured 100th rank in Times Higher Education (THE) Asia University Rankings 2018. The University has also featured in the 20th position in the list of top 20 world's best small universities by Times Higher Education in 2018.

1.3: Facilities and Services

The University offers the following major facilities and services for students and research scholars.

Central Library

Central Library is the focal point of all user community of Tezpur University. The Library caters to the educational and research needs of the academic community and its resources are consulted by scholars from all over the country. Central Library has started functioning since 1994. At present, the library holds about 91209 books, 10,000+ journals (print + online), online databases, CDs and 9661 back volumes of journals.

Library is a member of e-Shodh Sindhu Consortium, DeLCON consortium and DELNET. Library users can access book database, journal database, e-journals, institutional repository, electronic thesis & dissertations and other e-resources from any terminal within the University campus. Library provides reading facility for 365 days in the year.

The library is continuously striving at to adopt the best practices in all endeavours of its activities. The library is fully computerized with the help of Libsys software & KOHA -open source software that supports all in-house operations of the Library.

Computing Facilities

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

Sophisticated Analytical Instrumentation Centre (SAIC)

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.

Centre for Innovation Incubation and Entrepreneurship (CIIE)

The Centre for Innovation Incubation and Entrepreneurship (CIIE) promotes specialized knowledge in the field of entrepreneurship development, innovation and creative ideas. The Centre strives to identify and

motivate talented youths to implement new ideas for the fulfillment of the larger societal objectives. The CIIE also maintains an exhibition hall, called TUNOVATION that showcases various innovations made by students and faculty members as part of their projects/ research works. It also displays collection of cultural antiques of the North East Region including musical instruments, masks and terracotta.

Health Services

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. Psychiatrist from LGBRIMH also visits the University regularly for offering counseling on stress related problems. One Sonologist visits the Health Centre once a week for ultrasound scanning. One Physiotherapist visits twice a week for physiotherapy related treatment. 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.

Student Accommodation

The University provides separate accommodation for men and women students and research scholars, having more than 3700 capacity. The University also has a married research scholar's hostel with capacity of accommodating more than 30 married research scholars. **However, hostel seats will be allotted on merit basis as per availability. Due to limited seats, mere admission to the university does not guarantee hostel accommodation.**

Scholarships

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.

4. UGC Merit scholarship for University rank holders.
5. Ishan Uday scholarship for the students (from NE States) of UG courses.
6. 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.
11. DBT scholarship.
12. NEC scholarship from Director of Technical Education.
13. 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.

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.

Culture & Sports

The University provides opportunities for students to excel in various cultural and sports activities. The University has basketball, badminton, volleyball and tennis courts; cricket and football grounds with flood light facilities. The University has a well-equipped multi gymnasium and training facilities for Archery. The University also encourages students to participate in various zonal, national and international levels cultural, literary and sports competitions organized by Association of Indian Universities (AIU), New Delhi.

Tezpur University Student Council (TUSC)

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

Tezpur University Alumni Association (TUAA)

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.

Academic Calendar

The University adheres to a well-planned calendar specifying the schedule of academic activities. All events including examinations are held according to that calendar. Prospective students are advised to go

through the current calendar to get acquainted with the academic events of the University. The academic calendar for the year 2019 is available in the University webpage.

1.4: Training and Placement Cell

Helping and guiding students in shaping their career as per their aspirations has become an integral part of higher education today. In order to exclusively take care of these aspects, the University has a *Training and Placement Cell* which acts as the interface between the recruiting organizations and the University students. It facilitates recruitment events on-campus as well as off-campus as required. It also organizes various pre-placement grooming programmes to enhance the employability of the targeted students of the University. They are also made aware of the corporate social responsibilities that serve catalyst to holistic growth.

The graduated students of the University have already created a niche in various leading MNCs, PSUs and government departments through their high professionalism and intellectual ability, coupled with honesty and commitment.

The organizations that have recruited graduates of the University in the recent past include:

Private Sector Organizations– Aircel, Accenture, AGC Networks, Airtel (Bharti Telecom), American Embassy (New Delhi), Aricent, Asia Carbon Limited, Asian Paints, Axis Bank, Azim Premji Foundation, Berger Paints, Broadcom Corporation, Café Coffee Day, Calcom Cement, Catalyst Management Services, Channelply, Channel Look-East, Chembioteek Life Science, CG foods, Cipla Ltd., CNN-IBN, Colgate-Palmolive, Dabur India, Delphi, Diamond Fabcare (New Delhi), Disha (New Delhi), DSCL, Dyna Roof, ETV-Ramoji Film City, Genpact, GE Health Care, GLAXO-Smithline, Godrej and Boyce Manuf. Co. Ltd., Hindustan Coca-cola Ltd, Hindustan Lever Ltd., Housing Dev. Finance Co. (HDFC), Huawei Technologies, IBM, ICI Paints, ICICI Bank, Indian Express, Infosys, Intel, ITC Ltd., Jindal Steel and Power Ltd., Jungle Travels India, Jenson and Nicholson, Kotak Life, Mahindra Finance, LG Soft, L&T Infotech, Look East Channel, Nagaland Fruit and Veg. Prod. Unit, NDTV, Nestle India Ltd., NE Chronicle, NE TV, Newslive, Nokia, OCWEN, Oracle, Pantaloons, Perkin Elmer (India) Pvt Ltd., Philips, PRADAN, Press Trust of India, Q-Tech Nano Systems, Reliance, Reverie Language Technologies, RIMS, Samsung, SBI Life, SeSTA, Shalimar Paints, Shriram Transport Finance Company Ltd., Siemens Technology, Software AG, Sony India, SRD Nutrients (Mangaldoi), Star Cement, Sunrise Biscuits (Britannia), Symphony, Syntel, Tata Consultancy Service, TATA-ELEXI, TCI Tech Mahindra, The Shillong Times, Unisys Global Services, Vodafone, Wipro, WSP, XL Dynamics, Yes Bank, Zaloni Technologies, etc.

Public Sector Units – Allahabad Bank, Bank of Maharashtra, Bharat Sansar Nigam Ltd. (BSNL), Bongaigaon Refineries and Petrochemicals, Brahmaputra Cracker and Polymer Ltd., Centre for Science and Environment (Delhi), DRDO, Export-Import Bank of India, Food Corporation of India, Food Safety and Standards Authority, Gas Authority of India Limited (GAIL), ICAR, Indian Army, Indian Oil Corporation Ltd. (IOCL), Industrial Development Bank of India, Intelligence Bureau, ISRO, NRHM, Govt. of Assam, National Thermal Power Corporation, Numaligarh Refinery Limited (NRL), Oil India Limited (OIL), ONGC, Powergrid Corporation of India, Reserve Bank of India, State Bank of India, United Bank of India, etc.

Institutions of Higher Learning – Assam Don Bosco University, Assam Engineering College, Assam University, Banaras Hindu University, Jadavpur University, Bareilly Engineering College, Bielefeld University

(Germany), Central Institute of Post-Harvest Engg. and Tech., Dibrugarh Polytechnic, Dibrugarh University, Edinburgh University England, Epitome College (Diphu), Galgotia Institute of Technology (Noida), Gauhati University, Girijananda Choudhury Institute of M&T, Hyderabad University, IISC Bangalore, IIT Delhi, IIT Guwahati, IIT Kharagpur, IMPRS (Halle, Germany), Indian Academy of Science (Bangalore), Institute of Genomics and Integrative Biology, J.B. College (Jorhat), JNU (New Delhi), Jorhat Engineering College, Konkuk University (Korea), M.S University of Baroda, National Institute of Cholera and Enteric Diseases, National Centre for Genome Research, NCL (Pune), NIT Silchar, North Eastern Hill University (Shillong), Royal Group of Institutions, Sikkim Manipal Institute of Technology, Silchar Polytechnic, Sognag University (Korea), Sona College of Technology (Salem), St. Anthony's College (Shillong), University College of Cork (Ireland), Rajiv Gandhi University, University of Pune, etc.

1.5: List of Academic Programmes

UG Degree/Integrated/Diploma/Certificate Programmes

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

9	Certificate in Chinese	English and Foreign Languages	Humanities and Social Sciences
10	Integrated dual B.A. & M.A. in English	English and Foreign Languages	
11	Integrated dual B. Com. & M.Com.	Commerce	Management Sciences
12	Integrated B. Sc. B.Ed. in Chemistry	Chemical Sciences	Sciences
13	Integrated dual B. Sc. & M.Sc. in Chemistry		
14	Integrated B.Sc. B.Ed. in Mathematics	Mathematical Sciences	
15	Integrated dual B. Sc. & M.Sc. in Mathematics		
16	Integrated dual B. Sc. & M.Sc. in Life Science	Molecular Biology and Biotechnology	
17	Integrated B.Sc. B.Ed. in Physics	Physics	
18	Integrated dual B. Sc. & M.Sc. in Physics		

NBA accredited as Tier -I Programme

§AICTE Approved

PG Degree/Diploma Programmes

Sl. No.	Programme	Department /Centre	School
19	Master of Computer Application (M.C.A.) [§]	Computer Science and Engineering	Engineering
20	M.Tech [§] . in Information Technology		
21	M.Tech. in Computer Science & Engineering		
22	M. Tech. in Civil Engineering	Civil Engineering	
23	M.Tech [§] . in Bioelectronics	Electronics and Communication Engineering	
24	M.Tech [§] . in Electronics Design and Technology		
25	M. Tech [§] . in Energy Technology	Energy	
26	M.Tech [§] . in Food Engineering and Technology	Food Engineering and Technology	
27	M.Tech [§] . in Mechanical Engineering	Mechanical Engineering	

28	M.A. in Cultural Studies	Cultural Studies	Humanities and Social Sciences
29	M.A. in Education	Education	
30	M.A. in English	English and Foreign Languages	
31	M.A. in Linguistics and Language Technology		
32	M.A. in Hindi	Hindi	
33	Post Graduate Diploma in Translation (Hindi)		
34	Master of Laws (LL.M)	Law	
35	M.A. in Mass Communication and Journalism	Mass Communication and Journalism	
36	M.A. in Communication for Development		
37	M.A. in Social Work	Social Work	
38	M.A. in Sociology	Sociology	
39	P.G. Diploma in Child Rights and Governance	Centre for Inclusive Development	
40	P.G. Diploma in Women’s Studies	Chandraprabha Saikiani Centre for Women’s Studies	
41	M.B.A.*	Business Administration	Management Sciences
42	Master of Tourism and Travel Management (MTTM)		
43	Certificate in NCCMP#(Part Time)		
44	M.Com	Commerce	Sciences
45	M.Sc. in Chemistry	Chemical Sciences	
46	M.Sc. in Environmental Science	Environmental Science	
47	M.Sc. in Mathematics	Mathematical Sciences	
48	M.Sc. in Molecular Biology and Biotechnology	Molecular Biology and Biotechnology	
49	M.Sc. in Physics	Physics	

*Admission to M.B.A. is made on the basis of basis of CAT/ MAT/XAT/ATMA/GMAT/CMAT score.

§AICTE Approved. # Admission not through TUEE.

Ph.D. Programmes

Sl. No.	Programme	Department /Centre	School
50	Ph.D. in Civil Engineering	Civil Engineering	Engineering
51	Ph.D. in Computer Science and Engineering	Computer Science and Engineering	
52	Ph.D. in Electronics and Communication Engineering	Electronics and Communication Engineering	
53	Ph.D. in Energy	Energy	
54	Ph.D. in Food Engineering and Technology	Food Engineering and Technology	
55	Ph.D. in Mechanical Engineering	Mechanical Engineering	
56	Ph.D. in Cultural Studies	Cultural Studies	Humanities and Social Sciences Humanities and Social Sciences
57	Ph.D. in Education	Education	
58	Ph.D. in English and Foreign Languages	English and Foreign Languages	
59	Ph.D. in Hindi	Hindi	
60	Ph.D. in Mass Communication and Journalism	Mass Communication and Journalism	
61	Ph.D. in Sociology	Sociology	
62	Ph.D. in Social Work	Social Work	
63	Ph.D. in Assamese Studies	Centre for Assamese Studies	Management Sciences
64	Ph.D. in Business Administration	Business Administration	
65	Ph.D. in Chemical Sciences	Chemical Sciences	Sciences
66	Ph.D. in Environmental Science	Environmental Science	
67	Ph.D. in Mathematical Sciences	Mathematical Sciences	
68	Ph.D. in Molecular Biology and Biotechnology	Molecular Biology and Biotechnology	
69	Ph.D. in Physics	Physics	

Centre for Open and Distance Learning (CODL)

SN	Programme*	Department	School
70	P.G. Diploma in Renewable Energy and Energy Management	Energy	Engineering
71	M.A. in Mass Communication	Mass Communication and Journalism	Humanities and Social Sciences
72	P.G. Diploma in Human Resource Management	Business Administration	Management Sciences
73	P.G. Diploma in Environmental and Disaster Management	1. Environmental Science	Sciences
		2. Centre for Disaster Management	Management Sciences

* Admission is made through the Centre for Open and Distance Learning.

1.6: 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. Flexibility is there for students to opt for elective Courses on their own choices from a pool of courses. 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.

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.

1.7: 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. Finally, a Letter Grade is awarded against each Course based on these assessments.

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

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

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 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.
X	Extended Project	A project work remains incomplete and it is extended to the next semester.
S	Satisfactory	Successful completion of a Foundation/ Audit Course.
U	Unsatisfactory	Unsuccessful in completing a Foundation/ Audit Course.
W	Withdrawn	(i) The student withdraws the Course after the last date for withdrawal of Courses. (ii) Deficit in attendance.

1.8: 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 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 in future. 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 ragging in Higher Educational Institutions, 2009.
- During the study period in the University, involvement in any criminal/offensive activity, that may be punishable according to the Law of the country.

1.9: 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.

- (c) **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.**
- (d) There may be penalty for violation of discipline including maintenance of cleanliness, late payment of hostel dues etc.
- (e) Participation of the students/boarders in university/hostels' common events, like celebrations, competitions are subject to their willingness and is not mandatory.



The logo of Tezpur University is a circular emblem. The outer ring contains the text "TEZPUR UNIVERSITY" at the top and "ESTD • 1979" at the bottom. Inside the ring is a stylized atomic symbol with three orbits and a central nucleus. Below the atom is an open book. At the very bottom of the emblem is the Sanskrit motto "विज्ञानं यज्ञं तनुते" (Vignanam Yajnam Tanute).

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 Degree/ Integrated/ Certificate Programmes

Sl. No.	Programme Names	Intake	Eligibility
1	B. Tech. in Civil Engineering†	54(+5)	10+2 or equivalent examination with pass marks in (1) Physics, (2) Mathematics, (3) Language, (4) any subject (Chemistry, Biology, Biotech, Technical vocational subjects), (5) Any other subject and with minimum 60% (55% in case of candidates belonging to reserved category) marks in above subjects taken together.
2	B. Tech. in Computer Science and Engineering†	54(+5)	
3	B. Tech. in Electrical Engineering†	30(+3)	
4	B. Tech. in Electronics and Communication Engineering†	54(+5)	
5	B. Tech. in Food Engineering and Technology†	45(+5)	
6	B. Tech. in Mechanical Engineering†	54(+5)	
7	Lateral Entry to 2nd year of B.Tech in Civil Engineering	3 ^{\$}	Diploma in Civil Engineering from an AICTE approved program. Duration of Diploma must be: (i) 03 years after 10th (Matriculation) in conventional system (ii) 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.
8	Lateral Entry to 2nd year of B.Tech in Computer Science and Engineering	3 ^{\$}	Diploma in Computer Science and Engineering or Allied subjects and Electronics and Communication Engineering or Allied Subjects Duration of Diploma must be: (i) 03 years after 10th (Matriculation) in conventional system (ii) 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.
9	Lateral Entry to 2nd year of B.Tech in Electronics and Communication Engineering	3 ^{\$}	Diploma in Electronics and Communication Engineering or Allied subjects from an AICTE approved program. Duration of Diploma must be: (i) 03 years after 10th (Matriculation) in

			conventional system (ii) 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.
10	Lateral Entry to 2nd year of B.Tech in Electrical Engineering	3 ^{\$}	Diploma in Electrical Engineering from an AICTE approved program. Duration of Diploma must be: (i) 03 years after 10th (Matriculation) in conventional system (ii) 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.
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: (i) 03 years after 10th (Matriculation) in conventional system (ii) 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.
12	Lateral Entry to 2nd year of B.Tech in Mechanical Engineering	3 ^{\$}	Diploma in Mechanical Engineering or Allied subjects from an AICTE approved program. Duration of Diploma must be: (i) 03 years after 10th (Matriculation) in conventional system (ii) 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.Ed. (There will be 50 % seat each for Humanities and Science Stream.)	50(+5)	Minimum 55% marks in B.A./B.Sc./B.Tech./B.E.
14	Certificate in Chinese	39(+4)	10+2 with 45% of marks in aggregate.
15	Integrated dual B.A. & M.A. in English	20(+2)	First Division in the 10+2 Examinations
16	Integrated dual B. Com. & M. Com.	30(+3)	Minimum 60% aggregate marks in 10+2 Examination

17	Integrated B.Sc. B.Ed. in Chemistry	10(+1)	First division in 10+2 Examination (Science)
18	Integrated B.Sc. B.Ed. in Mathematics	10(+1)	
19	Integrated B.Sc. B.Ed. in Physics	10(+1)	
20	Integrated dual B.Sc. & M.Sc. in Chemistry	20(+2)	Minimum 60% aggregate marks in Physics, Chemistry and Mathematics at 10+2 examination with minimum pass marks in individual subjects and pass mark in English.
21	Integrated dual B.Sc. & M.Sc. in Mathematics	20(+2)	Minimum 60% aggregate marks in Mathematics, Physics, Chemistry/Statistics in 10+2 examination with minimum pass marks in individual subjects and pass mark in English.
22	Integrated dual B.Sc. & M.Sc. in Physics	20(+2)	Minimum 60% aggregate marks in Mathematics, Physics, Chemistry in 10+2 examination with minimum pass marks in individual subjects and pass mark in English
23	Integrated dual B.Sc. & M.Sc. in Life Science	20(+5)	Minimum 60% aggregate marks in Biology, Chemistry, Physics and/or Mathematics subjects in 10+2 examination with minimum pass marks in individual subjects and pass mark in English.
2.2 Post Graduate Degree/Diploma Programmes			
24	M. A. in Cultural Studies	46(+5)	Bachelor's Degree in any discipline with at least second class in Major subject. Candidates having no major / honours, must have a minimum of 45% marks
25	M. A. in Education	30(+3)	Bachelor's Degree with at least 45% marks
26	M.A. in English	50(+5)	Bachelor's degree with at least 45% marks in major/honours in English. Candidates not having major/honours must have at least 50% marks in aggregate as well as in English
27	M. A. in Linguistics and Language Technology	30(+3)	(1)B. A. with honours in Linguistics/English/any allied subject with a minimum of 45% marks, or (2)B.A. with a minimum of 50% of aggregate marks.

28	M. A. in Hindi	25(+3)	Bachelor's Degree with Major/ Honours in Hindi from a recognized University or Bachelor's degree with Hindi as an elective subject having at least 50% of marks in aggregate.
29	P. G. Diploma in Translation (Hindi)	23(+3)	BA with Hindi Major/ Honours; B. A. with Elective Hindi; B.A/B.Com/B. Sc with Praveen/ Sahityaratna. Candidates not having Major/Honours must have at least 50% marks in aggregate.
30	M. A. in Mass Communication and Journalism	35(+4)	Bachelor's Degree in any discipline with at least 45% marks in Major/ Honours. Candidates not having Major/ Honours must have at least 50% marks in aggregate.
31	M. A. in Communication for Development	12(+1)	Bachelor's Degree in any discipline with at least 45% marks with Major/Honours. Candidates not having Major/Honours must have at least 50% marks in aggregate.
32	M. A. in Social Work	15(+2)	Graduate in any discipline with 45% marks in Major.
33	M. A. in Sociology	30(+3)	Bachelor's Degree with at least 45% marks in Sociology major/honours or in any subject offered as major/honours. Candidates not having major/honours must have 50% marks in aggregate.
34	Master of Laws (LL.M.)	20(+2)	Bachelor's degree in Law with a minimum of 50% marks.
35	P. G. Diploma in Child Rights and Governance	20(+2)	Bachelor's Degree in any discipline
36	P. G. Diploma in Women's Studies	20(+2)	
37	M. Sc. in Chemistry	20(+2)	Bachelor's degree with major/ honours in Chemistry subject with a minimum of 45% marks and having Physics and Mathematics as subsidiary subjects.
38	M. Sc. in Environmental Science	30(+3)	B.Sc. in Physical/Biological/ Earth and Environmental Sciences as major/ honours with minimum of 50% marks. Candidates not having major/honours must have at least 55% marks in aggregate. Or, B.Sc. (Agri.) with at least 6.0 CGPA in 10 point scale or equivalent. Or Bachelor's degree in Engineering /Medicine with 55% marks or equivalent grade points.

39	M. Sc. in Mathematics	42(+4)	Bachelor's degree with a minimum of 45% marks in major/honours, either Mathematics or Statistics. Candidates with Statistics major/honours must have Mathematics as subsidiary course with a minimum of 50% marks. Candidates not having major/honours must have 50% marks in aggregate as well as in Mathematics.
40	M. Sc. in Molecular Biology and Biotechnology* (12 seats through TUEE, 26 seats through "All India Combined Entrance Test" conducted by DBT)	30(+8)	Bachelor's degree in Physical, Biological, Agricultural, Veterinary, Fishery Sciences, Pharmacy, Engineering/ Technology, four years B.S. programme (Physician Assistant course) or Medicine, MBBS or BDS with a minimum 55% marks in major/honours or aggregate. Those who have passed the qualifying examination before 2 years from the date of announcement of admission are not eligible.
41	M. Sc. in Physics	30(+3)	B.Sc. with minimum of 50% marks in major/honours in Physics having Mathematics as one of the subsidiary subjects. Candidate not having major/honours must have 55% marks in aggregate and in Physics
42	Master of Computer Application (MCA)	45(+5)	Bachelor's degree in any discipline with a minimum of 50% marks in major / honours subject or 55% marks in aggregate for those candidates having no major/honours or 55% marks in aggregate in BCA. Passed in Mathematics at 10+2 Examination.
43	M.Tech. in Civil Engineering	9(+1)	B.Tech. in Civil Engineering
44	M. Tech. in Information Technology	28(+3) (Through GATE- 18, Through TUEE -10)	B.E./B.Tech./AMIE/AMIETE in CSE/IT/ECE/allied subjects or MCA or its equivalent or M.Sc. in Computer Science/IT/Electronics/ Mathematics / Statistics with a minimum of 55% marks in aggregate. Candidates selected under GATE must possess a valid GATE score in CS.
45	M. Tech. in Computer Science and Engineering	10	B.E./B.Tech./AMIE/AMIETE in Computer Science & Engineering or MCA with minimum of 60% marks in aggregate.
46	M. Tech. in Electronics Design and Technology	28(+3) (Through GATE- 18, Through TUEE -10)	B.E./B.Tech./AMIE/AMIETE in Electronics/ Electrical/ Instrumentation Engineering or M.Sc. in Electronics/Instrumentation/Physics (Electronics as specialization)/ AMIETE with a minimum of 50% marks in aggregate
47	M. Tech. in Bioelectronics	15(+2) (Through GATE- 12, Through TUEE -03)	B.E./B.Tech. in Electronics and Communication Engineering/ Instrumentation/ Chemical Engineering/ Computer Science and Engineering/Electrical Engineering/Biomedical Engineering/ Bioengineering/Neuro Engineering/ Genetic Engineering/ Biotechnology or M.Sc. in Biotechnology/ Biochemistry /Chemistry/Polymer Science/Physics/ Electronics/ Nano Science and Technology/ Instrumentation or MBBS with at least 50% marks in aggregate

48	M. Tech. in Energy Technology	28(+3) (Through GATE- 18, Through TUEE -10)	B.E./ B.Tech. / AMIE in Mechanical /Electrical / Electronics / Instrumentation / Chemical /Agricultural Engineering / Energy Engineering or M.Sc. in Physics/ Chemistry with a minimum of 50% marks in aggregate
49	M. Tech. in Food Engineering and Technology**	18(+2) (Through GATE- 15, Through TUEE -03)	B.E. /B. Tech. in Food Engineering and Technology/ Food Process Engineering/ Food Technology/ Agricultural Engineering/ Mechanical Engineering/ Chemical Engineering / Biotechnology/Dairy Engineering /Dairy Technology or food related fields with a minimum of 55% marks in aggregate. (Note: The B. Tech./ B.E. programme completed by the candidate should satisfy the AICTE requirements).
50	M. Tech. in Mechanical Engineering (Specialization: Machine Design)	18(+2) (Through GATE- 15, Through TUEE -03)	BE/B.Tech. or equivalent Bachelor's degree in Mechanical, Aerospace Engineering, Automobile Engineering or in any allied disciplines in Mechanical Engineering with a minimum of 60% marks (or 6 CGPA in 10 point scale) in aggregate.
	M. Tech. in Mechanical Engineering (Specialization: Thermo Fluids Engineering)		BE/B.Tech. or equivalent Bachelor's degree in Mechanical, Energy and Power Engineering, Aerospace/ Aeronautical or any other relevant Engineering discipline.
51	M. Com.	06(+1)	B. Com. with minimum of 50% marks in major/honours. Mathematics at degree level is desirable.
52	Master of Tourism and Travel Management (MTTM)	15(+2)	Bachelor's Degree in any discipline with at least 45% marks in major/honours. Candidates not having major/honours must have 50% marks in aggregates
53	Master of Business Administration (MBA)^	46(+5)	Bachelor's Degree in any discipline with a minimum of 50% marks in major/honours subject or in aggregate. (Admission Process of 2019 is already over)

Note: Intakes shown in the bracket are subject to approval by UGC/MHRD for implementation of EWS Quota.

† Admission to all the B. Tech. programmes shall be made through the **JEE Main 2019**, 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 06 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-2019) 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.

