

PROSPECTUS 2014



TEZPUR UNIVERSITY

(A Central University)

www.tezu.ernet.in

Napaam, Tezpur, Assam 784028

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NOTE : This Brochure does not create a binding contract between the University and the students. Various provisions mentioned in the Brochure are subject to change. University regulation, circular and/or notification issued at a later date are liable to supersede the provisions mentioned in this Brochure.



“Education is not the learning of facts, but the training of the mind to think”

— Albert Einstein

SECTION ONE

TEZPUR UNIVERSITY

ABOUT THE UNIVERSITY

Tezpur University was established on 21st January in 1994 by an Act of Parliament of India, *The Tezpur University Act, 1993 (Act No. 45)*, as a non-affiliating and residential Central University. The University is located at Napaam, about 15 Km. east of Tezpur town in the Sonitpur District of Assam. The sprawling, serene and green University Campus of about 262 acres provides the best of atmosphere including modern infrastructure conducive for learning and dedicated research. The academic programmes offered in the University have a distinct focus on science, technology and humanities, reflecting the objective of the University. At present the University offers Doctor of Philosophy programme in 17 disciplines, Masters programme in 23 disciplines, Post-Graduate Diploma in 3 disciplines, B. Tech. in 6 disciplines, Certificate programme in 3 discipline, Integrated M. Sc. programme in 4 disciplines, Integrated B. A. B. Ed. Programme in 1 discipline, Integrated M. A. in 1 discipline, Integrated B. Sc. B. Ed. Programme in 3 disciplines, Integrated M. Com., Diploma and Advanced Diploma Programme in 1 discipline each.

During the last twenty 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 and a relatively small but rich library having connectivity to several digital libraries. While students' accommodation is provided in 12 well-designed hostels, several residential quarters have been built for accommodating teachers and non-teaching staff. Other basic amenities like central water supply, campus security, guest house, canteen, gymnasium, outdoor & indoor sports facilities, post office, banks with ATMs, schools, etc. are also available to cater to the various needs of the university community.

Being a Central University, the University is privileged to receive funds from the Ministry of Human Resource Development, Government of India, through the University Grants Commission. Assistance has also been received from the Non-Lapsable Central Pool of Resources of the Government of India. Faculty members of different academic Departments have been able to earn a large number of research projects worth crores of rupees from different sources. The University promotes industry-academy alliance and the existence of a few prestigious industry sponsored projects in the University bear testimony to this.

FACILITIES AND SERVICES

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

University Library:

The University offers a Central Library with a rapidly increasing collection of books, periodicals and journals. Central library holds 53390 books, 5084 back volumes, active subscription to 169 print journals, 778 e-resources, and 3 online Databases. The UGC-Infonet Consortia of INFLIBNET Center is providing free access to about 10,000 e-journals and 11 online Databases. The DelCon DBT e-library Consortium has also provided access to 115 e-journals. The library holds 1281 CD/ VCDs. Library users can access book database, theses database, journal database, e-journals and other e-resources from any terminal within the University campus.

Computing Facilities:

The University started using computers from its very inception both in its academic and administrative activities. The University has elaborate computing facilities accessible to the students. There are two clusters of modern state-of-the-art Computer Centre situated appropriately within the campus for use by the students and research scholars in addition to the Departmental computer laboratories. Apart from a large number of PCs and several servers, all connected to the high speed campus LAN, the Centre also has a 4-processor SGI ALTIX-350 server. There are also high quality laser printers, DMP printers, scanners and multimedia projectors. Various software systems are available that run in environments such as LINUX & MS Windows. The campus LAN is connected to the Internet through 1-Gbps National Knowledge Network (NKN) optical fiber link. It also has a 2-Mbps leased line for Internet as a backup link.

Hostel Accommodation:

The University has separate hostels for boys and girls adequate to accommodate all students and research scholars. In total there are 7 women's and 5 men's hostels comprising of more than 3300 capacity.

Scholarships:

A limited number of scholarships are offered to Tezpur University students by various Government/semi-Government organizations such as NEC, DBT, ITDP, MNRE, DTE, DST, UGC, ICSSR, AICTE, other State Governments, and ONGC etc. Tezpur University also offers an Institutional fellowship to PhD students having good academic career. Free studentships are also provided to a limited number of meritorious students of PG/UG programmes belonging to economically weak families.

Health Services:

The University has a Health Centre to provide basic medical services with its own medical and paramedical staff. The Health Centre is manned by three full-time highly qualified physicians. Besides, specialist doctors like radiologist, gynecologist and psychologist regularly visit the University in a weekly basis. The students are also provided with the benefit of health insurance scheme. The newly admitted student will be covered under the insurance from 25 August 2014.

Games and Sports:

The University provides opportunities for students to excel in various departments of sports. The University has basketball, volleyball and tennis courts, cricket and football grounds with playing facilities under flood light, and a well-equipped multi gymnasium.

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 network among the alumni of the University.

Academic Calendar:

The University strictly adheres to a well-planned academic calendar specifying the schedule of academic activities. All events including the examinations are held strictly according to this 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 2014 is available in the URL- <http://www.tezu.ernet.in/academic/calendar-2014.pdf>

CURRICULUM

Each academic programme is designed to provide enough flexibility in the choice of courses for the students. The courses across the Departments have been designed in such a way that multiple teaching pedagogies could be incorporated easily for delivering the syllabus. Besides the compulsory (core) courses for each of the programmes, the students also have the option to choose courses of their own interest from the elective courses. Students will be required to register some inter disciplinary courses as per their choice under the Choice Base Credit Transfer (CBCT) mechanism. This is a unique feature of the academic programmes of this University.

Instruction Methodology:

The medium of instruction / examination in the University at all levels is English. In framing the courses, care has been taken to see that they 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. Group Discussion is an integral part of teaching pedagogy to help the students in increasing their analytical capability and creativity.

Evaluation system:

The students are evaluated following relative grading system which is basically internal. In order to make sure that the students do not have to rely on any one or two major examinations for evaluation the University follows a continuous and comprehensive evaluation system, where the tests and assignments are spread across the entire semester. A relative Letter Grade is awarded on the basis of continuous internal assessment through class tests, assignments, seminars, term tests etc.

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 Grade represents a Grade Point as tabulated below. The letter grades A+ to D are considered as *Pass grades* and *F* is considered as *Fail grade*.

Letter Grade	Grade Point	Description
A+	10	Outstanding
A	9	Excellent
B+	8	Commendable
B	7	Very Good
C+	6	Good
C	5	Average
D	4	Marginal
F	0	Poor

In addition there are other grades as stated below:

Letter Grade	Status	Remarks/Context
I	Incomplete	Letter grade assigned in case any evaluation component remains to be completed due to an extraordinary situation (conforming to the relevant provision in the Regulations for Academic Matters) faced by the student. This grade must be converted to any of the regular grades above within the first month of beginning of the following semester by completing the remaining evaluation component(s).
W	Withdraw	Letter grade assigned if (i) a student withdraws from a course after the last date for withdrawal of course and (ii) deficient of required attendance.

Course registration and attendance:

The student shall register for the course /project/ research work(s) for a particular semester by filling-in the registration card. A course adviser appointed by the Head of the Department (HoD) shall assist the student in the selection of the courses for the semester. The registration card duly signed by the student and countersigned by the course adviser and the HoD shall be submitted to the Controller of Examinations. One copy each of the form shall be made available to the Dean of Students' Welfare, Head of the Department, and the student concerned.

Abridged Academic Calendar 2014:

JANUARY 16	Admission to classes and hostels/course registration
APRIL 01-08	Major I (tentative)
MAY 16-24	Spring semester end term examinations (Major II)
JULY 31	Counselling and course registration for new entrants
AUGUST 1	Commencement of classes for autumn semester
OCTOBER 22-30	Major I (tentative)
DECEMBER 01-09	Autumn semester end term examinations (Major II)

NOTE: Detailed academic calendar is available in the University website.

TRAINING AND PLACEMENT

Helping and guiding the 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 in association with the Equal Opportunity Cell of the University. Currently, the Cell is headed by the Deputy Director (Training and Placement).

The 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 qualities that are emphasized upon during the training sessions. While doing so, they are also made aware of the corporate social responsibilities that serve catalyst to holistic growth.

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

List of Past Recruiters:

Private Sector Organizations	
Aircel	Jungle Travels India
Accenture	Jenson and Nicholson
AGC Networks	Mahindra Finance
Airtel (Bharti Telecom)	LG Soft
American Embassy, New Delhi	Look East Chennel
Aricent	Nagaland Fruit and Veg. Prod. Unit
Asia Carbon Limited	NDTV
Asian Paints	Nestle India Ltd.
Axis Bank	NE Chronicle
AzimPremji Foundation	NE TV
Broadcom	Newslive
Calcom Cement	Nokia
Channelply	OCWEN
Channel Look-East	Oracle
Chembioetek Life Science	Perkin Elmer (India) Pvt Ltd
CG foods	Philips
Cipla Ltd.	PRADAN
CNN-IBN	Press Trust of India,
Colgate-Palmolive	Q-Tech Nano Systems
Dabur India	Reliance
Delphi	Reverie Language Technologies
Diamond Fabcare, New Delhi	RIMS
Disha, New Delhi	Samsung
Private Sector Organizations	
DSCL	SBI Life
Dymanics Orbit	Shalimar Paints
Dyna Roof	Shriram Transport Finance Company Ltd
ETV-Ramoji Film City, Hyderabad	SiemensTechnology,
Genpact	Software AG

GE Health Care	Sony India
GLAXO-Smithkline	SRD Nutrients, Mangaldoi,
Godrej and Boyce Manuf. Co. Ltd.	Star Cement
Hindustan Coca-cola Ltd	Sunrise Biscuits (Britannia)
Hindustan Lever Ltd.	Symphony
Housing Dev. Finance Co. (HDFC)	Syntel
Huawei Technologies	Tata Consultancy Service
IBM	TATA-ELEXI
ICI Paints	TCI
ICICI Bank	Tech Mahindra
Indian Express	Vodafone
Infosys	Unisys Global Services
ITC Ltd	Wipro
Jindal Steel & Power Ltd	Yes Bank
Public Sector Units	
Allahabad Bank	Indian Oil Corporation Ltd. (IOCL)
Bank of Maharashtra	Industrial Development Bank of India
Bharat Sansar Nigam Ltd.(BSNL)	Intelligence Bureau
Bongaigaon Refineries and Petrochemicals	ISRO
Brahmaputra Cracker and Polymer Ltd.	NRHM, Govt. of Assam
Centre for Sc. and Env., Delhi	National Thermal Power Corporation
DRDO	Numaligarh Refinery Limited (NRL)
Export-Import Bank of India	Oil India Limited (OIL)
Food Corporation of India	ONGC
Food Safety and Standards Authority	Powergrid Corporation of India
Gas Authority of India Limited (GAIL)	Reserve Bank of India
ICAR	State Bank of India
Indian Army	United Bank of India
Institutions of Higher Learning	
Assam Don Bosco University	Indian Academy of Science, Bangalore,
Assam Engineering College, Guwahati	Institute of Genomics and Integrative Biology
Assam University, Silchar	J. B College, Jorhat
Banaras Hindu University	JNU, New Delhi
Jadavpur University,	Jorhat Engineering College
Bareilly Engineering College	Konkuk University, Korea
Bielefeld University, Germany	M.S University of Baroda,
Central Institute of Post-Harvest Engg. and Tech.	National Institute of Cholera and Enteric Diseases
Dibrugarh Polytechnic	National Centre for Genome Research
Dibrugarh University	NCL, Pune,
Edinburgh University England,	NIT, Silchar
Epitome College, Diphu	North Eastern Hill University, Shillong
Galgotia Institute of Technology, Noida,	Royal Group of Institutions
Gauhati University	Sikkim Manipal Institute of Technology
Girijananda Choudhury Institute of M&T	Silchar Polytechnic
Hyderabad University,	Sognag University, Korea
IISC, Bangalore,	Sona College of Technology, Salem
IIT, Delhi,	St. Anthony's College, Shillong
IIT Guwahati	University College of Cork, Ireland
IIT Kharagpur	Rajiv Gandhi University
IMPRS, Halle, Germany	University of Pune

STUDENTS' CODE OF CONDUCT

Students are to follow discipline as prescribed in the regulations on Maintenance of Discipline of the University. Violation of any clause by any student may lead to disciplinary action as per the regulations.

Tezpur University is Ragging Free University. Ragging in any form is strictly prohibited inside or outside the University. Students found indulging in ragging shall be subjected to punishment as per rule. Candidates are advised to visit the website: www.ugc.ac.in or www.tezu.ernet.in for UGC Regulations on curbing the menace of ragging in Higher Educational institutions, 2009.

IMPORTANT ACADEMIC RULES

Course registration:

The courses opted by the students in a particular semester are to be registered on some specific date(s). For newly admitted students, registration of courses will be done on July 30 and 31, 2014.

Attendance requirement:

All students must attend every lecture, tutorial and practical classes, of the course registered by him/her. However, to account for late registration, sickness or such other contingencies, the attendance requirement will be a minimum 90% of the classes. Students with deficiency in attendance in a course will be awarded W (withdrawn) grade in the course.

Renewal of admission:

Every student will renew his/her admission in the successive semesters on the notified dates. No student is allowed to get himself/herself admitted after the scheduled date.

Requirement for award of degree/diploma:

A student shall be required to satisfy the following conditions for award of degree/diploma

- a) Obtain a pass grade in each of the courses.
- b) Earn the minimum credit required for award of degree/diploma within the prescribed maximum duration of the programme (maximum credit load allowed per semester is 25).
- c) Secure a minimum CGPA of 4.5.

The **provisionally admitted students** shall have to discontinue their studies if they fail to submit the required documents such as pass certificate, mark sheet, etc within the specified period.

ADMISSION PROCEDURE

The eligible candidates may apply for admission into different programmes of Tezpur University manually or online.

Manual Application:

TU application form along with the prospectus can be obtained from **(i)** select **Post Offices** (please refer to www.tezu.ernet.in) by paying Rs. 270/- for SC/ST categories and Rs. 520/- for other categories or **(ii)** by **sending a request** to the Controller of Examinations, Tezpur University with a demand draft of Rs. 310/- for SC/ST category candidates and Rs. 560/- for other categories. Additional Bank charge may apply. The demand draft should be drawn in favour of *The Registrar, Tezpur University, payable at Tezpur*, with a self-addressed unstamped envelope of 36 x 25 cm.

Online Application:

Interested candidates may also apply through the University Website by paying a fee of Rs. 250/- for SC & ST and Rs. 500/- for other categories candidates. Additional bank charge may apply. Payment receipts of the manual application received from the Post offices shall not be valid for online application.

The candidates are required to fill-up the application form online in the University website www.tezu.ernet.in. Candidates should read and follow the instructions (that is available in the website) carefully while filling up the relevant columns of the online application. On completion of the entire filing up process, the applicant is required to take a print-out of the form and the bank challan with all filled up data. The fee is to be deposited in the relevant **Powerjyoti account with the State Bank of India** through the printed challan. The printed form along with the

receipt of the fees deposited and other relevant documents (*as given at the end of the form*) is to be sent to the *Head of the relevant Department* (in case of non-B.Tech. programmes) and to the *Controller of Examinations* (for B.Tech. programmes) so that it is received within the last date. Please note that the relevant copy of the **Bank challan** (generated during the online process) shall be stamped and a Journal number shall be entered by the Bank. The Journal number, in turn must be entered in the relevant column to complete the process of online form fill-up.

Forms received after the last date shall not be considered for shortlisting.

Important Points:

1. Candidates applying for more than one programme must apply separately for each programme. However, for the Integrated M.Sc. and Integrated B.Sc.B.Ed. Programmes of the same Department, candidate needs to apply in a single application form. Similarly for Integrated M.A. (English) and Integrated B.A.B.Ed. (English major in B.A.), candidate needs to apply in a single application form. Even though there shall be one combined entrance examination for Integrated M.Sc. /M.A. and Integrated BSc.B.Ed./B.A.B.Ed. for a Department, there shall be two different merit lists. Such integrated course candidates must mention their choices clearly in Item no.2 (a) and 2(b) of the application form.
2. For all B. Tech. programmes, a candidate needs to apply in a single application form only.
3. Candidates who have already finished their qualifying examination, and those who are expected to complete all components of the examination including practical, and viva (if any) before the date of admission may also apply (*Please read the paragraph on “provisional admission” given hereafter for detail*).
4. Please fill in the application form in legible handwriting without cutting and overwriting. (only for manual application)
5. Last date of receipt of applications:

(i) For B.Tech. Programmes: The Controller of Examinations, Tezpur University on or before May 7, 2014.

(ii) For all other programmes: The concerned Head of the Department on or before April 8, 2014.

The University shall strictly follow these deadlines. And the applications received after the dates mentioned above shall not be considered for shortlisting. Therefore, please take extra caution that your form is received at the Offices mentioned above within the last date. Even for online application the printout duly signed and pasted with photograph must reach the relevant addressee within these dates. It may be noted that Tezpur University is located outside the Tezpur city and some private courier services may not deliver the documents to the University in time.

6. For B.Tech Applicants : B.Tech applicants should use the following codes for indicating their preferences in the application form.

Code	Programme
CE	Civil Engineering
CSE	Computer Science & Engineering
EE	Electrical Engineering
ECE	Electronics & Communication Engineering
FET	Food Engineering & Technology
ME	Mechanical Engineering

Branch allotment will be as per merit in the JEE (Main) examinations

7. **Admit Cards (Not required for B. Tech. & Ph.D. applicants) :** Fill in the Admit Card (in duplicate) attached to the application form and send them along with the filled up form.
8. **Entrance Examination Centres (other than for B. Tech. & Ph.D.):** To be filled in by the candidate in the Admit Card. Admit Card is attached along with the application form. Form received without mention of centre in the admit card for examination shall be rejected.
Candidates should select the centre very carefully. It is to be noted that change of centre at a later date is not allowed. Please note that Admission test for shortlisted Ph.D. candidate shall be held in concerned Department.

Centre	Code	Address
Agartala	101	Tripura University, Agartala, Tripura
Bangalore	102	Indian Institute of Science, Bangalore – 560012
Barpeta Road	103	B. H. College, Howly, Barpeta, Assam, Pin-781316
Bhubaneswar	104	B.J.B. College (Autonomous), Bhubaneswar, Orissa
Chennai	105	Presidency College, Chennai-600005, Tamilnadu
Delhi	106	Gargi College, University of Delhi, Siri Fort Road, Delhi-110049
Dibrugarh	107	Dibrugarh University, Dibrugarh
Diphu	108	Diphu Govt. College, Diphu-782 460
Guwahati	109	NERIM, Jayanagar, Guwahati-781006
Hyderabad	110	Nizam College, Opposite L.B. stadium, Basheer Bag, Hyderabad, Andhra Pradesh
Imphal	111	D.M. College of Science, Imphal, Manipur
Itanagar	112	North Eastern Regional Institute of Science and Technology (NERIST), Nirjuli, Itanagar
Jorhat	113	J.B. College, Jorhat, Assam
Kokrajhar	114	Kokrajhar College, Kokrajhar, Assam
Kolkata	115	Giribala Sirkar Balika Vidyalay, 70B and C Shyampukur Street Kolkata-700004, West Bengal
Lucknow	116	Babasaheb Bhimrao Ambedkar University, Lucknow, U.P.-226025
Mumbai	117	KPB Hinduja College of Commerce, Mumbai
North Lakhimpur	118	North Lakhimpur College, Khelmati, North Lakhimpur, Assam
Patna	119	Central University of Bihar, BIT Campus, P.O. B.V. College, Patna-800014
Shillong	120	St. Anthony's College, Shillong, Meghalaya
Silchar	121	G.C. College, College Road, Silchar
Siliguri	122	North Bengal University, Raja Rammohanpur, Darjeeling, West Bengal
Tezpur	123	Tezpur University, Napaam, Tezpur, Assam

* In case the venue is changed due to unavoidable circumstances the same will be notified in the University website well in advance.

9. Enclosures:

Following documents are to be submitted along with the application form:

A. For B. Tech. programme:

- i) Relevant copies of the Challan (for online application only)
- ii) A copy of **JEE(Main)-2014** admit card
- iii) Permanent Residence Certificate (PRC) in case applying for Northeast Quota.

B. For other programmes:

- i) Relevant copies of the Challan (for online application only)
- ii) Duly filled Admit Card (**not for Ph.D.**)
- iii) Self-addressed envelope with postage stamp of Rs. 5/- (**Except for Ph.D. candidates**)
- iv) Attested copies of certificates (*and other documents, if relevant*) if applying under reserved category (*SC/ST/OBC-NCL/Person With Disability/Kashmiri Migrant categories*)
- v) Attested Copies of certificates supporting educational and other qualifications (including GATE, NET etc.) Sponsorship/No Objection Certificate, if relevant (**Only for Ph.D. candidates**)

The selected candidates will have to produce all relevant documents in original at the time of admission. They shall have to submit a set of attested copies of all mark sheets and certificates at the time of admission.

10. Keep a record of submission of TU Application Form, which shall be handy to prove your candidature in case of non- receipt of the Admit Card.

Selection of eligible candidates:

(a) B. Tech. Programmes

- (i) Candidates seeking admission to the B.Tech. Programmes are required to appear in the **JEE (Main)-2014** to be conducted by CBSE, New Delhi. All Admission shall be based on **JEE (Main)-2014** All India Ranking.
- (ii) 60% of available B.Tech. seats are reserved for the permanent residents of NE States. Candidates who fill-up Tezpur University application form shall be considered for the reserved seats. The applicants desiring a seat under NE quota must attach a PRC (Permanent Residence Certificate) along with the form. However, these applicants shall also be eligible to get admitted to the open seats through central counselling procedure.
- (iii) Admission to the remaining 40% open seats shall be made through the central counselling based on **JEE (Main)-2014**

(b) All other Programmes

The applicants for all other programmes (except for MBA) shall have to take an Admission Test conducted by TUEE-2014. The relevant syllabi for the test are made available at the end of this section.

(i) M.Tech. Programmes:

For M.Tech. Programmes, candidates may apply for more than one programme separately. Candidates of M.Tech programmes may seek admission either based on a valid GATE score or based on performance at TUEE-2014. For claiming admission based on GATE, the candidate must submit a valid GATE score card along with the application form. All applicants to M. Tech. courses, if eligible otherwise, may appear at the TUEE-2014, and may seek admission based on performance at TUEE. For some M.Tech programmes candidates may be required to appear for personal interview, which should be referred from department specific admission criteria.

(ii) Integrated M.Sc. and Integrated B.Sc.B.Ed.:

Candidates applying for Integrated M.Sc. and Integrated B.Sc.B.Ed. Programmes will be selected for admission according to his/her performance in the TUEE-2014. There shall be combined test for both Integrated M.Sc. and Integrated B.Sc.B.Ed. in the same subject. For example, the test for Integrated M.Sc.in Chemistry and B.Sc.B.Ed. (Chemistry major in B.Sc.) shall be identical. However, two different merit lists shall be prepared based on the choices made by the candidates.

(iii) Integrated M.A. (English) and Integrated B.A.B.Ed. (English major in B.A.):

There will be combined entrance examination for both the programmes and qualified candidates will be selected for admission according to his/her performance in the examination. However, two different merit lists shall be prepared based on the choices made by the candidates.