**Seats remaining vacant after accommodating candidates with valid GATE score will be filled up through TUEE-2019 merit list. If the candidate claims admission based on a valid GATE score, the following criteria will be used:

- (i) For GATE holder with food technology as one of the optional subjects: 100% weightage for GATE Score.
- (ii) For GATE holder without food technology as one of the optional subject: GATE score (70% weightage) TUEE score (30% weightage).

^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 2019)

Sl. No	School	Department	Pre-requisite	Area of Research
54	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, Environmental Engineering.
55	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.

56	Engineering	Electronics & Communication Engineering	<p>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.</p> <p>M.Sc. in Electronics/ Physics/ Applied Mathematics.</p> <p>MCA with Physics, Chemistry and Mathematics in Bachelor degree, MBBS with MD/ MS degree.</p> <p>B.E. / B.Tech with 75% marks in aggregate or equivalent CGPA with a valid GATE Score.</p> <p>Minimum two recommendation Letters from Intitute /University of B.E./ B.Tech. degree.</p>	Bio electronics, Biosensor, Bio-electronic Device, Neuro-engineering, Image Processing, Computer Vision, Biomedical Signal Processing, Robotics, CMOS Design & MOSFET Modelling, Plasmonic Device, Sensors, MEMS, Semiconductor Devices, VLSI.
57	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 Environment Interaction, Solar Photovoltaic, PV Systems, Hybrid Energy Systems, Fuel cells, Hydrogen Technology, Building Energy.
58	Engineering	Food Engineering and Technology	<p>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.</p>	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.

59	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, Micro-alloying, Mechanical Properties Renewal Energy Conversion Machine Design, Theoretical and experimental residual stress.
60	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 Memory, Cultural History, Media & Culture
61	Humanities & Social Sciences	Education	Post Graduate degree in Education or in any allied discipline/subjects with 55% marks.	Language Education, Sociology of Education, Educational Measurement and Evaluation, Teacher Education, Educational Psychology, Educational Administration, ICT in Education, Environmental Education, Special Needs Education, Method of Teaching in Biological Science/Elementary Education.
62	Humanities & Social Sciences	English and Foreign Languages	M.A. in English (specialization may be in Literature, English Language Teaching or Linguistics); M.A. in 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, Indian Vernacular Literature, Travel Writing, Contemporary British Literature, Acoustic Phonetics, Computational Linguistics, Language Documentation, English Language Education, Language Testing, SLA.

63	Humanities & Social Sciences	Hindi	M.A. in Hindi	Fiction & Modern Hindi Literature
64	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.
65	Humanities & Social Sciences	Sociology	Post-Graduation in Sociology / Cultural Studies / Anthropology (with specialization in Social Anthropology) / Economics / History / Political Science / Philosophy / Mass Communication / English / Law / Management/ Social Work.	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
66	Humanities & Social Sciences	Social Work	Consistent good academic record with minimum 55% marks in M.A. (50% for SC/ST) in the following subjects: M.A. in Social work and allied Social Sciences (such as Sociology, Psychology, Rural development, Development studies, Law, Public Health, Education and Management)	Social Work & Mental Health, Disaster Management, Street Children, Substance and Application of Social Work Methods, Rural Development, Sustainable Development
67	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, ChangeManagementandHumanResource 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

68	Sciences	Chemical Sciences	M.Sc. in all branches of Chemical Science/ Physics/Nanoscience/ Material Science/ Biotechnology/ Biochemistry/ Bioinformatics/ Environmental Science. M.E./M.Tech. in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering etc.).	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.
69	Sciences	Environmental Science	Masters in any Science/ Applied Science / Engineering discipline with at least 55% marks or equivalent CGPA. At Bachelor's level the candidate must have attended Science / Technology programme.	Atmospheric chemistry, chemistry of Aerosol, some apportionment studies, PAHs, River morphology and landforms, riverine hazards; Climate studies (Urban climate, Urban Heat Island); Coupling study between hydro-geomorphic processes and ecology, geomorphic response to climate change; Socio-environmental issues (Vulnerability and Risk Assessment) Application of Remote Sensing and GIS techniques to atmospheric, hydro- geomorphic studies and socio-environmental issues, Ecology, Ecosystem dynamics, Biodiversity conservation, Stress Physiology & GHG emission from Agricultural Sector, Vermi-culture, Plant Nutrition & Soil Fertility Management, Atmospheric Processes; Air and Noise pollution monitoring and modelling; Environmental System modelling; Urban Climate.
70	Sciences	Mathematical Sciences	M.A. / M.Sc. in Mathematics or M.A./M.Sc. in Statistics with requisite background in Mathematics.	Number Theory, Functional Analysis and Operator Theory, Graphs and Matrices. Nonparametric Density, Distribution Function Estimation, Empirical Research in Finance, Ring Theory, Computational Fluid Dynamics, Abstract Differential Equations, Algebraic Graph Theory.
71	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	Cancer Biology, Genetic Engineering, Microbial genetics, Microbial recombinant enzyme, Cardiovascular drugs from medicinal plants, Microbial Biotechnology, Molecular Plant Microbe Interactions, Snake

			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.	venom, protein characterization, Scientific Validation of antimalarial and antidiabetic formulation, Phytoremediation MEOR, Plant Biotechnology, environmental biotechnology, Molecular Genetics, Disease Biology, Computational Biophysics, Non canonical function of ribosomal protein, Anti-inflammatory action of Polyphenols, Molecular Virology and Scrup typhus, Bioinformatics, Modelling & Simulation, Systems Biology, Bioinformatics, Big data analytics, Plant stress response, Evolutionary genomics, Cancer genomics, Next Generation Sequencing, Plant secondary metabolites, Organic cultivation, Germination.
72	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, CMP & Nanotech, 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.

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

The logo of Tezpur University is a large, light purple circular emblem in the background. It features a stylized atomic symbol with three orbiting electrons in the center. The words "TEZPUR UNIVERSITY" are written in a semi-circle at the top, and "ESTD • 1994 •" is at the bottom.

SECTION- III

Admission Procedure

1. General Admission Procedure
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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 2019-2020 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) – 2019** to be conducted by NTA, New Delhi. All admission shall be based on **JEE (Main) - 2019** All India Ranking/CRL.
- (ii) The Candidates who appear in the **JEE (Main) – 2019** 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)-2019**. The Candidates of any part of India can participate in “Central Counselling” conducted by CSAB/ JoSA (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) - 2019** application. The applicants desiring a seat under the NE quota PRC (Permanent Residence Certificate) issued by the competent authority will be required.

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

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

- (i) Diploma holders who have completed the 03 years AICTE approved diploma after 10th (Matriculation) in conventional system of Diploma programs or who have completed 04 years AICTE approved Diploma after 10th (Matriculation) in modular system of Diploma programs, are eligible to apply.
- (ii) The Candidate must have passed 10th (Matriculation) with 60% marks in aggregate and must have secured 60% marks in Mathematics, as well as must have a minimum aggregate of 70% marks at Diploma level.
- (iii) Those, who are appearing for the final year of Diploma examinations, are also eligible, subject to the condition that they shall submit the provisional certificate at the time of admission, along with final grade sheet to support fulfilment of eligibility criteria.

3. M. Tech. Programmes:

Candidates applying for M.Tech. Programmes may seek admission either based on valid GATE score 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	Goalpara	Kolkata
Aizwal	Guwahati	North Lakhimpur
Barpeta Road	Hyderabad	Patna
Bengaluru	Imphal	Pune
Bhubaneswar	Itanagar	Shillong
Chennai	Jorhat	Silchar
Delhi	Kanpur	Siliguri
Dibrugarh	Kohima	Tezpur
Diphu	Kokrajhar	

Application Procedure

Interested eligible candidates may **APPLY ONLINE** through the university website www.tezuadmissions.com by paying a fee of Rs. **400/-** for **SC, ST** and **PWD** candidates, and Rs. **800/-** for other categories. 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:

- 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.**
- 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.
- 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:**
- (i) Copy of the JEE (Main) 2019 admit card, if applying for the B. Tech. Programmes.
 - (ii) Copy of the Permanent Residence Certificate (PRC) issued by the competent authority of any North Eastern State, if applying for the B.Tech. Programmes or M.Sc. Programme in Molecular Biology and Biotechnology under the North East quota.
 - (iii) Copy of the valid GATE score card, if applying for direct admission to any M.Tech. Programme.
 - (iv) Copy of the relevant certificate issued by the competent authority, if seeking admission under any reserved category as mentioned.
 - (v) Copy of the Sponsorship/No Objection Certificate issued by the employer, if the candidate is employed.
 - (vi) A passport size photograph.
 - (vii) Scanned copy of the signature.
 - (viii) Relevant certificate as evidence of representing State or Country in sports, if any (**Not applicable for B. Tech, M. Tech and Ph. D programme**)

Examination Pattern:

- (i) Duration for the TUEE for all programmes will be of 2 hours.
- (ii) 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.
- (v) 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

- a) 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.
- b) If there is a tie even after this criterion either graduation or 10+2 marks will be considered.
- c) 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:
 1. Prime Minister's special scholarship scheme for candidates from Jammu and Kashmir.
 2. 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.

Important Dates

- | | |
|--|---|
| (a) Opening of the online application submission | : 27 February, 2019 |
| (b) Closing of the online application submission | : 07 May, 2019 |
| (c) Online Admit Card Generation | : 20 May, 2019 (tentative) |
| (d) University entrance examinations | : 31 st May & June 1-2, 2019 |
| (e) Declaration of merit lists of provisionally selected candidates
(Excluding Ph.D. programmes) | : 25 June, 2019 (tentative) |
| (f) Declaration of provisionally shortlisted candidates for personal
interview for the Ph.D. programmes | : 12 June, 2019 (tentative) |
| (g) Counselling/Admission of selected candidates | : 22-25 July, 2019(tentative) |
| (h) Commencement of classes of the Autumn Semester | : 26 July, 2019 |

Note:

- (i) All communication with candidates will be made through their registered e-mail ID/mobile number or notification in the admission portal **www.tezu.ernet.in/admission**.
- (ii) No separate letter will be issued for acceptance/rejection of application form, appearing entrance examinations (admit card), entrance examination schedule, selection for admission, etc.
- (iii) Communication for any doubt/query may be made on asktuee@tezu.ernet.in. For queries related to B.Tech. programmes need to email on bssc2019@tezu.ernet.in.

Admission

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

- (a) Fulfilment of the eligibility criteria as specified in Eligibility Criteria for Admission
- (b) Selection for admission to the Programme.
- (c) Production of all the relevant documents such as pass certificates and 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.

- (d) Submission of a set of self-attested copy of all pass certificate, marksheets and other the relevant documents.
- (e) Submission of the character certificate from the Head of the Institution and Migration certificate (in original) from the Board/University last attended.
- (f) Submission of a self-attested printout of the filled-in application form.
- (g) Receipt of payment of admission fee in full.

Provisional Admission

- a) If the result of the qualifying examination of a student is awaited at the time of admission, he/she must produce/submit pass certificate/marksheet with requisite percentage of marks within 30th October, 2019. 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 30th October, 2019. Candidates failing to produce marksheet or pass certificate with requisite percentage of marks within the specified period will not be allowed to continue her/his study.

Admission to Ph.D. Programmes:

- (i) The candidates who have appeared in the qualifying examination but their results are yet to be declared may be selected provisionally for admission to Ph.D. programme. Such candidates must produce mark sheets of the qualifying examination fulfilling the eligibility criteria at the time of admission.
- (ii) If a provisionally selected candidate fails to produce the mark sheet of the qualifying examination at the time of admission, the seat will be offered to the next eligible candidate from the merit list.

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

- (i) Production/submission of any false/tempered information/document.
- (ii) Failing to produce/submit any required pending document within 30th October, 2019.
- (iii) If the required percentage of marks of the qualifying examination is not fulfilled or does not meet the requirement of the eligibility criterion.

SECTION- IV

Departments / Centres

Departments

1. [Civil Engineering](#)
2. [Computer Science and Engineering](#)
3. [Electronics and Communication Engineering](#)
4. [Electrical Engineering](#)
5. [Energy](#)
6. [Food Engineering and Technology](#)
7. [Mechanical Engineering](#)
8. [Business Administration](#)
9. [Commerce](#)
10. [Cultural Studies](#)
11. [Education](#)
12. [English and Foreign Languages](#)
13. [Hindi](#)
14. [Law](#)
15. [Mass Communication and Journalism](#)
16. [Social Work](#)
17. [Sociology](#)
18. [Chemical Sciences](#)
19. [Environmental Science](#)
20. [Mathematical Sciences](#)
21. [Molecular Biology and Biotechnology](#)
22. [Physics](#)

Centres

1. [Centre for Assamese Studies](#)
2. [Centre for Disaster Management](#)
3. [Centre for Endangered Languages](#)
4. [Centre for Inclusive Development](#)
5. [Centre for Open and Distance Learning](#)
6. [Teaching Learning Centre](#)
7. [Chandraprava Saikiani Centre for Women's Studies](#)

CIVIL ENGINEERING (Year of Establishment: 2009)

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

Programmes offered

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

Faculty and Areas of Interest

Professor		
1.	Utpal Kumar Das,* Ph.D. (GU)- HoD and Dean, P&D	<i>Geotechnical Engineering</i>
Assistant Professors		
1.	Ankurjyoti Saikia*, Ph.D. (TU)	<i>Geotechnical Engineering</i>
2.	Kamal Uddin Ahamad,* Ph.D. (IITG)	<i>Environmental Engineering</i>
3.	Binanda Khungur Narzary, M.Tech. (IITG)	<i>Transportation Engineering</i>
4.	Debaraj Bailung Sonowal, M.Tech. (IITR)	<i>Structural Engineering</i>
5.	Shailen Deka*, Ph.D. (IITG)	<i>Geotechnical Engineering</i>
6.	Jayanta Deori Bharali, M.Tech. (IITG)	<i>Transportation Engineering</i>
8.	Rituraj Buragohain, M.Tech. (IITG)	<i>Water Resources Engineering</i>
9.	Karabi Bharadwaj, M.E. (NITS)	<i>Structural Engineering</i>
10.	Arunav Chakraborty, M.E. (AEC)	<i>Geotechnical Engineering</i>

*Recognized Ph.D Supervisor

LEGENDS: **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, **AEC**-Assam Engineering College Guwahati, **HoD**- Head of the Department.

Facilities

The Department has the following Laboratory facilities

Computational Laboratory Facilities

MatLab and Simulink R2011b	Civil FEM for Ansys, version 12.1	Plaxis 2D
ETABS Version 9	AutoCAD	SAP 2000, v-20

Core Departmental Laboratories

Geotechnical Engg. Laboratory-I	Environmental Engg. Laboratory -I	Water Resources Laboratory
Structural Engg. & NDT Laboratory	Transportation Engg. Laboratory	Surveying Laboratory
Geotechnical Engg. Laboratory-II	Environmental Engg. Laboratory-II	Computational Laboratory

Research Activities

- No. of papers published in the year 2017-2018: 10
- No of ongoing research projects: 01
- No. of current Ph.D. scholars : 08

Selected Publications

- Narzary, B.K. and Ahamad, K.U., *Estimating elastic modulus of California bearing ratio test sample using finite element model*, Construction and Building Materials, July 2018, 175, 601-609, <https://doi.org/10.1016/j.conbuildmat.2018.04.228>
- Bhagowati, B. and Ahamad, K.U., *A review on lake eutrophication dynamics and recent developments in lake modeling*, a Ecohydrology & Hydrobiology, July 2018, <https://doi.org/10.1016/j.ecohyd.2018.03.002>
- Chakraborty, A. and Goswami, D., *Three-dimensional (3D) slope stability analysis using stability charts*, International Journal of Geotechnical Engineering May 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			

Seventh Semester			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
XXxxx	HSS / Management Elective	3	CExxx	Programme Elective	3
CExxx	Programme Elective-II	3	CExxx	Programme Elective	3
CExxx	Programme Elective-III	3	XXxxx	Open Elective	3
CExxx	Programme Elective-IV	3	CE484	Project	6
XXxxx	Open Elective-II	3			
CE471	Industrial Summer Training	2			
CE483	Project-I	4			
CT465	Essentials of Indian Traditional Knowledge	0			

Elective Courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CE 421	Advanced Reinforced Concrete Design	3	CE 432	Hydraulic Machines	3
CE 422	Dynamics of Structures	3	CE 433	Groundwater Hydrology and Management	3
CE 423	Pre-stressed Concrete and Industrial Structures	3	CE 434	Air Pollution and Industrial Waste Management	3
CE 424	Bridge Engineering	3	CE 435	Solid Waste Engineering	3
CE 425	Soil Dynamics and Foundation Engineering	3	CE 436	Environmental Impact Assessment	3
CE 426	Ground Improvement Methods	3	CE 437	Remote Sensing and GIS	3

CE 427	Earth Retaining Structures	3	CE 438	Pavement Design	3
CE 428	Applied Geotechnical Engineering	3	CE 439	Pavements Materials	3
CE 429	Environmental Geo-techniques	3	CE 440	Geometric Design of Road Transportation System	3
CE 430	Open Channel Flow	3	CE 441	Design and Construction of Rural Roads	3
CE 431	Hydraulic Structures	3	CE442	Analysis and design of foundations	3

Courses offered in M. Tech. in Civil Engineering

Specialization: Geotechnical Engineering

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CE501	Engineering Behaviour of Soil	4	CE 504	Advanced Foundation Engineering	4
CE 502	Geotechnical Exploration and Testing	5	CE 505	Ground Improvement Methods	3
CE 503	Strength and Compressibility of Soils	3	CE 590	Term Paper	2
	Elective I	3		Elective III	3
CE 101	Elective II	3		Elective IV	3
	Open Elective I	3		Elective V	3
				Open Elective II	3

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 Geosynthetics	3	CE 528	Soil Dynamics and Foundation Engineering	3
CE 523	Rock Mechanics	3	CE 529	Earth and Rockfill Dams	3
CE 524	Groundwater Hydrology	3	CE 530	Geotechnical Aspects of Waste Disposal	3
CE 525	Numerical Methods in Engineering	3	CE 531	Environmental Geotechnology	3
CE 526	Analysis and Design of Pavements	3	CE 532	Earthquake Engineering	3

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

COMPUTER SCIENCE AND ENGINEERING (Year of Establishment: 1994)

The Department of Computer Science and Engineering was established in 1994 and it is one of the oldest Departments of the University. The Department has been recently recognized as a Centre of Excellence in Machine Learning and Big Data Analytics by MHRD, Government of India under FAST. The Department is also recognized by UGC under Special Assistance Programme (SAP DRS Phase II). During 2005-2009 and 2018-2023 the Department received support from the Department of Science and Technology (DST), Govt. of India under its FIST- programme. The Department has also been recognized as ISEA member, MeitY, GoI and BRICS-NU Member. The Department has been carrying out active research in the fields of computational theory, computer networks, network security, mobile computing, soft computing and data mining, natural language processing, workflow management, qualitative spatial reasoning, web services, rehabilitation robotics, pattern recognition, computer vision, bioinformatics, image processing algorithms, speech processing, algorithms and optimization techniques, 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. M. Tech. in Computer Science and Engineering
5. Ph. D.

Faculty and Areas of Interest

Professors		
1.	Dilip Kumar Saikia,* Ph.D. (IITKgp), Pro Vice-Chancellor	<i>Networks, Mobile Computing</i>
2.	Dhruba Kumar Bhattacharyya,* Ph.D. (TU), Dean, Academic Affairs	<i>Data Mining, Network Security, Bio-informatics</i>
3.	Smriti Kumar Sinha,* Ph.D. (TU)-Dean, SoE	<i>Workflow Automation, Web Theory</i>
4.	Utpal Sharma,* Ph.D. (TU)	<i>Natural Language Processing</i>
5.	Nityananda Sarma,* Ph.D. (IITG)- HoD	<i>Wireless Networks and Mobile Computing</i>
6.	Bhogeswar Borah,* Ph.D. (TU)	<i>Data Mining, Image Processing</i>

Associate Professors		
1.	Sarat Saharia,* Ph.D. (TU)	<i>Pattern Recognition</i>
2.	Bhabesh Nath,* Ph.D. (TU)	<i>Data Mining</i>
3.	Siddhartha Sankar Satapathy,*Ph.D. (TU)	<i>Computational Biology and Bioinformatics,Wireless Sensor Network</i>
Assistant Professors		
1.	Sarangthem Ibotombi Singh, Ph.D. (TU)	<i>Service Oriented Systems, Trust and Reputation</i>
2.	Loitongbam Basanta Kumar Singh, M.Tech. (TU) (On Study leave)	<i>Object Recognition, Trust and Reputation</i>
3.	Rosy Sarmah,* Ph.D. (TU)	<i>Data Mining, Bioinformatics, Image Processing</i>
4.	Sanjib Kumar Deka,* Ph.D. (TU)	<i>Cognitive Radio Network, Operating System</i>
5.	Debojit Boro, Ph.D. (TU)	<i>Network Security</i>
6.	Arindam Karmakar,* Ph.D. (ISI)	<i>Algorithms, Computational Geometry</i>
7.	Sanghamitra Nath, Ph.D. (TU)	<i>Speech Processing</i>
8.	Swarnajyoti Patra,* Ph.D. (JU)	<i>Pattern Recognition, Machine Learning, Remote Sensing, Image Analysis</i>
9.	Shobhanjana Kalita, Ph.D. (TU)	<i>Knowledge Representation and Reasoning</i>
10.	Nabajyoti Medhi, Ph.D. (NITM)	<i>Software Defined Networking, Wireless Networks, Network Security, Cloud Computing, Web Technologies</i>
11.	Monisha Devi, M.Tech.(TU)(On Adhoc)	<i>Cognitive Radio Networks</i>
12.	Nazrul Hoque, Ph.D. (TU)(On Adhoc)	<i>Data Mining, Network Security</i>

*** Recognized Supervisor**

LEGENDS: **IITKgp**-Indian Institute of Technology Kharagpur, **TU**-Tezpur University, **Leeds**-University of Leeds England, **IITG**-Indian Institute of Technology Guwahati, **MU**-Manipur University, **ISI**-Indian Statistical Institute Kolkata, **JU**-Jadavpur University Kolkata, **NITM**- National Institute of Technology Meghalaya, **SoE**-School of Engineering, **HoD**-Head of the Department

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 Research Laboratory
- * Network Laboratory
- * Malware Research Laboratory

Departmental Library

The Department has a library with a collection of more than 2238 book volumes in the field of computer science and information technology. The library also receives 8 international and 3 national journals in the field of computer science 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 2017-2018:47
- No. of ongoing research projects:08
- No. of current Ph.D. scholars: 50

Selected Publications:

- T Kakoty, HJ Kashyap and DK Bhattacharyya (2018) THD-Tricluster: A Robust Triclustering Technique and Its Application in Condition Specific Change Analysis in HIV-1 Progression Data, Journal of Computational Biology and Chemistry, Vol 75 (2018): PP 154-167, 2018.
- S Borah and B Borah, Watermarking Techniques for Three Dimensional (3D) Mesh Authentication in Spatial Domain, 3D Research, 9(3), 43, 2018.
- Hussain A. Chowdhury, Dhruba K. Bhattacharyya and Jugal K. Kalita, Differential Expression Analysis of RNA-seq Reads: Overview, Taxonomy and Tools, IEEE/ACM Transaction on Computational Biology and Bioinformatics, 2018.
- K Bhardwaj and S Patra, An unsupervised technique for optimal feature selection in attribute profiles for spectral-spatial classification of hyperspectral images, ISPRS Journal of photogrammetry and remote sensing, vol. 138. Page 139-150, 2018.
- S Kalita, A Karmakar and SM Hazarika, Efficient extraction of spatial relations for extended objects vis-à-vis human activity recognition in video, Journal of Applied Intelligence, Volume 48, Issue 1, Pages 204-219, 2018.
- H Choudhury, B Roychoudhury and D K Saikia, Enhanced Identity Privacy in UMTS, International Journal of Ad Hoc and Ubiquitous Computing, 28 (4), 203-219, 2018.