(iv) P.G. Programmes (other than MBA):

Candidates seeking admission to any of the PG programmes (other than MBA) shall have to appear in the TUEE-2014 as per the schedule given in **Annexure II**. Selection will be based on the performance in TUEE-2014. Mathematics at 10+2 level is compulsory for candidates applying for programmes of (i) MCA and (ii) Post B.Sc integrated M.Tech programmes in Food Engineering and Technology. For some programmes candidates selected through TUEE-2014 shall be required to appear for Group Discussion and Personal Interview.

In case of **non-receipt of Admit Card** along with the test roll number the candidates are advised to check the University website for their roll number and confirmation of candidature. Such candidates may contact the TUEE Official at the examination centre with proof of submission of application on the day of examination. Duplicate admit card may be issued on the spot.

The results of entrance examinations are likely to be declared in the fourth week of June 2014.

Seats are reserved for SC/ST/OBC (NCL) and Persons with Disabilities (PWD)/ Kashmiri Migrants candidates as per

central government rules. **Please note that PWD candidates with at least 40% permanent disabilities will only be considered.**

The list of selected candidates for admission, including a waiting list, will be notified in the University Notice Board and the University Website.

No separate call letter will be sent to the candidates selected/waitlisted for admission. No TA/DA will be paid to the candidates for appearing in the entrance examination and/or interview.

Admission:

The Schedule of Admission is given in Annexure III. Selected candidates will be admitted to the concerned programme on payment of requisite fees. The candidate's presence at the time of verification of testimonials etc., course registration and hostel admission is essential.

In case of a gap of one year or more between completion of qualifying examination and the year of admission, the candidate must produce a 'Gap certificate' from the District Police Authorities or an affidavit specifying his/ her occupation during the gap period.

Provisional Admission:

Candidates who have appeared/are appearing in the qualifying examination before the date of admission and whose results are being awaited may be admitted provisionally if otherwise found eligible at the entrance examination and/or interview, provided that

1. *They have passed all the earlier examinations held for the same degree without any carryover of subject(s) (back, arrear etc.) satisfying the eligibility criteria;*
2. *All academic works including theory and practical of qualifying examinations are completed before the admission.*
3. *They must produce the evidence of passing the qualifying examination with requisite qualification on or before 15 November, 2014 failing which they will be debarred from appearing the semester end examination.*
4. *Candidates must submit a proof of taking all the examinations at the time of admission duly certified by the Principal/ Head of the Institution last attended.*

Application for Hostel Accommodation

Candidates requiring hostel accommodation need to indicate in item no.19 of the application Form.

Commencement of Classes:

Classes for all the programmes will commence on 01 August, 2014 as mentioned in the Academic Calendar. Students admitted to any of the programmes must report to the Head of the Department concerned within a week from the date of commencement of classes, failing which his/her seat may be forfeited.

Refund of Caution Deposit:

Refund of caution money shall be made to a student after his/her release from the University. The claim for refund of caution money shall not be entertained beyond a period of one year from the date of release of the student. The caution money shall not be refunded if a student leaves the programme without permission and/or does not join and attend any class after admission. Refund of caution money shall be made against application in prescribed form and production of Release Order.

The fees deposited by the candidate shall not be refunded if the seat is withdrawn after the last day of admission (please refer to the admission schedule attached to this document for determining the last day of admission).

Self-Supported Scheme (SSS):

Eligible candidates under SSS will be admitted on payment of additional amount. Candidates in the waiting list only will be considered for admission under SSS. Tentative number of seats in each programme is available in section 3 of this prospectus. The details regarding SSS seats shall be notified on the website in appropriate time.

COURSE OUTLINES FOR THE ENTRANCE EXAMINATIONS

(I) P.G. Degree/Diploma/Certificate Programme

Candidates are to sit for Tezpur University Entrance Examinations (TUEE), 2014 to be held during May 31 and June 01 to June 02, 2014. Entrance Examinations for all programmes will be of two hours duration and will carry 100 marks.

M.Sc. in Chemical Sciences: The questions are on the basis of B.Sc. (Chemistry Major) syllabus along with 10+2 standard Mathematics, Physics, Biology and General Aptitude. The test comprises of all objective type questions. The distribution of marks is as per the following - General Science (10), Physical Chemistry (30), Organic Chemistry (30) and Inorganic Chemistry (30).

M.Sc. in Molecular Biology and Biotechnology: The entrance examination is held for 10 seats (out of 30 seats) reserved for the domicile of North East India. The Question booklet will have two parts. Subjective answers in Part B will be checked only if the candidate qualifies the objective questions given in Part A. The booklet will have questions on higher secondary level Chemistry, Physics and Mathematics and graduate level Life Science subjects.

M.A./M.Sc. in Mathematics: Questions will be of objective of Graduate level Mathematics. Each question carries 2 marks and 0.5 marks will be deducted for each wrong answer.

M.Sc. in Physics: Upto B.Sc. Physics (Honours) syllabus. The paper is of objective type.

M.Sc. in Nano Science and Technology: Upto B.Sc. honours in Physics/Chemistry/Biology syllabus. The paper is of objective type.

M.Sc. in Environmental Science: The test paper shall have multiple choice type questions of 10+2 and under graduate level science.

M.A. in Cultural Studies: The written test includes questions (descriptive as well as objective type) covering (a) General Information on North East India, particularly Assam, (b) Elementary Knowledge about the artistic and cultural heritage of India with particular reference to the North East India. The candidates may have to face an interview.

M.A. in English: The entrance examination assesses whether the candidate has the level of knowledge and skills expected of a student who has graduated/is going to graduate with major/honours in English.

M.A. in Hindi: The entrance examination for M.A. in Hindi assesses whether the candidate has the level of knowledge and skills expected of a student who has graduated or is going to graduate with major/honours in Hindi. There will be 100 marks for the test. The written test shall include multiple choice objective type questions of 50 marks. Descriptive type questions shall consist of the remaining fifty marks.

M.A. in Linguistics and Language Technology: The entrance examination tests whether the candidate has the basic information and ideas about languages of the world and how language as a phenomenon works.

M.A. in Mass Communication and Journalism: The written test shall comprise of both objective and subjective questions. The objective questions consist of current affairs, general knowledge, English language, general awareness on Northeast India and the basics of mass media. The subjective section is to test the candidate's writing skills, creative and analytical capabilities. The final selection will be based on written test, group discussion and personal interview.

M.A. in Social Work: There shall be 100 marks in two groups of 50 marks each. The first group will consist of multiple choice questions and the second group will have short descriptive type questions. Questions will be on general awareness, current affairs, knowledge about civil society initiatives, social justice, various social issues and challenges. The final selection will be based on written test, group discussion and personal interview.

M.A. in Sociology: The written test includes questions (objective as well as subjective type) on (i) general awareness and (ii) understanding of various socio-economic issues.

MCA: The written test consists of three parts: (i) Logical Reasoning and Basic Mathematical Ability, (ii) Mathematics (10+2 level) or fundamentals of Computer Science and (iii) English composition.

M.Tech. in Information Technology: The written test will be based on Programming in C, Computer Organization, Data Structures, Operating Systems, System Software, Computer Network, DBMS and Theory of Computation. The candidates may have to face an interview.

M.Tech. in Electronics Design and Technology: B.E. or equivalent level courses on Electronics and Communication Engineering, Electrical Engineering, AMIE in Electronics, M.Sc. in Physics with Electronics as special paper, M.Sc. in Electronics Sciences.

M.Tech. in Bioelectronics: B.E./B.Tech. level courses in Electronics Engineering, Electrical Engineering, Instrumentation Engineering, Communication Engineering, Biomedical Engineering, Chemical Engineering, Bioengineering, Computer Science & Engineering, Biotechnology, MBBS level, M.Sc. level courses on Chemistry, Biophysics, Molecular Biology, Cell Biology, Molecular Biology & Biotechnology, Polymer Science and Electronics.

Post B. Sc. Integrated M. Tech. in Food Engineering and Technology: The test paper shall contain 100 objective type questions from 10+2 Mathematics (30%), Physics (20%) and Chemistry (20%) and General Knowledge & Aptitude (30%). Selection will be based on Total Marks secured in TUEE.

M.Tech. in Food Engineering and Technology: The test paper shall contain 100 objective type questions covering the subjects of mathematics (20%), General Engineering (30%) and Food Engineering and Technology (50%). Selection will be based on Total Marks secured in TUEE.

However, if the candidate claims admission based on a valid GATE score, following criteria will be used:

- i) For GATE holder with food technology as one of the optional subjects : GATE Score (70% weightage) + Personal Interview (30% weightage)
- ii) For GATE holder without food technology as one of the optional subjects : GATE Score (70% weightage) + TUEE marks (30% weightage).

The final selection will be based on written test, group discussion /personal interview.

M.Tech. in Energy Technology: The final selection is based on written test. The test paper will include multiple choice questions covering (i) energy sources and energy conservation, (ii) mathematics, (iii) physics and (iv) chemistry (Graduate level courses in Science and Engineering).

M.Tech. in Polymer Science and Technology: The test papers shall have questions based on chemical science related subjects (Chemistry/ Polymer Science/Applied Chemistry) at Master's degree level and allied subjects (Polymer Sci. & Tech./Fiber Sci. & Tech./ Rubber Tech. / Plastic Tech./ Chemical Engineering) at professional (B.Tech./B.E.) degree level. Candidates with valid GATE score will get preference.

M.Tech. in Mechanical Engineering (Specialization: Applied Mechanics): The written test will be on basic mechanical engineering with special emphasis on Solid Mechanics and Fluid Mechanics. There may be a personal interview also if the number of candidates is large.

Certificate in Chinese: The entrance examination will assess the candidate's knowledge of English grammar and usage, ability to write coherent paragraphs in English and general information about China

P.G. Diploma in Mobile and Multimedia Communication: The written test shall comprise of both objective and subjective type questions. The objective questions will consist of tests on English Language, General Knowledge, Computer Knowledge, Current Affairs, Culture and Traditions of North East India. The subjective questions are to test the candidates' sensitivity towards social issues and writing skills. The final selection will be based on the written test and personal interview.

P.G. Diploma in Tourism Management: The written test of objective type will consist of General Knowledge, Test of Reasoning and Test of English. Short listed candidates (based on the written test) may have to appear for

a personal interview. Information regarding Personal Interview will be given in the website along with declaration of shortlisted candidates.

P.G. Diploma in Translation (Hindi): The written test shall have both objective and descriptive type of questions based on degree level syllabus of Hindi major, electives, praveen and sahityaratna.

(III) Integrated M.Sc. and B.Sc. B.Ed Programmes

Integrated M.Sc. in Bioscience and Bioinformatics: Test comprising of 50 objective type questions in two sections. The first section shall contain 35 questions in Biology and the second section shall contain 15 questions from Chemistry, Mathematics, Physics and General. Each question carries two marks and 0.5 marks will be deducted for each wrong answer.

Integrated M.Sc. and B.Sc. B.Ed in Chemistry: Test comprising of 50 objective type questions in two sections. The first section shall contain 35 questions in Chemistry and the second section shall contain 15 questions from Biology, Mathematics, Physics and General. Each question carries two marks and 0.5 marks will be deducted for each wrong answer.

Integrated M.Sc. and B.Sc. B.Ed in Mathematics: Test comprising of 50 objective type questions in two sections. The first section shall contain 35 questions in Mathematics and the second section shall contain 15 questions from Chemistry, Biology, Physics and General. Each question carries two marks and 0.5 marks will be deducted for each wrong answer.

Integrated M.Sc. and B.Sc. B.Ed in Physics: Test comprising of 50 objective type questions in two sections. The first section shall contain 35 questions in Physics and the second section shall contain 15 questions from Chemistry, Mathematics, Biology and General. Each question carries two marks and 0.5 marks will be deducted for each wrong answer.

(IV) Integrated M.A. in English and Integrated B.A. B.Ed. in English: The entrance test has two components. The first aims to test the candidate's general knowledge and the second their ability to write grammatically correct and acceptable English

(V) Integrated M.Com: The test paper shall consist of 100 multiple choice having six sections viz. General Knowledge (15 questions), knowledge about business/ socio-economic environment (15 questions), test of Reasoning (15 questions), test of English (20 questions), data interpretation (15 questions) and test of arithmetic/mathematics (20 questions). There will 0.25 negative marks for each incorrect answer.

(V) Ph.D. Programme: Candidates are selected based on the performance in the written test followed by personal interview. The syllabus for the examination will be as per respective P.G./U.G. courses. Please check Departmental websites or contact the Department for detail.

Model Questions for the Admission Test:

The model questions are provided along with the prospectus in a separate booklet. Also check the University website for further updates.

OMR Evaluation Sheet :

Candidates shall have to use an OMR sheet for marking the answers to the objective multiple answer-type questions.

While filling up the OMR sheet only black or blue ballpoint pens are to be used.

The candidates shall have to write and mark the Roll Number, Programme Code and Centre Code on the OMR sheet at the beginning of the examinations. **Failure to mark these components correctly will lead to rejection of the OMR sheet, which shall not be evaluated.**

A sample OMR sheet for a hypothetical student 2061080026 for MCA programme in Diphu centre along with detail instructions for use of the OMR sheet is enclosed in Annexure XI. Please follow the instructions meticulously.

Candidates are advised to be very careful in filling up the OMR sheet as correction/overwriting are not allowed. Please note that separate/alternative blank OMR sheet shall NOT be supplied to a candidate.

CANVASSING IN ANY FORM LEADS TO DISQUALIFICATION

[For detail rules please visit www.tezu.ernet.in]

SECTION TWO

B.TECH. PROGRAMME

B.TECH. PROGRAMME

Admission to the following B.Tech. programmes shall be made through the All India JEE 2014.

Programme B.Tech. in	Department
Civil Engineering	<i>Civil Engineering</i>
Computer Science and Engineering	<i>Computer Science and Engineering</i>
Electrical Engineering	<i>Electronics and Communication Engineering</i>
Electronics and Communication Engineering	<i>Electronics and Communication Engineering</i>
Food Engineering and Technology	<i>Food Engineering and Technology</i>
Mechanical Engineering	<i>Mechanical Engineering</i>

Curriculum Structure

Duration: Minimum : 08 Semesters
Maximum : 12 Semesters

Credit Requirements: Minimum Total : 176

Semester-wise distribution of courses for B. Tech Programme First Year (Common to all disciplines)

Semester I		
Course Code.	Course Title	Cr
MS 101	Mathematics I	4
PH 101	Physics I	4
CH 101	Chemistry	4
EL 101	Basic Electrical Engineering	4
ME 103	Workshop Practice	2
ME 101	Engineering Graphics	3
Humanities Elective		
EG101/ SO101/ BM 101	Communicative English/ Sociology/ Elementary Economics	3
Total		24

Semester II		
Course Code.	Course Title	Cr
MS 103	Mathematics II	4
PH 102	Physics II	4
ME 102	Engineering Mechanics	4
EL 102	Basic Electronics	5
CO 101	Introductory Computing	3
CO 102	Computing Laboratory	2
Science Elective		
BT 101/ ES 101/ CH 102	Elements of Modern Biology / Environmental Science / Introductory Material Science	3
Total		25

SECOND TO FOURTH YEAR

CIVIL ENGINEERING

Semester III		
Course Code	Course title	Cr
MS201	Mathematics-III	3
CE201	Fluid Mechanics	3
CE214	Solid Mechanics	4
CE202	Surveying	4
CE203	Building Materials and Technology	3
CE204	Engineering Geology	3
CE205	Surveying Practical	2
CE213	Concrete and Structural laboratory	2
Total		24

Semester IV		
Course Code	Course title	Cr
MS203	Numerical Analysis	3
CE206	Elementary Civil Engineering Drawing	1
CE207	Hydraulics and Hydraulic Structures	4
CE208	Structural Analysis-I	4
CE209	Geotechnical Engineering-I	4
CE210	Transportation Engineering-I	3
CE211	Hydraulics Laboratory	2
CE212	Geotechnical Engineering Laboratory	2
Total		23

Semester V		
Course Code	Course title	Cr
BM321	Fundamentals of Management	3
CE301	Structural Design-I	4
CE302	Water Resources Engineering	3
CE303	Structural Analysis-II	4
CE304	Geotechnical Engineering-II	3
CE305	Environmental Engineering-I	3
CE306	Environmental Engineering Laboratory	2
CE311	Transportation Engineering Laboratory	1
Total		23

Semester VI		
Course Code	Course title	Cr
BM322	Social Responsibility and Professional Ethics in Engineering	3
CE307	Structural Design-II	4
CE308	Environmental Engineering-II	4
CE309	Construction Engineering and Management	3
	CE Elective-I	3
	Open Elective-I	3
CE310	Concrete and Structure Laboratory	2
Total		22

Semester VII		
Course Code	Course title	Cr
CE401	Transportation Engineering-II	3
	Open Elective-II	3
	CE Elective-II	3
	CE Elective-III	3
CE471	Industrial Summer Training	2
CE481	Project-I	6
Total		20

Semester VIII		
Course Code	Course title	Cr
	Open Elective-III	3
	CE Elective-IV	3
CE482	Project-II	12
Total		18

CE Electives:

Course Code	Course title	Cr
CE421	Advanced Reinforced Concrete Design	3
CE422	Dynamics of Structures	3
CE423	Pre-stressed Concrete and Industrial Structures	3
CE424	Bridge Engineering	3
CE425	Soil Dynamics and Foundation Engineering	3
CE426	Ground Improvement methods	3
CE427	Earth Retaining Structures	3
CE428	Applied Geotechnical Engineering	3
CE429	Environmental Geo-techniques	3

Course Code	Course title	Cr
CE430	Open Channel Flow	3
CE431	Hydraulic Structures	3
CE432	Hydraulic Machines	3
CE433	Groundwater Hydrology and Management	3
CE434	Air Pollution and Industrial Waste Management	3
CE435	Solid Waste Engineering	3
CE436	Environmental Impact Assessment	3
CE437	Remote Sensing and GIS	3
CE438	Pavement Design	3

Also any other course of level 400 and above offered by the department of Civil Engineering.

COMPUTER SCIENCE AND ENGINEERING

Semester III		
Course Code	Course title	Cr
MS201	Mathematics III	3
CO 201	Discrete Structures	4
CO 202	Digital Logic Design	4
CO 203	Data Structures	5
CO 212	Computer Architecture and Organization	5
EL 204	Signals and Systems	3
Total		24

Semester IV		
Course Code	Course title	Cr
CO 205	Formal Language and Automata	3
CO 206	Design and Analysis of Algorithms	4
CO 207	System Programming	3
CO 208	Object Oriented Programming	4
EL 221	Electronic Devices and Circuits	4
CO213	Data Communication	4
Total		22

Semester V		
Course Code	Course title	Cr
CO 301	Operating Systems	4
CO 302	Database Systems	5
CO 303	Computer Graphics	4
CO 304	Principles of Programming Languages	3
CO 305	Computer Networks	4
BM 321	Fundamentals of Management	3
Total		23

Semester VI		
Course Code	Course title	Cr
CO 306	Embedded Systems	4
CO 307	Software Engineering	4
CO 308	Compiler Design	4
BM 322	Social Responsibility and Professional Ethics in Engineering	3
	CS Elective I	3
	Open Elective I	3
Total		21

Semester VII		
Course Code	Course title	Cr
CO 401	Artificial Intelligence	3
-	CS Elective II	3
-	CS Elective III	3
-	Open Elective II	3
CO 471	Industrial Summer Training	2
CO 481	Project I	6
Total		20

Semester VIII		
Course Code	Course title	Cr
-	CS Elective IV	3
-	Open Elective III	3
CO 482	Project II	12
Total		18

Electives

Course Code	Course title	Cr
CO 421	Graph Theory	3
CO 423	Web Technology	5
CO 425	VLSI Design	5
CO 427	Modeling and Simulation	5
CO 429	Computer Systems Performance Evaluation	3
CO 431	System Analysis and Design	3
CO 433	Digital Signal Processing	3
CO 435	Mobile Computing	3
CO501	Network Management and Security	3
CO 503	Fuzzy Logic and Neural Networks	3
CO 505	Advanced Database Management System	3
CO 507	Advanced Embedded Systems	3
CO 509	Computer Vision	3
CO 511	Ubiquitous and Pervasive Computing	3

Course Code	Course title	Cr
CO 422	Theory of Computation	3
CO 424	E-Commerce	5
CO 426	Advanced Computer Architecture	3
CO 428	Computer Peripherals and Interfacing	5
CO 430	Management Information System	3
CO 432	Information Theory and Coding	3
CO 434	Image Processing	3
CO 436	Wireless Communication	3
CO 502	Data Compression	3
CO 504	Natural Language Processing	3
CO 506	Advanced Software Engineering	3
CO 508	Grid Computing	3
CO 510	Robotics	3

ELECTRICAL ENGINEERING

Semester III		
Course Code	Course title	Cr
MS 201	Mathematics – III	3
EE 201	Network Theory	3
EE 202	Network Laboratory	2
EL 201	Switching Circuits and Digital Logic	4
EL 203	Analog Electronic Devices and Circuits	4
EL 204	Signals and Systems	3
CO 212	Computer Architecture and Organization	5
Total		24

Semester IV		
Course Code	Course title	Cr
EE 203	Measurement and Instrumentation	4
EE 204	Electrical Machines -I	3
EE 205	Electrical Machines Laboratory -I	2
EL 205	Integrated Circuit	4
EL 206	Principles of Communication	4
EL 208	Engineering Electromagnetics	3
CO 221	Data Structures and Object Oriented Programming	4
Total		24

Semester V		
Course Code	Course title	Cr
EE 301	Power Systems-I	5
EE 302	Electrical Machines -II	3
EE 303	Electrical Machines Laboratory -II	2
EL 302	Microprocessors and Interfacing	4
EL 303	Digital Signal Processing	4
EL 304	Control System Engineering	4
BM 321	Fundamental of Management	3
Total		25

Semester VI		
Course Code	Course title	Cr
EE 304	Power Systems-II	5
EE 305	Advanced control System Engineering	4
EE 306	Power Electronics and Drives	3
EE 307	Power Electronics and Drives Laboratory	2
BM 322	Social Responsibility and Professional Ethics in Engineering	3
	EE Elective - I*	3
Total		23

Semester VII		
Course Code	Course title	Cr
EE401	Computer aided Power System analysis	5
	EE Elective - II	3
	EE Elective- III	3
	Open Elective - II*	3
EE402	Industrial Summer Training**	2
EE403	Project I	6
Total		22

Semester VIII		
Course Code	Course title	Cr
	EE Elective - IV	3
	Open Elective - III	3
EE 404	Project - II	12
Total		18

Electives

Course Code	Course title	Cr
EE 308	Nonconventional Energy sources	3
EE 309	Utilization and Conservation of Electrical Energy	3
EE 310	Embedded systems	3
EE 405	Industrial automation Systems	3
EE 411	Power system interconnection and control	3

Course Code	Course title	Cr
EE407	Advanced power electronics and Drives	3
EE408	High Voltage Engineering	3
EE409	Industrial Drives and Control	3
EL 426	Fuzzy Logic and Neural Networks	3

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

** 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.

ELECTRONICS AND COMMUNICATION ENGINEERING

Semester III		
Course Code	Course title	Cr
MS 201	Mathematics III	3
EL 201	Switching Circuits and Digital Logic	4
EL 202	Electrical Technology	4
EL 203	Analog Electronic Devices and Circuits	4
EL 204	Signals and Systems	3
CO 205	Computer Architecture and Organization	5
Total		23