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	3
			Total -		24

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

Fifth Semester			Sixth Semester		
Course Code	Course Title	CR	Course Code	Course Title	CR
CO309	Operating Systems	3	CO314	System Software and Compiler Design	4
CO311	Software Engineering	3		Elective-II (PEC02)	3
CO310	Operating Systems Lab	1		Open Elective-II (OEC02)	3
CO312	Database Systems	3	CO315	Computer Networks	3
CO313	Data base Systems Lab	2	CO316	Computer Networks Lab	1
CO303	Computer Graphics	4	IC361	Accounting and Financial Management	3
	Elective-I (PEC01)	4	CO317	Project-I (using SE perspective)	2
	Open Elective-I (OEC01)	3	Total -		19
LW301	Indian Constitution (MC-Non Credit)	-			
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	Total-		
	Open Elective-III (OEC03)	3			
CO402	Project-II	4			
CT465	Essence of Indian Traditional Knowledge (MC- Non Credit)	0			
Total -		20			

Mandatory Non-credit Courses:

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

Professional Elective Courses (PEC)

Sixth Semester :

Group	Course Name	L-T-P	Credit
PEC01	Web Technology	3-0-1	4
	Embedded Systems	3-0-1	4
	Parallel Programming	3-0-1	4
PEC02	Principles of Programming Languages	3-0-0	3
	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

Seventh Semester :

Group	Course Name	L-T-P	Credit
PEC03	Machine Learning	3-0-1	4
	Distributed Systems	3-0-1	4
	Computer Vision & Image Processing	3-0-1	4
PEC04	Cloud Computing	3-0-0	3
	Quantum Computing	3-0-0	3
	Statistical Modelling and Applications	3-0-0	3
	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
PEC05	Natural Language Processing	3-0-0	3
	Linear Optimization	3-0-0	3
	Advanced Database Management Systems	3-0-0	3
	Fuzzy Logic and Neural Networks	3-0-0	3
	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			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS 502	System Software	3	CS 504	Operating System	4
CS 508	Database Management	5	CS 505	Software Engineering	4
CS 509	Data Communication	4	CS 507	Computer Networks	4
	Elective	-		Elective	-
	Elective	-		Elective	-
	Open Elective-II	3		Elective/ Open Elective-III	3

Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS 514	Minor Project	8	CS 515	Major Project	16
	Elective	-			
	Elective	-			
	Elective	-			
	Elective/ Open Elective-III (if three Open Electives are not yet taken)	-			

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 531	Object Oriented Programming and Design	5
CS 523	Enterprise Resource Planning	3	CS 532	Compiler Design	4
CS 524	Theory of Computation	3	CO 503	Fuzzy Logic and Neural Network	3
CS 538	Computational Geometry	3	IT 504	E-Commerce	3
CS 601	Design and Analysis of Algorithms	3	IT 507	Computer Security and Cryptography	3
CS 602	Image Processing	3	IT 509	Data Mining and Data Warehousing	4
CS 606	Computer Architecture and Parallel Processing	3	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

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	CS 601	Design and Analysis of Algorithms	3
CS 634	Selected Topics in Computer Networks	4	IT 610	Advanced Database System	4
IT 611	Distributed Systems	3		Elective-II	3
	Elective-I	3		Elective-III	3
	Open Elective -I	3		Open Elective-II	3

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IT 604	Term Project-I	8	IT 605	Term Project-II	16
	Elective-IV	3			
	Elective-V	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 503	Fuzzy Logic and Neural Networks	3	CS 621	Mobile Computing	4
CO 504	Natural Language Processing	3	CS 625	Web Technology	4
CS 505	Software Engineering	4	CS 725	Knowledge Representation and	4

					Reasoning	
CS 507	Computer Networks	4		CS 731	Data Mining in Security	4
CS 508	Database Management Systems	5		IT 503	Multimedia Systems	4
CS 509	Data Communication	4		IT 504	E-Commerce	3
CS 522	Computer Graphics	4		IT 506	Logic Programming	3
CS 523	Enterprise Resource Planning	3		IT 507	Computer Security and Cryptography	3
CS 524	Theory of Computation	3		IT 509	Data Mining and Data Warehousing	4
CS 525	Artificial Intelligence	3		IT 510	Advanced Operating Systems	4
CS 529	Embedded Systems	4		IT 517	Pattern Recognition	4
CS 532	Compiler Design	4		IT 518	Graph Theory	3
CS 538	Computational Geometry	3		IT 523	Discrete Mathematics	3
CS 602	Image Processing	3		CO 501	Network Management and Security	3
CS 606	Computer Architecture and Parallel Processing	3		CS637	Topics on Cognitive Radio and Networks	4
				CS638	Software-Defined Networking and Network Function Virtualization	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 660	Programming in Java	3
CS 651	AI: Search Methods for Problem Solving	3	CS 661	Data Science for Engineers	2
CS 652	Privacy and Security in Online Social Media	2	CS 662	Machine Learning for Engineering and Science Applications	3
CS 653	Introduction to Internet of Things	2	CS 663	Randomized Algorithms	3
CS 654	Programming, Data Structures and Algorithms using Python	2	CS 664	Parallel Algorithms	3
CS655	Scalable Data Science	2	CS 665	AI: Knowledge Representation and Reasoning	3
CS656	Introduction to R Software	2	CS 666	Embedded System Design with ARM	2
CS657	Cloud Computing	2	CS 667	Introduction to Soft Computing	2
CS658	Social Networks	3	CS 668	Blockchain Architecture and Use Cases	3
CS659	An Introduction to Probability in Computing	3	CS 669	Introduction to Industry 4.0 and Industrial Internet of Things	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	IT510	Advanced Operating Systems	4
CS 542	Advanced Algorithms and Data Structures	3	CS 634	Selected Topics in Computer Networks	4
CS 606	Computer Architecture and Parallel Processing	3	CS 544	Advanced Programming Lab II	3
CS543	Advanced Programming Lab I	3	CS 545	Seminar Presentation	2

	Elective I	3/4		Elective II	3/4
	Open Elective I	3		Open Elective II	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			
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 611	Distributed Systems	3
CS 607	Optimization Techniques	3	CS 612	Advanced Computer Graphics	3
CS 659	An Introduction to Probability in Computing	3	CS 613	Image Processing and Computer Vision	3
CS 611	Modern Compiler Design	3	CS 614	Graph Theoretic Algorithms	3
IT 517	Pattern Recognition	4	CS 664	Parallel Algorithms	3

Elective II					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS 615	Robotics	3	CS 538	Computational Geometry	3
CS 637	Topics on Cognitive Radio and Networks	4	IT 509	Data Mining and Data Warehousing	4
CS 525	Artificial Intelligence	3	CS 504	Natural Language Processing	3
CS 616	Machine Learning	3	CS 610	Bioinformatics	3
CS 529	Embedded Systems	4	CS 663	Randomized Algorithms	3
CS 653	Introduction to Internet of Things	3	CS 638	Software Defined Networking and Network Function Virtualization	3
IT 503	Multimedia Systems	4	CS 524	Theory of Computation	3
CS 617	VLSI Design	3	CS 618	Information Theory and Coding	3

Elective III & IV					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CS 621	Mobile Computing	4	C0503	Fuzzy Logic and Neural Networks	3
IT 507	Computer Security and Cryptography	3	CS 619	Privacy and Security in Online Social Network	3
CS 725	Knowledge Representation and Reasoning	4	CS 668	Blockchain Architecture and Use cases	3
CS 602	Image Processing	3	CS 620	Data Science	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 660	Programming in Java	3
CS 651	AI: Search Methods for Problem Solving	3	CS 661	Data Science for Engineers	2
CS 652	Privacy and Security in Online Social Media	2	CS 662	Machine Learning for Engineering and Science Applications	3
CS 653	Introduction to Internet of Things	2	CS 663	Randomized Algorithms	3
CS 654	Programming, Data Structures and Algorithms using Python	2	CS 664	Parallel Algorithms	3
CS655	Scalable Data Science	2	CS 665	AI: Knowledge Representation and Reasoning	3
CS656	Introduction to R Software	2	CS 666	Embedded System Design with ARM	2
CS657	Cloud Computing	2	CS 667	Introduction to Soft Computing	2
CS658	Social Networks	3	CS 668	Blockchain Architecture and Use Cases	3
CS659	An Introduction to Probability in Computing	3	CS 669	Introduction to Industry 4.0 and Industrial Internet of Things	3

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

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

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

Faculty and Areas of Interest

Professors	
Manabendra Bhuyan,* Ph.D. (GU)	<i>Sensor Design, Intelligent Instrumentation, Signal Processing</i>
Partha Pratim Sahu,* Ph.D. (JU)-HoD	<i>Optical Networks and its Components, Clinical Instrumentation, Micro-fabrication</i>
Jiten Chandra Dutta,* Ph.D. (JU)	<i>Biosensors and Bioelectronics, Neurobioengineering,</i>
Satyajib Bhattacharyya,* Ph.D. (DU)	<i>Microwave Antennas, Absorbing Materials</i>

Associate Professors	
Santanu Sharma,* Ph.D. (TU)	<i>Semiconductor Devices, Bioelectronic Devices, Vehicular Electronics, Power Electronics</i>
Soumik Roy,* Ph.D. (TU)	<i>Neuroengineering.</i>
Bhabesh Deka,* Ph.D. (IITG)	<i>Image Processing, Computer Vision, Compressive Sensing MRI, Biomedical Signal Processing</i>
Vijay Kumar Nath,* Ph.D. (IITG)	<i>Image and Video Processing</i>
Nayan Moni Kakoty,* Ph.D. (TU)	<i>Robotics, Biomedical Signal Processing</i>
Assistant Professors	
Riku Chutia, Ph.D. (TU)	<i>E-nose, Instrumentation and Signal Processing, Embedded System</i>
Deepika Hazarika*, Ph.D.(TU)	<i>Image Processing</i>
Ratul Kumar Baruah, Ph.D. (IITG)	<i>Nanoelectronics, VLSI, MEMS</i>
Biplob Mondal, Ph.D. (JU)	<i>VLSI and MEMS Devices</i>
Durlav Sonowal, Ph.D. (TU)	<i>Sensors, Signal Processing</i>
Ananya Bonjyotsna, M. Tech. (TU)	<i>Audio Processing</i>
Priyanka Kakoty, M. Tech. (TU)	<i>Intelligent Instrumentation</i>
Santanu Maity, Ph.D. (NITY)	<i>Semiconductor devices, Nano Technology, RF-MEMS switch and Antenna, Photo-voltaic cell</i>

* Recognized Ph. D. Supervisor

LEGENDS: **GU**-Gauhati University, Guwahati; **JU**-Jadavpur University, Jadavpur; **DU**- University of Delhi, 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

(a) Basic Electrical Engineering Laboratory: It is equipped with DC Motor-Generator sets, 30 Power factor Trainer Kits, Series Motor Panel Kits, Synchronous Panel Motors, Shunt Motors, various trainer kits and measuring instruments. Experiments on Basic Electrical Engineering are conducted in this lab.

(b) Basic Electronics Laboratory: It is equipped with a number of analog trainer kits, digital trainer kits, DSOs, CROs, function generators, etc. Experiments on Switching Circuit and Digital Logic (SCDL), Biomedical Electronics (BE), Analog Electronics Devices & Circuits (AEDC), Integrated Circuits (IC), Electronic Devices and Circuits (EDC), Design of Digital Systems (DDS) are conducted in this lab.

(c) Design and Prototyping Laboratory: It is equipped with following machines: Lathe machine, drilling machine, milling machine, grinding machine, welding machine, bending machine, spot welding, wood planer, miter saw, hand grinder, power hack-saw, etc. Experiments on Physical and Industrial Design of Electronic

Systems (PIDE) are conducted in this lab for M. Tech. students. This lab is also used for many hardware related project works of B. Tech. and M. Tech. programmes.

(d) M.Tech. Project Laboratory: It is equipped with a number of computers equipped with software for computer simulation of different M.Tech. project works.

(e) Software Simulation Laboratory: It is equipped with PCs connected to a LAN server and the internet. There are up-to-date Circuit Simulators like PCB layout, XILINX. Experiments on Data and Computer Networks (DCN), VLSI, Modelling and Simulation (MS), Device Modelling, and Advanced Programming Language (APL) are conducted in this lab.

(f) Communication Laboratory: It is equipped with CRO, DSO, function generator, trainer kit, measuring instruments, spectrum analyser, etc. Experiments on Principles of Communication (PC), Digital Communication (DC), Control System (CS) and Microprocessors are conducted in this lab.

(g) Microwave Laboratory: It is equipped with Power meter, VSWR meter, DMM etc. and consists of setups for different microwave experiments.

(h) DSP Laboratory: It is equipped with (i) Software - MATLAB, CCS for DSP, LabView, etc. (ii) Hardware - DSP and FPGA Boards, PCs. Experiments on digital signal processing applications are conducted in this lab.

(i) Computer Vision and Image Processing Laboratory: It is equipped with PCs, digital camera, embedded FPGA Software and Hardware, MATLAB, Open CV for computer vision and image processing experiments.

(j) Instrumentation Laboratory: It is equipped with temperature transducers – thermocouple, IC sensors, ti-channel temperature indicators, Load cell indicator, humidity sensor, sensor interfacing to PC, industrial type remote transmitter, PC based stepper motor, Servo motor driver, etc. it also includes CRO, Function Generator, various trainer kits and measuring instruments. **(Supported by AICTE under MODROB).**

(k) Bioelectronics Laboratory: It is related with Robotics, vision development with LabView, E-nose, Insectronics, Device Simulator and a number of computers.

(l) Neuro engineering Laboratory: It is equipped with a power lab system which includes instruments having capabilities of measuring and processing of ECG, EMG, EEG. It has a number of computers, sensors, Robotics setups and various motors.

(m) Optical Fibre Laboratory: It is equipped with He-Ne Laser (630nm), fibre optic connectorization kit, optical fibre communication single channel, single phase lock in amplifier, optical bread-board, etc. This lab is under MODROB, AICTE.

(n) Micro fabrication/MEMS Facility: Established in 2014, focuses on research and education in the broad area of Microelectronics and Nano Technology covering topics such as MEMS devices, materials, Bio Sensor, Chemical and Gas Sensor etc. Faculty, Research Scholars, M. Tech. and B. Tech. Students and Students/Research Scholar from other Institutes are engaged in the facility. The Facility has a state-of-the-art Clean Room (Class 1000 and Class 10000) to enable the development of cutting edge technologies for various applications.

o) Major equipment are: RIE (Reactive Ion Etching), PECVD (Plasma Enhanced Chemical Vapour Deposition), Photolithography, Vacuum coating unit (Thermal evaporation and E-Beam Technology), Oxidation Furnace, Laminar Air Flow Unit, Spin coating unit, Prism Coupler Water De-ionizer, thickness measurement instrument, stereo-microscope etc.

(p) 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 2017-2018: 23
- No. of ongoing research projects: 4
- No. of current Ph.D. scholars: 35

Selected Publications

- Dutta, L., Talukdar, C., Hazarika, A. and Bhuyan, M., A Novel Low Cost Hand-Held Tea Flavor Estimation System. IEEE Transactions on Industrial Electronics (2017), 10.1109/TIE.2017.2772184, IEEE.
- Datta, S. and Deka, B. Magnetic Resonance Image Reconstruction using Fast Interpolated Compressed Sensing. Journal of Optics, Springer, (2017).
- Dutta, J.C., and Thakur, H.R., Sensitivity Determination of CNT-Based ISFETs for Different High-Dielectric Materials. IEEE Sensors Letters, 1(2), 1-4, (2017).
- Maity, S., Muchahary, D., Sahu, P.P., Enhancing Responsivity and Detectivity of Si-ZnO Photodetector With Growth of Densely Packed and Aligned Hexagonal Nano rods. IEEE Transactions on Nanotechnology, 16 (6), 939-945, (2017).
- Gogoi, N. and Sahu, P.P., All-optical tunable power splitter based on a surface plasmonic two-mode interference waveguide. Applied Optics, 57 (10), 2715-2719, (2018).
- Das, H.K. and Sahu, P.P., Electro-Physiology of Coupling Model and Its Impact on Naja Kaouthia Venom Treated Sciatic Nerves of Toad IEEE Transactions on Neural Systems and Rehabilitation Engineering, 26(5), 987-992, (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)	3
	ECE Elective-I (any one from the subjects below)	3	EC316	Microwave techniques	
EC307	Mobile communication & Networks		EC317	Speech and Audio processing	
EC308	Electrical machines and power protection		EC318	Digital image and video processing	
EC309	Intelligent instrumentation		EC319	VLSI Design	
EC310	CMOS design			Open Elective-II	3
	Open Elective-I	3	IC361	Accounting & Financial Management	3
LW301	Indian constitution (MC- Non Credit)	0			

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

Seventh Semester			Eighth Semester			
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.	
	ECE Elective –III(any one from the subjects below)	3		ECE Elective-VI(any one from the subjects below)	3	
EC401	Information Theory & Coding		EC418	Power electronics		
EC402	Embedded systems		EC419	Mixed signal design		
EC403	Satellite communication		EC420	High speed electronics		
EC404	Digital systems and VHDL			Open Elective-IV	3	
	ECE Elective-IV(any one from the subjects below)	3	EC421	Project- Stage II	20	
EC405	Computer Vision					
EC406	Biomedical Signal Processing					
EC407	Antenna and propagation					
EC408	Digital control system					
	ECE Elective-V(any one from the subjects below)	3				
EC409	Introduction to MEMS					
EC410	Biomedical electronics					
EC411	Fibre optic communication					
EC412	Nano-electronics					
	ECE Elective-VII(any one from the subjects below)	3				
EC413	Fuzzy Logic and Neural network					
EC414	Bioneuro engineering					
EC415	Digital signal processor					
EC416	Electronics design automation					
	Open Elective -III	3				
EC417	Project- Stage I	12				
	* HSS/Management Elective	3				
CT465	Essence of Indian Traditional Knowledge (MC- Non Credit)	1				

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

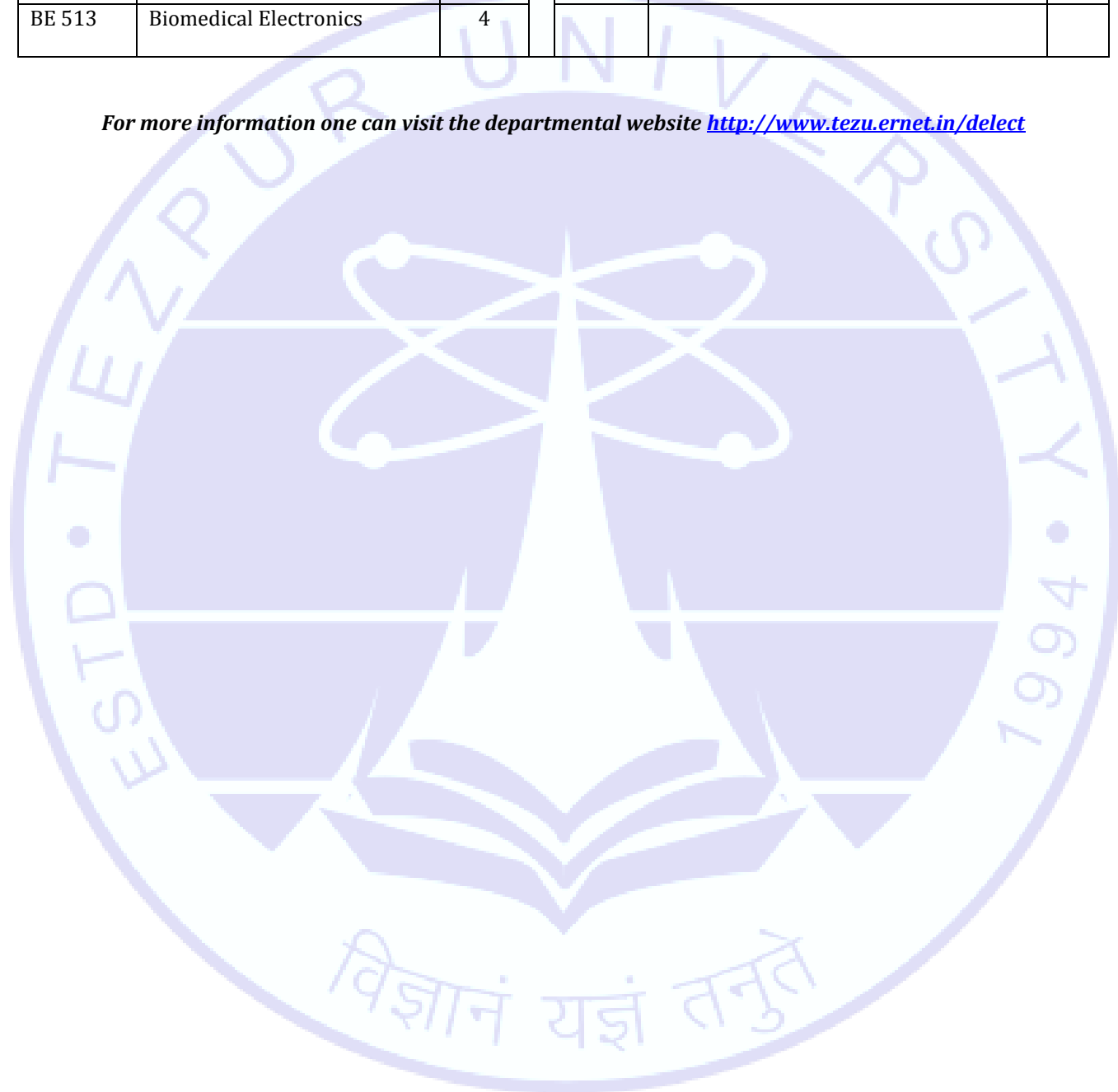
Courses offered in M. Tech. in Bioelectronics

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 (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>



ELECTRICAL ENGINEERING (Year of Establishment: 2016)

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

Faculty and Areas of Interest

Professor		
1.	Jiten Chandra Dutta* Ph.D. (JU)- HoD	<i>Biosensors and Bioelectronics</i>
Assistant Professors		
1.	Rahat Mahboob, PhD (JMI)	<i>Sensors and Sensing Technology; Electronics Instrumentation; Wireless Sensor</i>
2.	Manashita Borah, M.Tech. (NITS)	<i>Control Systems, Non-linear Control, Chaos and Fractional Order Systems</i>
3.	Angshuman Sharma, M.Tech. (AEC)	<i>Multilevel Inverters, Vehicle-to-Grid Interconnection, Bidirectional DC-Dc Converters, Hybrid Electric Vehicles</i>
4.	Barnam Jyoti Saharia, M.Tech.(NITA)	<i>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</i>

* Recognized Supervisor

LEGENDS: **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 x_d and x_q 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 2017-2018: 11
- Number of ongoing research projects: Nil
- Number of current Ph.D. scholars: Nil

Selected Publications

- Dutta, J. and Thakur, H., Sensitivity determination of CNT based ISFETs for different high- κ dielectric materials. IEEE Sensors Letters, 1(2). 2017
- Saharia, B.J. and Manas, M. Viability Analysis of Photovoltaic/Wind Hybrid Distributed Generation in an Isolated Community of Northeastern India, Distributed Generation & Alternative Energy Journal , 32, (1), 2017.
- Siddiqui, A., Mahboob, M. Rand Tarikul, I. A Passive Wireless Tag With Digital Readout Unit for Wide Range Humidity Measurement. IEEE Transactions on Instrumentation and Measurement, vol. 66, no.5, pp. 1013-1020, 2017.
- Borah, M., Roy, P., & Roy, B. K. Enhanced Performance in Trajectory Tracking of a Ball and Plate System using Fractional Order Controller. IETE Journal of Research, 1-11, 2017.
- Borah, M., & Roy, B. K. An enhanced multi-wing fractional-order chaotic system with coexisting attractors and switching hybrid synchronisation with its nonautonomous counterpart. Chaos, Solitons & Fractals. vol. 102, pp 372-386, 2017.

Courses offered in B.Tech. in Electrical 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
ME103	Workshop Practice	2	CO 102	Computing Laboratory	2
Humanities Elective			Science Elective		
EG101/ SO101/ BM 101	Communicative English/ Sociology/Elementary Economics	3	BT 101/ ES 101/ CH 102	Elements of Modern Biology/ Environmental Science/ Introductory Material Science	4

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 Organization	5	CO 221	Data Structures and Object Oriented Programming	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 Professional Ethics in Engineering	3
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			
Elective Courses					
Course Code	Course Title	Cr.	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	Embedded 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			

*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>

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 two-year (four semesters) AICTE approved M. Tech. programme in Energy Technology, One year Post Graduate Diploma in Renewable Energy and Energy Management (under distance education mode through CODL) and Ph. D. in energy related areas. The thrust areas of research are Biomass energy, Solar energy, Energy-Environment interface, Energy Conservation and Management, Energy Efficiency, Climate Responsive Buildings, Hydrogen Energy, Fuel Cell and Rural Hybrid Energy. Apart from teaching and research, the department also organizes training programmes, workshops and seminars in the relevant areas of energy. The Faculty of 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. The Department also has six on-going international collaborative research projects. Research Scholars in the Department received accolades at national and international level, Nehru-Fulbright Fellowship in 2013, CIMO fellowship at Abo Akademi University, Finland in 2013, ISCA young Scientist Award, Indo-French Sandwich Ph.D. Fellowship, Swarna Jayanti Puraskar for the best paper of National Academy of Science, India, 2010.

Programmes offered

1. M.Tech. in Energy Technology
2. Ph.D.
3. Post Graduate Diploma in Renewable Energy and Energy Management (through CODL)

Faculty and Areas of Interest

Professors	
Debendra Chandra Baruah,* Ph.D. (PAU)	<i>Renewable Energy and Energy Management</i>
Dhanapati Deka,* Ph.D. (TU)-DSW	<i>Biofuels, Catalytic transformation of biomass to biofuel and chemical, Bioenergy and Environment</i>
Rupam Kataki,* Ph.D. (TU)- HoD	<i>Biomass and Bioenergy, Biofuels, Energy Environment interaction</i>
Associate Professor	
Sadhan Mahapatra, Ph.D. (IISc)	<i>Biomass Gasification, Climate Responsive Buildings, Decentralized Energy Options, Energy Conservation</i>

Assistant Professors	
Pradyumna Kumar Choudhury, Ph.D. (TU)	<i>Energy Conservation and Management, Integration of Renewable Energy Systems</i>
Biraj Kumar Kakati,* Ph.D. (IITG)	<i>Fuel Cell, Hydrogen Technology and Redox Flow Battery, Graphene, Nanocatalyst.</i>
Nabin Sarmah,* Ph.D. (HWU)	<i>Solar Energy, Photovoltaic, Energy Systems</i>
Bibha Boro, M.Tech. (TU)	<i>Electrical Engineering</i>
Vikas Verma, Ph.D. (IITR)	<i>Thermal Engineering, Solar Thermal Energy, Heat Transfer</i>

*Recognized Supervisor

LEGENDS: **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 equipments such as Gas Chromatograph, Computerized power meter, Bomb Calorimeter, Biomass gasifier system, Solar radiation measuring equipments, Wind speed direction measuring equipments, Wind electric generator, Briquetting Press, Single cylinder 4-stroke petrol engine Test Rig with electrical Dynamometer, Fibertech apparatus, Toxic Gas analyzer, Carbon-Hydrogen analyzer, UV-visible spectrophotometer, TOC Analyser, Petrol and Diesel Engine Test set-up, Hydrocarbon type Analyser, Pyrolyser, Adiabatic Bomb Calorimeter, TBP Apparatus, Dual Fuel Engine, Vacuum Distillation Apparatus, Microhydel test set-up, Research Radiometer, Solar thermal collector test set-up, Solar Dryer, Peristaltic Pump, Ultrasonicator, Programmable Muffle Furnace, Biodiesel Plant and various renewable energy systems.