Semester IV		
Course Code	Course title	Cr
EL 205	Integrated Circuits	4
EL 206	Principles of Communication	4
EL 207	Instrumentation	4
EL 208	Engineering Electromagnetics	3
CO 221	Data Structures and Object Oriented Programming	4
CO 222	System Software and Operating systems	4
Total		23

Semester V		
Course Code	Course title	Cr
EL 301	Digital Communication	4
EL 302	Microprocessors and Interfacing	4
EL 303	Digital Signal Processing	4
EL 304	Control System Engineering	4
EL 305	Microwave Engineering	4
BM 301	Fundamentals of Management	3
Total		23

Semester VI		
Course Code	Course title	Cr
EL 306	Communication Networks	4
EL 307	Device Modelling & Simulation	4
EL 308	VLSI Design	4
BM 302	Social Responsibility and Professional Ethics in Engineering	3
	ECE Elective I	3
	Open Elective I	3
Total		21

Semester VII		
Course Code	Course title	Cr
EL 401	Digital Systems Design and VHDL	4
	ECE Elective II	3
	ECE Elective III	3
	Open Elective II	3
EL 471	Industrial Summer Training	2
EL 481	Project I	6
Total		21

Semester VIII		
Course Code	Course title	Cr
	ECE Elective IV	3
	Open Elective III	3
EL 482	Project II	12
Total		18

Electives

Course Code	Course title	Cr
EL 421	Image Processing	3
EL 423	Medical Electronics	3
EL 425	Mobile Communication	3
EL 427	Satellite Communication Systems	3
EL 429	Graph Theory	3
EL 431	MEMS and Microsystems Technology	3
EL 433	Biomedical Signal Processing	3
EL 435	Nanoelectronics	3
EL 437	Wireless Communication	3
EL 439	Power Electronics	3

Course Code	Course title	Cr
EL 422	Electronic Design Automation	3
EL 424	Fiber Optic Communication	3
EL 426	Fuzzy Logic and Neural Networks	3
EL 428	Information and Coding Theory	3
EL 430	Computer Vision	3
EL 432	Advance Semiconductor Devices	3
EL 434	Bioneuro Engineering	3
EL 436	Intelligent Instrumentation	3
EL 438	Digital Signal Processor	3

FOOD ENGINEERING AND TECHNOLOGY

Semester III		
Course Code	Course title	Cr
MS 201	Mathematics III	3
FT 201	Food Chemistry	4
FT 202	Basic and Food Microbiology	3
FT 203	Fluid Mechanics	5
FT 204	Computations in Food Processing	4
ME 205	Thermodynamics	4
Total		23

Semester IV		
Course Code	Course title	Cr
FT 205	Food Biochemistry and Nutrition	4
FT 206	Principles of Food Processing and Preservation	3
FT 207	Transfer Processes in Food Engineering	4
FT208	Mechanical Operations in Food Processing	4
FT209	Fruits and Vegetables Process Technology	3
EL 321	Instrumentation and Process Control	4
Total		22

Semester V		
Course Code	Course title	Cr
T 301	Instrumental Methods of Food Analysis	2
FT 302	Thermal Operations in Food Processing	4
FT 303	Mass Transfer Operations in Food Processing	4
FT 304	Cereals, Pulses and Oilseeds Processing Technology	4
FT 305	Biochemical Engineering	3
FT 306	Recent Advances in Food Research	1
BM 321	Fundamentals of Management	3
Total		21

Semester VI		
Course Code	Course title	Cr
FT 307	Food Quality and Safety	3
FT 308	Food Plant Utilities	3
FT 309	Dairy Products Technology	3
FT 310	Food Process Equipment Design	3
BM 322	Social Responsibility and Professional Ethics in Engineering	3
-	FT Elective I	3
-	Open Elective I	3
Total		21

Semester VII		
Course Code	Course title	Cr
FT 401	Food Packaging, Transportation and Storage	3
FT 402	Plant Design and Process Economics	3
-	FT Elective II	3
-	FT Elective III	3
-	Open Elective II	3
FT 471	Industrial Summer Training	2
FT 481	Project I	6
Total		23

Semester VIII		
Course Code	Course title	Cr
-	FT Elective IV	3
-	Open Elective III	3
FT 482	Project II	12
Total		18

Electives

Course Code	Course title	Cr
FT 421	Bakery and Confectionary Technology	3
FT 422	Plantation Products and Spices Technology	3
FT 423	Oils and Fats Technology	3
FT 434	Processing Technology of Meat, Poultry and Fish	3
FT 425	Fermented and Non Fermented Beverages	3
FT 426	Food Product Development	3
FT 427	Flavors Technology	3
FT 428	Specialty Foods: Nutraceuticals and Functional Foods	3
FT 429	Traditional Indian Foods	3
FT 430	Industrial Microbiology and Enzyme Technology	3
FT 422	Plantation Products and Spices Technology	3
FT 423	Oils and Fats Technology	3
FT 434	Processing Technology of Meat, Poultry and Fish	3
FT 425	Fermented and Non Fermented Beverages	3
FT 426	Food Product Development	3

Course Code	Course title	Cr
FT 427	Flavors Technology	3
FT 428	Specialty Foods: Nutraceuticals and Functional Foods	3
FT 429	Traditional Indian Foods	3
FT 430	Industrial Microbiology and Enzyme Technology	3
FT 431	Food Process Design and Analysis	3
FT 432	Food Process Automation	3
FT 433	Numerical Methods in Food Processing	3
FT 434	Energy Conservation in Food Processing	3
FT 435	Food Plant Hygiene and Sanitation	3
FT 436	Food Industry Waste Management	3
FT 437	Industrial Safety and Hazards	3
FT 438	Optimization Techniques	3
FT 439	Advanced Food Processing Methods	3
FT 440	Engineering Properties of Biological Materials	3

MECHANICAL ENGINEERING

Semester III		
Course Code	Course title	Cr
MS 201	Mathematics III	3
ME 201	Solid Mechanics	4
ME 202	Fluid Mechanics I	3
ME 203	Material Science	3
EL 202	Electrical Technology	4
ME 205	Thermodynamics	4
ME 206	Mechanical Engineering Laboratory I	3
Total		24

Semester IV		
Course Code	Course title	Cr
MS 202	Mathematics IV	3
ME 207	Theory of Mechanisms and Machines	4
ME 208	Manufacturing Technology I	3
ME 209	Fluid Mechanics II	3
ME 210	Mechanical Engineering Laboratory II	3
CO 221	Data Structures and Object Oriented Programming	4
ME 204	Machine Drawing	2
Total		22

Semester V		
Course Code	Course title	Cr
ME 301	Dynamics and Vibration of Machinery	3
ME 302	Mechanical Measurements and Instrumentation	3
ME 303	Manufacturing Technology II	3
ME 304	Applied Thermodynamics I	3
ME 305	Mechanical Design	4
ME 310	Mechanical Engineering Laborator III	3
BM 321	Fundamentals of Management	3
Total		22

Semester VI		
Course Code	Course title	Cr
ME 307	Applied Thermodynamics II	3
ME 308	Heat and Mass Transfer	4
ME 309	Systems and Control	3
ME 306	Advanced Workshop Practice	3
BM 322	Social Responsibility and Professional Ethics in Engineering	3
	ME Elective I	3
	Open Elective I	3
Total		22

Semester VII		
Course Code	Course title	Cr
ME 401	Industrial Systems Engineering	3
-	ME Elective II	3
-	ME Elective III	3
-	Open Elective II	3
ME 471	Industrial Summer Training	2
ME 481	Project I	6
Total		20

Semester VIII		
Course Code	Course title	Cr
-	ME Elective IV	3
-	Open Elective III	3
ME 482	Project II	12
Total		18

Electives

Course Code	Course title	Cr	Course Code	Course title	Cr
ME 421	Computer Graphics and Solid Modeling	3	ME 422	Optimization Methods in Engineering	3
ME 423	Mechanical Vibration	3	ME 424	Theory of Elasticity	3
ME 425	Machine Tools and Machining	3	ME 426	Reliability Engineering	3
ME 427	Productivity Improvement Techniques	3	ME 428	Finite Element Methods in Engineering	3
ME 429	Gas Turbine and Compressor	3	ME 430	Value Engineering	3
ME 431	Fracture and Fatigue	3	ME 432	Engineering Optimization	3
ME 433	Experimental Stress Analysis	3	ME 434	Composite Materials	3
ME 435	Machine Tool Design	3	ME 436	Combustion Engineering	3
ME 437	Tea Machineries	3	ME 438	Petroleum and Drilling Technology	3
ME 439	Refrigeration and Air Conditioning	3	ME 440	Advanced Solid Mechanics	3
ME 521	Robotics	3	ME 522	Quality Engineering	3
ME 523	Non-Conventional Energy	3	ME 524	Operations Management	3
ME 525	Tribology	3	ME 526	Modern Control System	3
ME 527	Computer Aided Design	3	ME 528	Computer Aided Process Planning	3
ME 529	Artificial Intelligence in Engineering	3	ME 531	Project Management	3
ME 532	Power Plant Engineering	3	ME 533	Energy Management	3
ME 534	Mechatronics	3			

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

SECTION THREE

**POST GRADUATE, UNDER GRADUATE, DEGREE,
DIPLOMA AND CERTIFICATES OFFERED
BY THE UNIVERSITY :
Eligibility and Intake for each Programme**

The University offers the following Degree, Diploma and Certificate programmes under various departments. The eligibility, duration of the programmes and tentative intake are shown in the following table. Intake under SSS is subject to change. Candidates are advised to visit University website for further update.

Degree, Diploma and Certificate						
Department	Programme	Eligibility	Duration (semesters)		Tentative Intake	
			Min	Max	Merit	SSS
Business Administration	Master of Business Administration (MBA)	Bachelor's degree in any discipline with a minimum of 50% marks in major/honours subject or in aggregate. <i>(Admission Process of 2014 is already over).</i>	4	8	46	4
	P.G. Diploma in Tourism Management (PGDTM)	Bachelor's degree in any subject with at least 45% marks in major/honours subject or in aggregate.	2	4	23 ^s	-
Commerce	Integrated M.Com.	Minimum 60% aggregate marks in higher secondary (+2) final examination.	10	14	30	--
Chemical Sciences	M.Sc. in Chemistry	Bachelor's degree with major/ honours in Chemistry subject with a minimum of 45% marks and having Physics and Mathematics as subsidiary subjects.	4	8	20 ^s	1 ^s
	Integrated M.Sc. in Chemistry	Minimum 60% aggregate marks in Physics, Chemistry and Mathematics at 10+2 and pass marks in English.	10	14	15	1
	M. Tech. in Polymer Science and Technology	B.Tech/B.E in Polymer Science and Technology/ Fiber Science and Technology/ Textile Technology/ Plastic Technology/ Chemical Engineering; Master of Science in any discipline from a recognized Institutions with 50% marks or equivalent grade or having Chemistry as one of the subject in the Bachelor Degree.	4	8	10	1
	Integrated B.Sc.B.Ed. in Chemistry	First division in the Higher Secondary (Plus Two) School Final Examination (Science stream)	8	12	10	1
Civil Engineering	B.Tech. in Civil Engineering	Minimum 50% aggregate marks in PCM (Phys, Chem and Math) subjects at 10+2 and pass marks in English.	8	12	50	4
Computer Science and Engineering	B.Tech. in Computer Science and Engineering	Minimum 50% aggregate marks in PCM (Phys, Chem and Math) subjects at 10+2 and pass marks in English.	8	12	52	4
	Master of Computer Application (MCA)	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. Passed in Mathematics at 10+2 level.	6	10	45	-
	M.Tech. in Information Technology*	B.E. / B.Tech. degree in any discipline or MCA or its equivalent or M.Sc. in Computer Science / IT / Electronics / Mathematics / Statistics / Physics with a minimum of 50% marks in aggregate.	4	8	28	-

Degree, Diploma and Certificate						
Department	Programme	Eligibility	Duration (semesters)		Tentative Intake	
			Min	Max	Merit	SSS
Cultural Studies	M.A. in Cultural Studies (Modular)	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 (40% for SC/ST) in aggregate.	4	8	46 [§]	3 [§]
Electronics and Communication Engineering	B.Tech. in Electronics and Communication Engineering	Minimum 50% aggregate marks in PCM (Phys, Chem and Math) subjects at 10+2 and pass marks in English.	8	12	52	4
	B.Tech. in Electrical Engineering	Minimum 50% aggregate marks in PCM (Phys, Chem and Math) subjects at 10+2 and pass marks in English.	8	12	30	-
	M.Tech. in Electronics Design and Technology*	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.	4	8	28	2
	M.Tech. in Bioelectronics**	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.	4	8	15	3
Energy	M.Tech. in Energy Technology*	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.	4	8	28	-
English and Foreign Languages	M.A. in English	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.	4	8	50	2
	M. A. in Linguistics and Language Technology	(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	4	8	20	2
	Integrated M.A. in English	First division in the Higher Secondary (Plus Two) School Final examinations.	10	14	10	2
	Integrated B.A.B.Ed.	First division in the Higher Secondary (Plus Two) School Final examinations.	8	12	10	2
	One year Certificate in Chinese	10+2 with 45% of marks in aggregate.	2	4	39	-

Degree, Diploma and Certificate						
Department	Programme	Eligibility	Duration (semesters)		Tentative Intake	
			Min	Max	Merit	SSS
Environmental Science	M.Sc. in Environmental Science	B.Sc. in Physical/Biological/ Earth and Environmental Sciences as major/honours with a minimum of 50% marks. Candidates not having major/honours, must have at least 55% marks in aggregate. Or, B.Sc. (Agri.) with at least 5.0 CGPA in 10 point scale or equivalent.	4	8	30	2
Food Engineering and Technology	Post B. Sc. Integrated M. Tech. in Food Engineering and Technology	First Class graduates with qualifications of B.Sc. with Chemistry as one of the subjects / B. Sc. (Agricultural) / B. Sc. (Home Science) with elective in Food & Nutrition /B. Sc in Food Science/B. Sc. (Fishery). Candidates must have passed Mathematics at 10+2 level.	8	12	12	2
	M.Tech. in Food Engineering and Technology (lateral entry)	B.E. /B. Tech. degree in Food Engg./ Food Process Engg./ Food Technology/ Agricultural Engg./ Mechanical Engg./ Chemical Engg/ Biotechnology or related fields with a minimum of 60% marks in aggregate. (The B.Tech./ B.E. programme completed by the candidate should satisfy the AICTE requirements). ii)02 years M.Sc. in Food Technology/ Food Processing Technology with a minimum of 60% marks in aggregate. (50% in Mathematics at 10+2 level is compulsory. However, it is exempted if the candidate has passed mathematics in programme(s) prescribed as qualification.)	4	8	18	-
	B.Tech. in Food Engineering and Technology	Minimum 50% aggregate marks in PCM (Physics, Chemistry and Mathematics) at 10+2 and pass marks in English.	8	12	30	4
Hindi	MA in Hindi	Bachelor's degree with Major/ honours in Hindi from a recognised University or Bachelor's degree with Hindi with an elective subject having at least 50% of marks in aggregate.	4	8	25	2
	P.G. Diploma in Translation (Hindi)	B.A. with Hindi major/honours or B.A. with Elective Hindi or, B.A./B.Com./B.Sc. with Praveen/Sahityaratna. Candidates not having major/honours must have atleast50% marks in aggregate.	2	4	23	-

Degree, Diploma and Certificate						
Department	Programme	Eligibility	Duration (semesters)		Tentative Intake	
			Min	Max	Merit	SSS
Mass Communication and Journalism	M.A. in Mass Communication and Journalism	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.	4	8	35	2
	P.G. Diploma in Mobile and Multimedia Communication	Bachelor's degree in any discipline with at least 45% marks in major/ honours subject or in aggregate. For sponsored candidates, Bachelor's degree in any discipline with a minimum of 2 years of service with sponsoring organizations.	2	4	15	-
Mathematical Sciences	M.A./M.Sc. in Mathematics	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.	4	8	42	1
	Integrated M.Sc. in Mathematics	Minimum 60% aggregate marks in Mathematics, Physics, Chemistry/Statistics subjects at 10+2 and pass mark in English.	10	14	15	1
	Integrated B.Sc.B.Ed.	First division in the Higher Secondary (Plus Two) School Final examinations (Science).	8	12	10	1
Mechanical Engineering	M. Tech. in Mechanical Engineering (Specialization in Applied Mechanics)	BE/B.Tech. or equivalent Bachelor's degree in Mechanical, Production, Aerospace, Aeronautical, Metallurgy, Civil, or in any other relevant Engineering discipline.	4	8	18	-
	B.Tech. in Mechanical Engineering	Minimum 50% aggregate marks in PCM (Phys, Chem and Math) subjects at 10+2 and pass mark in English.	8	12	52	4
Molecular Biology and Biotechnology	M.Sc. in Molecular Biology and Biotechnology ***	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.	4	8	30	-
	Integrated M.Sc. in Bioscience and Bioinformatics	Minimum 60% aggregate marks with Biology, Chemistry, Physics and/or Mathematics subjects at 10+2 and pass mark in English.	10	14	15	1

Degree, Diploma and Certificate						
Department	Programme	Eligibility	Duration (semesters)		Tentative Intake	
			Min	Max	Merit	SSS
Physics	M.Sc. in Physics	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.	4	8	20	1
	M.Sc.in Nanoscience and Technology	(i) Bachelor's degree with 50% marks in Physics as major/honours subjects and Chemistry, Biology/Mathematics as allied subjects Or, (ii) Bachelor's Degree with 50% marks in Chemistry as major/honours subject with Physics, Biology/ Mathematics as allied subjects or, (iii) Bachelor's with 45% marks in Biology as major/honours subject with Physics, Chemistry/ Mathematics as allied subjects. Candidates having no major/honours must have minimum 55% marks in aggregate.	4	8	20	1
	Integrated M.Sc. in Physics	Minimum 60% aggregate marks in PCM (Phy, Chem. and Math) subjects at 10+2 and pass mark in English.	10	14	15	1
	Integrated B.Sc.B.Ed.	First division in the Higher Secondary (Plus Two) School Final examinations (Science).	8	12	10	1
Social Work	M.A. in Social Work	Graduate in any discipline with 45% marks in Major	4	6	15	--
Sociology	M.A. in Sociology	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.	4	8	30	5

Relaxation: 5% relaxation in marks is allowed for candidates belonging to SC/ST categories.

* 5 seats are reserved for sponsored candidates (they have to qualify in the TUEE)

** 3 seats are reserved for sponsored candidates (they have to qualify in the TUEE)

*** Only ten seats will be filled up through TUEE. The application form attached with this prospectus is only for these ten seats. For rest of the seats, candidates are selected for admission through "All India Combined Entrance Test" conducted by the Jawaharlal Nehru University, New Delhi under the sponsorship of the Department of Biotechnology, Government of India, New Delhi (eligibility as decided by DBT, Government of India from time to time).

§Number of intake is under revision for these programmes.

SECTION FOUR

Ph.D. PROGRAMME

Ph.D. PROGRAMME

The University is offering Ph.D. programme in the following Departments for Autumn semester 2014 in the Academic Year 2014-2015.

1. Business Administration
2. Chemical Sciences
3. Civil Engineering
4. Computer Science and Engineering
5. Electronics and Comm. Engineering
6. Energy
7. English and Foreign Languages
8. Environmental Science
9. Food Engineering and Technology
10. Hindi
11. Mathematical Sciences
12. Mechanical Engineering
13. Molecular Biology and Biotechnology
14. Physics
15. Sociology

Some important information regarding the Ph.D. programme of the University are highlighted below. Detail regulations currently in force may be perused in the document “Ph.D. Rules and Regulation” available in the University website under the link Academic Regulations.

COURSE WORK, COURSE REGISTRATION AND ATTENDANCE REQUIREMENTS

Course Work:

A student admitted to the Ph. D. programme shall be required to complete specified course work prior to the submission of Plan of Research as per the recommendation of the Departmental Research Committee (DRC)/ Research Committee for Centre (CRC). Currently the scholars are required to complete a total of 16 credits (1 credit generally consists of one hour lecture/ tutorials or two hours of practical in a week). As a revolutionary step initiated by the University towards implementation of Choice Based Credit Transfer (CBCT) system out of the stipulated credit requirement 4 credit should be from another Department. The course work should be completed within the first two Semesters. However, employed part-time candidates shall be given the option of carrying out the course work during any two of the first three semesters.

In order to continue research a candidate must secure a CGPA (Cumulative Grade Point Average) of 6 or more.

During the course work, students shall report at the Department/Centre regularly and attend classes or do assigned tasks.

Course registration:

The Courses opted by the students in a particular Semester are to be registered on the specified date(s). For newly admitted students, registration of courses shall take place during 30-31 July, 2014 along with the Admission formalities.

Attendance requirement:

All students including Ph.D. scholars must attend every lecture, tutorial and practical classes of the course registered by him/her. However, to account for late registration, sickness or other such contingencies, the attendance requirement will be a minimum 90% of the classes. Students with deficiency in attendance in a course will not be allowed to appear in the Term-end examination and will be assigned W grade in the course.

Renewal of admission:

Every student will renew his/her admission in the successive Semesters on or before the notified dates. No student is allowed to get himself/herself admitted after scheduled date.

Monitoring the progress of research:

During the period of research work scholars shall be in touch with their supervisors and give at least one seminar in each semester on experiments/ field work/ library work completed during the Semester. Except for part-time students, other categories of students shall be generally available in the Department/ Centre unless they are engaged in experiments/ field work/ library work elsewhere with prior permission of the supervisors.

CATEGORIES OF CANDIDATES

The University shall admit Ph. D. students under the following categories:

- a) Full Time:** Students under this category shall work full time for the Ph. D. courses/ research. They may apply for fellowship/assistantship available from different funding agencies.
- b) Sponsored:** Candidates may be sponsored by recognised R&D organisations, national institutions, other universities, government organizations or industries. They shall be admitted through the normal process, and they shall not be entitled to any fellowship/assistantship from the University. They shall work full time for the Ph.D. courses/research.
- c) Project Fellows:** Students working on different research projects at Tezpur University may be admitted to the Ph.D. programme provided they satisfy the eligibility criteria, subject to the consent of the Principal Investigator of the project.
- d) Part Time:** Candidates employed in academic institution /University (including Tezpur University)/ R&D organizations may be considered for admission into the Ph. D. programme of Tezpur University, following the normal admission procedure. They shall fulfil the stipulated requirements for Ph. D. admission.

The University encourages full time scholars, and as such the applicants shall be admitted as Part-time scholars only in exceptional cases.

Eligibility for Admission:

Master's Degree in Humanities and Social Sciences/ Management Sciences/ Science/ Engineering/ Technology or Master's degree in the allied subject with consistently good academic record and minimum of 55% marks or an equivalent CGPA in the Master's Degree/ B. E./ B. Tech. with an aggregate of 80% marks or equivalent CGPA with valid GATE score.

A fellowship in Chartered Accountancy/ Company Secretary-ship from a recognized Indian or foreign institution with not less than 60% of marks or equivalent CGPA having a minimum of Bachelor's Degree.

Relaxation in requisite qualifications for SC/ST candidates shall be followed as per Central Govt. rules.

For detail Department-wise eligibility criteria one may consult the table given hereunder. It may please be noted that mere fulfilment of the minimum eligibility criteria does not guarantee shortlisting of the candidate for the Admission Test. For detail one may contact the Department and/or its website.

ADMISSION TEST AND SELECTION

The names of the shortlisted candidates who are eligible for appearing in the Admission Test will be published in the University website along with the specific selection procedure to be followed by the Department. The list shall be published within a reasonable time ahead of the test date(s). No separate call letters or Admit Card shall be sent to shortlisted candidates. The test dates are given in the Annexure -II.

Final selection of candidates will strictly be done on merit based on performance in the Admission Test followed by personal interview.

The Departments follow individual selection procedure, and as such the candidates may consult the Department and its website for specific information on selection tests etc.

Requisite qualifications for admission into various disciplines of Ph. D. programmes

School	Department	Qualification
Engineering	Civil Engineering	Master's degree in Engineering/Technology/Science. B. E./B. Tech with 80% marks in aggregate or equivalent CGPA with a valid GATE Score.
	Computer Science and Engineering	M. Tech. in Computer Science/ I.T./ Electronics MCA M. Sc. in Computer Science/ I.T. B. E./B. Tech. with 80% marks in aggregate or equivalent CGPA with valid GATE score.
	Electronics and Communication Engineering	M. E. / M. Tech. / M. Sc. Engg. / M. S. in Electronics/ Communication/ Electronics Design/ Electrical/ Instrumentation / Control/ Microwave /Biomedical/ Bioelectronics/ Bio-Technology/ Computer Science/ Information Technology. M. Sc. in Electronics/ Physics/ Applied Mathematics. MCA with Physics, Chemistry and Mathematics in Bachelor degree, MBBS with MD/ MS degree. B. E. / B. Tech. with 80% marks in aggregate or equivalent CGPA with valid GATE score.
	Food Engineering and Technology	M. Sc. /M. Tech. / M. E. in Food Tech/Food Processing Technology/ Food science and Technology / Food and Nutrition / Microbiology / Food Microbiology / Biochemistry / Chemistry / Biotechnology/ Food Engineering/ Applied Microbiology/ Dairy engineering/ Food Biotechnology Engineering. B. E. / B. Tech. with an aggregate of at least 80% marks or equivalent CGPA.
	Mechanical Engineering	M. E. / M. Tech. / M Sc. (Engg.) in Mechanical Engg. or allied areas. B. E. /B. Tech with 80% marks in aggregate or equivalent CGPA with a valid GATE Score.
	Energy	M. Sc. / M. E. / M. Tech. degree in Energy Technology/ Energy Management/ Energy related Engineering & Technology/ Physics/ Chemistry/Agriculture/ Allied subjects.
Humanities & Social Science	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
	English and Foreign Language	M. A. in English (specialization may be in Literature, English Language Teaching or Linguistics) M. A. in Linguistics
	Hindi	M. A. in Hindi
	Mass Communication and 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.
	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.

School	Department	Qualification
Management Sciences	Business Administration	M. B. A. M. Com. M. A. / M. Sc. in Economics M. A. in Psychology/ Sociology/Social Work./Cultural Studies M. C. A M. T. M. / M. T. A. FCA/ FCS/ FICWA
Sciences	Chemical Sciences	M. Sc. in all branches of Chemical Science/ Physics/Nano Science/ Material Science/ Biotechnology/ Biochemistry/ Bioinformatics/ Environmental Science. M. E./M. Tech. in allied subjects (Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering, etc.); B.Tech. in Chemical Engineering/ Polymer Technology/ Material Sciences/ Environmental Engineering, etc. with 80% marks in aggregate or equivalent grade.
	Mathematical Sciences	M. A. / M. Sc. degree in Mathematics/ Statistics/ Physics/ Computational Seismology/ Economics with requisite background in Mathematics.
	Molecular Biology and Biotechnology	M. Sc in Biotechnology/Molecular Biology/Molecular Biology and Biotechnology/ Biochemistry/Microbiology /Genetics/Plant Breeding/Agriculture Biotechnology/Life Sciences/Botany /Zoology/Applied Botany/Biophysics/Bioinformatics. M. Tech. in Biotechnology, Bioinformatics, Food Processing Technology, Biochemical Engineering/M. Pharma /M. V. Sc./ M. F. Sc. /M. D./M. B. B. S. with 80% or equivalent GPA/M. Sc. in Nanoscience& Technology.
	Physics	M. Sc. in Physics/ Electronics/ Geophysics/ Material Science/ Applied Mathematics/ Nano Science & Technology/ Biotechnology/ Environmental Science and Chemical Science. M. Phil., M. Tech in Solid State Material/ Materials 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.
	Environmental Science	M. Sc. in Environmental Science / Botany / Applied Botany / Chemistry / Physics / Zoology / Earth Sciences / Life Sciences/ Agro-Forestry M. Sc. (Agri) in Crop Physiology / Biochemistry / Horticulture / Agronomy / Soil Science / Meteorology M. Sc. in Agricultural Sciences.

Seats are reserved for SC/ST/ OBC (NCL), Kashmiri Migrant and Person with Disability (PWD) candidates as per central government rules. PWD candidates with at least 40% permanent disabilities will only be considered.

Direct Admission:

Candidates with B.Tech.degree from Tezpur University in Computer Science and Engineering, Electronics and Communication Engineering, and Mechanical Engineering with an aggregate of at least 80% marks or equivalent CGPA in relevant branch may apply for direct admission to Ph.D. programme

Recognised supervisors of Tezpur University and their areas of specialization :

The names of available supervisors and their areas of research interests have been indicated in the Departmental Profile in Section Five. For detail candidates may browse through the specific faculty's webpage available in www.tezu.ernet.in.

SECTION FIVE

DEPARTMENTS

At present Tezpur University has 20 different departments and centres under the umbrella of four schools of studies. The school wise distribution of department/ centre is given below:

1. School of Engineering:

- (a) Department of Civil Engineering
- (b) Department of Computer Science and Engineering
- (c) Department of Electronics and Communication Engineering
- (d) Department of Energy
- (e) Department of Food Engineering and Technology
- (f) Department of Mechanical Engineering

2. School of Humanities and Social Sciences:

- (a) Department of Cultural Studies
- (b) Department of English and Foreign Languages
- (c) Department of Hindi
- (d) Department of Mass Communication and Journalism
- (e) Department of Social Work
- (f) Department of Sociology

3. School of Management Sciences:

- (a) Department of Business Administration
- (b) Department of Commerce
- (c) Centre for Disaster Management

4. School of Sciences:

- (a) Department of Chemical Sciences
- (b) Department of Environmental Science
- (c) Department of Mathematical Sciences
- (d) Department of Molecular Biology and Biotechnology
- (e) Department of Physics

The alphabetical departmental profiles along with the faculty and their areas of specialisations are given in this section from the next page.

BUSINESS ADMINISTRATION (Year of Establishment: 1995)

The Department of Business Administration came into existence in 1995 with the objective of producing quality management professionals and carrying out research in the areas of Finance, Human Resources, Marketing, Production and Systems Management. The Department also offers PG Diploma in Tourism Management. The Department is rated A3 by AIMA in the year 2012. 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.

Programmes offered

1. Master of Business Administration (MBA)
(Admission process already over for the year 2014)
2. P G Diploma in Tourism Management
3. Ph. D.

Faculty and Areas of Interest:

Professors

*Sarma, M. K., Ph.D. (TU)	<i>Service Marketing.</i>
*Goswami, Chandana., Ph.D. (GU)	<i>Financial Management, General Management.</i>
*Sarkar, S. S., Ph.D. (TU)- Dean, SoMS	<i>Accounting, Taxation, Social Development Issues.</i>
*Das, D., Ph.D. (RGU)-HoD	<i>Financial Management, Financial Markets and Development Finance.</i>
*Goswami, Chandan., Ph. D. (TU)	Marketing and Promotional Strategies, Consumer Behaviour, Tourism
*Baruah, P., Ph. D. (TU)	Change Management and Human Resource Management, Organization Behaviour, Rural Development

Associate Professors

*Sarma, T. R., Ph.D. (TU)	<i>Systems Management, Operations, Project Management, Tourism.</i>
*Bhuyan, A., Ph.D. (TU)	<i>Economics, Tourism Management, Entrepreneurship, Business Ethics.</i>
Roy, A., Ph. D. (TU)	<i>Microfinance, Stock Market, Financial Derivatives</i>

Assistant Professors

Barpujary, H., Ph.D. (TU)	<i>Knowledge Management, E -Commerce, Web Technology.</i>
Mahanta, K., Ph.D. (DU)	<i>Human Resource Management, Employee engagement, Work life balance.</i>
Das, R., Ph.D. (GU)	<i>Marketing, Rural Marketing.</i>
Dutta, M., MBA (TU)	<i>Leisure, Intellectual Property Rights, Community Models.</i>

*Recognized Supervisor

LEGENDS: TU- Tezpur University, GU-Gauhati University, DU- Dibrugarh University, RGU- Rajib Gandhi University, Itanagar, SoMS-School of Management Sciences, 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 LCD projector etc. The Department has an air conditioned board room for facilitating case study, group discussion etc.

Research Activity:

No. of papers published in the year 2013 (up to September): **09** (Journal)

No. of ongoing research project/consultancy: **3**

The Department of Business Administration is a UGC SAP Department.

Selected publications:

1. Roy, A. & Goswami Chandana. "A scientometric analysis of literature on performance assessment of microfinance institutions (1995-2010)." *International Journal of Commerce and Management* 23.2 (2013): 148-174.
2. Sarkar, S. S., Dutta S & Dutta P. "A Review of Indian Index Funds." *Global Business Review*, 14.1 (2013): 89-98.

Courses offered in the PGDTM Programme:

First Semester :

Course Code	Course Name	Cr.
TM 430	Fundamentals of Tourism	3
TM 431	Destination Geography, History and Heritage	3
TM 432	Management Fundamentals	2
TM 433	Tour Guiding Skills	3
TM 434	Soft Skills and Personality Development	3
TM 435	Term Paper and Tour Reports	2
	Inter Disciplinary Course (CBCT-I)	3
	Inter Disciplinary Course (CBCT-II)	3

Second Semester:

Course Code	Course Name	Cr.
TM 440	Tour Operations and Travel Agency Management	3
TM 441	Computerized Reservation System	2
TM 442	Finance and Accounting for Tourism	3
TM 443	Tourism Marketing	2
TM 444	Tourism Entrepreneurship	3
TM 445	Hospitality Management	2
TM 446	Project and Tour report	2
TM 447	Internship	2
	Inter Disciplinary Course (CBCT-III)	3

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

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 Department is offering M.Sc. programme in Chemistry, Integrated M.Sc. in Chemistry, Integrated B.Sc. B.Ed. in Chemistry, M.Tech. in Polymer Science & Technology and Ph.D. programme in Chemistry. The faculty members are actively involved in advanced research programmes in the areas of catalysis, polymers, nanocomposites, drug delivery, bioinorganic chemistry, surfactant systems, water purification technique, synthetic organic chemistry, theoretical chemistry and green chemistry.

Programmes offered:

1. Integrated M.Sc. in Chemistry.
2. Integrated B.Sc. B.Ed. in Chemistry.
3. M.Sc. in Chemistry.
4. M.Tech. in Polymer Science and Technology.
5. Ph. D.

Faculty and Areas of Interest:

Professors

*Dolui, S.K., Ph.D. (IITKgp)	<i>Fibre reinforced plastic, self reinforced plastic, water based coating and adhesive, diffusion of small molecule through plastic.</i>
*Islam, N.S., Ph.D. (NEHU)	<i>Synthetic Inorganic Chemistry and Biomimetic Chemistry of Transition Metals, Catalysis.</i>
*Maji, T.K., Ph.D. (CU)	<i>Grafting of fibres, Rubber processing, Reaction engineering, Emulsion polymer, Textile finishing.</i>
*Dutta, R.K., Ph.D. (NEHU)	<i>Surfactants and micelles, Water Purification.</i>
*Karak, N., Ph.D. (IITKgp)	<i>Synthesis of advanced Polymers, Polymer Nanocomposites and Nanomaterials.</i>
*Deka, R.C., Ph.D. (NCL, Pune)-HoD	<i>Theoretical Chemistry, Catalysis and Drug Design.</i>

Associate Professors

*Borah, R., Ph.D. (NEIST)	<i>Synthesis of bioactive molecule, Development of green methodologies for organic transformation.</i>
*Thakur, A.J., Ph.D. (NEIST)	<i>Heterocyclic chemistry, Organic synthesis and Molecular container chemistry.</i>
*Phukan, A.K., Ph.D. (HU)	<i>Theoretical Inorganic and Organometallic chemistry.</i>

Assistant Professors

*Puzari, P., Ph.D. (IITG)	<i>Physical Chemistry, Biosensor.</i>
Bania, K.K., Ph.D. (T U)	<i>Heterogeneous catalysis.</i>
*Bharali, P., Ph.D. (IICT, Hyderabad),	<i>Inorganic Materials, Catalysis, adsorption.</i>
*Gogoi, N., Ph.D. (IITB)	<i>Molecular Magnet, Functional Metal Organic Framework.</i>
*Sarma, B., Ph.D. (HU)	<i>Organic Supramolecular and Crystallography solid state.</i>
*Das, S.K., Ph.D. (CDRI, Lucknow & JNU)	<i>Synthetic organic chemistry.</i>
*Bora, U., Ph.D. (NEIST)	<i>Synthetic Organic Chemistry.</i>

Assistant Professors (Adhoc)

Kamrupi, I.R., Ph.D. (TU)
Mahanta, S.P., Ph.D. (HU)

Inspire Faculty

Pratihari S., Ph.D. (IITKgp)

*Recognized Supervisor

LEGENDS: **CU**-Calcutta University, **HU**-Hyderabad University, **TU**-Tezpur University, **HoD**- Head of the Department, **NEIST**-North East Institute of Science & Technology- Jorhat, **IITKgp**- Indian Institute of Technology- Kharagpur, **IITB**- Indian Institute of Technology- Bombay, **IITG**- Indian Institute of Technology- Guwahati, **NEHU**- North Eastern Hill University- Shillong, **JNU**- Jawaharlal Nehru University- Delhi, **IICT**- Indian Institute of Chemical Technology- Hyderabad, **NCL**- National Chemical Laboratory- Pune, **CDRI**- Central Drug Research Institute-Lucknow.

Facilities

In addition to the laboratory facilities required for post graduate level studies in Chemical Sciences, the Department is equipped with sophisticated instrumentation facilities, like FT-IR spectrophotometer, CHN Analyzer, Thermal analyzer, UV-Visible spectrophotometer, Universal testing machine (UTM), Atomic absorption spectrophotometer, Polarizing microscope, Computational facilities etc. Besides these, the University has central instrumentation facilities of Scanning electron microscope, 400 MHz Nuclear Magnetic Resonance spectrophotometer, GC-MS, ICP-AES, GPC, HPLC, GC etc.

Award

The highest scorer among the students of the department is awarded with the Applied Chemistry Education Award.

Research Activity

No. of papers published in the year 2013 (up to September): **98**

No. of ongoing research projects : **15**

The Department of Chemical Sciences is a UGC SAP Department.

Selected publications

1. Boruah, J. J., Das, S. P., Ankireddy, S. R., Gogoi, S. R. & Islam, N. S. Merrifield resin supported peroxomolybdenum(VI) compounds: recoverable heterogeneous catalysts for the efficient, selective and mild oxidation of organic sulfides with $H_2O_2^+$, *Green Chemistry*, 2013, DOI: 10.1039/c3gc40304a.
2. Dey, M., & Gogoi, N. Geometry Mediated Enhancement of Single Ion Anisotropy: A Promising Route to High T_b SMMs, *Angew. Chem. Int. Ed* (2013) DOI: 10.1002/anie.201304982.

Other relevant information

The Department has received financial assistance under UGC-SAP and DST-FIST special grants for strengthening teaching, research and training.

Courses offered in M. Sc. in Chemistry:

First Semester :

Course Code	Course Name	Cr.
CH 401	Principles of Inorganic Chemistry	3
CH 402	Principles of Organic Chemistry	3
CH 403	Chemical and Statistical Thermodynamics	3
CH 404	Quantum Chemistry and Chemical Bonding	3
CH 405	Laboratory Course in Organic Chemistry	6
	CBCT-I	3

Second Semester:

Course Code	Course Name	Cr
CH 408	Chemistry of Transition Elements	3
CH 409	Organic Reactions and Mechanism	3
CH 410	Chemical Dynamics and Electrochemistry	3
CH 411	Principles and Applications of Spectroscopy	3
CH 412	Laboratory Course in Inorganic Chemistry	6
	CBCT-II	3

Third Semester :

Course Code	Course Name	Cr.
CH 501	Bio-Organic Chemistry	3
CH 502	Physical Chemistry of Surface and Condensed Systems	3
CH 503	Special Topics in Inorganic Chemistry	3
CH 504	Analytical Techniques	3
CH 505	Laboratory Course in Physical Chemistry	6
	CBCT-III	3

Fourth Semester :

Course Code	Course Name	Cr.
CH 506/507/508	Elective-I	3
CH 509/510/511	Elective-II	3
CH 512/513/514/515/516	Elective-III	3
CH 517	Project Work	9

Elective -I : Any one from the following group

Course Code	Course Name	Cr.
CH 506	Catalysis (Physical)	3
CH 507	Bio-inorgani Chemistry (Inorganic)	3
CH 508	Methods in Organic Synthesis (Organic)	3

Elective -II : Any one from the following group

Course Code	Course Name	Cr.
CH 509	Polymer Chemistry(Physical)	3
CH 510	Organometall Chemistry (Inorganic)	3
CH 511	Heterocyclic Compounds and Medicinal Applications (Organic)	3

Elective -III : Any one from the following group

Course Code	Course Name	Cr.
CH 512	Chemistry of Materials	3
CH 513	Organic Solid State Chemistry	3
CH 514	Bio molecular Chemistry	3
CH 515	Environmental and Green Chemistry	3
CH 516	Computational Chemistry and Numerical Analysis	3

Courses offered in M. Tech. in Polymer Science and Technology:

Course Code	Course name	Cr.
PT 501	Introduction to Polymer Science	3
PT 502	Industrial Polymers	3
PT 503	Polymer Characterization and Analysis	3
PT 504	Polymer Reaction Engineering and Reactor Design	3
PT 505	Fundamentals of Chemical Engineering	3
PT 506/507/508	Elective-I	3
PT 509	Polymer Synthesis and Analysis Laboratory	3
	CBCT-I	3

Course Code	Course name	Cr.
PT 510	Processing and Fabrication of Polymers	3
PT 511	Polymer Rheology and Morphology	3
PT 512	Rubber Science and Technology	3
PT 513/514	Elective-II	3
PT 515/516	Elective - III	3
PT 517	Polymer Processing and Testing Laboratory	3
	CBCT-II	3

Third Semester:

Course Code	Course name	Cr.
PT601/602 /603/604	Elective –IV	3
PT 605	Project –I	9
	CBCT-III	3

Fourth Semester:

Course Code	Course name	Cr.
PT 606	Project – II	12

Electives – I : Any one from the following group

Course Code	Course name	Cr.
PT 506	Paints and Surface Coating Technology	3
PT 507	Fiber Science and Technology	3
PT 508	Production of Polymer Raw Materials	3

Elective- II : Any One from the following group

Course Code	Course name	Cr.
PT 513	Polymer Composites and Blends	3
PT 514	Conducting Polymer	3

Electives –III : Any one from the following group

Course Code	Course name	Cr.
PT 515	Polymeric Biomaterials	3
PT 516	Chemical Computation	3

Elective- IV : Any One from the following group

Course Code	Course name	Cr.
PT 601	Environmental Engineering and Polymer Waste Management	3
PT 602	High Performance Polymers	3
PT 603	Computer Aided Design	3
PT 604	Nanomaterials and Nanocomposites	3

Courses offered in Integrated M. Sc. in Chemistry:**First Semester:**

Course Code	Course Name	Cr.
PI 101	Physics-I	3
CI 101	Chemistry-I	4
BI 101	Biology-I	3
MI 101	Mathematics-I	3
	CBCT - I	3
	CBCT - II	3

Second Semester:

Course Code	Course Name	Cr.
PI 102	Physics-II	3
CI 102	Chemistry-II	4
BI 102	Biology-II	3
MI 102	Mathematics-II	3
	CBCT - III	3
	CBCT - IV	3
NS 102	NSS	2

Third Semester:

Course Code	Course Name	Cr.
CI 201	Chemistry-III (For non - Chemistry Majors)	3
CI 203	Physical Chemistry-I	3
CI 205	Organic Chemistry-I	3
CI 207	Inorganic Chemistry-I	3
CI 209	Chemistry Laboratory-I	3
MI 211	Numerical Methods and integrals (Common Paper)	3
PI 211	Quantum Physics	3
	CBCT Elective—V	3

Fourth Semester:

Course Code	Course Name	Cr.
CI 202	Chemistry -IV (For non - Chemistry Majors)	3
CI 204	Physical Chemistry-II	3
CI 206	Organic Chemistry-II	3
CI 208	Inorganic Chemistry-II	3
CI 210	Chemistry Laboratory-III	3
MI 212	Introductory Statistics (Common Paper)	3
PI 216/ BI 224	Thermodynamics and Optics / Ecology and Environmental Biology	3/3
	CBCT Elective - VI	3

Fifth Semester:

Course Code	Course Name	Cr.
CI 301	Physical Chemistry – III	3
CI 303	Organic Chemistry-III	3
CI 305	Inorganic Chemistry-III	3
CI 307	Quantum Chemistry	3
CI 309	Chemistry Laboratory-III	4

Sixth Semester:

Course Code	Course Name	Cr.
CI 302	Physical Chemistry-IV	3
CI 304	Organic Chemistry-IV	3
CI 306	Inorganic Chemistry-IV	3
CI 308	Principles and Applications of Spectroscopy	3
CI 310	Chemistry Laboratory IV	4

Seventh Semester:

Course Code	Course Name	Cr.
CI 401	Principles of Inorganic Chemistry	3
CI 402	Principles of Organic Chemistry	3
CI 403	Chemical and Statistical Thermodynamics	3
CI 404	Quantum Chemistry and Chemical Bonding	3
CI 405	Laboratory Course in Organic Chemistry	6
	CBCT—VII	3

Eighth Semester:

Course Code	Course Name	Cr.
CI 408	Chemistry of Transition Elements	3
CI 409	Organic Reactions and Mechanism	3
CI 410	Chemical Dynamics and Electrochemistry	3
CI 411	Principles and Applications of Spectroscopy	3
CI 412	Laboratory Course in Inorganic Chemistry	6
	CBCT—VIII	3

Ninth Semester:

Course Code	Course Name	Cr.
CI 501	Bio-Organic Chemistry	3
CI 502	Physical Chemistry of Surface and Condensed Systems	3
CI 503	Special Topics in Inorganic Chemistry	3
CI 504	Analytical Techniques	3
CI 505	Laboratory Course in Physical Chemistry	6
	CBCT—IX	3

Tenth Semester:

Course Code	Course Name	Cr.
CI 506/507/508	Elective-I	3
CI 509/510/511	Elective-II	3
CI 512/513/514/515/516	Elective-III	3
CI 517	Project Work	9

Elective -I : Any one from the following group

Course Code	Course Name	Cr.
CI 506	Catalysis (Physical)	3
CI 507	Bio-inorganic Chemistry (Inorganic)	3
CI 508	Methods in Organic Synthesis (Organic)	3

Elective -II : Any one from the following group

Course Code	Course Name	Cr.
CI 509	Polymer Chemistry (Physical)	3
CI 510	Organometallic Chemistry (Inorganic)	3
CI 511	Heterocyclic Compounds and Medicinal Applications (Organic)	3

Elective -III : Any one from the following group

Course Code	Course Name	Cr.
CI 512	Chemistry of Materials	3
CI 513	Organic Solid State Chemistry	3
CI 514	Bio molecular Chemistry	3
CI 515	Environmental and Green Chemistry	3
CI 516	Computational Chemistry and Numerical Analysis	3

Course offered in Integrated B. Sc. B. Ed. In Chemistry

The curriculum and syllabi for B. Sc. B. Ed. has been going through a major revision. The course structure and detail syllabi shall be made available in the University Web-site at an appropriate time.