Departmental Library

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

Scholarship

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

Research Activities

- No. of papers published in the year 2017 - 2018: 20
- No. of ongoing research projects: 09
- No of current Ph.D scholars: 23

Selected Publications

- Baruah, D., Baruah, D.C., Hazarika, M.K. Artificial neural network based modeling of biomass gasification in fixed bed downdraft gasifiers, *Biomass and Bioenergy*, 98, 2017.
- Gohain, M., Devi, A., and Deka, D. Musa balbisiana Colla peel as highly effective renewable heterogeneous base catalyst for biodiesel production, *Industrial Crops and Products*, 109, 2017.
- Narzari, R., Bordoloi, Neon J., Sarma, B., Gogoi, L., Gogoi, N., Borkotoki, B. and Kataki, R. Fabrication of bio-carbons obtained from valorization of biowaste and evaluation of its physicochemical properties, *Bioresource Technology*, 242, 2017.
- Snehesh, S., Mukunda, H S., Mahapatra and S., Dasappa, S. Fischer-Tropsch route for the conversion of biomass to liquid fuels - Technical and economic analysis, *Energy*, 130, 2017.
- Sivasakthivel, T., Philippe, M., Murugesan, K., Verma, V. and Hu, P. Experimental thermal performance analysis of ground heat exchangers for space heating and cooling applications, *Renewable Energy*, 113, 2017.

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	Cr.
EN 539	Project (Part-I)	8	EN 540	Project (Part-II)	16

Elective -I (Any one from the following Courses)			Elective -II & III (Any two from the following Courses)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EN 515	Advanced Bio-Energy	3	EN 525	Thermal Power Plant Engineering	3
EN 516	Advanced Solar Thermal Energy	3	EN 526	Energy Efficient Buildings	3

EN 517	Advanced Solar Photovoltaic Energy	3	EN 527	Renewable Energy Grid Integration	3
EN 518	Hydrogen Energy and Fuel Cell	3	EN 528	Decentralized Energy Systems	3
EN 519	Alternative Fuels for IC Engines	3	EN 529	Energy, Climate Change and Carbon Trade	3
EN 520	Petroleum Exploration, Production and Refining	3	EN 530	Instrumentation and Control for Energy Systems	3
EN 521	Nuclear Energy	3	EN 531	Numerical Heat Transfer and Fluid Flow	3
			EN 532	Energy Conservation and Waste Heat Recovery	3
			EN 533	Energy Storage Systems	3
			EN 534	Energy Modeling and Optimization	3
			EN 535	Energy Environment Interaction	3
			EN 536	Materials and Devices for Energy Applications	3
			EN 537	Power Generation and System Planning	3
			EN 538	Hybrid Renewable Energy Systems Design	3

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

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

1. B. Tech. in Food Engineering and Technology
2. M. Tech. in Food Engineering and Technology
3. Ph. D.

Faculty and Areas of Interest

Professors	
Charu Lata Mahanta,* Ph.D. (CFTRI)	<i>Rice Science and Technology, Product Development and Food Quality</i>
Sankar Chandra Deka,* Ph.D. (HAU)	<i>Food Biochemistry and Food Quality, Fermented Foods</i>
Associate Professors	
Manuj Kumar Hazarika,* Ph.D. (IITKgp)	<i>Food Materials Engineering, Food Industrial Engineering, Food Design.</i>
Brijesh Srivastava,* Ph.D. (IITKgp)- HoD	<i>Process and Food Engineering, Fruits and Vegetable Processing and Machineries, Non-Thermal Processing, Unit Operations in Food Engineering</i>
Nandan Sit,*Ph.D. (TU)	<i>Food Engineering, Biochemical Engineering, Oils and Fats, Food and Biotechnology</i>
Poonam Mishra,*Ph.D. (TU)	<i>Nano Composite, Fruits and Vegetable Technology, Function Food, Biosensors.</i>
Laxmikant S. Badwaik,* Ph.D. (TU)	<i>Food Packaging, Food Safety and Laws, Osmotic Dehydration</i>
Assistant Professors	
Dibyakanta Seth, Ph.D. (TU)	<i>Dairy and Food Engineering, Dairy Technology, Unit Operations in Food Engineering, Emerging Trends in Food Process Engineering</i>
Raj Kumar Duary,* Ph.D. (NDRI)	<i>Isolation and Establishment of Probiotic Organism, Probiotic Food Formulation and Development, Fermentation, Human Cell Culturing</i>
Kshirod Kumar Dash,* Ph.D. (IITKgp)	<i>Food Process Modeling, Transfer process in Engineering, Optimization in Food Engineering</i>
Amit Baran Das, M.S. (IITKgp)	<i>Food Process Modeling, Optimization in Food Engineering, Product Technology Development</i>
Nishant Rachayya Swami Hulle, Ph.D. (IITKgp)	<i>Food Process Technology, Non Thermal Processing, Product Development</i>
Sourav Chakraborty, M.Tech. (TU)	<i>Food Engineering, Food Process Simulation and Modeling</i>

* Recognized Supervisor

LEGENDS: 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 2017-18: 45
- Number of ongoing research projects: 10
- Number of current Ph.D. scholars: 30

Selected Publications

- Saxena, J., Ahmad Makroo, H., & Srivastava, B. (2017) Effect of ohmic heating on Polyphenol Oxidase (PPO) inactivation and color change in sugarcane juice. *Journal of Food Process Engineering*, 40(3).
- Bora, S. J., Handique, J., & Sit, N. (2017) Effect of ultrasound and enzymatic pre-treatment on yield and properties of banana juice. *Ultrasonics Sonochemistry*, 37, 445-451.
- Borah, P. P., Das, P., & Badwaik, L. S. (2017) Ultrasound treated potato peel and sweet lime pomace based biopolymer film development. *Ultrasonics sonochemistry*, 36, 11-19.
- Borah, P.K., Deka, S. C. and Duary, R. K. (2017) Effect of repeated cycled crystallization on digestibility and molecular structure of glutinous bora rice starch. *Food Chemistry*, 223, 31-39.
- Dutta, H., Mahanta, C. L., Singh, V., Das, B. B., & Rahman, N. (2016). Physical, physicochemical and nutritional characteristics of Bhoja chaul, a traditional ready-to-eat dry heat parboiled rice product processed by an improvised soaking technique. *Food chemistry*, 191, 152-162.
- Chakraborty, S, Sarma, M, Bora, J, Faisal, S and Hazarika, M K, (2016) Comparative study between ANN and master curve technique for the thin layer drying kinetic study of paddy and modeling of its critical drying temperature. *Agricultural Engineering International: CIGR Journal* 18 (4), 177-189.

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

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS 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			Science Elective		
EG101/ SO101/ BM 101	Communicative English/ Sociology/Elementary Economics	3	BT 101/ ES 101/ CH 102	Elements of Modern Biology/ Environmental Science/ Introductory Material Science	4

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS 201	Mathematics- III	3	FT 205	Food Biochemistry and Nutrition	4
FT 201	Food Chemistry	4	FT 206	Principles of Food Processing and Preservation	3
FT 202	Basic and Food Microbiology	3	FT 207	Transfer Processes in Food Engineering	4
FT 203	Fluid Mechanics	5	FT208	Mechanical Operations in Food Processing	4
FT 204	Computations in Food Processing	4	FT209	Fruits and Vegetables Process Technology	3
ME 205	Thermodynamics	4	EL 321	Instrumentation and Process Control	4
Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
FT 301	Instrumental Methods of Food Analysis	2	FT 307	Food Quality and Safety	3
FT 302	Thermal Operations in Food Processing	4	FT 308	Food Plant Utilities	3
FT 303	Mass Transfer Operations in Food Processing	4	FT 309	Dairy Products Technology	3
FT 304	Cereals, Pulses and Oilseeds Processing Technology	4	FT 310	Food Process Equipment Design	3
FT 305	Biochemical Engineering	3	BM 322	Social Responsibility and Professional Ethics in Engineering	3
FT 306	Recent Advances in Food Research	1	-	FT Elective- I	3
BM 321	Fundamentals of Management	3	-	Open Elective- I*	3
Seventh Semester ^s			Eight Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
FT 401	Food Packaging, Transportation and Storage	3	FT 482	Project- II	12
FT 402	Plant Design and Process Economics	3	-	FT Elective- IV	3
FT 471	Industrial Summer Training#	2	-	Open Elective- III*	3
FT 481	Project- I	6			
-	FT Elective- II	3			
-	FT Elective- III	3			
-	Open Elective- II*	3			
Elective Courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
FT 421	Bakery and Confectionary Technology	3	FT 431	Food Process Design and Analysis	3
FT 422	Plantation Products and Spices Technology	3	FT 432	Food Process Automation	3

FT 423	Oils and Fats Technology	3	FT 433	Numerical Methods in Food Processing	3
FT 424	Processing Technology of Meat, Poultry and Fish	3	FT 434	Energy Conservation in Food Processing	3
FT 425	Fermented and Non Fermented Beverages	3	FT 435	Food Plant Hygiene and Sanitation	3
FT 426	Food Product Development	3	FT 436	Food Industry Waste Management	3
FT 427	Flavors Technology	3	FT 437	Industrial Safety and Hazards	3
FT 428	Specialty Foods: Nutraceuticals and Functional Foods	3	FT 438	Optimization Techniques	3
FT 429	Traditional Indian Foods	3	FT 439	Advanced Food Processing Methods	3
FT 430	Industrial Microbiology and Enzyme Technology	3	FT 440	Engineering Properties of Biological Materials	3

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 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 Properties of Biological Materials	3	FT 518	Recent Trends in Food Product development and Packaging	3
-	Elective- I	3	FT 519	Food Process Modeling and Simulation	3
-	Elective- II	3	FT 571	Seminar	1
-	Elective -III	3	-	Elective- IV	3
-	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
Elective Courses					
Group-I			Group-II		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
FT 541	Recent Trends in Plant Products Technology	3	FT 546	Powder Technology	3
FT 542	Recent Trends in Animal Products Technology	3	FT 547	Recent trends in Biochemical engineering	3
FT 543	Recent Trend in Baking and	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			

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

MECHANICAL ENGINEERING (Year of Establishment: 2006)

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

Programmes offered

1. B. Tech in Mechanical Engineering
2. M. Tech in Mechanical Engineering (Three Specializations)
 - 2a. M. Tech in Thermal and Fluid Engineering
 - 2b. M. Tech in Applied Mechanics
 - 2c. M. Tech in Machine Design
3. Ph.D. in Mechanical Engineering

Faculty and Areas of Interest

Professors	
Dilip Datta,* Ph.D.(IITK)	<i>Design, Optimization and Operational Research</i>
Tapan Kumar Gogoi,* Ph.D. (TU)	<i>Thermal, Energy and Environment Engineering</i>
Associate Professor	
Partha Pratim Dutta*, Ph.D. (TU)-HoD	<i>Energy and Thermal Engineering, Drying Technology</i>
Assistant Professors	
Paragmoni Kalita, Ph.D. (IITG)	<i>Computational Fluid Dynamics , High speed flows</i>
Polash Pratim Dutta, M.E. (BIT)	<i>CAD, Laser Forming, Mechatronics, Soft Computing</i>
Sushen Kirtania, Ph.D. (IITG)	<i>Composite Materials, Carbon Nanotubes, Carbon Nanotubes Based Composites, Finite Element Method, Fracture Mechanics</i>
Prabin Haloi, M.E. (GU)	<i>Fluid and Thermal Engineering</i>
Sanjib Banerjee,* Ph.D. (IITG)	<i>Materials and Manufacturing</i>
Monoj Bardalai, Ph.D. (GU)	<i>Thermal Engineering, Renewal Energy Conversion</i>
Satadru Kashyap, M.Sc. (Engg.) (UA)	<i>Manufacturing and Materials Science</i>

Zahnupriya Kalita, M.E. (AIT)	<i>Mechatronics</i>
Rakesh Bhadra, M.E. (BESUS)	<i>Manufacturing, Production Engineering</i>
Barnali Chowdhury, M.E. (AEC)	<i>Mechanical Engineering</i>
Seikh Mustafa Kamal, Ph.D. (IITG)	<i>Machine Design</i>
Vivek Kumar Mehta, Ph.D. (IITK)	<i>Robotics, Optimization: Classical and Evolutionary Algorithms, Multi-objective Optimization, Multi-modal Optimization</i>
Shikha Bhuyan, M. Tech. (NITS)	<i>Thermal Engineering</i>
Kalpajyoti Borah M. Tech (IITKgp)	<i>Aerospace Engineering, Navel Architecture (Guest Faculty)</i>

*Recognized Supervisor

LEGENDS: **IITK**-Indian Institute of Technology Kanpur, **TU**-Tezpur University, **BIT**- Birla Institute of Technology, Jharkhand, **IITG**-Indian Institute of Technology Guwahati, **GU**-Gauhati University, **UA**-University of Alberta, Canada, **AIT**- Asian Institute of Technology, Bangkok, **BESUS**-Bengal Engineering and Science University, West Bengal, **AEC**- Assam Engineering College, Guwahati, **NITS** - National Institute of Technology, Silchar, **IITKgp**- Indian Institute of Technology Kharagpur, **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 machine 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, Stefan 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 petrol car (Model ESTEEM), Variable compression ratio spark ignition engine, 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 installed 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 micrometer, universal bevel pro-tractor, vernier caliper, sine vice, slip gauge, surface plate, surface roughness tester, digital micrometers 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 2016-2017: 42
- Number of ongoing research projects: 01
- Number of current Ph.D. scholars: 10

Selected Publications

- Gogoi, T. K., Estimation of operating parameters of a water-LiBr vapour absorption refrigeration system through inverse analysis, *ASMEJ of Energy Resources Technology*, 138(2), 022002, 2017.

- Kalita, P., Dass, A. K., A diffusion-regulated scheme for the compressible Navier-Stokes equations using a boundary-layer sensor, *Computers & Fluids*, 2016, Vol. 29, pp. 91-100, DOI 10.1016/j.compfluid.2016.02.001.
- Dutta, P.P., Kumar, A. Development and Performance Study of Solar Air Heater for Solar Drying Applications, In: *Solar Drying Technology, Concept, Design, Modelling, Economics and Environment* (Springer), 579-501, 2017.
- Deka, A., Datta, D. Geometric size optimization of annular step fin using multi-objective genetic algorithm. *Journal of Thermal Science and Engineering Applications* (ASME), 9(2), 2017.
- Talukdar, K., Gogoi, T. K., Energy analysis of a combined vapour power cycle and boiler fuel gas driven double effect water-LiBr absorption refrigeration system, *Energy Conversion & Management*, 110, 468—477, 2017.

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			Science Elective		
EG101/ SO101/ BM 101	Communicative English/Sociology/Elementary Economics	3	BT 101/ ES 101/ CH 102	Elements of Modern Biology/ Environmental Science/Introductory Material Science	4
Third Semester			Fourth Semester		
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 of Mechanisms and 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 Structures and Object 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

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			
-	Open Elective- II*	3			

Elective Courses					
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			

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

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

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

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

Courses Offered in M.Tech. in Mechanical Engineering

First Semester			Second Semester		
Specialization: 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
			-	Elective V	3/4

Specialization: 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

Specialization: Machine Design			Specialization: Machine Design		
Course Code	Course Title	Cr .	Course Code	Course Title	Cr .
ME 501	Advanced Solid Mechanics	4	ME 502	Finite Element Methods	4
ME 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					
Specialization: Applied Mechanics			Specialization: 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
Specialization: Machine Design					
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			

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

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 and 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.

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

Professors	
Mrinmoy Kumar Sarma,* Ph.D. (TU)	<i>Services Marketing, Tourism Marketing</i>
Chandana Goswami,* Ph.D. (GU)- Dean, SoMS	<i>Financial Management, General Management</i>
Subhrangshu Sekhar Sarkar,* Ph.D. (TU)	<i>Accounting, Taxation, Social Development Issues</i>
Debabrata Das,* Ph.D. (RGU), Director, CODL	<i>Financial Management, Financial Markets and Development Finance</i>
Chandan Goswami,* Ph.D. (TU)	<i>Marketing and Promotional Strategies, Consumer Behaviour, Tourism</i>
Papori Baruah,* Ph.D. (TU)-HoD	<i>Human Resource Management, Organization Behaviour, Change Management, Rural Development, NGOs</i>

Associate Professors	
Tridib Ranjan Sarma,* Ph.D. (TU)	<i>Operations Management, Project Management, Tourism</i>
Anjan Bhuyan,* Ph.D. (TU)	<i>Economics, Rural Economics, Tourism Management, Entrepreneurship</i>
Arup Roy,* Ph. D. (TU)	<i>Microfinance, Stock Market, Development Finance, Social Entrepreneurship</i>
Assistant Professors	
Heera Barpujary, Ph.D. (TU)	<i>Knowledge Management, Web Technology</i>
Kakali Mahanta, Ph.D. (DU)	<i>Human Resource Management, Organization Behaviour</i>
Runumi Das, Ph.D. (GU)	<i>Marketing, Rural Marketing, Human Resource Management</i>
Mridul Dutta, Ph.D. (GU)	<i>Community Based Tourism, Intellectual Property Rights</i>
Prayash Baruah, MBA (SIU)	<i>Supply Chain Management, Logistics, Transportation</i>

* Recognized Supervisor

LEGENDS: **IIMA**– Indian Institute of Management Ahmadabad, **TU**–Tezpur University, **GU**–Gauhati University, **SoMS**–School of Management Sciences, **RGU**–Rajiv Gandhi University Itanagar, **CODL**–Centre for Open and Distance Learning, **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 2017-2018: 08
- No. of ongoing research projects: Nil
- No. of current Ph.D. scholars: 19

Selected Publications

- Begum, R. & Goswami, C. (2017). Problems and Prospects of Informal Enterprises : A Study of Street Vendors and Home Based Enterprises in Assam (India), *International Journal of Entrepreneurship and Development Studies (IJEDS)*, 5(1), 33-52.
- Gurung, D.J. & Goswami, C. (2017). User Generated Content on Sikkim as an Image Formation Agent : A Content Analysis of Travel Blog, *International Journal of Hospitality & Tourism Systems*, 10(2), 47-57, (ISSN: 0947-6250)
- Yasung, M. & Baruah, P. (2017). Professionalism and Employee Outcome: A Comparative Analysis of

Three Districts in Arunachal Pradesh, *IBMRD's Journal of Management and Research*, 6 (1), Print (ISSN: 2277-7830), Online (ISSN: 2348-5922).

- Sarkar, S. S. (2017). Base Erosion and Profit Shifting : A Challenge to Governments, *Management Accountant*, 52(6).
- Roy, A. (2017). *Impact Assessment of Microfinance Programme of MFI's on their Clients : A Study in Sonitpur District of Assam in India*, Germany: Lambert Academic Publishing. [ISBN: 978-3-300-03940-7].
- Das, D. & Das, R. (2017). Barriers in Financial Inclusion : Ground Level Observations From Assam, In S. S. Sangwan and G. Deep (Eds), *Efficiency of Financial Inclusion Policies and Way Ahead*, (pp. 23-44), Chandigarh : CRRID, [ISBN : 978-81-85835-85-3].

Courses offered in Master of Business Administration

First Semester			Second Semester		
Course Code	Course Title	Cr.	Couse Code	Course Title	Cr.
BA 501	Foundations of Management	3	BA 510	Research Methods in Business	3
BA 502	Financial Management	3	BA 511	Managerial Economics and Legal Environment	3
BA 503	Marketing Management	3	-	Specialization A -I	3
BA 504	Human Resource Management	3	-	Specialization A- II	3
BA 505	Operations Management	3	-	Specialization B-I	3
BA 506	Quantitative Techniques	2	-	Specialization B-II	3
BA 507	Organizational Behaviour	2	-	CBCT	3
-	CBCT	3	-	Elective-II	3
-	Elective-I	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)			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.)

AREA -I: MARKETING (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 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 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 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 Development	3

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)		
Course Code	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/ TM 662/ TM 663/ TM 644	Department Centric Elective -IV	3
TM 605	Summer Internship	3	-	Department Centric Elective-V	3
TM 611/ TM 612	Department Centric Elective - III	3	-	Open Elective	3
-	Open Elective- Foreign Language Base	3			

Department Centric Elective -I			Department Centric Elective -II		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
TM 511	Soft Skill Development	3	TM 561	Tour Guiding and Local Handling	3
TM 512	Leisure Delivery System	3	TM 562	Basic Cargo Rating and Handling	3

Department Centric Elective -III			Department Centric Elective -IV and V		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
TM 611	Tourism in North East India	3	TM 661	Managerial and Financial Decisions for Small Business	3
TM 612	Promotional Strategies in Tourism	3	TM 662	MICE Management	3
			TM 663	Tourist Behaviour	3
			TM 664	Basic Airfare	3

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

COMMERCE
(Year of Establishment: 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.

Programmes Offered

1. Integrated dual B.Com. & M.Com.
2. Master of Commerce.

Faculty and Areas of Interest

Professors	
Subhrangshu Sekhar Sarkar, Ph.D. (TU)- HoD (i/c)	<i>Accounting, Taxation, Social Development Issues</i>
Assistant Professors	
Reshma Tiwari, Ph.D (GU)	<i>Accounting, Financial Inclusion and Microfinance</i>
Farah Hussain, Ph. D. (DU)	<i>Econometrics, Mathematical Economics</i>
Manish Kumar, M. Com (DU^)	<i>Corporate Finance, Accounting</i>
Dhritabrata Jyoti Bharadwaz, M.Phil. (DU)	<i>Accounting and Finance, Micro Finance and Risk Management</i>
Ankurima Goswami, M. Com (GU)	<i>Accounting and Finance</i>
Guest/Visiting Faculty	
CS Amitava Banerjee, NFCG, New Delhi	<i>Corporate Governance</i>
Prof. Gautam Dutta, IIFT, Kolkata	<i>International Business</i>
Anjan Choudhury	<i>Inter-personal Skills</i>
Navneeta Bhuyan, MA(DU^)	<i>English Communicative Skills & Functional Communicative Skills</i>
Priyanka Kakoti, MA (TU)	<i>English Communicative Skills & Functional Communicative Skills</i>
CA Surendra Dugar (ICAI)	<i>Taxation</i>
CA Rachita Saraf(ICAI)	<i>Corporate Tax</i>
CA Rajkumar Nahata (ICAI)	<i>Indirect Taxes</i>

From the Department of Business Administration	
Prof. Mrinmoy Kumar Sarma, Ph.D. (TU)	<i>Services Marketing, Tourism Marketing</i>
Prof. Debabrata Das, Ph.D. (RGU)	<i>Financial Management, Financial Markets and Development Finance</i>

Prof. Papori Baruah, Ph.D. (TU)	<i>Human Resource Management, Organization, Behaviour, Change Management, Rural Development , NGOs.</i>
Dr. Tridib Ranjan Sarma, Ph.D (TU)	<i>Operations Management , Project Management, Tourism</i>
Dr. Anjan Bhuyan Ph.D. (TU)	<i>Economics, Rural Economics, Tourism Management and Entrepreneurship</i>
Dr. Arup Roy, Ph. D. (TU)	<i>Microfinance, Stock Market, Development Finance, Social Entrepreneurship.</i>
Dr. Heera Barpujary, Ph.D. (TU)	<i>Knowledge Management, Web Technology</i>
Dr. Mridul Dutta, Ph.D. (GU)	<i>Community Based Tourism, Intellectual Property Rights</i>
Mr. Prayash Baruah, B.Tech (TU) MBA (Symbiosis)	<i>Supply Chain Management, Logistics, Transportation</i>

LEGENDS: TU: Tezpur University, GU: Gauhati University, DU: Dibrugarh University, DU[^]: Delhi University, RGU: Rajiv Gandhi University, ICSI: The Institute of Company Secretaries of India ICAI: The Institute of Chartered Accountants of India.

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 2017-2018: 07
- No. of ongoing research projects: NIL

Selected Publications

- Tiwari R.K. & Debnath J. (2017). Forensic Accounting: A Blend of Knowledge, *Journal of Financial Regulation and Compliance*, (Emerald), 25 (1), 73-85
- Tiwari R. K. & Debnath J. (2018). Financial Inclusion: A Study of Street Vendors in Nagaland, Gauhati University Journal of Commerce, Vol. XIX, 37-57
- Hussain, F. and Saikia, B. Rural Non- Farm Employment in North Eastern Region: The Changing Structure, *Quest International Multidisciplinary Research Journal*, Vol-7(2), February 2018, ISSN: 2278-4497
- Kumar, M. and Vij, M. Earnings management and financial crisis: Evidence from India, *Journal of International Business and Economy*, 18(2), 2017
- Bharadwaz D.J & Sharma A. (2017), "Basel III in Indian Banks: A Review of Literature", *IRACST-International Journal of Commerce, Business & Management (IJCBM)*, Vol 6, No. 3 (June), pp 48-56, ISSN: 2319-2828
- Bharadwaz D.J (2017), "Corporate Social Responsibility Practices of Banks in India: A Study of Two Private Sector Banks", *International Journal of Research in Commerce, Economics and Management*, Vol No. 7, Issue No. 10 (October), pp 64-68, ISSN: 2231-4245
- Bharadwaz D.J (2017), "Micro Financing Model of Bandhan Financial Services: Functions and Operations", *International Journal of Engineering Development and Research*, UGC Approved Peer Reviewed Journal, Volume 5, Issue 4, (November), pp 400-402, ISSN: 2321-9939

Courses offered in Integrated dual B.Com & M.Com and M.Com

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IC 101	English Comprehension Skill	3	IC 122	Principles and Practice of Management	4
IC 106	Business Regulatory Framework-I	3	IC 123	Financial Accounting – II	4
IC 107	Business Organization and Environment	4	IC 124	Business Mathematics- I	4
IC 108	Micro Economics	4	IC 125	Macro Economics	3
IC 109	Financial Accounting – I	4	ES 103	Environmental Studies	4

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IC 201	Business Regulatory Framework-II	3	IC 222	Indirect Taxes	4
IC 205	Functional Communicative Skill	3	IC 223	Fundamentals of Insurance	4
IC 207	Inter-Personal Skills	4	IC 224	Banking Laws and Practice	4
IC 208	Basic Statistics	4	IC 225	Corporate Accounting -II	4
IC 209	Cost Accounting	4	IC 226	Business Mathematics- II	3
IC 210	Corporate Accounting- I	4		Open Elective	3
Fifth Semester			Sixth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IC 301	Company Law	2	IC 321 or IC 341	Computer and Its Application in Accounting and Taxation@ Computer and Its Application in Banking and Finance@	4
IC 303	Corporate Accounting-III	4	IC 327 or IC 342	Auditing and Assurance Indian Financial Market and Financial System	3
IC 304	Income Tax – Law and Practice	4	IC 323 or IC 343	Management Accounting Financial Services	4
IC 307	Entrepreneurship	4	IC 324 or IC 344	Public Finance Banking Regulatory Framework	4
IC 308	Business Finance	4	IC 325 or IC 347	Tax Planning and Procedures Capital Market Operations	4
	Open Elective	3	IC 326 or IC 346	Dissertation (Accounting, Taxation Area) Dissertation (Banking, Finance Area)	3

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

Ninth Semester (Integrated dual B.Com & M.Com) /Third Semester (M.Com)			Tenth Semester (Integrated dual B.Com & M.Com) /Fourth Semester (M.Com)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
IC 601	Strategic Management	3	IC 625	Strategic Financial Management	4
IC 602	Management Information System	4	GROUP 'A': Accounting And Taxation		
IC 605	Project Work	4	IC 621	Advanced Auditing	3
	Open Elective	3	IC 622	Strategic Cost & Management Accounting	3
GROUP 'A': Accounting And Taxation			IC 623 or IC 630	Innovations in Accounting or Project Planning and Control	3
IC 603	Corporate Financial Reporting	4	IC 624	Corporate Tax Management	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 628	Marketing of Financial Services	3
			IC 629 or IC 630	Credit and Risk Management or Project Planning and Control	3

@ Students opting for "Accounting/Taxation" are provided trainings on TALLY whereas those opting for "Banking/Finance" are trained on FINACLE.