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

COMMERCE (Year of Establishment 2013)

The Department of Commerce offers the Integrated M.Com. Programme. The Department Commerce functions under the School of Management Sciences.

The School of Management Sciences has, at present, following Department/Centres:

1. Department of Business Administration
2. Centre for Disaster Management
3. Intellectual Property Rights Cell (IPR)
4. Department of Commerce

The Department of Business Administration offers 2 year Full year Masters of Business Administration (MBA) programme, 1 year Post Graduate Diploma in Tourism Management (PGDTM) programme, a 6 month Certificate Course on Air Ticketing and Computerized Reservation System (for students undergoing degree programmes), PG Diploma in Retail Management (under distance mode), PG Diploma in Investment Management (under distance mode), PG Diploma in Human Resource Management (under distance mode). Besides, the Department also offers Ph.D. programme in management. A detail about the Department of Business Administration is available in relevant portion of the Prospectus.

The Centre for Disaster Management besides organizing various programmes for creating awareness for disaster mitigation, also offers Choice Based Credit Transfer (CBCT) courses for undergraduate and postgraduate students of the University.

The Intellectual Property Rights (IPR) cell is headed by a IRP Chair Professor, the position is created by the Ministry of Human Resource Development (MHRD), Government of India. The cell takes care of innovations and its patentability by providing support to the innovators The Cell has been actively involved in organizing seminars, workshops related to IPR issues. The cell also offers CBCT courses on IPR to undergraduate, postgraduate and Ph.D. students of the University.

Programme Offered:

Integrated Master of Commerce (M. Com.)

with option of lateral exit on successful completion of six semesters with B.Com (Hons) degree and lateral entry in the Seventh Semester (subject to fulfillment of eligibility criteria) for the M. Com. Degree

Faculty

The faculty for the programme will comprise of full time members engaged under the Department of Commerce. However, till the time, the Department of Commerce is fully equipped it shall run with the assistance of faculty members of the Department of Business Administration as well as other relevant departments. Besides, guest faculty members with adequate experience will be engaged to teach specialized courses.

Special Feature of the Programme

The programme is designed to provide the basis for developing the skills necessary to face the challenges of job market, The course structure supports the process of competency building of the students in attaining success in NET/SET and other competitive examinations that the pass outs may appear in, and the course structure takes care of both practical and theoretical dimensions. Moreover, possible care has been taken to ensure that the students acquire relevant skills and knowledge expected of a successful graduate in case anyone opts for lateral exit after completion of the sixth semester with a required B. Com. (Hons.) degree, enabling him/her to pursue any professional programme of his/her choice. This course structure attempts to ensure that the students are equipped with necessary soft and behavioural skills, which are expected to distinguish this programme from the typical B.Com. programmes usually offered. The pass outs of the Integrated M. Com. Programme are expected to fulfill all the requirements of careers in teaching, research, industry and consultancy, apart from becoming a self-employed professional or a successful entrepreneur.

Courses offered in Integrated M. Com. :

First Semester :

Course Code	Course Name	Cr.
IC 101	English Comprehension Skill	3
IC 102	Business Organization	3
IC 103	Business Environment	3
IC 104	Economics – I	3
IC 105	Financial Accounting – I	3
IC 106	Business Regulatory Framework-I	3

Second Semester:

Course Code	Course Name	Cr.
IC 121	Economics – II	3
IC 122	Principles and Practice of Management	4
IC 123	Financial Accounting – II	4
IC 124	Business Mathematics- I	4
ES 102	Elementary Environmental Science	3

Third Semester :

Course Code	Course Name	Cr.
IC 201	Business Regulatory Framework-II	3
IC 202	Business Mathematics- II	4
IC 203	Cost Accounting	3
IC 204	Corporate Accounting- I	3
IC 205	Functional Communicative Skill	3
IC 206	Inter-Personal Skills - I	3

Fourth Semester :

Course Code	Course Name	Cr.
IC 221	Basic Statistics	4
IC 222	Indirect Taxes	4
IC 223	Fundamentals of Insurance	4
IC 224	Banking Laws and Practice	4
IC 225	Corporate Accounting -II	4

Fifth Semester :

Course Code	Course Name	Cr.
IC 301	Company Law	2
IC 302	Business Finance	3
IC 303	Corporate Accounting-III	4
IC 304	Income Tax – Law and Practice	4
IC 305	Preparing a Business Plan	4
IC 306	Inter -Personal Skills - II	3

Sixth Semester (Any One of the following Two Groups)

Group –A
Accounting & Taxation

Course Code	Course Name	Cr.
IC 321	I T and Its Application in Accounting and Taxation	4
IC 322	Auditing	3
IC 323	Management Accounting	4
IC 324	Public Finance	4
IC 325	Tax Planning and Procedures	4

Group—B
Banking & Finance Group

Course Code	Course Name	Cr.
IC 341	I T and Its Application in Banking and Finance	4
IC 342	Indian Financial Market and Financial System	3
IC 343	Financial Services	4
IC 344	Banking Regulatory Framework	4
IC 345	Credit and Risk Management in Banks	4

Seventh Semester :

Course Code	Course Name	Cr.
IC 501	Organizational Theory and Behaviour	4
IC 502	Macro- Economics	4
IC 503	Statistics for Business Decisions	4
IC 504	Corporate Governance	4
IC 505	International Business	4

Eighth Semester:

Course Code	Course Name	Cr.
IC 521	Human Resource Management	4
IC 522	Marketing Management	4
IC 523	Managerial Economics	4
IC 524	Operations Research	4
IC 525	Methodology for Business Research	4

Ninth Semester :

Course Code	Course Name	Cr.
IC 601	Accounting Theory	4
IC 602	Corporate Financial Accounting and Reporting	4
IC 603	Strategic Management	4
IC 604	Management Information System	4
IC 605	Project Work	4

Tenth Semester:

Course Code	Course Name	Cr.
IC 621	Financial Statement Analysis	4
IC 622	Strategic Financial Management	4
IC 623	Strategic Cost and Management Accounting	4
IC 624	International Finance	4
IC 625	Security Analysis and Portfolio Management	4

Students will be advised to take some Choice Based Credit Transfer (CBCT) courses in some of the semesters as per University rules.

CIVIL ENGINEERING (Year of Establishment: 2009)

The Department of Civil Engineering of the Tezpur University was established in the year 2009 under the School of Engineering for offering B. Tech. Degree. Ph.D. programme was initiated in winter, 2010. The Department aims to provide quality educational, research and professional experiences that enable our 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. Ph. D.

Faculty and Areas of Interest

Associate Professor

#Das, U. K., Ph.D. (G U)-HoD *Geotechnical Engineering.*

Assistant Professors

Saikia, A., M. Tech. (IITKgp) *Geotechnical Engineering.*

*Ahmad, K.U., Ph.D. (IITG) *Environmental Engineering.*

#Sil, B.S., Ph.D. (NIT, Silchar) *Water Resources Engineering.*

Narzary, B.K., M. Tech. (IITG) *Transportation Engineering.*

Sonowal, D.B., M. Tech. (IITR) *Structural Engineering.*

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

Ering, P., M. Tech. (IISc) *Geotechnical Engineering.*

Debnath, N., M. Tech (IITG) *Structural Engineering*

*Recognized Supervisor; # Recognized Co-supervisor

LEGENDS: GU-Gauhati University, IITKgp- Indian Institute of Technology-Kharagpur, IITG- Indian Institute of Technology- Guwahati, NIT-National Institute of Technology, IITR- Indian Institute of Technology-Roorkee, HoD- Head of the Department, IISc- Indian Institute of Science

Facilities

The Department has the following Laboratory facilities

1. Computational Laboratories

- Matlab and Simulink R2011b
- Sap 2000
- Plaxis 2D
- ETABS version 9
- Civil FEM for Ansys, version 12.1
- AutoCAD

2. Core Departmental Laboratories

- Geotechnical Lab
- Environmental Engg Lab
- Surveying Lab
- Structural Lab
- Water Resources Lab
- Transportation Lab

Library Facilities:

The central library has subscribed number of international and national journals of reputed publishers.

Research Activity:

No. of papers published in the year 2013 (up to September) : 4.

Department has already started research activity and has two Ph.D. scholars.

Selected publications:

1. Ahmad, K.U., & Jawed, M. Breakthrough Studies with Mono- and Binary-Metal Ion Systems Comprising of Fe(II) and As(III) using Community Prepared Wooden Charcoal Packed Columns, Desalination, Elsevier Publication , 285 (2012), 345-351.
2. Saikia, A., Vertical stress averaging over a layer depth down the axis of symmetry of uniformly loaded circular regime: An analytical cum graphical solution, *International Journal of Geotechnical Engineering*, 6(3), 359-364, 2012.

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

COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science and Engineering is one of the oldest Departments of the University. The Department has the support of the UGC under SAP (DRS-I) since 2009. During 2005-2009 the Department received support from the Department of Science and Technology (DST), Govt. of India under its FIST programme. In addition to the academic programmes at the UG and PG levels, the Department has been carrying out active research in the fields of computational theory, computer networks, network security, mobile computing, soft computing & data mining, natural language processing, workflow management, qualitative spatial reasoning, web services, rehabilitation robotics, and pattern recognition.

Currently, the Department has eight sponsored research projects (including UGC SAP DRS-I) worth over Rs 494.38 Lakhs.

Programmes offered

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

Faculty and Areas of Interest

Professors

* Dutta, M., Ph.D. (IITK)	<i>Optimization, Computational Theory.</i>
*Saikia, D.K., Ph.D. (IITKgp) -On lien as Director, NIT, Meghalaya	<i>Networks, Mobile Computing.</i>
*Bhattacharyya, D. K. Ph.D.(TU), Dean-SoE	<i>Data Mining, Cryptography.</i>
*Sinha, S.K., Ph.D. (TU)	<i>Workflow Automation, Web Theory.</i>
*Hazarika, S.M., Ph.D. (Leeds) -HoD	<i>Knowledge Representation & Reasoning Rehabilitation Robotics.</i>
*Sharma, U., Ph.D. (TU)	<i>Natural Language Processing.</i>
*Sarma, N., Ph.D. (IITG)	<i>Wireless Networks and Mobile Computing.</i>

Associate Professors

* Saharia, S., Ph.D. (TU)	<i>Pattern Recognition</i>
*Borah, B., Ph.D. (TU)	<i>Data Mining.</i>
Nath, B., Ph.D. (TU)	<i>Data Mining.</i>

Assistant Professors

Singh, S.I., MCA (MU)	<i>Service Oriented Systems, Trust and Reputation.</i>
Satapathy, S.S., M. Tech. (TU)	<i>Computational Biology and Bioinformatics, Wireless Sensor Network.</i>
Singh, L.B., M. Tech. (TU)	<i>Object Recognition, Trust and Reputation.</i>
#Sarmah, R., Ph.D. (TU)	<i>Data Mining, Bioinformatics, Image Processing.</i>
Deka, S. K., M. Tech. (TU)	<i>Cognitive Radio Network, Operating System.</i>
Boro, D., M. Tech. (TU)	<i>Network Security.</i>
Karmakar, A., Ph.D. (ISI, Kolkata)	<i>Algorithms, Computational Geometry.</i>
Nath, S., M. Tech. (TU)	<i>Speech Processing.</i>
Dash, D., Ph. D. (IITKgp)	<i>Sensor Network Algorithms</i>
Patra, S., Ph. D (JU)	<i>Pattern Recognition Machine Learning and Remote Sensing Image Analysis</i>

*Recognized Supervisor; # Recognized Co-supervisor

LEGENDS: TU-Tezpur University, MU-Manipur University, HoD-Head of the Department, JU- Jadavpur University, ISI- Indian Statistical Institute, IITK-Indian Institute of Technology, Kanpur- IITKgp- Indian Institute of Technology, Kharagpur, IITG- Indian Institute of Technology, Guwahati, Leeds- University of Leeds, England, SoE- School of Engineering, HoD-Head of the Department.

Facilities

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

- Two basic programming laboratories,
- A software engineering laboratory,
- Two network security laboratories,
- A hardware laboratory
- A natural language processing laboratory
- Biomimetic and cognitive Robotics laboratory
- A network laboratory
- A Cognitive Radio Laboratory

These laboratories house a host of servers, workstations and a large number of PC terminals connected to the campus-wide LAN with access to the Internet. The network laboratory is equipped with wireless and wireline network equipment, wireless sensor network accessories, LAN trainers, internet security trainers etc. The hardware laboratory is equipped with various training kits, experimental setup, logic analyzer, embedded system kits, etc. The systems run on wide variety of operating systems including Linux, Windows 7/8, etc. The laboratories are equipped with up-to-date DBMS packages, graphics and animation packages, multimedia authoring packages, GIS packages, Web servers & browsers, Matlab, NS2 Qualnet, Mathematica, Matrox, in addition to the various state-of-the art compilers and programming environments, and office automation software.

Departmental Library:

The Department has a library with a collection of more than 1400 book volumes in the field of computer science and information technology. The library also receives 8 international and 3 national journals in the field of computer science in addition to those at the central library. The digital libraries of ACM, IEEE, are accessible to the Department.

Research Activity:

No. of papers published in last one year : **67**

The Department of Computer Science and Engineering is a UGC SAP Department.

Selected publications:

1. Kakoty, N. M., Saikia, A. & Hazarika, S. M. Exploring a Family of Wavelet Transforms For EMG-based Grasp Recognition, *Signal, Image and Video Processing*, Springer, April 2013.
2. Chatterjee, B. C., Sarma, N. & Sahu, P. P. A Qos-aware Wavelength Assignment Scheme for Optical Networks, *Optik-International Journal. Light Electron Opt.*, **124**(20), 4498-4501, 2013.

Courses offered in the M. Tech. (Information Technology)

Core Courses

Course Code	Course Name	Cr.
CS 531	Object Oriented Programming and Design	5
CS 601	Design and Analysis of Algorithms	3
IT 611	Distributed Systems	3

Course Code	Course Name	Cr.
IT 610	Advanced Database System	4
CS 634	Selected Topics in Computer Networks	4
IT 604	Term Project- I	8
IT 605	Term Project- II	16

Electives

Course Code	Course Name	Cr.
CS 502	System Software	3
CS 505	Software Engineering	4
CS 507	Computer Networks	4
CS 508	Database Management	5
CS 509	Data Communication	4
IT 503	Multimedia Systems	4
IT 504	E-Commerce	3
IT 506	Logic Programming	3
IT 521	Programming and Data Structure	4
IT 522	Computer Architecture	4
IT 523	Discrete Mathematics	3
CS 424	Formal Language and Automata	3
IT 518	Graph Theory	4
CS 522	Computer Graphics	4
CS 523	Enterprise Resource Planning	3
CS 524	Theory of Computation	3
CS 525	Artificial Intelligence	3
CS 504	Natural Language Processing	3

Course Code	Course Name	Cr.
CS 528	Digital Signal Processing	4
CS 529	Embedded Systems	4
CS 621	Mobile Computing	4
CS 532	Compiler Design	4
CS 602	Image Processing	3
CS 607	Optimization Technique	3
CS 606	Computer Architecture and Parallel Processing	3
CS 610	Bioinformatics	3
IT 509	Data Mining and Data Warehousing	4
IT 510	Advanced Operating Systems	4
CS 623	Randomized Algorithms	3
CS 624	Web Technology	4
CS 625	Intelligent Assistive Systems	3
CS 725	Knowledge Representation and Reasoning	4
CS 727	Formal Verification	4
CS 731	Data Mining in Security	4
CS533	Computational Geometry	3
IT 507	Computer Security and Cryptography	3

Courses offered in MCA

Core Courses:

Course Code	Course Name	Cr.
CS 404	Programming & Problem Solving	5
CS 405	Discrete Mathematics	3
CS 406	Digital Logic	4
CS 407	Information and Communication Technology	4
CS 403	File Structures	2
CS 408	Data Structures	5
CS 409	Comp. Organization and Architecture	5
CS 502	System Software	3

Course Code	Course Name	Cr.
CS 504	Operating System	4
CS 505	Software Engineering	4
CS 507	Computer Networks	4
CS 508	Database Management	5
CS 509	Data Communication	4
CS 514	Minor Project	8
CS 515	Major Project	16

Elective Courses:

Course Code	Course Name	Cr.
CS 421	Graph Theory	3
CS 422	Numerical Methods	4
CS 423	Graphical User Interface Programming	3
CS 424	Formal Language and Automata	3
CS 522	Computer Graphics	4
CS 523	Enterprise Resource Planning	3
CS 524	Theory of Computation	3
CS 525	Artificial Intelligence	3
CS 526	Management Information Systems	3
CS 528	Digital Signal Processing	3
CS 529	Embedded Systems	4
CS 530	Social and Professional Issues in Computing	3
CS 531	Object Oriented Programming and Design	5
CS 532	Compiler Design	4
IT 503	Multimedia Systems	4
IT 504	E-Commerce	3
IT 509	Data Mining and Data Warehousing	4
IT 507	Computer Security and Cryptography	3

Course Code	Course Name	Cr.
CS 601	Design and Analysis of Algorithms	3
CS 602	Image Processing	3
CS 604	Optimization Techniques	3
CS 605	Simulation and Modeling	4
CS 606	Computer Architecture and Parallel Processing	3
CS 609	Geographic Information Systems	3
CS 610	Bioinformatics	3
IT 611	Distributed Systems	3
CS 621	Mobile Computing	4
CS 622	Software Testing Quality Assurance and Maintenance	4
CS 623	Randomized Algorithms	3
CS 624	Web Technology	4
CS 625	Intelligent Assistive Systems	3
BM 421	Accounting and Financial Management	3
MS 405	Probability and Statistics	4
BM 504	Managerial Economics	4
BM 501	Foundation of Management	3

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

CULTURAL STUDIES (Year of Establishment: 1996)

Established in 1996, the Department of Cultural Studies is one of the few Departments in the country devoted exclusively to the academic pursuit of Cultural Studies. A truly 21st century discipline, Cultural Studies initially emerged in Great Britain and later on in conjunction with developments in the United States, evolved into a vibrant interdisciplinary approach in the understanding of society, culture and expressive forms associated with human behaviour across a wide range of disciplinary engagements. Asia is fast emerging as an important location where methods evolved in Cultural Studies are used to interrogate disciplinary approaches in an attempt to promote a discursive understanding of various issues like ethnicity, migration, national and nationalistic assertion, gender and society, media generated cultural forms, environment and development and emerging lifestyle patterns. The Department of Cultural Studies at Tezpur University mediates global concerns and theoretical approaches of the discipline with issues that are of local importance and promotes an understanding of the rich cultural heritage and the ingrained plural nature of the region, the folk and oral inheritance and ethnic and cultural assertions amongst others. PhD scholars in the Department are drawn from an array of disciplines and include a number of UGC JRFs and NET qualified candidates. The University awards institutional fellowships to deserving non JRF candidates to pursue their research.

Programmes offered

1. M. A. in Cultural Studies (Modular)
2. Ph. D.**

Faculty and Areas of Interest

Professors

*Mahanta, P.J., Ph.D. (GU), Dean-HSS *Cultural History, Old Assamese Literature, Performing Arts.*

*Dutta, S.K., Ph.D. (VB) *Folklore Studies, Assamese Language and Culture.*

Associate Professor

*Nath, D.P., Ph.D. (RGU)-HoD *Gender Studies, Comparative Literature, Translation, Critical Theory.*

Assistant Professors

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

*Dutta, P., Ph.D. (TU) *Heritage Studies, Folklore Studies, New Museology.*

*Konwar, J. G., Ph.D. (DU) *Medical Anthropology, Anthropology of Food and Costume.*

Das, J.V., M.A. (TU) *Cultural Communication, Development Communication, Epistemology of Communication Studies.*

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

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

* Recognized Supervisor

**** The Department is not going to admit Ph. D. students for the Autumn Semester, 2014.**

LEGENDS: GU-Gauhati University, VB- Visva-Bharati, Santiniketan, RGU- Rajiv Gandhi University, Itanagar, TU-Tezpur University, HU-Hyderabad University, DU-Dibrugarh University, HoD-Head of the Department, HSS- Humanities and Social Sciences.

Facilities

The Department has a well equipped seminar cum conference hall with projection facilities and audio-visual teaching aids and an archival centre cum edit suite. The student support infrastructure also includes the Pratibha Kath Hazarika Memorial Library and a cultural museum.

Research Activity

No. of papers published in the year 2012-13 (up to September): **32**

No. of ongoing research project: **3**

The Department of Cultural Studies is a UGC SAP Department.

Selected Publications

A. Papers

1. Goswami, Madhurima. "Kherai of the Bodos: Imagination of Their World." *International Journal of Physical and Social Sciences*, January 2013.
2. Hashik, N. K. "Text in the Life and Life in the Text: Towards a Complimentary Model." *Performing Islam (University of Leeds, U. K.)* 1.2 (2013).

B. Books published from the Department

1. Konwar, J. G., *Warp and Weft: Textile Tradition of the Bodos*. Guwahati: Purbanchal Prakash, 2013.
2. Nath, D. P., *Jacques Lacan and The French Feminists: Theory and Praxis*. Guwahati: Purbanchal Prakash, 2013.
3. Mahanta, P. J. & Nath, D. P. (eds.) *Cultural Studies: Perspectives from North East India*. Guwahati: Purbanchal Prakash, 2013.