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

CULTURAL STUDIES

(Year of Establishment: 1996)

Established in 1996, the Department of Cultural Studies of Tezpur University took the lead in the establishment of the UGC's prestigious 'Centre with Potential for Excellence in Particular Area' at Tezpur University in 2016. The department engages in an analysis of society, culture and expressive forms from a wide range of disciplinary engagements. We use methods evolved in Cultural Studies to promote an understanding of various issues like memory, ethnicity, migration, nationalism, gender, media, museology, art history, environment and emerging lifestyle patterns. The department mediates global concerns and theoretical approaches of the discipline with issues that are of local importance to promote an understanding of the rich cultural heritage and the folk and oral inheritances of the region. The department is currently supported by UGC-SAP (DRS-II).

Programmes offered

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

Faculty and Areas of Interest

Professor	
Debarshi Prasad Nath,* Ph.D. (RGU) (HoD)	<i>Cultural Theory and Contemporary Culture, Comparative Literature and Translation, Cultural Memory</i>
Associate Professor	
Madhurima Goswami,#Ph.D. (TU)- On Lien	<i>Sanskrit Poetics, Indian Classical Performing Arts</i>
Assistant Professors	
Parasmoni Dutta,* Ph.D. (TU)	<i>Heritage Studies, Folklore Studies, New Museology</i>
Juri Gogoi Konwar,* Ph.D. (DU)	<i>Medical Anthropology, Anthropology of Food and Costume</i>
Jayanta Vishnu Das*, Ph.D. (TU)	<i>Cultural Communication, Development Communication, Epistemology of Communication Studies</i>
Mandakini Baruah*, Ph.D. (TU)	<i>Gender Studies, Folklore Studies, Paremiology</i>
Hashik, N.K*, Ph.D. (UoH)	<i>Performance Studies, Community Studies, Research Methodology</i>
Moushumi Kandali*, Ph.D. (UB)	<i>Contemporary Visual Culture, Literary Cultures of India, Gender Studies, Translation and Creative Writing</i>

*Recognized Supervisor

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

Facilities

The Department has a well-equipped seminar-cum-conference hall, classrooms with projection facilities and audio-visual teaching aids, and an archival center-cum-edit suite. The student support infrastructure also includes the Pratibha Kath Hazarika Memorial Library and a Cultural Interpretation Centre.

ResearchActivities

- No. of papers published in the year 2018-19: 17
- No. of ongoing research projects: 04
- No. of current Ph.D. scholars: 18

Selected Publications

- Dowerah S and Nath D. P. "Exploring Selfhood through Performance in The Danish Girl". Journal of Creative Communications. (A Sage Journal). Published online: 31 Aug 2018.
- 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 SasankPerreira (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 Chitralkha". 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 BishnuprasadRabha". 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 JyotiprasadAgarwala". International Journal of Research in Social Sciences. Volume 8, Issue: 8. August 2018.

Courses offered in M.A in Cultural Studies

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 427	Cultural Policy	3
CT 423	Exploring North East India	4	CT 428	Folklore & Culture II	3

CT 424	Society and Culture	3	CT 429	Reading Culture: Perspectives from the West	3
CT 528	Performance & Culture	3	-	Open elective	3

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CT 520	Digital Culture	4	CT 146	Dissertation	6
CT 521	Methods & Methodology	3	-	Elective –I (Any two)	6
CT 522	Mapping the Contemporary : Reading through Visual Cultural Expressions	4	-	Elective –II (Any three)	9
CT 523	Gender and Culture	4			
CT 524	Fundamentals of Photography and Documentary Production (skill based)	4			
	Open elective	3			

Elective Courses I (Any two from the following courses)			Elective Courses II (Any two from the following courses)		
First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CT 526	Cultural Industries (Skill based)	3	CT 532	Culture for Social Change(Skill based)	3
CT 527	Reading Indian through the Cinematic lens	3	CT 533	Contemporary Cultural Phenomena : Spectacles and Infotainment	3
CT 529	Cultural Memory	3	CT 534	Reading Culture : Perspective from Assam	3
CT 530	Culture, Science and Society	3	CT 535	Intercultural Communication (skill based)	3
CT 531	Cultural Documentation (Skill based)	3	CT 536	Tapping the Transitions: Folk and Tribal Art in Contemporary time	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

Associate Professor	
Nil Ratan Roy,* Ph.D. (AU)-HoD	<i>Measurement and Evaluation in Education, Research Methodology, Educational Planning and Management, Curriculum Development.</i>
Assistant Professors	
Yeasmin Sultana,* Ph.D. (AU)	<i>Language Education and Research Methodology</i>
R.D. Padmavathy, Ph.D. (PU)	<i>Mathematics Education, Educational Psychology, Educational Technology, e-content Development, Research Methodology and Statistics in Education, Guidance and Counselling, Environmental Education</i>
Hitesh Sharma,* Ph.D. (DAV)	<i>Method of Teaching Physical Science and Biological Science, Educational Psychology, ICT in Education, Educational Administration, Guidance and Counselling, Early Childhood Education</i>
Sashapra Chakrawarty, Ph.D. (BHU)	<i>Biological Science, Educational Psychology, Teacher Education, Elementary Education, Special Education, Guidance and Counselling</i>
Pratima Pallai,* Ph.D. (LU)	<i>Social Science Teaching, ICT in Education, Guidance and Counselling, Measurement and Evaluation, Educational Psychology</i>
Mohammad Asif, M. Ed. (JMI)	<i>Contemporary Indian Education, Teacher Education, Educational Technology, Pedagogy of Social Science, History of Education</i>
Sradhanjali Pradhan, M.Ed. (UU)	<i>Pedagogy of Physical Science, Educational Technology and ICT in Education, Measurement and Evaluation</i>
Rajinder Singh*, Ph.D. (PU^)	<i>Educational Technology, Educational Research, Special Education, ICT in Education, Language Education, Environment Education, Educational Guidance and Counselling</i>

***Recognized Supervisor \$ Recognized Associate Supervisor**

LEGENDS: **AU**-Assam University , **PU**-Pondicherry University, **DAV**-Devi Ahilya Vishwavidyalaya Indore, **BHU**-Banaras Hindu University Varanasi, **LU**-Lucknow University, **JMI**- Jamia Millia Islamia New Delhi, **UU**- Utkal University Odisha , **PU^** - Panjab University, **HoD**-Head of the Department

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 2017-18: 21
- No of ongoing research projects: 0
- No. of current Ph.D. scholars: 13

Selected Publications

- Chakrawarty, S. Relevance of Rama's Philosophy in Contemporary Society, *Indian Journal of Psychometry and Education*, 49 (1), 80-84, 2018
- Padmavathy, R.D. Gender Equality in Education: Empower Women, *International Journal of Multidisciplinary Educational Research*, 6(7). 24-39, 2017
- Pallai, P., Chakrawarty, S., & Sultana, Y, Quality Life and Academic Achievement: A survey of Post Graduate Students, *Psycho-lingua*, 48(1), 2017
- Pallai, P. Integration of Technological Tools in Higher Education: Challenges and Opportunities, *Psycho-Lingua*, 49 (1), 2018.
- Roy, N.R and Das, S.S. Social Intelligence of Undergraduate Students in Tezpur University, *Journal of Contemporary Educational Research and Innovations*, 8 (1), 01-08, 2018
- Roy, N.R. Present scenario of Higher Education in Bodoland Territorial Area District of Assam, *Adhikar: An International Refereed & Peer-Reviewed Research Journal Related to Higher Education for all subjects*, 7 (12), 33-35, 2017
- Singh, R. A study of environmental attitude of senior secondary school teachers in relation to their locality, *International Journal of Research in Management & Social Science*, 6(1) VIII, 14-22, 2018
- Singh, R. A study of human rights awareness among college students in relation to their gender and family type, *International Journal of advance and Innovative Research*, 5(4) V, 76-81, 2018
- Sultana, Y. & Akhtar, M. A Study on Human Rights Awareness among Undergraduate Students of Nagaon District, *Indian Journal of Psychometry and Education*, 49(1), 110-118, 2018

Courses offered in B.Ed.

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BD 401	Human Growth and Development	5	BD 501	Teaching Learning and Management	4

BD 402	Contemporary Indian Education	5	BD 502/ BD 503/ BD 504	Teaching of Assamese -Part I/ Teaching of English -Part I/ Teaching of Hindi -Part I	3
			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/ BD 551/ BD 552	Teaching of Assamese -Part I/ Teaching of English -Part I/ Teaching of Hindi -Part I	3	BD 575	Gender, School and Society	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 554	Teaching of Social Science -Part I/ Teaching of Physical Science-Part I	3	BD 578	Guidance and Counselling	3
			BD 579/ BD 580	Peace Education/ Environmental Education	3
BD 557	School Internship	16	BD 581	Critical Understanding of ICT	4
			BD 582	Understanding the Self	2

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

Courses offered in M.A in Education

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MA 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 AND FOREIGN LANGUAGES (Year of Establishment: 1994)

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

Programmes offered

1. One Year Certificate Course in Chinese
2. Integrated dual B.A. & M.A. in English
3. M.A. in English
4. M.A. in Linguistics and Language Technology
5. Ph. D.

Faculty and Areas of Interest

Professors	
Madan Mohan Sarma,* Ph.D. (DU)	<i>Applied Linguistics, ELT, Literature in English</i>
Bijay Kumar Danta,* Ph.D. (UU)-HoD	<i>American Literature, Critical Theory, Fiction Studies</i>
Farheena Danta,* Ph.D. (DU)	<i>American Literature, Cultural Studies, Modernist Poetics</i>
Prasanta Kumar Das,* Ph.D. (GU)-Dean-HSS	<i>Indian Writing in English, British Literature, Book History</i>
Madhumita Barbora,* Ph.D. (TU)	<i>Linguistics (Syntax, Psycholinguistics), Field Linguistics, Documentation</i>
Gautam Kumar Borah,* Ph.D. (NTNU)	<i>Linguistics, Cognitive Semantics, Philosophy of Language, Literary Theory</i>
Associate Professors	
Debasish Mohapatra,* Ph.D. (EFLU, Hyderabad)	<i>Curriculum Development, Materials Production, Language Policy</i>
Sravani Biswas,* Ph.D. (NEHU)	<i>Indian Writing in English, Postcolonial Studies, British Romantic Poetry</i>
Hemjyoti Medhi,* Ph.D. (DU^)	<i>Gender and Literature, New Literatures in English, Indian Vernacular Literature</i>
Sanjib Sahoo,* Ph.D. (TU)	<i>Indian Writing in English, Travel Writing, Contemporary British Literature</i>

Assistant Professors	
Rathijit Chakraborty, M.Phil. (Chinese), (JNU)	<i>Chinese Language and Literature</i>
Reetamoni Narzari, Ph.D. (TU)	<i>Women's Writing, Indian Writing in English, Postcolonial Literature</i>
Pallavi Jha, Ph.D. (UoHyd)	<i>Children's Literature, Popular Culture and Literature, Postcolonial Writing</i>
Bashabi Gogoi, Ph.D. (G.U)	<i>Critical Theory, Adaptation Studies</i>
Arup Kumar Nath,*Ph.D. (JNU)	<i>Language Typology, Morphology, Sociolinguistics</i>
Bipasha Patgiri, M.Phil. (JNU)	<i>Phonology (Prosody, Dialectology, Language Typology and Syntax)</i>
Esther Daimari, Ph.D. (GU)	<i>South Asian English Literature</i>
Amalesh Gope,*Ph.D. (IITG)	<i>Acoustic Phonetics, Computational Linguistics, Language Documentation</i>
Sarat Kr. Doley,* Ph.D. (EFLU, Shillong)	<i>English Language Education, Language Testing, SLA</i>
Daveirou Lanamai, M. A. (Chinese) (JNU)	<i>Chinese Language</i>
Pallavi, M. Phil. (German), (JNU)	<i>German Literature and Language, Holocaust Literature, Post-War Literature</i>

* Recognized Supervisor

LEGENDS: **DU**-Dibrugarh University, **UU**-Utkal University Odisha, **GU**-Gauhati University, **HSS**- Humanities and Social Sciences, **TU**-Tezpur University, **NTNU**-Norwegian University of Science and Technology Norway, **EFLU**- English and Foreign Language University, **NEHU**- North Eastern Hill University Shillong **DU**^ - Delhi University, **JNU**- Jawaharlal Nehru University New Delhi, **UoHyd**-University of Hyderabad, **IITG**- Indian Institute of Technology Guwahati, **HoD**- Head of the Department.

Facilities

Departmental Library

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

Research Activities

- No. of papers published in the year 2018-2019: 15
- No. of ongoing research projects : 03
- No. of current Ph.D. scholars: 42

Selected Publications

1. Daimari Esther. (2017). "Scarred and Ruined Landscapes in Romesh Guneseekera's *Heaven's Edge*." *Assonance: A Journal of Russian and Comparative Literary Studies*, Vol- 17, pp- 144-154, ISSN: 2394-7853.

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

Courses offered in Integrated dual B.A. & M. A. in English

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
EG111	Reading Literature	4	EG113	History of English Literature	4
EG112	English for Communication	3	EG114	English Poetry I: Chaucer to Dryden	3
CS101	Basics in Computer Application	3	ES102	Elements of Environmental Science	3
MIL (ANY ONE)			MIL (ANY ONE)		
AS101	MIL Assamese: Poetry (Early and Modern)	3	AS102	Assamese : Drama	3
HN101	Madhyakalin aur Adhunik Kabya (in Hindi)	3	HN102	Kahani aur Upanyas (in Hindi)	3
EG106	Alternative English -I	3	EG109	Alternative English-II	3
OPTIONAL COURSES (ANY TWO)			OPTIONAL COURSES (ANY TWO)		
SO102	Introduction to Sociology	2	SO103	Introduction to Sociological Thought	2
CT161	Basic Concepts in Cultural Studies -I	2	CT162	Introduction to Folklore Studies	2
MC101	Introduction to Communication	2	MC201	Journalism	2

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

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

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

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

EG503	Modern Fiction	4	EG506	Postcolonial Literatures in English	4
-	Elective- I	4	-	Elective- II	4
To be chosen by students	CBCT-II	3	EG519	Term Paper	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.
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 Linguistics and Language Technology

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LG421	Philosophy of Linguistics	4	LG426	Phonetics and Phonology -II	3
LG422	Phonetics and Phonology -I	4	LG427	Syntax	3
LG423	Morphology	4	LG428	Semantics	3
LG424	Basic Syntax	4	LG429	Field Linguistics	3
LG425	Introduction to Computational Linguistics	3	LG430	Cognitive Linguistics	4
			To be chosen by students	CBCT-I	3

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

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

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

HINDI

(Year of Establishment: 2010)

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

Programmes offered

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

Faculty and Areas of Interest

Associate Professor	
S. Tripathi*, Ph.D. (BHU)-HoD	<i>Applied Linguistics, Indian Poetics and Folk Literature</i>
Assistant Professors	
Anju Lata *, Ph.D. (TU)	<i>Fiction</i>
Anushabda*, Ph.D. (DU)	<i>Poetry, Poetics, Media and Linguistics</i>

*Recognized Supervisor

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

Facilities

The Department has a small departmental library.

Selected Publications:

- Tripathi, S. Ganesh Chauth (Book), Vishwavidyalay Prakashan, Varanasi : 2015.
- Tripathi, S. Lok ka Awalokan (Book), Arya Prakashan, Gandhi Nagar, New Delhi, 2013.
- Anju Lata, Dalit 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.

A. 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

B. 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 और मध्यकाल	4	HN 437	हिन्दी साहित्य का इतिहास : आधुनिक काल	4
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)		
			Optional I प्रयोजनमूलकहिंदी		
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 उसकाअनुप्रयोगात्मकपक्ष	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)			Fourth Semester (Elective Courses)		
Optional II (आधुनिक हिंदी साहित्य)			Optional III (अनुप्रयुक्त भाषा विज्ञान)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
HN 549	प्रेमचंद	04	HN 554	भाषा शिक्षण	04
HN 550	जयशंकर प्रसाद	04	HN 555	शैली विज्ञान	04
HN 551	सूर्यकांत त्रिपाठी 'निराला'	04	HN 556	समाज भाषा विज्ञान	04
HN 552	सच्चिदानंद हीरानंद वात्सायन 'अज्ञेय'	04	HN 557	कोश विज्ञान	04
HN 553	लघु शोध-प्रबंध / परियोजना कार्य	06	HN 558	लघु शोध-प्रबंध / परियोजना कार्य	06

Fourth Semester (Elective Courses)			Fourth Semester (Elective Courses)		
Optional IV (तुलनात्मक साहित्य)			Optional V (लोक साहित्य)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
HN 559	तुलनात्मक साहित्य: स्वरूप, उद्भव और विकास	04	HN 564	लोक साहित्य : सिद्धांत-संदर्भ	04
HN 560	भारतीय साहित्य : अवधारणा और विशेषताएँ	04	HN 565	लोकगीत और लोकगाथा	04
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

Fourth Semester (Elective Courses)			Fourth Semester (Elective Courses)		
Optional VI (विमर्शमूलक अध्ययन)			Optional VII (सिनेमा, साहित्य और समाज)		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
HN 569	अस्मितामूलक विमर्श	04	HN 574	सिनेमा, साहित्य और समाज का अन्तः संबंध	04

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 सामाजिक परिप्रेक्ष्य	04
HN 573	लघु शोध-प्रबंध / परियोजना कार्य	06	HN 578	लघु शोध-प्रबंध / परियोजना कार्य	06

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



LAW

(Year of Establishment: 2016)

Tezpur University has established the Department of Law in the session 2016-17 with the objective of making it a vibrant centre of legal education, particularly in the North-East India. Four faculties have already joined the Department. Initially the Two- Year LL.M. Programme will be started from the session 2018-19. The LL.M. programme has been designed in such a way that the students are exposed not only to the theoretical aspects but also to pedagogical and research aspects of socio-legal relevance. It is proposed to start subsequently the Five-Year B.A. LL.B.(Hons.), P.G. Diploma in Law and Ph.D. Programmes.

Programmes offered

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

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

Faculty and Areas of Interest

Professor	
Bhaskar Kumar Chakravarty Ph.D. (GU)-HoD	<i>Constitutional Law, Administrative Law, Human Rights, Family Law.</i>
Assistant Professors	
Angel Habamon Syiem, LL.M. (SIU)	<i>Human rights, International Law and Tribal issues</i>
Madhumita Acharjee, LL.M. (AU)	<i>Criminal Law, Criminology, Juvenile Justice, Rights of elderly persons</i>
Debajit Kumar Sarmah, LL.M. (IP)	<i>Criminology and Criminal Law</i>

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

Courses offered in Master of Laws

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
LW 401	Indian Constitutional Law and Emerging Challenges	4	LW 420	Judicial Process	4
LW 402	Research Methodology	4	-	ELECTIVE FROM GROUP A-1 or A-2	4
	ELECTIVE FROM GROUP A-1 or A-2		LW 421	General Principles of Criminal Law OR	4
LW 403	Criminology, Penology and Victimology OR	4	LW 422	International Human Rights Law	
LW 404	Human Rights Jurisprudence		LW 423	Law Relating to Cyber Crime OR	4
			LW 424	Protection and	

				Enforcement of Human Rights	
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

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
LW 501	Correctional Laws and Administration in India	4	LW 521	Pedagogy in Law	4
LW 502	OR International Humanitarian Law				
LW 503	Socio Economic Offences	4	LW 522	Dissertation & Viva-Voce	6 2
LW 504	OR Law Relating to Crimes Against Humanity				
LW 505	Comparative criminal procedure	4			
LW 506	OR 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 <http://www.tezu.ernet.in/dlaw>

MASS COMMUNICATION AND JOURNALISM (Year of Establishment: 2001)

The Department was established in 2001 primarily for teaching Media and Communication studies. Over the years it has grown as a nodal centre for teaching, training and research in Media Studies with national and international collaborations. An important feather in the cap of the Department is that it has achieved the top position among Indian universities in the Times Higher Education Asia University Ranking 2018 declared in February, 2018 in the Communication & Media Studies category. It is based on an assessment of 13 performance indicators. The Department, while focusing on the comprehensive MA in Mass Communication and Journalism (MCJ) programme, has also launched a specialized programme – MA in Communication for Development since 2016. The thrust areas of the Department are Community Communication and Mass Communication with a mission to impart quality training through innovative mix of classroom and field-based pedagogy. Our students regularly produce laboratory journals, audio programmes, web designs, corporate videos, TV news bulletins, and documentary films. They also develop alternative and community media productions like puppet shows and street plays as part of their academic curriculum. One major highlight of the department is that the campus placement scenario is looking up with 18 offers for the last two batches passing out in 2018 for both the programmes. Recruiters include reputed organizations like ETV Bharat, POSOCO (PSU in power sector), Drishti, Pradan among others. One company has already visited and selected a few students from the current MA in MCJ batch which will pass out in June, 2019. Further, the Ministry of Human Resources Development of Government of India has recognized the department as the National Resource Centre for preparing online Refresher Courses for teachers of the media and communication disciplines of the country which has been another major feather in the cap for the department.

Programmes offered

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

Faculty and Areas of Interest

Professors		
1.	Sunil Kanta Behera, Ph.D. (BU) Professor of Eminence	<i>Communication Theory and Research, Gender and Media</i>
2.	Abhijit Bora,* Ph.D. (GU) – HoD,	<i>Print Journalism, Community Radio, Specialized Reporting, Science Communication, Media Literacy</i>

Associate Professors		
1.	Perumal Anbarasan,* Ph.D. (JNU)	<i>Media Studies, Cultural and Subaltern Studies, International Communication, Film Studies</i>
2.	Joya Chakraborty,* Ph.D. (UoH)	<i>ICT for Development, Communication for Social Change, Women and Media, Alternative and Community Media</i>
3.	Uttam Kumar Pegu,* Ph.D. (JMI)	<i>ICT Implications on Society, Science Communication, Film Studies, Media Analysis</i>
Assistant Professors		
1.	Anjuman Borah, Ph.D. (TU)	<i>Development Communication, Television and Traditional Media</i>
2.	Perosh Jimmy Daimari, Ph.D. (TU)	<i>Film Studies, Development Communication</i>
3.	Kapou Malakar, Ph. D. (TU)	<i>New Media for Development, Multimedia Journalism, Political Communication, Online Journalism, Media Studies, Film Studies</i>
4.	Manoj Deori, M.A. (TU)	<i>Online Journalism, Multimedia Productions, Media and Disaster Management</i>
5.	Junali Deka Ph.D. (AU)	<i>Cultural Studies, Visual Communication, New Media and Society</i>

***Recognized Supervisor**

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

Facilities

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

Research Activities

- Number of papers published in the year 2017-18: 25
- Number of ongoing research projects : 2
- Number of current Ph.D. scholars: 17

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 by Dept. of Communication and Journalism 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 532	Writing for media	3
MC 527	Principles of Journalism	3	MC 533	Photo Journalism	3
MC 528	Advertising	3	MC 534	Broadcast Media : Television	3
MC 529	Broadcast media: Radio	3	MC 535	PR & Corporate communication	3
MC 530	New Media: Evolution, principles & theory	3		Elective I	3
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 541	Communication research methods	3	MC 549	Understanding cinema	3
MC 542	Communication for social change and development	3	MC 550	Science Communication	3
MC 543	Media law and ethics	3	MC 551	Political and International Communication	3
MC 544	Internship	3	MC 552	Communication research project	5
-	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 536	Media Management	3	MC 536	Media Management	3
MC 537	Graphic design for media	3	MC 537	Graphic design for media	3
MC 538	Health Communication	3	MC 538	Health Communication	3
MC 539	Film appreciation and criticism	3	MC 539	Film appreciation and criticism	3
MC 540	Digital Media Literacy	3			

Electives III (One to be chosen)		
Course Code	Course Title	Cr.
MC 553	New media production	4
MC 554	Documentary production	4
MC 555	Community radio	4

MA MCJ students shall opt for Open Electives in Semester II and III only.

This non-credited internship for students is voluntary and can be undertaken during the winter break after completion of the Third Semester.

Courses offered in M.A. in Communication for Development

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
DC 400	Theories of Communication and Media	4	DC 404	Communication Research Methods	4
DC 401	Development Journalism	5	DC 405	Radio for Development	5
DC 402	Theories of Communication for Development	4	DC 406	Participatory Video Production	5
DC 403	Issues in Development	4	DC 407	Information and Communication Technology for Development	4
-	CBCT	3	-	CBCT	3

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
DC 408	Campaign Planning	5	DC 415	Project *	12
DC 409	Folk and Community Media	5	* Students would be attached to different governmental/non-governmental development agencies to carry out a semester long communication campaign.		
DC 410	Message Design and Evaluation	4			
DC 411	Internship	4			
-	CBCT	3			

Elective Courses		
Course Code	Course Title	Cr.
DC 412	NGO Participation and Management	5
DC 413	Human Rights and Media	5
DC 414	Northeast India: Demography, Culture, and Identity	4

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

SOCIAL WORK (Year of Establishment: 2014)

The Department of Social Work was established in the year 2014 with the objective to create a just and equal society that ensures freedom from various forms of oppression and exploitation. It aims to develop competent human resources for effective professional social work practice. The Department engages with 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. It facilitates active involvement in the fields of social welfare, development, and allied areas through classroom teaching blended with the component of concurrent field work practice. This approach enables the students to develop knowledge, skills, attitudes and values appropriate to the practices of social work profession, besides cultivating critical thinking and the ability to apply theory to field experiences. This further contributes in evolving an interdisciplinary perspective which enhances the understanding of social problems and developmental issues with greater efficacy.

Programme offered

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

Faculty and Areas of Interest

Professor		
1.	Chandan Kumar Sharma, Ph.D. (DU)– HoD	<i>Development; Environment; Urbanisation; Agrarian Structure; Social Movements; Ethnicity; Migration; Society and Politics of Northeastern India.</i>
Assistant Professors		
1.	Apurba Saha, Ph.D. (NIMHANS)	<i>Social Work and Mental Health, Psychosocial Care in Disaster Management, Street Children and Application of Social Work Methods</i>
2.	Veda Yumnarn, M.Phil. (JNU)	<i>Health Systems Research, Epidemiology of HIV / AIDS and Social Determinants of Health</i>
3.	Rajesh Kalarivayil, Ph.D. (JNU)	<i>Biomedical Governance, Innovation Studies, Science and Technology in Rural Development</i>
5.	Namami Sharma, M.Phil. (DU)	<i>Environment and Ecology, Tribal Studies, Community Development</i>
6.	Prerana Banik, M.Phil. (TISS)	<i>Food Security, Gender and Livelihood, Labour rights, Inclusive policies and development, Marginalised group and social development</i>

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

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 Elective-II are to be chosen from the following courses			Elective-I and Elective-II are to be chosen from the following 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
SW502	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			

Both the Courses from any of Elective group A, B or C and any one course from Elective group D

Elective Courses for the Third Semester (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	Organisational Behaviour	2	SW543	Human Rights	2

Both the Courses from any of Elective group A, B or C and any two courses from Elective group D
Elective Courses for the Fourth Semester (Any two)

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>

SOCIOLOGY (Year of Establishment: 2006)

The Department of Sociology was established in 2006 with a Masters 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 the UGC-SAP (DRS-I) of University Grants Commission in 2016.

Programmes offered

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

Faculty and Areas of Interest

Professors	
Virginus Xaxa, Ph.D. (IITK) (Gopinath Bardoloi Chair Professor)	<i>Agrarian Studies, Plantation Labour, Indigenous Peoples, Development Studies</i>
Chandan Kumar Sharma,* Ph.D. (DU^)-HoD	<i>Development, Environment, Migration, Agrarian Studies, Identity Politics, Social Movements, Urbanisation</i>
Kedilezo Kikhi,* Ph.D. (NEHU)	<i>Research Methodology, Gender and Society, Sociology of Northeast India, Tribal Studies</i>
Associate Professor	
Rabin Deka,* Ph.D. (DU)	<i>Sociological Theories, Sociology of Movement, Agrarian Sociology</i>
Assistant Professors	
Amiya Kumar Das, * Ph.D. (TU)	<i>Sociology of Development, Sociology of Health and Illness, Sociology of Governance</i>
Sumesh, S. S,* Ph.D. (UK)	<i>Social Stigma and Exclusion, Sociology of Body, Sexuality</i>
Nirmali Goswami,* Ph.D. (IITK)	<i>Sociology of Education, Identity of Politics, Multiculturalism</i>

Sarmistha Das, Ph.D (TU)	<i>Gender Studies, Sociology of North East India</i>
Subhadepta Ray, Ph.D. (DU)	<i>Sociology of Science and Sociology of India</i>
A. S. Shimreiwung,* Ph.D. (JNU)	<i>Sociology of Religion, Environmental Sociology, Sociology of Music</i>
Pamidi Hagjer, M.A. (JNU)	<i>Ritual Studies, Kinship, Sociological Theories</i>

* Recognized Supervisor

LEGENDS: **IITK**– Indian Institute of Technology Kanpur **DU**^–Delhi University, **NEHU**–North Eastern Hill University Shillong, **DU**–Dibrugarh University, **TU**–Tezpur University, **UK**–University of Kerala, **JNU**–Jawaharlal Nehru University New Delhi, **HoD**–Head of the Department.

Facilities

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

Research Activities

- No. of papers published in the year 2017-18:10
- No. of ongoing research projects: 3
- No of current Ph.D. scholars: 26

Selected Publications

- Xaxa, V. et. Al., (ed), *Employment and labour market in North-East India: Interrogating Structural Changes*. Routledge. 2018
- Das, A.K., “The Magic called Elections: Polls, Performance and Citizenship” in Devnath Pathak and Sasanka Perera (Ed) *Performative Communication: Culture and Politics in South Asia*, New Delhi, pp 136-151, Routledge. 2018
- Sharma, C.K. Dams, ‘Development’ and Popular Resistance in Northeast India”, *Sociological Bulletin*, Vol. 67, No. 3, pp 317-333, Sage. 2018.

Courses offered in M.A. in Sociology

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SC 411	Classical Sociological Traditions	4	SC 415	Contemporary Theoretical Perspectives in Sociology	4
SC 412	Research Methodology	4	SC 416	Economic Sociology	4
SC 413	Sociology of Family and Kinship	4	SC 417	Social Stratification	4
SC 414	Sociology of India	4	-	Elective - I	3
-	CBCT	3	-	CBCT	3

Third Semester			Fourth Semester		
Course	Course Title	Cr.	Course	Course Title	Cr.

Code			Code		
SC 510	Political Sociology	4	SC 513	Sociology of Religion	4
SC 511	Sociology of Development	4	SC 514	Social Movements in India	4
SC 512	Sociology of Northeast India	4	SC 515	Research Project	8
-	Elective -II	3	-	Elective -III	3
-	CBCT	3	-	Elective -IV	3
			-	CBCT	3

Elective courses offered by the Department					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
SC 431	Fieldwork Practicum	3	SC 553	Environmental Sociology	3
SC 432	Social Statistics	3	SC 554	Sociology of Culture and Mass Media	3
SC 433	Population and Society	3	SC 555	Sociology of Governance	3
SC 550	Gender and Society	3	SC 556	Sociology of Education	3
SC 551	Industrial Sociology	3	SC 557	Identity and Violence	3
SC 552	Sociology of Health and Illness	3	SC 558	Sociology of Science	3

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

CHEMICAL SCIENCES (Year of Establishment: 1997)

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

Programmes offered

1. Integrated B.Sc. B.Ed. in Chemistry
2. Integrated dual B.Sc. & M.Sc. in Chemistry
3. M.Sc. in Chemistry
4. Ph.D.

Faculty and Areas of Interest

Professors	
M. Lakshmi Kantam, Adjunct Professor, Ph.D. (KU)	<i>Homogeneous/ Heterogeneous Catalysis</i>
Swapan Kumar Dolui,* Ph.D. (IITKgp)	<i>Fibre Reinforced Plastic, Self Reinforced Plastic, Water Based Coating and Adhesive, Diffusion of Small Molecule Through Plastic</i>
Nashreen S.Islam,* Ph.D. (NEHU)	<i>Synthetic Inorganic Chemistry and Biomimetic Chemistry of Transition Metals, Catalysis</i>
Tarun Kumar Maji,* Ph.D. (CU)	<i>Grafting of Fibres, Rubber Processing, Reaction Engineering, Emulsion Polymer, Textile Finishing</i>
Robin Kumar Dutta,* Ph.D. (NEHU)	<i>Surfactants and Micelles, Water Purification</i>
Niranjan Karak,* Ph.D. (IITKgp)	<i>Synthesis of Advanced Polymers, Polymer Nanocomposites and Nanomaterials</i>
Ramesh Chandra Deka,* Ph.D. (NCL), Dean, SoS	<i>Theoretical Chemistry, Catalysis and Drug Design</i>
AshimJyoti Thakur,* Ph.D. (NEIST)-HoD	<i>Heterocyclic Chemistry, Organic Synthesis and Molecular Container Chemistry</i>
Ashwini Kumar Phukan,* Ph.D. (UoHyd)	<i>Theoretical Inorganic and Organometallic Chemistry</i>

Ruli Borah,* Ph.D. (NEIST)	<i>Synthesis of Bioactive Molecule, Development of Green Methodologies for Organic Transformation</i>
Assistant Professors	
PanchananPuzari,* Ph.D. (IITG)	<i>Physical Chemistry, Biosensor</i>
Kusum Kumar Bania,* Ph.D. (TU)	<i>Heterogeneous Catalysis</i>
Pankaj Bharali,* Ph.D. (IICT)	<i>Inorganic Materials, Catalysis, Adsorption</i>
Nayanmoni Gogoi,* Ph.D. (IITB)	<i>Molecular Magnet, Functional Metal Organic Framework</i>
Bipul Sarma,* Ph.D. (UoHyd)	<i>Solid State Chemistry, Supramolecular Chemistry and Crystallography</i>
Sajal Kumar Das,* Ph.D. (CDRI & JNU)	<i>Synthetic Organic Chemistry</i>
Utpal Bora,* Ph.D. (NEIST)	<i>Synthetic Organic Chemistry</i>
Sanjeev Pran Mahanta,* Ph.D. (UoHyd)	<i>Physical Chemistry, Molecular Engineering and Molecular Recognition</i>
Himangshu Prabal Goswami (Adhoc) Ph.D., (IISc),	<i>Theoretical Chemical Physics</i>
INSA Young Scientist	
Sanjay Pratihar,\$Ph.D. (IITKgp)	<i>Inorganic Chemistry, Organometallic Chemistry</i>

***Recognized Supervisor \$ Recognized Associate Supervisor**

LEGENDS: **KU**-Kurukshetra University, **CU**-Calcutta University, **NCL**- National Chemical Laboratory Pune, **SoS**- School of Sciences, **NEIST**-North East Institute of Science and Technology Jorhat, **UoHyd**-University of Hyderabad, **IITG**-Indian Institute of Technology Guwahati, **TU**-Tezpur University, **IICT**- Indian Institute of Chemical Technology Hyderabad, **IITB**- Indian Institute of Technology Bombay, **CDRI**-Central Drug Research Institute Lucknow, **JNU**-Jawaharlal Nehru University New Delhi, **HoD**-Head of the Department, **IISc**-Indian Institute of Science, Bangalore.

Facilities

In addition to the laboratory facilities required for undergraduate-post graduate level studies and research 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.

Research Activities

- No. of papers published in the year 2017-2018: 100
- No. of ongoing research projects: 24
- No. of current Ph.D. scholars: 78

Selected Publications

- Mohan, K., Bora, A. and Dolui, S. K., Efficient Way of Enhancing the Efficiency of a Quasi-Solid-State Dye-Sensitized Solar Cell by Harvesting the Unused Higher Energy Visible Light Using Carbon Dots, ACS Sustainable Chemistry and Engineering, 6, 10914-10922, 2018.
- Borthakur, B., Das, S., Phukan, A. K., Strategies toward Realization of Unsupported Transition Metal-Boron Donor-Acceptor Complexes: An Insight from Theory, Chemical Communications, 54, 4975-4978, 2018.
- Devi, R., Das, J., Sarma, B. and Das, S. K., Phenolate-induced intramolecular ring-opening cyclization of N-tosylaziridines: access to functionalized benzoxacycles, Organic and Biomolecular Chemistry, 16, 5846-5858, 2018.

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

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 Semester			Tenth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CI 501	Bio-Organic Chemistry	3	CI 506/508 / 528	Elective I	3
CI 503	Special Topics in Inorganic Chemistry	3	CI 512/514 /516/518/520	Elective II	3
CI 519	Physical Chemistry of Surface and Condensed Systems	3	CI 522/524 /526	Elective III	3
CI 521	Analytical Methods in Chemistry	3	CI 528	Project Work*	10
CI 523	Chemical Technology and Society	3			
CI525	Organometallic Chemistry	3			
CI 505	Laboratory Course in Physical Chemistry	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

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	CI 516	Computational Chemistry and Numerical Analysis	3
			CI 518	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 Reactions and Mechanism	3
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 Chemistry/ Chemistry in Everyday Life	3
Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
CH 501	Bio-Organic Chemistry	3	CH 506/508/528	Elective I	3
CH 503	Special Topics in Inorganic Chemistry	3	CH 512/514/516/518/520	Elective II	3
CH 519	Physical Chemistry of Surface and Condensed Systems	3	CH 522/524/526	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			

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

ENVIRONMENTAL SCIENCE (Year of Establishment: 2004)

Initially established as a centre for Environmental Science in 2003, the centre was converted to the Department of Environmental Science in 2004, with the objective of imparting education on regional and global environmental issues. The curriculum for the M. Sc. programme focuses on all important aspects of Environmental Science covering contemporary problems of natural resource conservation and environmental quality. Areas of research include Environmental Pollution, Greenhouse Gas Emission, Riverine Hazards, Geomorphology, Climate Atmospheric Processes, 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.

Programmes offered

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

Faculty and Areas of Interest

Professors	
Kali Prasad Sarma,* Ph.D. (NEHU)	<i>Water and Soil Pollution, Hydro-geochemistry& Remediation of Toxic Substances</i>
Raza Rafiqul Hoque,* Ph.D. (JNU)	<i>Air Pollution & Environmental Monitoring and Assessment</i>
Apurba Kumar Das,* Ph.D. (JNU)	<i>Geomorphology& Regional Climate</i>
Associate Professor	
Ashalata Devi,* Ph.D. (NEHU)-HoD	<i>Forest Ecology,Ecosystem Dynamics, &Wildlife and Biodiversity Conservation</i>
Assistant Professors	
Nirmali Gogoi,* Ph.D. (DU)	<i>Stress Physiology & Biochemistry</i>
Satya Sundar Bhattacharya,* Ph.D. (VB)	<i>Vermiculture, Plant Nutrition and Soil Fertility Management, Soil C management, Plant products & Nano fertilizers</i>
Sumi Handique, Ph.D. (TU)	<i>Geochemistry of River Basins & Hydrogeochemistry</i>
Amit Prakash,* Ph.D. (JNU)	<i>Air pollution Meteorology, Noise Pollution Monitoring and Modelling , Environmental System Modelling& Urban Climate</i>
Nayanmoni Gogoi, Ph.D. (IITG)	<i>Ecosystem functions, Geochemistry and Hydrochemistry, Geostatistics, Pollution Indexing, Nanobiotechnology & Wetland Productivity</i>
Santa Kalita, Ph.D. (GU)	<i>Entomology & Environmental Physiology</i>
Pratibha Deka, Ph.D. (TU)	<i>Environmental Pollution– Air, Water and Soil& Human– Environment Interactions</i>

* Recognized Supervisor

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

Facilities

The Department has a sophisticated instrumentation laboratory to facilitate research and other academic activities. The laboratory has equipment, like ICP-OES, ICP-MS, HPLC, CHNS, Laser Leaf Area Meter with Root Measurement Attachment, Light Meter, Portable Photosynthesis Systems, Gas Chromatographs, Ion Chromatograph, TOC Analyzer, Continuous Air Pollution Monitoring Station, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler and Flame Photometer. The department also has GIS laboratory and Plant experimental site/shed.

Research Activities

- No. of papers published in the year 2017-18: 45
- No. of ongoing research projects: 08
- No of current Ph.D. scholars: 37

Selected Publications

- Das, P., Barua, S., Sarkar, S., Chatterjee, S.K., Mukherjee, S., Goswami, L., Das, S., Das, N., Das, A., Sarma, K.P. and Kumar, M. Provenance, prevalence and health perspective of co-occurrences of arsenic, fluoride and uranium in the aquifers of the Brahmaputra River floodplain. *Chemosphere*. 194: 755-77, 2018.
- Bhuyan, P., Deka, P., Prakash, A. and Hoque, R.R. Chemical characterization and source apportionment of aerosol over mid Brahmaputra Valley, India. *Environmental Pollution* 234:997-1010, 2018.
- Borah, M., Devi, A. and Kumar, A. Diet and feeding ecology of the western hoolock gibbon (*Hoolockhoolock*) in a tropical forest fragment of Northeast India *Primates*. 59, 2018.
- Sarma, D., Baruah, K. K., Baruah, R., Gogoi, N., Bora, A., Chakravorty, S. and Karipot, A. Carbon dioxide, water vapour and energy fluxes over a semi-evergreen forest in Assam, Northeast India. *Journal of Earth System Science*, 127(7), 2018.
- Bhattacharya, S., Karak, N. and Bhattacharya, S.S. Mechanism of toxicity and transformation of silver nanoparticles: inclusive assessment in earthworm-microbe-soil-plant system. *Geoderma*. 314, 2018.

Courses offered in M. Sc. in Environmental Science

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ES551	Fundamentals of Environmental Science	2	ES556	Solid Waste Management and Technology	3
ES552	Statistical Methods and Environmental Application	3	ES557	Climatology and Meteorology	2
ES553	Ecology and Ecosystem Dynamics	3	ES558	Environmental Biology	3
ES554	Earth Processes and Natural Hazards	3	ES559	Environmental Physics	3
ES555	Environmental Chemistry and Toxicology	3	ES560	GIS-Remote Sensing and application	2

-	<i>*Open elective (one course)</i>	3	ES572	Natural Resource and Biodiversity Conservation	3
			ES576	Environmental System Analysis	3
			-	<i>*Open elective (one course)</i>	3
			-	Departmental Elective (one course of 2 credit to be chooses from offered courses)	2

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ES562	Analytical Methods	3	ES563	Environmental Impact Assessment	2
ES564	Agriculture and Environmental Sustainability	2	ES569	Energy and Environment	2
ES565	Environmental Pollution and Management	3	ES550	Project	14
ES566	Soil Science	3	-	Departmental Elective (one course of 2 credit to be chooses from offered courses)	2
ES567	Environmental Plant Physiology and Biochemistry	3			
ES568	Hydrogeochemical Processes	2			
ES573	Environmental Extension and Field Survey	1			
-	<i>*Open elective (one course)</i>	3			
-	Departmental Elective (one course of 2 credit to be chooses from offered courses)	2			

** Students are to choose a total of 06 Credits of Open Elective courses offered by other departments, preferably to be finished within 3rd semester.*

Discipline Centric Elective Courses			Open Elective Courses		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
ES545	Human Population, Social issues and the Environment	2	ES 541	Contemporary Environmental Issues	3
ES546	Environmental Biotechnology	2	ES 542	Laboratory Guidance and Safety	3
ES547	Agro-Forestry and Forest Management	2	ES 543	Environmental Economics and Management	3
ES548	Environmental Economics	2	ES 544	Introductory Air Pollution	3
ES574	Laboratory Safety	2	ES 577	Indoor Air Pollution and Human Health	3

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 <http://www.tezu.ernet.in/denvsc>



MATHEMATICAL SCIENCES

(Year of Establishment: 1994)

The Department was started in July 1994 with the objective of producing trained manpower for undertaking research and teaching in mathematics and allied branches of basic or applied sciences. So far 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, 49 scholars have done their Ph.D. in Mathematics from the department. The Department carries out research in the areas of Number theory, Operator theory, Fuzzy topology, Finite element method, Algebraic graph theory, Algebra (Group Theory and Ring Theory), Computational fluid dynamics, Probability distributions, Coding Theory etc. The Department is currently supported by the UGC under its SAP (DRS-II) scheme and DST-FIST grant.

Programmes offered

1. Integrated B.Sc. B.Ed. in Mathematics
2. Integrated dual B.Sc. & M.Sc. in Mathematics
3. M.Sc. in Mathematics
4. Ph.D.

Faculty and Areas of Interest

Professors	
Nayandeep Deka Baruah, Ph.D. (TU)	<i>Number Theory, Ramanujan's Mathematics</i>
Debajit Hazarika, Ph.D. (JMI)	<i>General Topology, Fuzzy Sets and Applications</i>
Munmun Hazarika, Ph.D. (TU)-HoD	<i>Functional Analysis, Operator Theory</i>
Milan Nath, Ph.D. (IITG)	<i>Ordinary Graph Spectra, Inverse Eigen Value Problem</i>
Associate Professors	
Bhim Prasad Sarmah., Ph.D. (GU)	<i>High Energy Astrophysics, Relativity</i>
Santanu Dutta, Ph.D. (TU)	<i>Statistics (Non-parametric)</i>
Dhiren Kumar Basnet, Ph.D. (DU)	<i>Algebra</i>
Shuvam Sen, Ph.D. (IITG)	<i>Computational Fluid Dynamics</i>
Assistant Professors	
Rajib Haloi, Ph.D. (IITK)	<i>Abstract Differential Equations</i>
Bipul Kumar Sarmah, Ph.D. (TU)	<i>Theory of Partition, Ramanujan's Mathematics</i>
Rajat Kanti Nath, Ph.D. (NEHU)	<i>Theory of Finite Groups</i>

Debajit Kalita, Ph.D. (IITG)	<i>Algebraic Graph Theory</i>
Deepjyoti Goswami, Ph.D. (IITB)	<i>Finite Element Method</i>
Pankaj Kumar Das, Ph.D. (DU [^])	<i>Coding Theory</i>

****All the faculty members of the department are recognized supervisors**

LEGENDS: **TU**-Tezpur University, **JMI**-Jamia Millia Islamia New Delhi, **IITG**-Indian Institute of Technology Guwahati, **GU**- Gauhati University, **DU**-Dibrugarh University, **DU[^]**-Delhi University, **IITK**-Indian Institute of Technology Kanpur, **NEHU**- North Eastern Hill University Shillong, **IITB**-Indian Institute of Technology Bombay, **HoD**-Head of the Department.

Facilities

The Department has a computer laboratory established with financial assistance from the DST and UGC. Various Mathematical software is available in the laboratory. The laboratory is fully networked and it is linked with the Central Computer Center via LAN with access to the INTERNET. One Systems Analyst and one Technical Assistant look after the computational and networking facilities of the department.

Research Activities

- No. of papers published in the year 2017-2018: 48
- No. of ongoing research projects: 02
- No of current Ph.D. scholars: 30

Selected Publications

- Baruah, N. D. and Begum, N. M. On Exact generating functions for the number of partitions into distinct parts, Int. Journal of Number Theory, 14 (2018), no. 7, 1995-2011.
- Basnet, D. K., Dutta, J. and Nath, R. K. On Generalized Non-commuting Graph of a Finite Ring, Algebra Colloquium, 25 (2018), no.1, 149- 160.
- Dutta S. and Biswas, S. Nonparametric estimation of $100(1-p)\%$ expected shortfall: $p \rightarrow 0$ as sample size is increased, Communications in Statistics-Simulation and Computation, 47 (2018), no. 2, 338-352.

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	MD 222	Co-ordinate Geometry	4
CD 201	Chemistry-III	3	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	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 and Mathematical Software	4	MD 314	Elementary Number Theory	4
MD 315	Statics and Dynamics	4	MD 316	Introduction to Optimization	4
MD 317	Elementary Complex Analysis	4	ED 308	Pedagogy A: Physical Science-I	3
ED 301	Teaching Approaches and Strategies	3	ED 307/ ED 309	Pedagogy B: Mathematics I/ Pedagogy B: Biological Science I	3
ED 302	Classroom Organization and Management	3	ED 303	School Education in North East India	2

Seventh Semester			Eighth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MD 425	Combinatorics	4	MD 422	Elementary Coding and Information Theory	4
MD 414	Computer Programming+	4	ED 405	School Internship	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	PI 102	Physics-II	3
CI 101	Chemistry-I	3	PI 197	Physics-Lab	3
CI 107	Chemistry-Lab	3	CI 102	Chemistry-II	3
BI 101	Biology-I	3	BI 107	Biology-Lab	3
MI 103	Foundation of Mathematics	3	MI 104	Real Analysis-II	3
MI 105	Real Analysis-I	3	MI 106	Group Theory	3
EG 110	Communicative English	3	ES 103	Environmental Studies	4

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MI 221	Introductory Statistics & Probability	3	MI 218	Introductory ODE & PDE	4
MI 223	Calculus-I	4	MI 220	Linear Algebra-I	4
MI 225	Combinatorics	4	MI 222	Co-ordinate Geometry	4
PI 201	Physics-III	3	MI 224	Numerical Methods and Boolean Algebra	4
CI 201	Chemistry-III	3	MI 226	Introductory Topology	4
CS 535	Introduction to Scientific computing	3	DM 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 10 th semester)	0			

+ 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 Electives (DSE) to be offered from the following courses					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MI 538	Theory of Partial Differential Equation	4	MI 568	Theory of Distribution and Sobolev Spaces	4
MI 539	Advanced Numerical Analysis	4	MI 569	Coding Theory-I	4
MI 541	Fluid Mechanics	4	MI 570	Coding Theory-II	4
MI 543	Relativity	4	MI 572	Operator Theory -II	4
MI 544	Operations Research	4	MI 573	Analytic Number Theory	4
MI 545	Elliptic Curves	4	MI 574	Galois Theory	4
MI 546	Algebraic Number Theory	4	MI 581	Stochastic Processes -II	4
MI 547	Numerical Linear Algebra	4	MI 585	Fuzzy Sets and Applications-II	4
MI 551	Introduction to Category Theory	4	MI 587	Finite Element Method	4
MI 552	Operator Theory-I	4	MI 588	Applied Matrix Theory	4
MI 554	Commutative Algebra	4	MI 591	Computational Fluid Dynamics	4
MI 558	General Theory of Relativity	4	MI 594	Advanced Topology-I	4
MI 561	Stochastic processes-I	4	MI 595	Numerical Solutions of ODE	4
MI 565	Fuzzy Sets and Applications-I	4	MI 596	Advanced Topology-II	4
MI 566	Fourier Analysis	4	MI 597	Numerical Solutions of PDE	4
MI 567	Continuum Mechanics	4	MI 598	Algebraic Geometry	4

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			

List to be notified by the CoE from time to time

+Course for which there is a separate practical unit assigned as Computer Laboratory

Department Specific Electives (DSE) to be offered from the following units					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
MS 538	Theory of Partial Differential Equation	4	MS 568	Theory of Distribution and Sobolev Spaces	4
MS 539	Advanced Numerical Analysis	4	MS 569	Coding Theory-I	4
MS 541	Fluid Mechanics	4	MS 570	Coding Theory-II	4
MS 543	Relativity	4	MS 572	Operator Theory –II	4
MS 544	Operations Research	4	MS 573	Analytic Number Theory	4
MS 545	Elliptic Curves	4	MS 574	Galois Theory	4
MS 546	Algebraic Number Theory	4	MS 581	Stochastic Processes –II	4
MS 547	Numerical Linear Algebra	4	MS 585	Fuzzy Sets and Applications-II	4
MS 549	Graph Theory	4	MS 587	Finite Element Method	4
MS 551	Introduction to Category Theory	4	MS 588	Applied Matrix Theory	4
MS 552	Operator Theory-I	4	MS 591	Computational Fluid Dynamics	4
MS 554	Commutative Algebra	4	MS 594	Advanced Topology-I	4
MS 558	General Theory of Relativity	4	MS 595	Numerical Solutions of ODE	4
MS 561	Stochastic processes-I	4	MS 596	Advanced Topology-II	4
MS 565	Fuzzy Sets and Applications-I	4	MS 597	Numerical Solutions of PDE	4
MS 566	Fourier Analysis	4	MS 598	Algebraic Geometry	4
MS 567	Continuum Mechanics	4			

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

MOLECULAR BIOLOGY AND BIOTECHNOLOGY (Year of Establishment: 1997)

The Department of Molecular Biology and Biotechnology (MBBT) was established in the year 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 are in diverse areas of biotechnology which includes human diseases/disorders, microbial and petroleum biotechnology, snake venom biochemistry, enzymology immunology, immune genetics and evolutionary genetics, computational biology, nano biotechnology, plant microbe interactions, cancer genetics and chemoprevention and virology.