Courses offered in the M.A. in Cultural Studies Programme

First Semester:

Course Code	Course Name	Cr.
CT 131	Introduction to Cultural Studies	3
CT 132	Cultural Studies and Allied Discipline	2
CT 133	Folklore and Culture—I	3
CT 134	Reading Culture—I	3
CT 135	Culture and Oral History	2
	CBCT - I	3

Second Semester:

Course Code	Course Name	Cr.
CT 136	Introduction to Cultural Theory	2
CT 137	Performance and Culture	3
CT 138	Ethnicity and Nationalism	2
CT 139	Folklore and Culture—II	3
CT 140	Reading Culture—II	3
	CBCT— II	3

Third Semester:

Course Code	Course Name	Cr.
CT 141	Methods of Cultural Studies	2
CT 142	Culture and Heritage	3
CT 143	Media and Culture	3
CT 144	Gender and Culture- I	3
CT 145	North East Studies	2
	CBCT - III	3

Fourth Semester:

Course Code	Course Name	Cr.
CT 146	Dissertation	6
	CBCT- IV	3
	Elective—I	3
	Elective—II	3+3

Elective Courses -I

(One from the Following courses)

Course Code	Course Name	Cr.
CT 147	Culture, Heritage and Cyber Space	3
CT 148	Gender and Culture—II	3
CT 149	Film and Television Studies	3

Elective Courses -II

(Two from the following courses)

Course Code	Course Name	Cr.
CT 150	Cultural Tourism	3
CT 151	Cross—Cultural Studies : North East India and South East Asia	3
CT 152	Culture and Science	3
CT 153	Culture and Environment	3

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

ELECTRONICS AND COMMUNICATION ENGINEERING

(Year of Establishment: 1997)

The Department started functioning with the first batch of students admitted in 1997 into the M. Tech. in Electronics Design and Technology course. This course has been designed with an aim to meet the industry requirements in the field of Electronics Design with emphasis on latest technological developments. From August, 2004 the Department has started a new programme "M. Tech. in Bioelectronics" approved by the UGC under its innovative programmes Teaching and Research in interdisciplinary and emerging areas. The courses, designed with interdisciplinary relevance, aims at producing professionals in the fields of medical, food safety, agriculture, defense, biotech and biosensor industries. Both courses have been recognized by AICTE. The Department has also started B. Tech. programme in Electronics and Communication Engineering from August 2006. The Department has also started career oriented programme "Advanced Diploma in Healthcare Informatics and Management" supported by UGC from September 2012. It is a DST-FIST, DeITY – MIT and UGC-SAP supported Department.

Programmes offered

1. B. Tech. in Electronics and Communication Engineering
2. B. Tech in Electrical Engineering
3. M. Tech. in Electronics Design and Technology
4. M. Tech. in Bioelectronics
5. Advanced Diploma in Healthcare Informatics and Management.
6. Ph. D.

Faculty and Areas of Interest

Professors

* Dutta, J.C., Ph.D. (JU)-HoD	<i>Bio-electronics, Biosensors, Neurobioengineering.</i>
*Bhuyan, M., Ph.D. (GU)	<i>Sensor Design, Image Processing, Machine Vision.</i>
*Sahu, P.P., Ph.D. (JU)	<i>Optical Networks and its Components, Wireless Communication.</i>
*Bhattacharyya, S., Ph.D. (DU [^])	<i>Microwave Antennas</i>

Associate Professors

*Sharma, S., Ph.D. (TU)	<i>MOSFET, Bioelectronic Device-ISFET, Vehicular Electronics</i>
Roy, S., Ph.D. (IITG)	<i>Neuroengineering</i>
Deka, B., Ph.D. (IITG)	<i>Image Processing</i>
Nath, V. K., Ph.D. (IITG)	<i>Signal and Image Processing</i>

Assistant Professors

Chutia, R., M. Tech. (TU)	<i>E-nose</i>
Hazarika, D., M. Tech. (IITG)	<i>Signal Processing</i>
Kakoty, N.M., M. Tech. (TU)	<i>Robotics</i>
Barua, R.K., M. Tech. (TU)	<i>VLSI</i>
Mondal, B., M. Tech. (TU)	<i>VLSI & MEMS Devices.</i>
Sonowal, D., M. Tech. (TU)	<i>Sensors</i>
Bonjyotsna, A., M. Tech. (TU)	<i>Signal Processing</i>
Kakoty, P., M. Tech. (TU)	<i>Intelligent Instrumentation</i>

* Recognized Supervisor

LEGENDS: TU-Tezpur University, MU-Manipur University, HoD-Head of the Department, JU- Jadavpur University, ISI- Indian Statistical Institute, IITK -Indian Institute of Technology, Kanpur- IITKgp- Indian Institute of Technology, Kharagpur, IITG- Indian Institute of Technology, Guwahati, Leeds- University of Leeds, England, SoE- School of Engineering, HoD-Head of the Department.

Facilities

Microelectronics fabrication Laboratory: Supported by DST (FIST) and UGC (SAP).

Digital Laboratory: There are a good number of analog and digital ICs and their application facilities, logic analysers, microprocessors, microcontrollers, data acquisition cards, stepper motor controller cards, relay and opto-coupler interfacing cards etc.

Instrumentation Laboratory: It is equipped with temperature transducers - thermocouple, IC sensors, Multi-channel temperature indicators, Load cell indicator, humidity sensor, sensor interfacing to PC, Industrial type of remote transmitter, PC based stepper motor, Servo motor driver etc.

PCB Fabrication Facilities: It is equipped with Art work table, magnifier, photo resist U. V. exposure unit, photo resist coating whirler, sprayer, oven etching machine, guillotine shearing machine, high speed drill, roller tining machine and all necessary chemicals.

Computer Laboratory: Pentium based PCs attached to a LAN server by powerful Pentium Based Novel Network consisting of about 25 terminals all connected to Internal Server. There are up-to-date office automation software, ORACLE, Web Server & browser, MATLAB, Circuit Simulator like MICROSIM, PCB layout, CPLD-FPGA Electronic Design Automation (EDA) software, High Performance Data Acquisition - Control- Manipulation Software – GENIE, Lab View, XILINX, ORCAD.

DSP Laboratory: (i) Software (MATLAB) and (ii) Hardware with DSP kits (For B. Tech Project work) (iii) FPGA Boards.

M. Tech Project Lab: 20 number of computers equipped with different project based software. Computer systems are allotted to M. Tech. final year students to complete their M. Tech Dissertation.

Research Lab: This computer lab is exclusively for Ph.D. students.

Mechanical Workshop: It is equipped with the following machines: Lathe, High Speed Drilling, Milling, Turning, Wood Working Grinding, Shearing, Cutting, Bending, Electric Welding Plastic Welding etc.

Bioelectronics Engineering Laboratory: Robotics, vision development with Lab view, E-nose, Insectronics, Device Simulator.

Bioneuro-engineering Laboratory: Power Lab (AD instruments having capabilities of measuring and processing of ECG, EMG, EEG etc.)

Research Activity

No. of papers published in the year 2013 (up to September): **19**

Research Areas:

- | | |
|----------------------------------|--------------------------------|
| 1. Biosensors and Bioelectronics | 2. Intelligent Instrumentation |
| 3. Image and Signal Processing | 4. Microwave |
| 5. Vehicular Electronics | |

Research Output:

- | | |
|--------------------------|------------------------|
| 1. Completed : 07 | 2. Ongoing : 25 |
|--------------------------|------------------------|

Nos. of completed research project : 04

Nos. of ongoing research project : 06

This Department is a UGC SAP Department

Selected publications

1. Chatterjee, B. C., Sarma, N. & Sahu, P. P. Prioritybased Routing and Wavelength Assignment with Traffic Grooming for Optical Networks, *IEEE/OSA Journal of Optical Communication and Networking*, **4(6)**, 480-489, 2012.
2. Dutta, J. C. & Ahmed, T. A Simple Electronic Analog of the Postsynaptic Membrane: The NEUROBIOFET, *IEEE International conference publication. Digital Object Identifier: 10.1109/ICDCSyst.2012.6188656*, 670 – 672, 2012.

Courses offered in the M. Tech. (Electronics Design and Technology)

Core Courses

Course Code	Course Name	Cr.
EL516	Design of Fine Mechanics and Power Devices	4
EL 517	Physical and Industrial Design of Electronic Systems	4
EL 530	VLSI Design	4
EL 531	Design of Digital Systems	4
EL 538	Advanced Electronic Devices	3

Course Code	Course Name	Cr.
EL 521	Design and Technology of Electronic Devices	4
EL 532	Intelligent Instrumentation	4
EL 523	Advanced Programming Language	5
EL 528	Seminar-II	1
EL 601	M. Tech. Project (2 semesters) dissertation	24

Elective Courses

Course Code	Course Name	Cr.
EL 533	Data Communication and Networks	4
EL 535	Information Systems	4

Course Code	Course Name	Cr.
EL 534	Modeling and Simulation	4
EL 536	Application Software	4

Courses offered in M. Tech. (Bioelectronics)

Core Courses

Course Code	Course Name	Cr.
BE 515	Basic Bioelectronics	3
BE 516	Advanced Bioelectronics Devices	3
BE 517	Biomedical Signal Processing	4
BE 519	Bioinspired Systems and Engineering	3
BE 506	Biomedical Image Processing	4
BE 504	Neuroengineering	3

Course Code	Course Name	Cr.
BE 509	Biomathematics	3
BE 510	Bioelectronics System and Controls	3
BE 511	Basic Bioelectronics Lab	4
BE 512	Advanced Bioelectronics Lab	4
BE 514	Seminar	1
BE 601	M. Tech. Dissertation (2 semester)	24

Elective Courses

Course Code	Course Name	Cr.
BE 507	Bioinformatics	4
BE 508	BioMEMS & Nanotechnology	4

Course Code	Course Name	Cr.
BE 513	Biomedical Electronics	4

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

ENERGY

(Year of Establishment: 1996)

Department of Energy started in 1996, with an aim to produce manpower pool in the field of energy, develop new and efficient energy technologies, R & D and extension activities in diverse areas of energy. The department offers a two-year (four semesters) AICTE approved M. Tech. programme in Energy Technology Post Graduate Diploma in Renewable Energy and Energy Management (under distance education mode) and Ph. D. in energy related areas. The thrust areas of research are Biomass energy, Solar energy, Hydro-energy, Energy-Environment interaction, Energy Conservation and Management, Building Energy and Clean Coal Technology. Apart from the teaching and research, the department also organizes training programmes, workshops and seminars in the relevant areas of energy. Recently the Department has also initiated international collaborative research project with Institutes, like the University of Nottingham, UK and Abo Akademi, Finland.

Programmes offered

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

Faculty and Areas of Interest

Professors

*Deka, D., Ph.D., (TU) - HoD	<i>Biofuels, Biomass Assessment, Bioenergy and Environment</i>
*Baruah, D.C., Ph.D. (PAU)	<i>Biomass Energy, Energy Management and Mathematical Modeling and Farm Mechanisation</i>
*Samdarshi, S.K., Ph.D. (IITD) - On lien	<i>Solar Energy</i>

Associate Professor

*Kataki, R., Ph.D. (TU)	<i>Energy and Environment, Biomass energy</i>
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Assistant Professors

Mahapatra, S., M. Tech. (JU)	<i>Biomass Gasification, Climate responsive buildings, Decentralized Energy Options, Energy conservation.</i>
Choudhury, P.K., M. Tech. (TU)	<i>Energy Conservation and Management, Integration of Renewable Energy Systems.</i>
Kalita, P., Ph.D. ,(IITG)	<i>Fluid Mechanics, Heat Transfer, Biogas Technology, Circulation fluidized bed combustion and gasification</i>

* Recognized Supervisor

LEGENDS: **IITD**- Indian Institute of Technology- Delhi, **IITG**- Indian Institute of Technology-Guwahati, **PAU**-Punjab Agriculture University, **TU**- Tezpur University, **JU**- Jadavpur University, **HoD**- Head of the Department.

Facilities

Laboratory

The Department is equipped with various equipments such as Gas Chromatograph, Computerized powermeter, 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, Duel Fuel Engine, Vacuum Distillation Apparatus, Microhydel test set-up, Research Radiometer, Solar thermal collector test set-up, Solar Dryer, Peristaltic Pump, Ultrasonicator, Programmable Muffle Furnace, Biodiesel Plant and various renewable energy systems.

Departmental Library

A good number of books, 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

Ministry of New and Renewable Energy (MNRE), Government of India offers fellowship for M. Tech. and Ph. D. students under its National Renewable Energy Fellowship Schemes on the basis of GATE score. MHRD fellowships are also available for GATE qualified candidates. NEC fellowships are available for the students from North East regions. ONGC offers scholarship to M. Tech. student of the Department. UGC offers scholarship to SC/ST students.

Research Activity

No. of ongoing sponsored research projects: **07**

No. of papers published in referred Journals in 2012 and 2013 (Upto September): **37**

Selected Publications

1. L. J. Konwar, R. Das, A. J. Thakur, E. Salminen, P. Mäki-Arvela, N. Kumar, J-P Mikkola and D. Deka, Biodiesel production from acid oils using sulfonated carbon catalyst derived from oil-cake waste. Journal of Molecular Catalysis A: Chemical (2013, Accepted) (DOI: 10.1016/j.molcata.2013.09.031).
2. M. Chakraborty and D.C. Baruah, Production and characterization of biodiesel obtained from Sapindus mukorossi kernel oil, Energy, 60, 159–167, 2013.

Courses offered in M. Tech. (Energy Technology)

First Semester:

Course Code	Course Name	Cr.
EN 501	Foundation for Energy Engineering	2
EN 502	Energy, Ecology and Environment	3
EN 503	Fuel and Combustion	3
EN 504	Heat Transfer	3
EN 505	Solar Energy Utilization	3
EN 506	Biomass Energy Utilization	3
EN 507	Wind and Hydro Energy	3
EN 508	Energy Laboratory	2
	CBCT-I	3

Second Semester:

Course Code	Course Name	Cr.
EN 510	Energy Management and Auditing	4
EN 511	Energy Economics and Planning	3
EN 512	Energy Systems and Simulation Laboratory	3
EN 513	Seminar	1
	Elective-I	3
	Elective -II	3
	CBCT- II	3
	CBCT -III	3

Third Semester:

Course Code	Course Name	Cr.
EN 539	Project (Part-I)	8

Fourth Semester:

Course Code	Course Name	Cr.
EN 540	Project (Part-II)	16

Elective- I (Any One from the following)

Course Code	Course Name	Cr.
EN 515	Advanced Bio-Energy	3
EN 516	Advanced Solar Thermal Energy	3
EN 517	Advanced Solar Photovoltaic Energy	3
EN 518	Hydrogen Energy and Fuel Cell	3
EN 519	Alternative Fuels for IC Engines	3
EN 520	Petroleum Exploration, Production and Refining	3

Elective -II (Any One from the following)

Course Code	Course Name	Cr.
EN 525	Thermal Power Plant Engineering	3
EN 526	Energy Efficient Building	3
EN 527	Renewable Energy Grid Integration	3
EN 528	Decentralized Energy Systems	3
EN 529	Energy, Climate Change and Carbon Trade	3
EN 530	Instrumentation and Control for Energy Systems	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

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

ENGLISH AND FOREIGN LANGUAGES

(Year of Establishment: 1994)

The Department, which was established in 1994, aims to provide instruction and carry out research in American Literature, English Language Teaching, English Literature, Indian Writing in English, Linguistics, New Literature in English and Women's Writing in English.

Programmes offered

1. M.A. in English
2. Integrated B.A.B.Ed. (English Major)
3. Integrated M.A. Programme
4. M.A. in Linguistics and Language Technology
5. One Year Certificate Course of Chinese (Full Time)
6. Ph. D.**

Faculty and Areas of Interest

Professors

*Sarma, M.M., Ph.D., (DU)	<i>Applied Linguistics, Literature in English, ELT</i>
*Danta, B.K., Ph.D., (UU)	<i>American Literature, Critical Theory, Fiction Studies</i>
*Danta, F., Ph.D., (DU)	<i>American Literature, Cultural Studies, Modernist Poetics</i>
*Das, P. K., Ph.D., (GU)-HoD	<i>American Literature, Indian Writing in English</i>
*Barbora, M., Ph.D., (TU)	<i>Linguistics (Syntax, Psycholinguistics)</i>

Associate Professors

*Borah, G.K., Ph.D., (NTNU, Trondheim, Norway)	<i>Linguistics, Cognitive Semantics, Philosophy of Language.</i>
*Biswas, S., Ph.D., (NEHU)	<i>Critical Theory, Indian Writing in English</i>

Assistant Professors

*Mohapatra, D., Ph.D. (EFLU, Hyderabad)	<i>Curriculum Development, Materials Production, Language Policy</i>
Medhi, H.M., M.Phil., (DU [^])	<i>Gender and Literature, New Literatures in English</i>
Chakraborty, R., M.Phil. (Chinese), (JNU)	<i>Chinese Language & Literature.</i>
Narzari, R., M.A., (NEHU)	<i>Women's Writing, Commonwealth Literature, Indian Writing in English</i>
Jha, P., M.Phil., (HU)	<i>Children's Literature, Popular Culture and Literature, Postcolonial Writing</i>
Sahoo, S., Ph.D., (TU)	<i>Indian Writing in English, Ecocriticism, Travel Writing</i>
Gogoi B., M. Phil. (EFLU, Shillong)	<i>Critical Theory, Indian Writing in English</i>
Nath A.K., Ph.D. (JNU)	<i>Language Typology, Morphology, Language Endangerment, Multilingualism, Sociolinguistics</i>
Patgiri B., M.Phil. (JNU)	<i>Phonology (Prosody, Dialectology, Language Typology and Syntax)</i>
Daimari E., M.Phil. (GU)	<i>South Asian Literature</i>
Kumar P., Ph.D. (JNU)	<i>Language Description & Documentation, Endangered Languages and Lesser known Languages, Language</i>
Zingjarwon, N., M.Phil (JNU)	<i>Chinese Language and Literature</i>

**** The Department will be admitting students to the Ph.D. programme in Linguistics area only.**

* Recognized Supervisor

LEGENDS: **DU**- Dibrugarh University, **UU**-Utkal University, **GU**-Gauhati University, **TU**-Tezpur University, **DU[^]**-Delhi University, **HU**-Hyderabad University **VB**-Visva-Bharati, **HoD**- Head of the Department. **NEHU**- North Eastern Hill University, **EFLU**- English and Foreign Language University, Hyderabad, **JNU**- Jawaharlal Nehru University, New Delhi, **NTNU**-Norwegian University of Science and Technology.

Facilities

Digital Language Laboratory

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

Departmental Library

Selected books and photocopied materials relating to literature, linguistics and ELT are available in the Departmental Library. The Department also has a collection of audio cassette of 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 Activity

SAP-DRS project on Travel Writing, Life Writing, and the Assamese Language

No. of papers published in the year 2013 (Upto September): **10**

No of ongoing projects : **05**

The Department of English and Foreign Language is a UGC SAP Department

Selected Publications

1. Borah, G. K. Classifiers in Assamese and their meaning chains. In Morey, Stephen, Mark Post, and Gwendylyn Hyslop (Eds). North East Indian Linguistics, Vol 4. New Delhi: Cambridge University Press, 2012.
2. Nath, A K. "Sound Change in Deori: A Descriptive Account." *Journal of Universal Language, Language Research Institute, Sejong University, Seoul, South Korea* 13.2, (2012).

Courses Offered in M. A. in English:

First Semester:

Course Code	Course Name	Cr.
EG 441	Renaissance Drama	4
EG 443	18th and 19th Century Fiction	4
EG 445	ELT	4
EG 447	Structure of English Linguistics- II	4
	CBCT- I	3

Second Semester:

Course Code	Course Name	Cr.
EG 442	Jacobean to Victorian Poetry	4
EG 444	Literary Theory—I	4
EG 446	Modern Prose	4
EG 448	Language and Linguistics	4
	CBCT- II	3

Third Semester:

Course Code	Course Name	Cr.
EG 587	Modern Poetry	4
EG 589	Modern Fiction	4
EG 553	Literary Theory—II	4
	Elective -I	4
	CBCT- III	3

Fourth Semester

Course Code	Course Name	Cr.
EG 554	Modern Drama	4
EG 556	Postcolonial Writing	4
EG 558	Dissertation	6
	Elective -II	4
	CBCT- IV	3

Elective -I (Any One from the following)

Course Code	Course Name	Cr.
EG 555	Indian Writing in English—I	4
EG 557	American Literature—I	4
EG 559	Critical Theory—I	4
EG 569	Translation : Theory and Practice-I	4
EG 571	Gender and Literature -I	4
EG 572	ELT -I	4
EG 573	Linguistics—I	4
EG 574	Cognitive Linguistics—I	4

Elective -II (Any One from the following)

Course Code	Course Name	Cr.
EG 621	Indian Writing in English—II	4
EG 622	American Literature—II	4
EG 623	Critical Theory—II	4
EG 624	Translation : Theory and Practice—II	4
EG 625	Gender and Literature -II	4
EG 626	ELT -II	4
EG 627	Linguistics—II	4
EG 628	Cognitive Linguistics—II	4

Courses offered in M. A. (Linguistics and Language Technology)**First Semester :**

Course Code	Course Name	Cr.
LG 421	Philosophical Underpinnings of Modern Linguistics	4
LG 422	Phonetics and Phonology -I	4
LG 423	Morphology	4
LG 424	Syntax—I	4
	CBCT-I	3

Second Semester:

Course Code	Course Name	Cr.
LG 425	Syntax -II	4
LG 426	Phonology—II	4
LG 427	Cognitive Linguistics	4
LG 428	Field Linguistics	4
	CBCT—II	3

Third Semester :

Course Code	Course Name	Cr.
LG 501	Language Universals and Language Typology	4
LG 502	Semantics	4
LG 503	Computational Linguistics	4
	Elective—I	4
	CBCT-III	3

Fourth Semester:

Course Code	Course Name	Cr.
LG 508	Historical Linguistics	3
LG 509	Sociolinguistics	3
LG 514	Dissertation	6
	Elective -II	4
	CBCT -IV	3

Elective –I (Any One from the following)

Course Code	Course Name	Cr.
LG 504	Advanced Syntax—I	4
LG 505	Advanced Cognitive Linguistics –I	4
LG 506	Advanced Field Linguistics (Mainly on TBL ¹) - I	4
LG 507	Advanced Phonology—I	4

TBL¹- Tibeto—Burman- Language

Elective –II (Any One from the following)

Course Code	Course Name	Cr.
LG 510	Advanced Syntax—II	4
LG 511	Advanced Cognitive Linguistics –II	4
LG 512	Advanced Field Linguistics (Mainly on TBL- II)	4
LG 513	Advanced Phonology—II	4

Courses offered of Integrated M. A. in English**First Semester :**

Course Code	Course Name	Cr.
EG 102	Reading Literature	4
EG 105	English Literary History-I	4
CS 101	Basics in Computer Application	3
MIL (ANY ONE)		
AS 101	M.I.L. Assamese: Poetry (early and Modern)	3
HN101	Madhyakalin aur Adhunik Kabya	3
EG106	Alternative English-I	3
OPTIONAL COURSES (ANY TWO)		
SO102	Introduction to Sociology	2
CT101	Cultural Studies	2
MC101	Introduction to Communication	2

Second Semester:

Course Code	Course Name	Cr.
EG 103	Modern English Grammar	4
EG 104	Poetry from Chaucer to Dryden	4
ES 102	Elements of Environmental Science	2
NS102	NSS/NCC	2
MIL (ANY ONE)		
AS102	M.I.L. Assamese : Drama	3
HN102	Kahani aur Upanyas	3
EG 109	Alternative English-II	3
OPTIONAL COURSES (ANY TWO)		
SO103	Introduction to Sociological Thought	2
CT102	Cultural Studies-I	2
MC202	Journalism	2

Third Semester :

Course Code	Course Name	Cr.
EG201	English Drama from Beginning to Shakespeare	4
EG203	Phonetics of English and ELT	4
EG205	English Literary History—II	4
EG207	Seminar Presentation	2
MIL (ANY ONE)		
AS201	MIL (Assamese): Short Story and Novel	2
EG209	Alternative English-III	2
HN201	Natak Aur Ekanki	2
OPTIONAL COURSES (ANY TWO)		
SO201	Society in India	2
CT201	Folklore-II	2
MC201	Advertising and Public Relations	2

Fourth Semester:

Course Code	Course Name	Cr.
EG202	Fiction from Bunyan to Austen	4
EG204	Literary Criticism-I	4
EG206	Introductory Linguistics	4
EG208	Seminar Presentation	2
MIL (ANY ONE)		
AS202	MIL (Assamese) Essay, Structure of Assamese	2
EG211	Alternative English-IV	2
HN202	Nibandh Aur Hindi Bhasa Ki Bhasik Sangrachana	2
OPTIONAL COURSES (ANY TWO)		
SO202	Social Research Method	2
CT202	Cultural Studies-II	2
MC202	Electronic Media	2

Fifth Semester :

Course Code	Course Name	Cr.
EG301	Literary Criticism-II	4
EG303	Poetry: Pre-Romantic to Modern	4
EG305	Non-Fictional Prose	4
EG310	Project	3
EG307	Seminar Presentation	2
ED101	Education and Development-I	2

Sixth Semester:

Course Code	Course Name	Cr.
EG304	Drama: Seventeenth to Twentieth Century	4
EG306	Fiction : Victorian and Modern	4
EG308	India Writing in English	4
EG310	Project	5
ED102	Education and Development-II	2

Courses offered in One Year Certificate in Chinese (Full Time) Programme:**First Semester :**

Course Code	Course Name	Cr.
CL 101	Reading Chinese Text—I	3
CL 103	Comprehension and Translation	3
CL 105	Introduction to China -I	3
CL 107	Chinese Oral Skills -I	3

Second Semester:

Course Code	Course Name	Cr.
CL 102	Reading Chinese Text—II	3
CL 104	Comprehension and Translation	3
CL 106	Introduction to China -II	3
CL 108	Chinese Oral Skills -II	3

Courses offered in Integrated B.A. B. Ed. In English

The curriculum and syllabi for B.A. B. Ed. has been going through a major revision. The course structure and detail syllabi shall be made available in the University Website at an appropriate time.