Programmes offered

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

Faculty and Areas of Interest

Professors	
Bolin Kumar Konwar,* Ph.D. (IC)	<i>Petroleum Biotechnology, Plant Biotechnology, Genetic Engineering and Metagenomics, Bioenergy</i>
Ashis Kumar Mukherjee,* Ph.D. (BU), Dean, R &D	<i>Snake Venom Biochemistry and Microbial Biotechnology</i>
Sashi Baruah,* Ph.D. (PGIMER)	<i>Innate Immunity and Immunogenetics ((Heterogeneity and Evolution of Immune Responses)</i>
Suvendra Kumar Ray,* Ph. D. (CCMB)	<i>Molecular Plant -Microbe Interactions, Molecular Evolution</i>
Manabendra Mandal,* Ph.D. (IGIB)	<i>Probiotics and Nutrition, Microbial Biofilm, Bioenergy</i>
Anand Ramteke,* Ph.D. (JNU)- HoD	<i>Cancer Genetics and Chemoprevention</i>
Associate Professor	
Robin Doley,* Ph.D. (TU)	<i>Anti-haemostatic Proteins from Snake Venom and Hematophagous Insect</i>
Assistant Professors	
Tapas Medhi,* Ph.D. (IITKgp)	<i>Enzymology and Bioprocess Engineering</i>
Eshan Kalita,* Ph.D. (NIPGR-GU)	<i>Nanobiotechnology and Plant Functional Biology</i>
Surya Prakash G. Ponnampalnam,* Ph.D. (LVPEI-UoHyd)	<i>Molecular Genetics and Disease Biology of Various Human Diseases/Disorders</i>

Anupam Nath Jha,* Ph.D. (IISc)	<i>Computational Biophysics, Bioinformatics</i>
Rupak Mukhopadhyaya,* Ph.D. (IACS-JU)	<i>Cellular and Molecular Biology (Sub Areas: Inflammation, Cardiovascular Disease), Microbial Biotechnology</i>
Sougata Saha,* Ph.D. (IISc)	<i>Cellular and Molecular Biology (Protein Arginylation and its Role in Cellular Function, Obesity)</i>
Nima D. Namsa,* Ph.D. (IISc)	<i>Molecular Biology of Rotavirus</i>
Suman Dasgupta,* Ph.D. (VB)	<i>Insulin Resistance and Type 2 Diabetes</i>
Mattaparthi V. Satish Kumar,* Ph.D. (IITG)	<i>Computational Biotechnology and Bioinformatics</i>
Jyoti Prasad Saikia, Ph. D (TU)- Ad-hoc	<i>Plant Biotechnology</i>
Aditya Kumar, Ph.D. (IISc)	<i>Computational Biophysics, Genomics and Bioinformatics</i>
Pankaj Barah, Ph.D. (NUST)	<i>Evolutionary Genomics , Systems Biology , Big-data in Biology , Structural Systems Biology , Systems Medicine</i>

*** Recognized Supervisor \$ Recognized Associate Supervisor**

LEGENDS: **IC**-Imperial College London, **DU**-Dibrugarh University, **BU**-Burdwan University West Bengal, **R &D**- Research and Development, **PGIMER**-Post Graduate Institute of Medical Education and Research Chandigarh, **CCMB**-Centre for Cellular and Molecular Biology Hyderabad, **IGIB**-Institute of Genomics and Integrated Biology Delhi, **JNU**-Jawaharlal Nehru University New Delhi, **TU**-Tezpur University, **IITKgp**-Indian Institute of Technology Kharagpur, **NIPGR**-National Institute of Plant Genome Research New Delhi, **GU**-Gauhati University, **LVPEI**-L.V. Prasad Eye Institute Hyderabad, **UoH**-University of Hyderabad, **IISc**-Indian Institute of Science Bangalore, **IACS**-Indian Association for the Cultivation of Science Kolkata, **JU**-Jadavpur University Kolkata, **VB**-VisvaBharati Santiniketan, **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 2017-2018 :73
- No. of ongoing research projects: 42
- No of current Ph.D. Scholars: 72

Selected Publications

- Panigrahi, G. K., Ramteke, A., Birks, D., Ali, A.H. E., Venkataraman,S., Agarwal, C., Vibhaka, R., Miller, L. D., Agarwal, R., Zakaria Y. AbdElmageed., and Deep, G. Exosomal microRNA profiling to identify hypoxia-related biomarkers in prostate cancer. *Oncotarget*, 2018, Vol. 9, (No. 17), pp: 13894-13910.
- Yanik, M., Ponnam S.P.G., Wimmer, T., Trimborn, L., Müller, C., Gambert, I., Ginsberg, J., Janise A, Domicke, J., Wende, W., Lorenz, B., Stieger, K. Development of Reporter System to Explore MMEJ in the Context of Replacing Large Genomic Fragments. *MolTher Nucleic Acids*. 2018 Jun 1;11:407-415. PMID: 29858075.
- Das, P. P., & Medhi, T. (2018). Isolation and molecular identification of four culturable endophytes from TV22 clone of *Camellia sinensis* (L.). *Annals of Plant Sciences*, 7(4), 2119-2125.

- Mahanta, A., Ganguli, P., Barah, P., Sarkar, R. R., Sarmah, N., Phukan, S., Bora, M., Baruah, S. (2018). Integrative Approaches to Understand the Mastery in Manipulation of Host Cytokine Networks by Protozoan Parasites with Emphasis on Plasmodium and Leishmania Species. Front. Immunol., 23 February 2018 | <https://doi.org/10.3389/fimmu.2018.00296>.
- Kalita, B., Patra, A., Das, A., Mukherjee, A. K. (2018) Proteomic analysis and immuno-profiling of eastern India Russell's viper (*Daboia russelii*) venom: Correlation between RVV composition and clinical manifestations post RV bite. Journal of Proteome Research (In press).

Courses offered in Integrated dual B.Sc & M.Sc. in Life Science

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

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

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

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

First Semester			Second Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BT 441	Biochemistry	3	BT 440	Molecular Biology	3
BT 443	Cell Biology	3	BT 442	Immunology	3
BT 445	Microbiology	3	BT 444	Developmental Biology	3

BT 447	Genetics	3	BT 446	Bioinformatics	2
BT 449	Basics of Mathematics and Statistics	2	BT 448	Genomics and Proteomics	3
BT 451	Basics of Chemistry and Physics	2	BT 450	Lab-III Molecular Biology	3
BT 453	Lab-I Biochemistry and Analytical Techniques	3	BT 452	Lab-IV Immunology	3
BT 455	Lab-II Microbiology	2	BT 454	Seminar	1

Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
BT 457	Genetic Engineering	3	BT 456/ BT 458/ BT 460/ BT 462	Elective II Evolutionary genomics/ Nanobiotechnology/ Computation biology/ Environmental Biotechnology	3
BT 459	Molecular Diagnostics	3	BT 464	Project	20
BT 461	Bioprocess Engineering and Technology	3			
BT 463/ BT 467	Elective-I Plant and Animal Biotechnology /Microbial Biotechnology	3			
BT 469	Intellectual Property Rights, Biosafety and Bioethics	3			
BT 471	Lab-V Genetic Engineering	3			
BT 473	Lab-VI Bioprocess Engineering and Technology	2			
BT 475	Project proposal presentation	1			

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

PHYSICS

(Year of Establishment: 1998)

Department of Physics was established in 1998. It offers studies in various fields of physics leading to postgraduate and doctoral degree. The faculty members of the department are engaged in various areas of physics such as condensed matter physics, photonics, high energy physics, microwaves, plasma physics, astrophysics, neutrino physics and nanoscience & technology. The Department has collaboration with institutes like IUCAA Pune, CMACs Bangalore, IIT Guwahati, 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 also supported by UGC-SAP, DST-FIST and ISRO. The department provides a conducive and rigorous research environment.

Programmes offered

1. Integrated B.Sc. B.Ed. in Physics
2. Integrated dual B.Sc. & M. Sc. in Physics
3. M. Sc. in Physics
4. Ph. D.

Faculty and Areas of Interest

Professors	
Ashok Kumar,* Ph.D. (IITK)	<i>Condensed Matter Physics, Solid State Ionics</i>
Jayanta Kumar Sarma,* Ph.D. (GU)	<i>Theoretical High Energy Physics, Particle Physics</i>
Nidhi Saxena Bhattacharyya,* Ph.D. (DU [^])	<i>Microwave Devices, Antennas and EMI Materials</i>
Nilakshi Das,* Ph.D. (GU)-HoD	<i>Dusty Plasma Physics, Laser-Plasma Interaction</i>
Pritam Deb,* Ph.D. (JU)	<i>Nanoscience and Nano Technology, Physics of Materials</i>
Associate Professors	
Gazi Ameen Ahmed,* Ph.D. (GU)	<i>Laser Physics, Optoelectronics</i>
Dambarudhar Mohanta,* Ph.D. (TU)	<i>Condensed Matter Physics, Nanoscience</i>
Pralay Kumar Karmakar,* Ph.D. (GU)	<i>Plasma Physics, Astrophysics, Nonlinear Dynamics</i>
Mrinal Kumar Das,* Ph.D. (GU)	<i>Theoretical High Energy Physics, Physics Beyond Standard Model, Neutrino Physics, BAU, Dark Matter</i>
Pabitra Nath,* Ph.D. (GU)	<i>Photonics</i>

Assistant Professors	
Ng K. Francis,* Ph.D. (GU)	<i>Particle Physics Phenomenology and Particle Cosmology</i>
Rajib Biswas,* Ph.D. (DU)	<i>Fiber Optic Instrumentation, PCFs; Geophysical Instrumentation</i>
Rupjyoti Gogoi,* Ph.D. (GU)	<i>Astrophysics</i>
Shyamal Kumar Das,* Ph.D. (IISc)	<i>Material Science</i>
Ritupan Sarmah,* Ph.D. (IISc)	<i>Computational Material Science</i>
Moon Moon Devi,* Ph.D. (TIFR)	<i>Experimental High Energy and Astro-particle Physics, Neutrino Physics UHE Cosmic Rays and Extensive Air Showers Detector Instrumentation and Data Acquisition</i>
DST Inspire Faculty	
Arup Jyoti Choudhury, Ph.D. (GU)	<i>Low Temperature Plasma Processing</i>

Recognized Supervisor # Recognized Co-supervisor

LEGENDS: IITK-Indian Institute of Technology Kanpur, GU-Gauhati University, DU[^]-Delhi University, JU-Jadavpur University West Bengal, TU-Tezpur University, DU-Dibrugarh University, GU[^]-Gorakhpur University Uttar Pradesh, IISc-Indian Institute of Science Bangalore, TIFR- Tata Institute of Fundamental Research Mumbai, HoD-Head of the Department.

Facilities

The Department has a rich collection of setups and instruments related to Photonics, Electronics, Condensed Matter Physics and Nanoscience at research level in addition to general laboratory instruments for postgraduate teaching in Physics. The Department has a 25 MW pulsed, NdYAG laser, high vacuum coating unit, X-band Microwave Bench, Electrochemical Workstation, LCR HiTester Meter, AFM, PPMS, SEM, XRD, Double Distilled water treatment plant, hot air oven, material developing facilities, semiconductor characterization set-up, UV-VIS spectrophotometer, Millipore water purification system, LB film deposition unit, spectrophotometer, vector network analyzer, spin wave instability characterization system, antenna parameter measurement facility, hydraulic press, CNC Milling Machine and other systems. The Department also has high end computational facility to carry out theoretical and astrophysics research work. The department also offers its facilities to the students of other institutes and other departments within the University.

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

Research Activities

- Number of papers published in the year 2018 : 65
- Number. of ongoing research projects: 19
- Number of current Ph.D. scholars: 60

Selected Publications

- Rituraj Dutta, A. Kumar, Effect of IL incorporation on ionic transport in PVdF-HFP based polymer electrolyte nanocomposite doped with NiBTC-Metal-Organic Framework, *Journal of Solid State Electrochemistry*, 22 (9) 2945-2958 (2018).
- I. Hussain, A. J. Bora, D. Sarma, K. U. Ahmad, P. Nath, Design of a Smartphone Platform Compact Optical System Operational Both in Visible and Near Infrared Spectral Regime, *IEEE Sensors Journal*, 18(2), 4933-4939 (2018).

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	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 or ED 309	Pedagogy B: Mathematics I or Pedagogy B: Bio Science I	3
PD 399	Physics Lab-V	3	ED 303	School Education in NE India	2
ED 301	Teaching Approaches and Strategies	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 ED 409	Pedagogy B: Mathematics II or Pedagogy B: Bio Science II	3	ED 405	School Internship	15
ED 404	Initial School Experience/School Internship-I	3			
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			

Elective Courses offered by the Department in Semester IX and X					
Course Code	Course Title	Cr.	Course Code	Course Title	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
Third Semester			Fourth Semester		
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PH 500	Project I	6	PH 599	Project-II	10
PH 415	Nuclear and Particle Physics	3		Elective III	3
PH 553	Atomic and Molecular Spectroscopy	3		Elective IV	3
	Elective I	3		Open Elective II	3
	Elective II	3			
	Open Elective-I	3			

Electives Courses offered by the Department in Semester III and Semester IV					
Course Code	Course Title	Cr.	Course Code	Course Title	Cr.
PH 506	Physics of Thin Films	3	PH 541	Plasma and Astrophysics	3
PH 510	Fiber Optics and Optoelectronics	3	PH 542	Nanostructures	3
PH 514	Superconductivity and Critical Phenomena	3	PH 543	Surface Science	3
PH 517	Physics of Solid State Devices	3	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	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	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 <http://www.tezu.ernet.in/dphy>

CENTRE FOR ASSAMESE STUDIES

(Year of Establishment: 2011)

Centre for Assamese Studies was established in 2011. The prime aim of the Centre is to undertake and foster intensive and innovative study and research in Assamese Language, Literature and Culture in their varied dimensions adopting a wide perspective and all-encompassing worldview. The vision of the centre is to be a research centre of Assamese language, literature, culture and tradition.

Programme offered

1. Ph.D.

Faculty and Areas of Interest

Professor & Head in Charge		
1.	Prasanta Kr. Das	<i>American Literature, Indian Writing in English</i>
Assistant Professor		
1.	Juri Dutta , Ph.D. (RGU)	<i>Regional Literatures of India, Translation Studies and Comparative Literature, Creative Writing</i>

LEGENDS: RGU-Rajiv Gandhi University Arunachal Pradesh, HoD– Head of the Department

Research Activities

- No. of papers published in the year 2017– 2018: 03
- No. of current Ph.D. scholars: 02 (Dr. Bhupen Hazarika Fellows)

Facilities:

Departmental Library
Centre's Digital Archive

Research Activities:

- No. of papers published in the year 2017-18: 03
- No. of current Ph.D scholars: 02(Dr. Bhupen Hazarika Fellows)

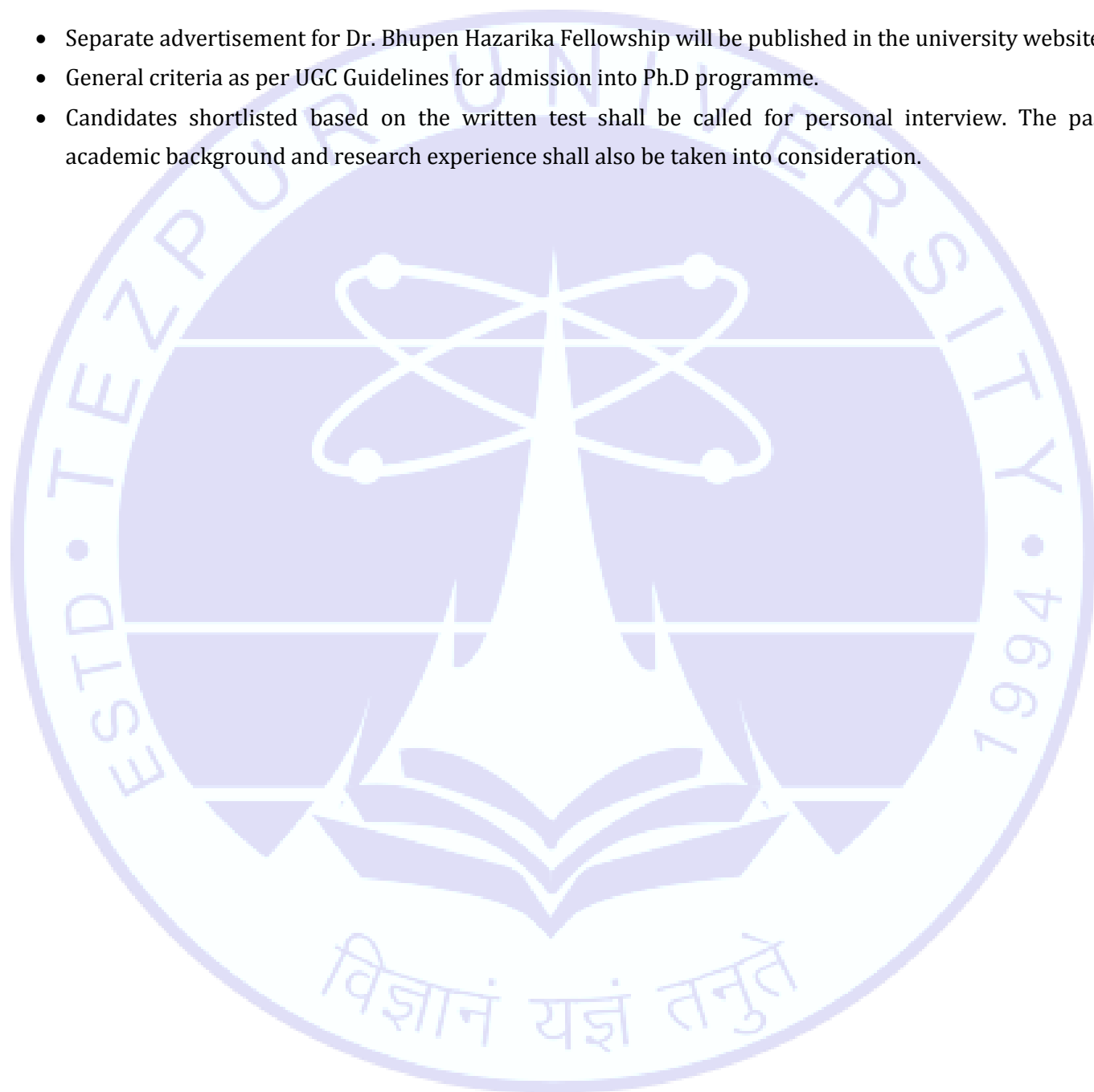
Selected Publications:

- Dutta, Juri. , July - August 2017. “*Ideological Conflicts in Birendra Bhattacharya’s fiction*” in *Muse India* (No.74), ISSN: 0975-1815.
- Dutta, Juri. May 2017. “*Translation of Literature and National Integration: A Re-appraisal*” in *International Education and Research Journal* (E-ISSN: 2454-9916) – a peer-reviewed Multi-disciplinary International Research Journal, Volume 3 Issue 5.

- Dutta, J. April-September, 2017. *“Tathya aru Satyar Bistrrita Anusandhan: Alpana Sarkar Deakar Unabimsa Satikar Patabhumit Asamiya Nari, Eti Alocana”* in Aallap edited by Sanjib Pol Deka, Vol I, Pp 294-300, Bandhav.

Selection procedure for Ph.D programmes (Dr. Bhupen Hazarika Fellowship):

- Separate advertisement for Dr. Bhupen Hazarika Fellowship will be published in the university website.
- General criteria as per UGC Guidelines for admission into Ph.D programme.
- Candidates shortlisted based on the written test shall be called for personal interview. The past academic background and research experience shall also be taken into consideration.



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		
1.	Dipak Nath, Ph. D. (GU)	<i>Disaster Risk Assessment and Risk Mitigation Approaches</i>

LEGENDS:GU-Gauhati University

Selected Publications

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

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

1. Certificate programme in Endangered Languages

Faculty and Areas of Interest

Coordinator		
1.	Madhumita Barbora,* Ph.D. (TU)	<i>Linguistics (Syntax, Psycholinguistics), Field Linguistics, Documentation</i>
Assistant Professors		
1.	Bobita Sarangthem, Ph.D.(MU)	<i>Phonetics and phonology, Field Linguistics and Socio-linguistics</i>
2.	Monali Longmailai Ph.D. (NEHU)	<i>Morphology, Syntax, Typology, Historical Linguistics, Areal Linguistics and Tibeto-Burman Languages</i>
3.	Dhanapati Shougrakpam, Ph.D. (MU)	<i>Morphology, Semantics, Field Linguistics</i>

* Recognized Supervisor

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

Facilities

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

- Apple iMac Workstation for Recording & Editing; YAMAHA 12XU 12 Channel Professional Mixing Console; Denon DN-4SOR Professional Grade Installed Recording Device; PresonusAudiobox 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

1. The Centre has two laboratories for various purposes

- Phonetic Lab (With 20 seat capacity)
- Documentation Lab (Recording and Editing Suite)

2. The Centre has three smart class rooms and a Multipurpose Hall, well equipped for Workshops, Seminars and Conferences etc.

3. 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 2017– 2018: 5

Selected Publications

- The Centre published the First volume of Annual Technical Report, released by Professor MihirKanti Chaudhuri, Former Vice Chancellor, Tezpur University on 16 May, 2017
- 6 Learners book on the endangered languages that the staff have been working on, are in press.
- 3 volumes on Phonology, Morphology and Syntax (of these 7 endangered languages) are forthcoming.
- 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 six (6) groups for collection of data from some of the endangered languages of the Northeast Region. Till date five (5) field works have been conducted by the 6 groups. The staff went for field work to Manipur, Nagaland and Dima Hasao Area and Tinsukia District of Assam for collection of data. The table below shows the details:

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

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

Courses offered by Centre for Endangered Languages, Tezpur University

Open Elective:

LE 223 Language, Society and Endangerment

LE 224 Language Policy, Education and Revitalization

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

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 *Training and Placement Cell* 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

1. Certificate Course in Technical Writing
2. P.G. Diploma in Child Rights and Governance (in collaboration with UNICEF)

Faculty and Areas of Interest

Director		
1.	Rajeev Kumar Doley, Ph.D. (IITG)	<i>Sociolinguistics</i>
Assistant Professors		
1.	Subhrangshu Dhar, Ph.D. (VB)	<i>Child Rights, Human Rights</i>
2.	Ritumoni Das, Ph.D. (JNU)	<i>Governance</i>

LEGENDS: **IITG**– Indian Institute of Technology Guwahati, **DU**–Dibrugarh University, **VB**– Vivas-Bharatai Santiniketan, **JNU**– Jawaharlal Nehru University

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	Doing 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

CENTRE FOR OPEN AND DISTANCE LEARNING
(Year of Establishment: 2011)

The Centre for Open and Distance Learning (CODL) was established in 2011 with the aim of disseminating knowledge and imparting quality education through open and distance learning mode. The Centre offers various postgraduate, diploma and certificate programmes in emerging areas of science, social sciences, management and humanities with flexible system to cater to the needs of the learners who otherwise cannot avail the regular mode of education. The basic focus of the Centre is to prepare human resources of the region and the country by making them skilled and employable.