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

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. Thrust areas of research include Environmental Pollution, Greenhouse gas emission, Riverine Hazards, Regional and Local Climate, Geomorphology, Pollution remediation and Biodiversity conservation.

Programmes offered

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

Faculty and Areas of Interest

Professors

*Baruah, K.K., Ph.D. (PAU)	<i>Environmental Plant Physiology and Biochemistry</i>
*Sarma, K.P., Ph.D. (NEHU)	<i>Water and soil Pollution, Hydro-geochemistry, Remediation of Toxic substances</i>

Associate Professors

*Hoque, R.R., Ph.D. (JNU)-HoD	<i>Air pollution and Environmental Monitoring and Assessment</i>
*Das, A.K., Ph.D. (JNU)	<i>Geomorphology, Regional Climate</i>

Assistant Professors

*Devi, A., Ph.D. (NEHU)	<i>Forest Ecology, Wildlife and Biodiversity conservation</i>
*Gogoi, N., Ph.D. (DU)	<i>Stress Physiology & Biochemistry</i>
*Bhattacharya, S. S., Ph.D.(VB)	<i>Vermiculture, Plant Nutrition & Soil Fertility Management</i>
*Kumar, M., Ph.D. (UT)	<i>Hydro-geochemistry, Groundwater modeling, Contaminant transport, Heavy metal speciation; Isotope fingerprinting, Soil and water pollution.</i>
Handique, S., M.Sc. (JNU)	<i>Geochemistry</i>
*Prakash, A., Ph.D. (JNU)	<i>Atmospheric Processes; Air and Noise pollution monitoring and modelling Environmental System modelling; Urban Climate.</i>
*Mitra, S., Ph.D. (IARI)	<i>Environmental Science - Environmental Chemistry</i>

*Recognized Supervisor

LEGENDS: PAU-Punjab Agricultural University, DU-Dibrugarh University, VB-Visva-Bharati, Santiniketan, UT-The University of Tokyo, HoD- Head of the Department, NEHU-North Eastern Hill University, JNU-Jawaharlal Nehru University, IARI-Indian Agricultural Research Institute, New Delhi.

Facilities

The Department has a sophisticated instrumentation laboratory to facilitate research and other academic activities. The laboratory has the following equipments: ICP-OES, Portable Photosynthesis Systems, Gas Chromatographs, Ion Chromatograph, TOC Analyzer, Continuous Air Pollution Monitoring Station, Aerosol Spectrometer, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler and Flame Photometer, GIS laboratory.

Research Activity

No. of papers published in the year 2012-13 : **14**

No. of ongoing research projects : **16**

Selected Publications

1. Baruah, K. K., Gogoi, B., Borah, L., Gogoi, M. and Boruah, R. Plant morphophysiological and anatomical factors associated with nitrous oxide flux from wheat (*Triticum aestivum*). *Journal of Plant Research*, 125:507-516, 2012.
2. Bhattacharya S.S, Gogoi, N, Goswami, L, Patel A.K, Dutta G, and Bhattacharyya P. Hazard remediation and recycling of tea industry and paper mill bottom ash through vermiconversion, *Chemosphere*, 92(2013), 708-713.

Courses offered in the M. Sc. (Environmental Science)

Core Courses

Course Code	Course Name	Cr.
ES 501	Fundamentals of Environmental Science	3
ES 502	Elements of Ecology	3
ES 503	Environmental Chemistry	3
ES 505	Natural Hazards	2
ES 506	Basics of Computer Science	3
ES 507	Environmental Biology	3
ES 508	Environmental Physics	3
ES 510	Energy and Environment	3
ES 511	Environmental Pollution	4
ES 512	Environmental Plant, Physiology and Biochemistry	4
ES 513	Environmental Impact and Assessment	3

Course Code	Course Name	Cr.
ES 514	Waste Management	3
ES 516	Global Climate Change and Its Impact	3
ES 518	Environmental Laws and Policies	2
ES 519	Seminar in Environmental Science	1
ES 529	Principles of Instrumental Methods and Analysis	3
ES 530	Environmental Geo-Science	3
ES 531	Climatology and Meteorology	3
ES 532	Agriculture and Environmental Sustainability	3
ES 533	Fundamental of Statistics	3
ES 500	Project / Dissertation	10

Electives Courses

Course Code	Course Name	Cr.
ES 520	Cell Biology	2
ES 521	Photosynthesis and Respiration	2
ES 523	Human Population, Social Issues and Environment	2
ES 526	Pesticides in relation to Environment	2
ES 534	Soil Science and Soil Ecology	2

Course Code	Course Name	Cr.
ES 535	Statistical Methods	2
ES 536	Environmental Biotechnology	2
ES 537	Agro - forestry and Forest Management	2
ES 538	Biodiversity and Biodiversity Conservation	2
ES 539	Remote Sensing and GIS	2

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

FOOD ENGINEERING AND TECHNOLOGY

(Year of Establishment: 2006)

The Department was established in the year 2006 with the name of Department of Food Processing Technology for imparting Post Graduate education in the area of food processing and engineering. With the introduction of B.Tech programme in Food Engineering and Technology (FET) in the year 2010, it was renamed as the Department of Food Engineering and Technology. The vision of the Department is to create trained and skilled human resources to cater to the needs of the rapidly growing food processing sectors in India. The programmes offered at the Department aim at imparting the students both with skills and knowledge to succeed as entrepreneurs and professionals. The students are exposed to the rigors of working environment of Food Processing industries through training and visits as a part of their course work.

The Department has the support of the Ministry of Food Processing Industries (MoFPI), Govt. of India, under HRD grant for establishing laboratories to conduct PG and UG courses in Food Engineering and Technology, and for establishing a Quality Control Laboratory. The Department of Science and Technology (DST), Govt. of India has recently enlisted the Department to extend support to strengthen the Post Graduate teaching and Research under its FIST programme. GATE qualified M.Tech students receive PG Scholarship of MHRD. One of the bright B.Tech students is considered for Scholarship from GE Foundations.

Research activities at the Department are supported by various sponsoring agencies like MoFPI, DST, DBT, UGC, and DRDO 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 & Technology
2. Integrated M. Tech. (4 year post B. Sc.) in Food Engineering and Technology
3. M. Tech. in Food Engineering and Technology
4. Ph. D.

Faculty and Areas of Interest:

Professors

- | | |
|---------------------------------------|---|
| *Mahanta, C.L., Ph.D. (CFTRI, Mysore) | <i>Rice Science & Technology, Product Development and Food Quality.</i> |
| *Deka, S.C., Ph.D. (CCS HAU, Hisar) | <i>Food Biochemistry and Food Quality, Fermented Foods.</i> |

Associate Professors

- | | |
|------------------------------------|--|
| Hazarika, M.K., Ph.D. (IITKgp)-HoD | <i>Food process modeling, product technology development, Transport Processes in Food Engineering.</i> |
| *Srivastava, B., Ph.D. (IITKgp) | <i>Process and Food Engineering, Fruits and Vegetable Processing and Machineries, Drying and Dehydration, Unit Operations in Food Engineering.</i> |

Assistant Professors

- | | |
|---|---|
| Sit, N., M. Tech. (GBPUAT, Pantnagar) | <i>Food Engineering, Biochemical Engineering, Oils and Fats, Food and Biotechnology.</i> |
| Mishra, P., M. Tech. (HBTI, Kanpur) | <i>Food Technology</i> |
| Badwaik, L.S., M. Tech. (SLIET, Longowal) | <i>Food Engineering and Technology, Fermentation Technology, Cereals and Pulses Technology, Fruits and Vegetables Technology, Food Packaging, Food and Safety and Laws.</i> |
| Seth, D., M. Tech. (IITKgp) | <i>Dairy and Food Engineering, Dairy Technology, Unit Operations in Food Engineering, Emerging Trends in Food Process Engineering.</i> |

*Duary, R.K., Ph.D. (NDRI, Karnal)	<i>Isolation and establishment of probiotic organism, Probiotic food formulation and development, Fermentation, Human Cell culturing.</i>
Dash, K.K., M. Tech. (IITKgp)	<i>Food process Modeling, Transfer process in Engineering, Optimization in Food Engineering.</i>
Das, A.B., M.S. (IITKgp)	<i>Food process Modeling, Optimization in Food Engineering, Product Technology Development.</i>

*** Recognized Supervisor**

LEGENDS: IITKgp-Indian Institute of Technology- Kharagpur, CFTRI-Central Food Technological Research Institute, CCSHAU-Haryana Agricultural University, HBTI- Haycourt Putler Technological Institute, GBPUAT-G. B. Pant University of Agricultural Technology, SLIET-St. Longowal Institute of Engineering and Technology, NDRI- National Dairy Research Institute.

Facilities

The Department is well equipped with processing and analytical equipments and is in the process of procuring many more equipments to make the state of the art facilities. Great emphasis is laid on practical for processing of foods and for analyzing their quality. List of some major equipments available with department are as follows: HPLC, Texture Analyser, Hunter Lab Color Spectrophotometer, Rapid Visco Analyser, UV-Vis Spectrophotometer, Binocular Microscope, Deep Freezer, BOD Incubator, Rotary Vacuum Evaporator, Photofluorometer, Biohazard Safety Cabinet, Lab. Scale Spray Drier, Tray Drier, Drum Drier, Fluidized Bed Drier, Baking Oven, Canning Unit, Food Processing Equipments, Packaging Equipments, Hammer Mill, Ball mill, Laboratory Pasteurizer, Paddy Huller, Paddy Sheller, Laminar Flow, Fruit Crasher, etc.

Research Activity

No. of papers published in the year 2013 : 19

No. of ongoing research projects: 10

Selected Publications

1. Dutta, H., and Mahanta, C.L. Laboratory process development and physicochemical characterization of a low amylose and hydrothermally treated ready-to-eat rice product requiring no-cooking. *Food and Bioprocess Technology*, 2013, DOI: 10.1007/s11947-012-1037-9.
2. Sit, N., Misra, S., and Deka, S.C. Physicochemical, functional, textural and colour characteristics of starches isolated from four taro cultivars of North-East India. *Starch/Stärke* 2013, DOI 10.1002/star.201300033.

First Semester :

Course Code	Course Name	Cr.
FT 511	Research Methodology	3
FT 512	Advanced Food Engineering	4
FT513	Engineering properties of Biological Materials	3
	Elective-I	3
	Elective-II	3
	Elective-III	3
	CBCT-I	3

Second Semester:

Course Code	Course Name	Cr.
FT 516	Emerging Trends in Food Processing	3
FT 517	Food Plant Design and Layout	3
FT 601	Food Product Development	3
FT 602	Simulation and Modeling	4
	Elective—IV	3
	CBCT-II	3
	CBCT-III	3
	Seminar	1

Third Semester:

Course Code	Course Name	Cr.
FT 681	Project Seminar	3

Fourth Semester:

Course Code	Course Name	Cr.
FT 682	Project Report	12

Elective Courses:

Course Code	Course Name	Cr.
FT 521	Bakery and Confectionary Technology	3
FT 522	Oils and Fats Technology	3
FT 523	Processing Technology of Meat, Poultry and Fish	3
FT 524	Novel Separation techniques	3
FT 525	Bioprocess Engineering	3
FT 526	Fermentation and Process Control	3
FT 527	Food Biotechnology	2
FT 528	Industrial Microbiology and Enzyme Technology	3
FT 529	Fermented and Non Fermented Beverages	3
FT 530	Food Process Design and Analysis	3

Course Code	Course Name	Cr.
FT 531	Food Process Automation	3
FT 532	Numerical Methods in Food Processing	3
FT 533	Energy Conservation in Food Processing	3
FT 534	Drying and Dehydration	3
FT 535	Specialty Foods: Nutraceuticals and Functional Foods	3
FT 536	Food Plant Hygiene and Sanitation	3
FT 537	Waste Management and by product utilization in food industries	3
FT 538	Industrial Safety and Hazards	3
FT 539	Food Rheology	3

List of Courses offered in Post B.Sc. Integrated M. Tech. (Food Engineering and Technology)**First Semester :**

Course Code	Course Name	Cr.
MS 400	Applied Mathematics and Statistics	4
FT 201	Food Chemistry	4
FT 202	Basic and Food Microbiology	4
FT 203	Fluid mechanics	4
ME 101	Engineering Graphics	2
ME 103	Workshop Practice	2
EL 475	Basic Electrical Engineering and Electronics	3

Second Semester:

Course Code	Course Name	Cr.
FT 205	Food Biochemistry and Nutrition	4
FT 206	Principles of Food Processing and Preservation	3
FT 211	Thermodynamics and Refrigeration	3
FT 212	Heat Transfer operations in Food Engineering	4
BM 322	Social responsibility and professional ethics in Engineering	3
CS 451	Computer fundamentals and programming	3

Third Semester :

Course Code	Course Name	Cr.
FT 411	Instrumental methods of food analysis	2
FT 412	Fruits and vegetables process technology	3
FT 413	Mass transfer operations in food processing	4
FT 414	Cereals, Pulses and oilseeds Processing Technology	4
FT 415	Biochemical Engineering	3
FT 471	Industrial Training	2
FP 513	Business Management	3

Fifth Semester:

Course Code	Course Name	Cr.
FT 511	Research Methodology	3
FT 512	Advanced food engineering	4
FT513	Engineering properties of biological materials	3
FT514	Food Packaging, Materials Handling and storage	4
	Elective - I	3
	CBCT-I	3

Seventh Semester:

Course Code	Course Name	Cr.
FT 601	Food Product Development	3
FT 602	Simulation & Modeling	4
	Elective- IV	3
	Elective- V	3
	CBCT -III	3
FT 681	Project Seminar	3

Fourth Semester:

Course Code	Course Name	Cr.
FT 416	Food quality and safety	3
FT 417	Plantation Products and Technology	3
FT 418	Dairy Products Technology	3
FT 419	Food Process Equipment Design	3
FT 420	Mechanical operations in Food Processing	4
EL 476	Instrumentation and Control in Food Processing	4

Sixth Semester:

Course Code	Course Name	Cr.
FT 515	Operations Research	4
FT 516	Emerging Trends in Food Processing	3
FT 517	Food Plant Design and Layout	3
	Elective -II	3
	Elective - III	3
	CBCT-II	3
	Seminar	1

Eight Semester:

Course Code	Course Name	Cr.
FT 682	Project Report	12

Elective Courses are the same as those offered to the M. Tech in Food Engineering and Technology, which are listed earlier.

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

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

Professor

*Nath, A.K., Ph.D. (MU) *Medieval Poetry, Folkloristic, Comparative Literature.*

Associate Professor

*Tripathi, S.K., Ph.D. (BHU)-HoD *Applied Linguistics, Indian Poetics and Folkloristic.*

Assistant Professors

Anjulata., M. Phil. (JNU) *Fiction.*

Anushabda., Ph.D. (DU) *Poetry, Poetics, Media and Linguistics.*

* Recognized Supervisor

LEGENDS: MU-Manipur University, BHU-Banaras Hindu University, JNU-Jawaharlal Nehru University, DU-Delhi University, HoD-Head of the Department

Facilities

The Department has a small Departmental library.

Research Activity

No. of papers published in the year 2013 : 6

Selected Publications

1. Nath, A.K., *Arunachal Pradesh mein Hindi Dasha Aur Disha, Samsamayik Hindi Sahitya : Vividh Ayam (Dr.Malatlal Patel Abhinandan Granth)*, Shanti Prakash, Gujrat, March 2012.
2. Tripathi, S.K. *Lok ka Awalokan (Book)*, Arya Prakashan, Gandhi Nagar, New Delhi, 2013.

Courses offered in PG Diploma in Translation (Hindi)

Course Code	Course Name	Cr.
HN 411	Prayojanmulak Hindi, Bhasha Prayukti Aur Anuvad	4
HN 412	Hindi Bhasha Ki Sanvaidhanik Sthiti Aur Anuvad	4
HN 413	Anuvad Vigyan Aur Uska Sidhanta	4
HN414	Karyalayee Hindi Aur Anuvad	4

Course Code	Course Name	Cr.
HN 421	Anuvad Ka Vyavaharik Paksh	4
HN 422	Janasansar Madhyam Aur Anuvad	4
HN 423	Paribhashik Sabdavalee, Kosh Vigyan Aur Anuvad	4
HN 424	Pariyojana Karya	4

Courses offered in M.A. in Hindi

Course Code	Course Name	Cr.
HN 401	आदि कालीन एवं निर्गुण काव्य	3
HN 402	छायावादी काव्य	3
HN 403	हिंदी साहित्य का इतिहास : आदिकाल और मध्यकाल	3
HN 404	भारतीय काव्यशास्त्र एवं आलोचना	3
	CBCT-I	3

Third Semester :

Course Code	Course Name	Cr.
HN 509	कथा साहित्य : उपन्यास एवं कहानी	3
HN 510	हिंदी नाटक और निबंध	3
HN 511	सामान्य भाषा विज्ञान	3
HN 512	पाश्चात्य समीक्षा एवं शोधप्रविधि	3
	CBCT-III	3

Fourth Semester: (Optional -II)

Course Code	Course Name	Cr.
HN 517	प्रेमचंद	3
HN 518	जयशंकर प्रसाद	3
HN 519	सूर्यकांत त्रिपाठी निराला	3
HN 520	लघु शोध -प्रबंध / परियोजनाकार्य	6
	CBCT-IV	3

Fourth Semester (Optional-IV)

Course Code	Course Name	Cr.
HN 525	तुलनात्मक साहित्य : स्वरूप, उद्भव और विकास	3
HN 526	भारतीय साहित्य : अवधारणा और विशेषताएँ	3
HN 527	पूर्वचल की संस्कृति और साहित्य	3
HN 528	लघु शोध -प्रबंध / परियोजनाकार्य	6
	CBCT-IV	3

Course Code	Course Name	Cr.
HN 405	सगुण भक्ति एवं रीति काव्य	3
HN 406	छायावादोत्तर काव्य	3
HN 407	हिंदी साहित्य का इतिहास : आधुनिक काल	3
HN 408	हिंदी भाषा एवं लिपि	3
	CBCT-II	3

Fourth Semester: (Optional-I)

Course Code	Course Name	Cr.
HN 513	राजभाषा हिंदी : संवैधानिक स्थिति एवं उसका अनुप्रयोगात्मक पक्ष	3
HN 514	हिंदी पत्रकारिता और जनसंचार	3
HN 515	अनुवाद विज्ञान: सिद्धांत एवं अनुप्रयोग	3
HN 516	लघु शोध -प्रबंध / परियोजनाकार्य	6
	CBCT-IV	3

Fourth Semester : (Optional-III)

Course Code	Course Name	Cr.
HN 521	भाषा -शिक्षण	3
HN 522	शैलीविज्ञान	3
HN 523	समाज भाषाविज्ञान	3
HN 524	लघु शोध -प्रबंध / परियोजनाकार्य	6
	CBCT-IV	3

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

MASS COMMUNICATION AND JOURNALISM (Year of Establishment: 2001)

The Department established in 2001, is engaged in teaching and research in Media and Communication studies. It has been undertaking research in tune with emerging trends in media and communication locally and globally. The thrust areas of the Department are Social Communication, New Media and Audience Studies with laying emphasis on critical understanding of theory and practice.

Programmes offered

- 1.M. A. in Mass Communication and Journalism
- 2.Post Graduate Diploma in Mobile and Multimedia Communication
- 3.Ph. D.**

Faculty and Areas of Interest

Professor	
* Dutta, S. K., Ph. D. (VB) , HoD	<i>Folklore Studies, Assamese Language and Culture.</i>
Associate Professors	
*Bora, A., Ph.D. (GU)	<i>Print Journalism, Community Radio, Development Communication, Analytical Journalism, Media Studies, Specialized Reporting, Science Communication.</i>
Anbarasan, P., Ph.D. (JNU)	<i>Media Studies, Cultural and Subaltern Studies, International Communication, Film Studies.</i>
Assistant Professors	
Chakraborty, J., Ph.D. (UH)	<i>ICT for Development, Development Communication, Women and Media; Traditional Media.</i>
Pegu, U.K., Ph.D. (JMI)	<i>ICT Implications on Society, Science Communication, Film Studies, and Media Analysis etc.</i>
Kabi, Kh., Ph. D.(AU) (On lien)	<i>International Communication, North-East Studies, Political and Cultural Communication.</i>
Nagaraju, A., M. A. (UH)	<i>Electronic Media Production, Documentary Filmmaking, Television Production and Advertising.</i>
Borah, A., M.A. (T U)	<i>Development Communication, Television and Traditional Media.</i>
Daimari, P.J., M.A. (TU)	<i>Film Studies, Development Communication</i>
Malakar, K., M. A. (JMI)	<i>New Media for Development, Multimedia Journalism, Political Communication, Online Journalism, Media Studies, Film Studies</i>
Lakhendra, B., Ph.D. (TU)	<i>Radio, Youth and Rural Development, Traditional Media, Public Relation and Development Communication, Coastal Environment.</i>

*Recognized Supervisor

** **The Department is not going to admit Ph. D. students for the Autumn Semester 2014.**

LEGENDS: VB- Visva—Bharati, Santiniketan ,GU- Gauhati University, JNU-Jawaharlal Nehru University, UH- University of Hyderabad, TU-Tezpur University, JMI- Jamia Millia Islamia, AU- Assam University, HoD- Head of the Department.

Facilities

The Department has a spacious exclusive three-story building and is endowed with specialized high-end equipments 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.

Productions

Students as part of their academic curriculum, regularly produce laboratory journals, audio programmes, web designs, brochures, TV news bulletin, corporate videos, documentary films and traditional communication programmes like puppet shows and street plays on a regular basis.