Faculty and Areas of Interest

Professor and Director		
1.	Debabrata Das,* Ph.D. (RGU)	<i>Management(Financial Management, Development Finance Financial Markets and BFSI)</i>
Associate Professor(Part-time)		
1.	Sanjib Sahoo,* Ph.D. (TU)	<i>English(Indian Writing in English, Eco Criticism)</i>
Assistant Professor		
1.	Suchibrata Goswami, Ph.D. (DU)	<i>English (American Literature, Post-Colonial Writing)</i>
2.	Ankita Bhattacharya, M.A. (TU)	<i>Sociology(Sociology of Health and Illness)</i>
3.	Mridusmita Baruah,M.A.(TU)	<i>Mass Communication(Advertising and Public Relation)</i>
Programme Coordinators		Programmes
1.	Uttam Kumar Pegu*, Ph.D. (JMI)	<i>M.A. in Mass Communication</i>
2.	Amiya Kumar Das*, Ph.D. (TU)	<i>M.A Sociology</i>
3.	PallaviJha, Ph.D. (UoH)	<i>M.A English</i>
4.	Suryakant Tripathi*, Ph.D. (BHU)	<i>P.G. Diploma in Functional Hindi</i>
5.	Runumi Das*, Ph.D. (GU)	<i>P.G. Diploma in Human Resource Management</i>
6.	Dipak Nath, Ph.D. (GU)	<i>P.G. Diploma in Environmental and Disaster Management</i>
7.	Nirmali Gogoi*, Ph.D. (DU)	
8.	Shuvam Sen*, Ph.D. (IITG)	<i>M.A/ M.Sc. in Mathematics</i>

9.	Sadhan Mahapatra, Ph.D.(IISc.)	<i>P.G. Diploma in Renewable Energy and Energy Management</i>
10.	Subhragshu Dhar, Ph.D(Visva-Bharati, W.B).	<i>P.G. Diploma in Child Rights and Governance</i>

* Recognized Supervisor

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

Administrative Officer

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

Study Centres of CODL

(a) Tezpur	(b) Guwahati	(c) Dibrugarh
Tezpur University CODL, Napaam, Sonitpur - 784028 Contact: 03712 - 275350/57 Mobile: 7002247087	B. Barooah College, Ulubari Guwahati- 781007 Contact: 8638167719	DHSK College, Dibrugarh— 786001 Contact: 99544-81785

Academic Session

The Academic Session for the programmes under Distance Education commence twice a year usually in January and July, respectively. All the programmes under the Centre of Open and Distance Learning (CODL) may not be offered in each of the sessions.

Admission

(a) Admission notice: Notice for admission into the different academic programmes of the open and distance learning programmes of the University shall be issued by the Director, Centre for Open and Distance Learning separately. The same shall also be put in the official website: http://www.tezu.ernet.in./tu_codl

(b) Fees: The fees and other charges payable by the candidates shall be decided by the Academic Council from time to time.

Degree and Diploma Programmes offered by CODL

Sl. No.	Programme	Eligibility	Department and School	Fees in Rupees (Under revision)	Duration (Number of semesters)	
					Min	Max
1	M.A. in Mass Communication	Bachelor's degree in any discipline	Mass Communication and Journalism (School of Humanities and Social Sciences)	12,500/-	4	8
2	M.A in English	Bachelor's degree in any discipline	English and Foreign Languages (School of Humanities and Social Sciences)	12,000/-	4	8
3	M.A in Sociology	Bachelor's degree in any discipline	Sociology (School of Humanities and Social Sciences)	12,000/-	4	8
4	P.G. Diploma in Human Resource Management	Bachelor's degree in any discipline	Business Administration (School of Management Sciences)	7,500/-	2	4
5	P.G. Diploma in Renewable Energy and Energy Management	BE/ B. Tech or MSc in Physics or Chemistry	Energy (School of Engineering)	8,500/-	2	4
6	P.G. Diploma in Environmental and Disaster Management	Bachelor's degree in any discipline	Environment Science (School of Sciences) and Business Administration (School of Management Sciences)	8,500/-	2	4
7	P.G. Diploma in Child Rights and Governance	Bachelor's degree in any discipline	Centre for Inclusive Development	8,500/-	2	4

All the programmes offered by CODL are permitted and recognized by University Grants Commission, New Delhi.

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

TEACHING LEARNING CENTRE

(Year of Establishment: 2016)

The Teaching Learning Centre (TLC), Tezpur University was inaugurated in January, 2016 as a Centre of Excellence for Curriculum and Pedagogy under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) scheme. The scheme is funded by Department of Higher Education, MHRD, GoI. TLC envisages developing and promoting a responsive and relevant teaching-learning system for higher education communities and contributing to excellence in teaching and learning as an innovative and resourceful Centre through the optimal use of technology.

Among the objectives of the TLC are:

- To organize workshops and seminars to facilitate capacity building and professional development of teachers.
- To provide assistance and support for promoting best practices in teaching learning environment through research and dissemination of already generated knowledge.
- To generate and maintain learning materials and resources for easy access to learners and teachers.
- To develop discipline specific (pedagogy, language and social sciences) curricular framework for professional development Programme
- To prepare an outline of different pedagogy and scheme of assessment and evaluation method of different disciplines.

The target group of TLC, Tezpur University are College and University Level Teachers and Researchers and PG Students.

Faculty and Areas of Interest

Director-in-Charge		
1.	Prof. M. K. Sarma, PhD (TU)	Research Methodology, Services Marketing, Tourism Marketing
Assistant Professors		
1.	Swapnarani Bora, PhD (DU)	<i>Folklore, Sociolinguistics, Assamese Studies</i>
2.	Ikbāl Hussain Ahmed, M.Phil. (DU*)	<i>Evolutionary Ethics, Environmental Ethics, Symbolic Logic, Philosophy of Education</i>
Research Associate		
1	Bhushita Patowari, PhD (GU)	<i>Survey Sampling & Statistical Epidemiology</i>

LEGENDS: *TU*-Tezpur University, *DU*-Dibrugarh University, *DU**- Delhi University, *GU*- Gauhati University

Major facility: One ICT Lab.

Teachers trained: Total 61

CHANDRAPRABHA SAIKIANI CENTRE FOR WOMEN'S STUDIES (Year of Establishment: 2009)

Chandraprabha Saikiani Centre for Women Studies (CSCWS), Tezpur University was established in the year 2009. The University Grants Commission (UGC), New Delhi approved the proposal no. F.No7-1/2012(W) dated 6th of March 2012 for continuation of Women Study Centre (WSC) at Tezpur University. The UGC has also revised the pattern of positions and financial assistance for WSC, Tezpur University. The centre supports redistribution of women power and control of resources in favour of women. The vision of Chandraprabha Saikiani Centre for Women Studies, Tezpur University is to provide a platform and promote studies on women belonging to the diverse socio-cultural milieu of North- East India. The priority of CSCWS is to build a body of information and knowledge resource pool regarding women of this region. The Centre is running CBCT Courses from 2012.

Programme offered

1. P.G. Diploma in Women Studies

Faculty and Areas of Interest

Associate Professor		
1.	Madhurima Goswami, Ph.D. (TU)- HoD	<i>Gender Studies, Critical Theory, Performance Studies</i>
Assistant Professor		
1.	Mousumi Mahanta., Ph.D. (TU)	<i>Women Studies, Women and Mental Health, Feminist Research Methodology</i>

LEGENDS: 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, TezpurUniversity.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 MadhurimaGoswami, CSCWS, Tezpur University. ISBN- 978-93-87035-23
- Mahanta.Mousumi, Boro. Sonali, (2018) Panchayati Raj and Women of Rural Assam, DeshVikas, ISSN-2394-1782, Vol-4 Issue-4
- Boro. Sonali, (2018) Women's Participation in Agriculture and The Urbanization Process of North East India, MahilaPratishtha, 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>

The logo of Tezpur University is a large, light purple circular emblem in the background. It features the text 'TEZPUR UNIVERSITY' around the top and 'ESTD. 1971' around the bottom. In the center is a stylized atomic symbol with three orbits and a central nucleus.

SECTION- V

Important dates, fee structure, forms and contact details

1. [Important Dates](#)
2. [Fee Structure semester wise](#)
3. [Fee Structure For Ph.D. Students](#)
4. [Fee Structure \(excluding Ph.D.\)](#)
5. [Format of OBC\(NCL\) certificate](#)
6. [Format of Sponsorship/ NOC certificate](#)
7. [Format of PRC](#)
8. [Contact Details](#)

Important Dates		
1	Online portal opens on	February 27, 2019
2	Online application closes on	May 07, 2019
3	Online Admit card generation	20 May, 2019 (Tentative)
4	Dates of Tezpur University Entrance Examinations	May 31, June 1-2, 2019
5	Declaration of provisionally shortlisted candidates for personal interview for the Ph.D programmes	June 12, 2019 (Tentative)
6	Declaration of results (Excluding PhD)	June 25, 2019 (Tentative)
7	Date of admission and course registration	July 22-25, 2019 (Tentative)
8	Starting of classes	July 26, 2019

Semester wise fee for the students to be admitted in 2019

Particulars	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester	9th Semester	10th Semester	Refundable (included in the fees of 1st semester)
Integrated dual B.Com & M.Com	18243.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	6500.00
Integrated dual B.A. & M. A.	18243.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	6500.00
Integrated dual B.Sc. & M. Sc. (Physics, Mathematics)	20743.00	12443.00	12443.00	12443.00	12443.00	12443.00	12443.00	12443.00	12443.00	2443.00	6500.00
Integrated dual B.Sc. & M. Sc. (Chemistry, Life Science)	21943.00	13643.00	13643.00	13643.00	13643.00	13643.00	13643.00	13643.00	13643.00	3643.00	6500.00
Integrated B.A. B.Ed.	18243.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	9943.00	-	-	6500.00
Integrated B.Sc. B.Ed. (Physics, Mathematics)	20743.00	12443.00	12443.00	12443.00	12443.00	12443.00	12443.00	12443.00	-	-	6500.00
Integrated B.Sc.B.Ed. in Chemistry	21943.00	13643.00	13643.00	13643.00	13643.00	13643.00	13643.00	13643.00			6500.00
B. Tech. (CSE, ECE, ME, CE, EE)	32243.00	23943.00	23943.00	23943.00	23943.00	23943.00	23943.00	23943.00	-	-	6500.00
B. Tech. (FET)	33443.00	25143.00	25143.00	25143.00	25143.00	25143.00	25143.00	25143.00	-	-	6500.00
B. Voc.	20743.00	12443.00	12443.00	12443.00	12443.00	12443.00	-	-	-	-	6500.00
Master of Computer Application	23743.00	15443.00	15443.00	15443.00	15443.00	15443.00	-	-	-	-	6500.00
B.Ed.	19743.00	11443.00	11443.00	11443.00	-	-	-	-	-	-	6500.00
M. A. (except M.A. in Mass Communication & Journalism)	18243.00	9943.00	9943.00	9943.00	-	-	-	-	-	-	6500.00
M. Com.	18243.00	9943.00	9943.00	9943.00							6500.00
M. Sc. (Physics, Mathematics)	18943.00	10643.00	10643.00	10643.00	-	-	-	-	-	-	6500.00
M. Sc. (Chemistry, MBBT, Environmental Science)	20143.00	11843.00	11843.00	11843.00	-	-	-	-	-	-	6500.00
M. Tech. (ME, IT, ELDT, Bioelectronics)	27743.00	19443.00	19443.00	19443.00	-	-	-	-	-	-	6500.00
M. Tech. (FET, Polymer Science & Technology, Energy Technology)	28943.00	20643.00	20643.00	20643.00	-	-	-	-	-	-	6500.00
M. A. in Mass Communication & Journalism	28743.00	19443.00	19443.00	19443.00	-	-	-	-	-	-	6500.00
<i>Master of Tourism & Travel Management</i>	22743.00	14443.00	14443.00	14443.00	-	-	-	-	-	-	6500.00
Master in Law (LLM)	22893.00	14593.00	14593.00	14593.00	-	-	-	-	-	-	6500.00
Certificate in Chinese	16543.00	8743.00	-	-	-	-	-	-	-	-	6500.00
PG Diploma in Translation	16743.00	8943.00	-	-	-	-	-	-	-	-	6500.00
PG Diploma in Women's Studies	22743.00	14443.00	-	-	-	-	-	-	-	-	6500.00
PG Diploma in Child Rights & Governance	22743.00	14443.00	-	-	-	-	-	-	-	-	6500.00

*** Fee is subject to change at any time. ** Fee structure for the LL.M. programme will be notified later.**

FEE STRUCTURE FOR Ph.D. STUDENTS TO BE ADMITTED IN AUTUMN SEMESTER, 2019

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	500	500	500	500
Provisional certificate	Once on admission	100	100	100	100
Alumni Association	Once on admission	500	500	500	500
Cautions deposit (Library and Laboratory)	Once on admission	2000	2000	2000	2000
Hostel Caution deposit	Once on admission	3000	-	-	-
Hostel Mess Advance	Once on admission (in case of Hostel boarder)	1500	-	-	-
* 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	350	350	350	
Students' activity	Per semester	500	500	500	500
Medical	Per Semester	250	250	250	
Transport	Per semester	1000	1000	1000	
Laboratory (including computer usage)	Per semester	1000	1000	1000	1000
Research Fee	Per semester	3000	3000	4000	4000
Infrastructure and amenity	Per semester	1000	1000	1000	1000
Fan, Electricity and Water charge	Per semester	300	300	300	300
Students' Welfare Fund	Per semester	150	150	150	150
Development Fund	Per semester	1500	1500	1500	1500
**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 Dept. of Chemical Sc./MBBT//FET/ Environmental Sc. at the time of admission		25493	16493	17850	16250
Total fee to be paid by the students of other departments at the time of admission.		23493	14493	15850	14250

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

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

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

Controller of Examinations

FEE STRUCTURE (Excluding Ph. D.)

Particulars	Mode	B. Tech./ B. Tech. Lateral Entry	Certificate in Chinese	Int. dual B.com & M.Com/ Int. Dual BA & MA.	Int. dual B.Sc.& M.Sc/ Int.B.Sc. B.Ed./ B.Voc	M.A./ M. Com	MCA	M. A. in MCJ	M. Sc.	M. Tech.	PG Diploma in Trans- lation (HINDI)	MTTM/ P. G. Diploma in Women's Studies/ PG Diploma in Child Rights & Governance	Two year B.Ed.	Master in Law (LL.M.)
Admission	Once on admission	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
Registration	Once on admission	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
Tuition	Per semester	15000.00	500.00	1000.00	3500.00	1000.00	6000.00	5000.00	1200.00	10000.00	1500.00	2000.00	2500.00	5000.00
Library	Per semester	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	350.00	1000.00
Students' activity	Per semester	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	Per semester	250.00	250.00	250.00	250.00	250.00	250.00	250.00	250.00	250.00	250.00	250.00	250.00	250.00
Convo- cation	Once on admission	500.00	-	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00
Transport	Per semester	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
Training & Placement	Once on admission	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	-	500.00	500.00	500.00
Placement Brochure	Once on admission	-	-	-	-	-	-	1000.00	-	-	-	-	-	-
I Card	Once on admission	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
Laboratory (including Com- usage)	Per semester	500.00	-	500.00	500.00	500.00	1000.00	1000.00	1000.00	1000.00	500.00	500.00	500.00	500.00
Caution depos- (Library and Laboratory)	Once on 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
Hostel caution deposit	Once on admission	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
Provisional certificate	Once on admission	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
Examination (Theoretical)	Per semester	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
Examination (Practical/Diss- ertation)	Per semester	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	Per semester	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
TU Alumni Association	Once on admission	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
Hostel Admission/ re-admission	Per semester	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
Mess Advance for hostel boarder	Once on admission	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00
Infrastructure amenity	Per semester	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
Fan, Electricity & Water Charges	Per semester	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
Student Welfare fund	Per semester	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	Per s emester	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	Per semester	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	-	1500.00	1500.00	1500.00
Charges for consumables	Per semester	-	-	-	-	-	-	5000.00	-	-	-	-	-	-
Outdoor activities	Per semester	-	-	-	-	-	-	-	-	-	-	3500.00	-	-
Total		32243.00	16543.00	18243.00	20743.00	18243.00	23743.00	28743.00	8943.00	27743.00	16743.00	22743.00	19743.00	22893.00

Prescribed Format of OBC (NCL) Certificate/As per Govt. format

FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES APPLYING FOR APPOINTMENT TO POSTS/ ADMISSION TO CENTRAL EDUCATIONAL INSTITUTIONS (CEIs), UNDER THE GOVERNMENT OF INDIA

This is to certify that

Shri/Smt./Kum.....

Son/Daughter of

Shri/Smt..... of Village/

Town District/Division.....

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

- (i) Resolution No. 12012 / 68 / 93BCC(C) dated 10 / 09 / 93 published in the Gazette of India Extra ordinary Part I Section I No. 186 dated 13 / 09 / 93.
- (ii) Resolution No. 12012 / 9 / 94BCC dated 19 / 10 / 94 published in the Gazette of India Extra ordinary Part I Section I No. 163 dated 20 / 10 / 94.
- (iii) Resolution No. 12012 / 7 / 95 BCC dated 24 / 05 / 95 published in the Gazette of India Extra ordinary Part I Section-I No. 88 dated 25/05/95.
- (iv) Resolution No. 12012 / 96 / 94BCC dated 9 / 03 / 96.
- (v) Resolution No. 12012 / 44 / 96 BCC dated 6 / 12 / 96 published in the Gazette of India Extra ordinary Part I Section I No. 210 dated 11 / 12 / 96.
- (vi) Resolution No. 12012 / 13 / 97BCC dated 03 / 12 / 97.
- (vii) Resolution No. 12012 / 99 / 94BCC dated 11 / 12 / 97.
- (viii) Resolution No. 12012 / 68 / 98BCC dated 27 / 10 / 99.
- (ix) Resolution No. 12012 / 88 / 98BCC dated 06 / 12 / 99 published in the Gazette of India Extraordinary Part-I Section-I No. 270 dated 06 / 12 / 99.
- (x) Resolution No. 12012 / 36 / 99BCC dated 04 / 04 / 2000 published in the Gazette of India Extraordinary Part-I Section-I No. 71 dated 04 / 04 / 2000.

(xi) Resolution No. 12012 / 44 / 99BCC dated 21 / 09 / 2000 published in the Gazette of India Extraordinary Par-I Section-I No. 210 dated 21 / 09 / 2000.

(xii) Resolution No. 12015 / 9 / 2000BCC dated 06 / 09 / 2001.

(xiii) Resolution No. 12012 / 1 / 2001BCC dated 19 / 06 / 2003.

(xiv) Resolution No. 12012 / 4 / 2002BCC dated 13 / 01 / 2004.

(xv) Resolution No. 12012 / 9 / 2004-BCC dated 16 / 01 / 2006 published in the Gazette of India Extra ordinary Part I Section I No. 210 dated 16 / 01 / 2006.

Shri/Smt./Kum.and/or his family ordinarily reside(s) in the.District/Division of state. This is also to certify that he/she does not belong to the persons/section (Creamy Layer) mentioned in Column 3 of the Schedules of the Government of India. Department of Personnel & Training O.M.No.36012/22/93Estt.(SCT) dated 08/09/93 which is modified vide OMNo.36033/3/2004Estt.(Res.) dated 09/03/2004.

Dated:.....

District Magistrate/Deputy Commissioner/Competent Authority

Seal

NOTE :

(a) The term ordinarily used here will have the same meaning as in Section 20 of Representation of the People Act. 1950.

(b) The authorities competent to issue Caste Certificates are indicated below:

(i) District Magistrate/Additional Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/ Deputy Collector/1stClass Stipendiary Magistrate/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

Sub: Sponsorship/ No objection Certification of Mr./ Ms. _____ for Ph.D. programme at Tezpur University.

Dear Sir/Madam,

Mr./Ms. _____ has been working in this organization/ Project as _____ since _____

This organization has no objection to his/her being admitted to the Ph. D. programme at Tezpur University from the session starting from _____ as a part time/full time candidate.

The employee will be relieved of his/her duties in the organization to join in the Ph.D. programme if he/she is selected as part time/full time candidate (not applicable to project fellow). The part time candidate will be allowed to stay on the campus for pursuing the course work (only for part time candidate)

Date:

Signature _____

Place:

Name _____

Official Seal of the employer

1. Verified by: Signature.....Date.....

Name:.....Designation.....

2. Recommended/Not Recommended

Signature:

Name:

Chairperson, Selection Committee

Head, Department of

Date.....

(In letter head of the employer)

Format for No Objection Certificate (for other than Ph.D. programme)

This is to certify that Shri/Smt.....(Name and Address).....is an employee of(Organization and Department) and he/she is presently holding the post of.....as regular/temporary employee. He/She has been working in this Department since.....till date.

This is to certify that we have no objection to Shri/Smt.....applying for the programmein Tezpur University as a full time candidate. In the event of his/her selection for the said programme Shri/Smt.....shall be relieved from his/her duties.

Place

Signature of Officer

Date

Office

Office Seal

(Prescribed format for EWS certificate)

Government of.....

(Name & Address of the authority issuing the certificate)

INCOME & ASSET CERTIFICATE TO BE PRODUCED BY ECONOMICALLY WEAKER SECTIONS

Certificate No. _____

Date: _____

VALID FOR THE YEAR _____

This is to certify that Shri/Smt./Kumari _____ son/daughter/wife of _____ permanent resident of _____ Village/Street _____ Post Office _____ District _____ in the State/Union Territory _____ Pin Code _____ whose photograph is attested below belongs to Economically Weaker Sections, since the gross annual income* of his/her "family"** is below Rs. 8 lakh (Rupees Eight Lakh only) for the financially year _____. His/Her family does not own or possess any of the following assets***:

- I. 5 acres of agricultural land and above;
- II. Residential flat of 1000sq. ft. and above;
- III. Residential plot of 100 sq. yards and above in notified municipalities;
- IV. Residential plot of 200 sq. yards and above in areas other than the notified municipalities.

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

Signature with Seal of Office _____

Name _____

Designation _____

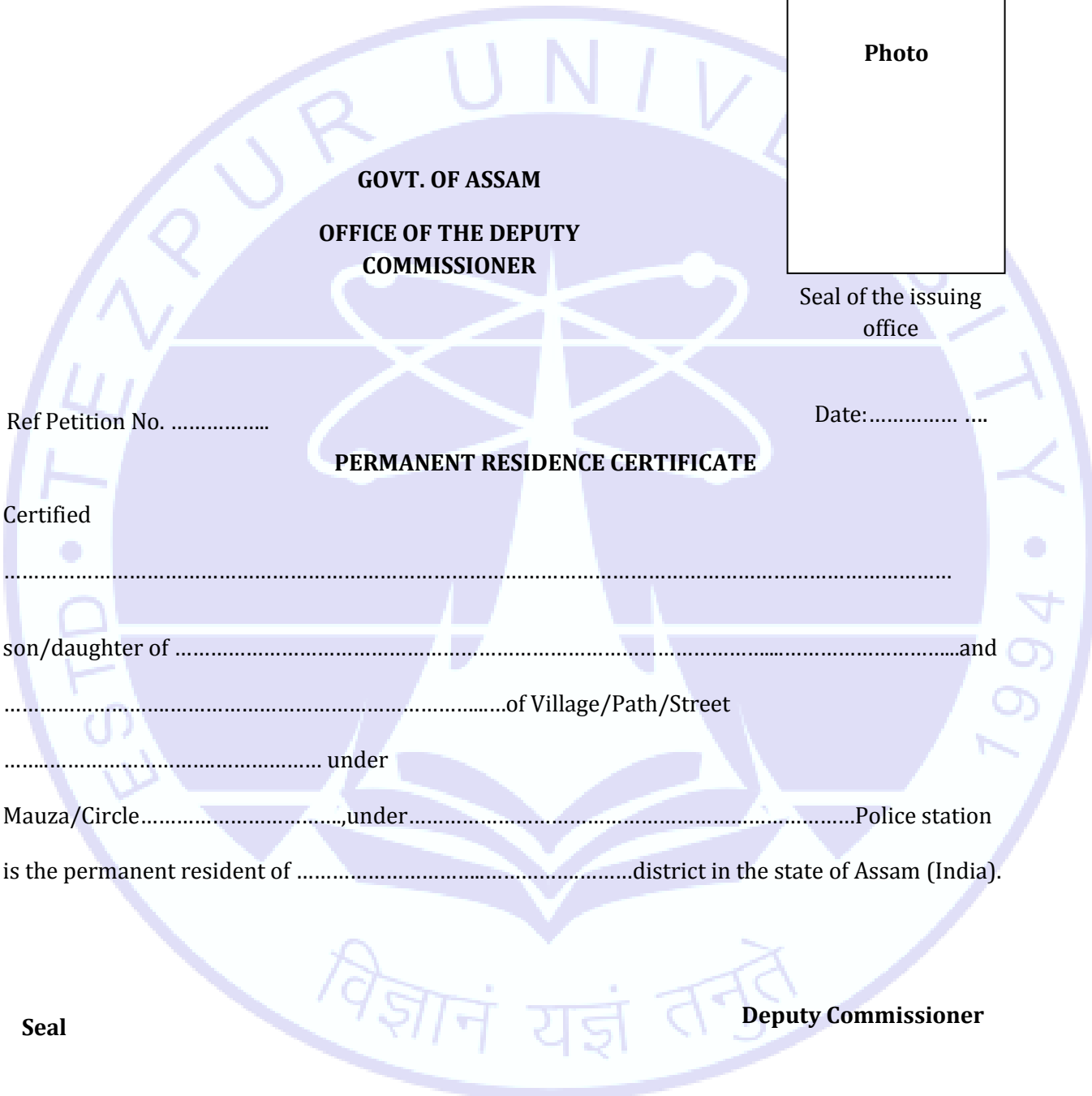
Recent Passport size
attested photograph
of the applicant

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

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

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

Prescribed Format of PRC/As per Government Format



GOVT. OF ASSAM

OFFICE OF THE DEPUTY COMMISSIONER

PERMANENT RESIDENCE CERTIFICATE

Ref Petition No.

Date:.....

Seal of the issuing office

Photo

Certified

son/daughter ofand

.....of Village/Path/Street

.....under

Mauza/Circle.....under.....Police station

is the permanent resident ofdistrict 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	rkdooley@tezu.ernet.in
Centre for Open and Distance Learning	275350	94350-15074	codl@tezu.ernet.in
Chandrabhabha 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	bkcyc@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

* Contact must be made during Office hours only.

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