Research Activity

No. of papers published in the year 2013 : 12

Selected publications

1. Bora, A., "Community Radio seeks that elusive boost" *VIDURA – Quarterly journal of the Press Institute of India (Research in Newspaper Development)*, Chennai ISSN No 0042-5303, 5.2(2013), 24-25.
2. Anbarasan, P., "Media in Assam: Moving From Late News Syndrome to 24 x 7", *Aayvagam an International Journal of Multidisciplinary Research*, 1.5 (2013).

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

First Semester:

Course Code	Course Name	Cr.
MC 490	Communication Theories	3
MC 491	History of Communication and Media	3
MC 492	Media Writing	3
MC 493	Advertising & Public Relations	3
MC 494	Visual Communication and Photography	3
	CBCT-I	3

Second Semester:

Course Code	Course Name	Cr.
MC 495	Communication Research Methods	3
MC 496	Introduction to New Media	3
MC 497	Media Laws & Ethics	3
MC 498	Broadcast Media : Radio	3
MC 499	Broadcast Media : Television	3
	CBCT -II	3

Third Semester :

Course Code	Course Name	Cr.
MC 500	Communication for Social Change	3
MC 501	Political and International Communication	3
MC 502	Communication Research Project	6
MC 503	Internship #	3
	CBCT- III	3

Fourth Semester :

Course Code	Course Name	Cr.
MC 514	Film Studies	3
MC 515	Media in Northeast India	3
MC 516	Internship (non-credit) ##	
	CBCT -IV	3

Students will opt for one paper from each of Group-A and Group-B in semester III and one from Group-C in semester IV.

Group –A Electives: (Third Semester)

Course Code	Course Name	Cr.
MC 504	Specialized Reporting and Editing	3
MC 505	Online Multi- Camera Production	3
MC 506	Radio Production	3
MC 507	Corporate Communication	3
MC508	Convergent Journalism	3

Group—B Electives: (Third Semester)

Course Code	Course Name	Cr.
MC 509	Photo Journalism	3
MC 510	Folk and Community Media	3
MC 511	Assamese Journalism	3
MC 512	Media, Culture & Society	3
MC 513	Media Management	3

Group-C Electives: (Fourth Semester)

Course Code	Course Name	Cr.
MC 517	Documentary Production	4
MC 518	Community Radio	4
MC 519	Web Design / Animation	4
MC 520	TV Reporting	4

Courses offered in PG Diploma (Mobile and Multimedia Communication)

Course Code	Course Name	Cr.
MM 401	Introduction to Communication and Media	3
MM 402	Broadcast Media Production	4
MM 403	Basics of Convergence Technologies	4
MM 404	Communication for Social Change	4
MM 405	Persuasive Communication in Practice	6
MM 406	Perspectives of North East India	3
MM 407	Internship	6

Students will undertake the internship during the summer semester break after completion of the second semester.

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

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

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. The Department carries out research in the areas of probability distributions, Optimization theories, Number theory (Algebraic and Analytical), Operator theory, Fuzzy topology, Finite element method, Algebraic graph theory, Algebra (Group Theory and Ring Theory) etc. The Department is currently supported by the UGC under its SAP (DRS-I) scheme. The Department has also been recommended for support under DST-FIST grant in 2012.

Programmes offered

1. Integrated M.Sc. in Mathematics
2. Integrated B.Sc. B. Ed. in Mathematics
3. M.A./M.Sc. in Mathematics
4. Ph.D. in Mathematical Sciences

Faculty and Areas of Interest

Professors

*Borah, M., Ph.D. (GU)	<i>Discrete Distribution, Combinational Optimization, Genetic Algorithms, Numerical Analysis.</i>
*Baruah, N.D., Ph.D. (TU)-Dean, SoS	<i>Number Theory, Ramanujan's Mathematics.</i>
*Hazarika, D., Ph.D. (JMI)-HoD	<i>General Topology, Fuzzy Sets and Applications.</i>
*Hazarika, M., Ph.D. (TU)	<i>Functional Analysis, Operator Theory.</i>

Associate Professors

*Nath, M., Ph.D. (IITG)	<i>Ordinary Graph Spectra, Inverse Eigen Value Problem.</i>
Sarmah, B.P., Ph.D. (GU)	<i>High Energy Astrophysics, Relativity.</i>
*Deka, B., Ph.D. (IITG) (on lien)	<i>Numerical Functional Analysis.</i>
*Dutta, S., Ph.D. (TU)	<i>Statistics (Non-parametric).</i>
*Basnet, D. K., Ph.D. (DU)	<i>Algebra.</i>
*Sen, S., Ph.D. (IITG)	<i>Computational Fluid Dynamics.</i>

Assistant Professors

Haloj, R., Ph.D. (IITK)	<i>Abstract Differential Equations.</i>
Sarmah, B.K., Ph.D. (TU)	<i>Theory of Partition, Ramanujan's Mathematics.</i>
#Nath, R.K., Ph.D. (NEHU)	<i>Theory of Finite Groups.</i>
Kalita, D., Ph.D. (IITG)	<i>Algebraic Graph Theory.</i>
Medhi, P., Ph.D. (G U)	<i>Queueing Theory.</i>
Goswami, D., Ph.D. (IITB)	<i>Finite Element Method.</i>

* Recognized Supervisor; # Recognized Co-supervisor

LEGENDS: *GU*-Gauhati University, *TU*-Tezpur University, *JMI*-Jamia Millia Islamia, *SoS*- School of Science, *DU*-Dibrugarh University, *HoD*-Head of the Departmen, *IITK*- Indian Institute of Technology, Kanpur, *NEHU*- North Eastern Hill University, *IITB*- Indian Institute of Technology, Bombay, *IITG*- Indian Institute of Technology, Guwahati.

Facilities

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

look after the computational and networking facilities of the department.

Research Activity

No. of papers published/accepted in referred journals in 2013: **47**

No. of ongoing research projects: **02**

The Department of Mathematical Sciences is a UGC SAP Department.

Selected publications

1. Deka Baruah, N. and Nath, K. Some Results on 3-cores, Proceedings of Amer. Math. Soc. 142(2), 441-448, 2014

2. Sen, S. A New Family of (5.5) CC-40C Schemes Applicable For Unsteady Navier-Stokes Equations, Journal of Computational Physics, 251, 251-271, 2013

Courses offered in the M. A / M. Sc. in Mathematics:

Course Code	Course Name	Cr.
MS 401	Abstract Algebra	4
MS 403	Linear Algebra	4
MS 405	Real Analysis	4
MS 411	Computer Programming	4
MS 421	Computer Laboratory	2
	CBCT-I	3

Course Code	Course Name	Cr.
MS 406	Complex Analysis	4
MS 408	Topology	4
MS 414	Ordinary Differential Equations	4
MS 416	Numerical Analysis	3
MS 424	Computer Laboratory	1
	CBCT—II	3

Third Semester:

Course Code	Course Name	Cr.
MS 507	Partial Differential Equations	4
MS 509	Probability and Statistics	3
MS 410	Functional Analysis	4
MS 515	Project	3
	Elective—I	4
	CBCT-III	3

Fourth Semester:

Course Code	Course Name	Cr.
MS 501	Classical Mechanics	4
MS 503	Mathematical Programming	4
MS 508	Mathematical Methods	4
	Elective—II	4
	CBCT—IV	3

Electives:

Course Code	Course Name	Cr.
MS 540	Mathematical Methods in Finance	4
MS 541	Fluid Mechanics	4
MS 542	Electrodynamics	4
MS 543	Relativity	4
MS 544	Operation Research	4
MS 545	Elliptic Curves	4
MS 546	Algebraic Number Theory	4
MS 547	Numerical Linear Algebra	4
MS 548	Mathematical Logic	4
MS 549	Graph Theory	4
MS550	Discrete Mathematics	4

Course Code	Course Name	Cr.
MS 551	Introduction to Category Theory	4
MS 552	Operator Theory—I	4
MS 553	Number Theory—I	4
MS 554	Advanced Algebra—I	4
MS 556	Quantum Mechanics—I	4
MS 557	Mathematical Modeling—I	4
MS 558	General Theory of Relativity	4
MS 559	Magneto Hydrodynamics and Plasma	4
MS 560	Sampling Techniques—I	4
MS 561	Stochastic Process—I	4
MS 562	Statistical Quality Control	4

Electives (Contd...)

Course Code	Course Name	Cr.
MS 563	Advanced Analysis -I	4
MS 564	Multivariate Analysis—I	4
MS 565	Fuzzy Sets and Applications—I	4
MS 566	Fourier Analysis	4
MS 567	Continuum Mechanics	4
MS 568	Theory of Distribution and Sobolev Spaces	4
MS 572	Operator Theory—II	4
MS573	Number Theory—II	4
MS 574	Advanced Algebra—II	4
MS 576	Quantum Mechanics—II	4
MS 577	Mathematical Modeling—II	4
MS 578	High Energy Astrophysics	4
MS 579	Mageneto Hydrodynamics and Plasma Physics- II	4
MS 580	Sampling Techniques—II	4
MS 581	Stochastic Processes—II	4
MS 582	Reliability Theory -	4

Course Code	Course Name	Cr.
MS 583	Advanced Analysis—II	4
MS 584	Multivariate Analysis—II	4
MS 585	Fuzzy Sets and Applications—II	4
MS 586	Parallel Numerical Algorithms	4
MS 587	Finite Element Method	4
MS 588	Applied Matrix Theory	4
MS 591	Computational Fluid Dynamics	4
MS 592	An Introduction to Fourier Theory	4
MS 593	Wavelets and Applications	4
MS 594	Advanced Topology—I	4
MS 595	Numerical solution of ODE	4
MS 596	Advanced Topology—II	4
MS 597	Numerical Solution of PDE	4
MS 598	Algebraic Geometry	4
MS 599	Probability Theory	4

Courses Offered in the Integrated M. Sc. in Mathematics:**First Semester :**

Course Code	Course Name	Cr.
PI 101	Physics—I	3
CI 101	Chemistry—I	4
BI 101	Biology—I	3
MI 101	Mathematics—I	3
	CBCT Elective —I	3
	CBCT Elective- II	3

Second Semester:

Course Code	Course Name	Cr.
PI 102	Physics—II	3
CI 102	Chemistry—II	4
BI 102	Biology—II	3
MI 102	Mathematics—II	3
	CBCT Elective —III	3
	CBCT Elective- IV	3
NS 102	National Service Scheme	2

Third Semester :

Course Code	Course Name	Cr.
MI 211	Numerical Methods and Integrals	3
MI 213	Set Theory and Mathematical Logic	3
MI 215	Classical Algebra	3
MI 207	Co-ordinate Geometry	3
PI 211	Quantum Physics	3
	CBCT Elective -V	3

Fourth Semester :

Course Code	Course Name	Cr.
MI 212	Introductory Statistics	3
MI 210	Elementary Abstract Algebra	3
MI 214	Linear Space and Linear Programming	3
MI 216	Elementary Real Analysis	3
PI 216/ BI 224	Thermodynamics and Optics / Ecology and Environmental Biology	3/3
	CBCT Elective- VI	3

Fifth Semester:

Course Code	Course Name	Cr.
MI 301	Computer Programming+	4
MI 303	Real Analysis	4
MI 208	Linear Algebra	4
MI 309	Computer Laboratory	2
MI 209	Statics and Dynamics	3
	CBCT Elective -VII	3

Sixth Semester :

Course Code	Course Name	Cr.
MI 304	Topology	4
MI 312	Elementary Complex Analysis	3
MI 410	Measure Theory	3
MI 504	Mathematical Programming	3
MI 308	Theory of Ordinary Differential Equations	4
	CBCT Elective- VIII	3

Seventh Semester:

Course Code	Course Name	Cr.
MI 306	Functional Analysis	4
MI 411	Partial Differential Equations	4
MI 409	Probability and Mathematical Statistics	3
MI 305	Abstract Algebra	4
MI 402	Advanced Analysis	3
	CBCT Elective—IX	3

Eighth Semester:

Course Code	Course Name	Cr.
MI 408	Complex Analysis	4
MI 302	Numerical Analysis +	4
MI 307	Elementary Number Theory	4
MI 310	Computer Laboratory	2
MI 410	Mathematical Methods	4
	CBCT Elective- X	3

Ninth Semester :

Course Code	Course Name	Cr.
MI 405	Graph Theory	4
MI 406	Probability Theory	4
MI 407	Mathematical Software	2
	Open Elective—I	4
	Open Elective—II	4
MI 515	Project (to be continued to 10th Semester)	0
	CBCT Elective—XI	3

Tenth Semester:

Course Code	Course Name	Cr.
MI 401	Classical Mechanics	4
	Open Elective—III	4
	Open Elective—IV	4
MI 515	Project	8

Note :1. CBCT Elective- I to CBCT Elective -VI are to be chosen from the list of CBCT courses given below:

Course Code	Course Name	Cr.
CS 535	Introduction to Scientific Computing	3
EG 101	Communicative English	3
ES 102	Elementary Environmental Science	3
EG 102	Communicative English-II	3
SC 102	Basic Sociology	3
ES 542	Laboratory Guidance and Safety	3
BM 101	Elementary Economics	3

Course Code	Course Name	Cr.
CL 121	Basic Chinese—I	3
FL 101	Basic French—I	3
GL 101	Basic German- I	3
DM 301	Disaster Management	3
CL 122	Basic Chinese—II	3
FL 102	Basic French—II	3
GL 102	Basic German- II	3

2. CBCT Elective-VII to CBCT Elective-XI are to be chosen from the general list of CBCT courses available for that particular semester.
3. A student has to choose a minimum of three courses from the list of electives offered by the Department of Mathematical Sciences. The other elective course may be chosen from the Departments under the School of Science & Technology and the School of Engineering.

Elective to be offered from the following units:

Course Code	Course Name	Cr.
MS 540	Mathematical Methods in Finance	4
MI 501	Stochastic Processes-I	4
MI 503	Advanced Numerical Analysis	4
MI 504	Theory of Partial Differential Equations	4
MI 541	Fluid Mechanics	4
MI542	Electrodynamics	4
MI 543	Relativity	4
MI 544	Operation Research	4
MI 545	Elliptic Curves	4
MI 546	Algebraic Number Theory	4
MI 547	Numerical Linear Algebra	4
MI 548	Mathematical Logic	4
MI 549	Graph Theory	4
MI550	Discrete Mathematics	4
MI 551	Introduction to Category Theory	4
MI 552	Operator Theory—I	4
MI 554	Advanced Algebra—I	4
MI 556	Quantum Mechanics—I	4
MI 557	Mathematical Modeling—I	4
MI 558	General Theory of Relativity	4
MI 560	Sampling Techniques—I	4
MI 562	Statistical Quality Control	4
MI 564	Multivariate Analysis- I	4
MI 565	Fuzzy Sets and Applications—I	4

Course Code	Course Name	Cr.
M 566	Fourier Analysis	4
MI 567	Continuum Mechanics	4
MI 568	Theory of Distribution and Sobolev Spaces	4
MI 572	Operator Theory—II	4
MI573	Analytic Number Theory—II	4
MI 574	Advanced Algebra—II	4
MI 576	Quantum Mechanics—II	4
MI 577	Mathematical Modeling—II	4
MI 580	Sampling Techniques—II	4
MI 581	Stochastic Processes—II	4
MI 582	Reliability Theory	4
MI 584	Multivariate Analysis—II	4
M 585	Fuzzy Sets and Applications—II	4
MI 586	Parallel Numerical Algorithms	4
MI 587	Finite Element Method	4
MI 588	Applied Matrix Theory	4
MI 591	Computational Fluid Dynamics	4
MI 593	Wavelets and Applications	4
MI 594	Advanced Topology—I	4
MI 595	Numerical solution of ODE	4
MI 596	Advanced Topology—II	4
MI 597	Numerical Solution of PDE	\$
MI 598	Algebraic Geometry	4

Course offered in the Integrated B. Sc. B. Ed. in Mathematics

The curriculum and syllabi for B. Sc. B. Ed. has been going through a major revision. The course structure and detail syllabi shall be made available in the University Web-site at an appropriate time.

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

MECHANICAL ENGINEERING (Year of Establishment: 2006)

The Department of Mechanical Engineering was established in 2006 under the School of Engineering for offering B. Tech degree in Mechanical Engineering.

Programmes offered:

1. B. Tech in Mechanical Engineering
2. M. Tech in Mechanical Engineering (Specialization: Applied Mechanics)
3. Ph.D.**

Faculty and Areas of Interest

Associate Professors

*Datta, D., Ph.D.(IITK)-HoD *Design/ Optimization*

*Gogoi, T. K., Ph.D. (TU) *Thermal, Energy and Environment Engineering*

Assistant Professors

Dutta, P. P., M. Tech. (TU) *Energy and Thermal Engineering*

Kalita, P., M. Tech., (BHU) *Computational Fluid Dynamics , High speed flows*

Dutta, P. P., M. E. (BIT Mesra) *CAD, Laser forming, Mechatronics, soft computing*

Kirtania, S., M. Tech (IITG) *Composite materials, Carbon nanotubes, Carbon nanotubes-based composites, Finite element method, Fracture mechanics.*

Haloi, P., ME (GU) *Fluid and Thermal Engineering*

Singh, S. K., Ph.D. (IITG) *Acoustics, Vibration, Machinery condition monitoring*

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

Bardalai, M., ME(GU) *Thermal Engineering, Renewal Energy Conversion.*

Kashyap, S., M.Sc. (Engg.) (University of Alberta, Canada) *Manufacturing and Materials Science*

Assistant Professors (Ad-hoc)

Kalita, Z., ME (AIT) *Mechatronics*

Mehta, V. K., Ph.D. (IITK) *Optimization/ Robotics*

*Recognized Supervisor; #Recognized Co-supervisor

** For Ph. D Programme vacancy exists only in the areas of Optimization / Design

LEGENDS: **HoD**- Head of the Department, **TU**-Tezpur University, **BHU**- Banaras Hindu University, **GU**-Gauhati University, **AIT**- Asian Institute of Technology, Bangkok, **IITK**-Indian Institute of Technology Kanpur, **BIT**- Birla Institute of Technology, **IITG**- Indian Institute of Technology Guwahati.

Facilities

CAD Laboratory:

This laboratory is equipped with computers having server based installed software such as ANSYS 12.0 version, FLUENT 6.3 teaching version and Pro-E Wildfire 3.0 version. At present the laboratory has two servers and 25 workstation computers for use of both student and academic staff.

Fluid Mechanics Laboratory:

This laboratory is equipped with hydraulic bench, discharge through orifice apparatus, Bernoulli's apparatus, flow meter demonstration apparatus, impact of jet apparatus, discharge over weir and notches attachments, energy losses in pipelines, and Reynolds apparatus.

Theory of Machine Laboratory:

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

Strength of Materials Laboratory:

This laboratory is equipped with Rockwell hardness testing machine, Brinell hardness tester, Vickers hardness tester, impact testing machine, and universal testing machine with computer interfacing.

Material Science Laboratory:

This is a new laboratory which is being developed with equipment such as metal melting furnace, metallographic cutting machine, metallographic sample mounting machine, metallographic automatic polishing machine, ultrasonic cleaner unit, injection molding machine, twin screw extruder, optical microscope, muffle furnace, hot air oven, etc.

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).

Kinematics Laboratory:

In this laboratory, there are various types of models for demonstration such as models of different mechanisms, shaper model, clutch model, Oldham 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 protractor, 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.

Thermal and 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.

Advanced Solid and Fluid Mechanics Laboratory:

This is another new laboratory equipped with digital torsion testing machine, rotating fatigue machine, multifunction measuring instrument (pressure, temperature, velocity, relative humidity, CO, CO₂ concentration) with relevant sensors, creep machine, thin cylinder testing machine, metallurgical polishing machine, digital LCD microscope, etc.

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 Activity

Number of journal papers published in last one year (2013): **18**

Selected publications:

1. Datta, D. Unit commitment problem with ramp rate constraint using a binary-real-coded genetic algorithm. *Applied Soft Computing*, **13**(9), 3873-3883, 2013.
2. Gogoi, T.K. Exergy analysis of a diesel engine operated with koroch seed oil methyl ester and its diesel fuel blends. *Int. J. Exergy*, **12**(2), 183-203, 2013.

Research Projects:

A number of R&D projects of total approximate amount of Rupees 1 crore, funded from external agencies are currently running in the Department.

First Semester

Course Code	Course Name	Cr.
ME 501	Advanced Solid Mechanics	4
ME 541	Advanced Fluid Mechanics	4
ME 561	Experimental Methods for Solid and Fluids	5
	CBCT-I	3
	Elective-I	
	Elective- II	

Second Semester

Course Code	Course Name	Cr.
ME 502	Finite Element Methods	4
ME 572	Advanced Engineering Materials	3
ME 592	Term Paper	2
	CBCT- II	3
	CBCT- III	3
	Elective-III	
	Elective- IV	

Third and Fourth Semester:

Course Code	Course Name	Cr.
ME 600	M. Tech. Thesis	24

Elective Courses:

Course Code	Course Name	Cr.
ME 504	Failure Analysis of Materials	3
ME 506	Theory of Elasticity and Plasticity	3
ME 508	Continuum Mechanics	3
ME 538	Computer - Aided - Design in Engineering	4
ME 540	Evolutionary Algorithms for Optimum Design	3
ME 543	Compressible Flow	4
ME 545	Viscous Fluid Flow	3
ME 547	Two Phase Flow	3

Course Code	Course Name	Cr.
ME 503	Mechanics of Composite Materials	4
ME 505	Advanced Dynamics	4
ME 507	Theory of Plates & Shells	3
ME 537	Applied Computational Methods	4
ME 539	Optimization Techniques in Engineering	3
ME 542	Computational Fluid Dynamics	4
ME 544	Turbulent Shear Flow	3
ME 546	Fluid Transportation Systems	3

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

MOLECULAR BIOLOGY AND BIOTECHNOLOGY

(Year of Establishment: 1997)

The Department of Molecular Biology and Biotechnology was established in the year 1997 with the objectives to create quality human resources and to persuade quality research work in the challenging and frontier areas of modern Biotechnology. The Department has close linkage with the industry and academic institutes of the country.

The current research activities in the Department include human disease biology and genetics, microbial, environmental and petroleum biotechnology, snake venom biochemistry, enzymology and enzyme technology, medicinal plants, immunology, immunogenetics and evolutionary genetics, computational biology, nanobiotechnology and plant microbe interactions.

Fellowship

The students admitted to the M. Sc. programme in Molecular Biology and Biotechnology are eligible for a DBT sponsored monthly studentship of Rs. 3000/- only. (for detail information visit: <http://www.tezu.ernet.in/dmbbt/>)

Programmes offered:

1. M. Sc. in Molecular Biology and Biotechnology
2. Integrated M. Sc. in Biosciences and Bioinformatics
3. Ph. D. in Molecular Biology and Biotechnology

Faculty and Areas of interest:

Professors

*Konwar, B.K., Ph.D. (IC), On-lien as V.C of NU	<i>Plant Biotechnology, Petroleum Biotechnology.</i>
*Buragohain, A.K., Ph.D. (IC) On-lien as V.C of DU	<i>Drug discovery from medicinal plants, Diatom nanotechnology, Plant Biotechnology, Evolutionary Genomics, Petroleum Biotechnology.</i>
*Mukherjee, A.K., Ph.D. (BU)	<i>Snake venom biochemistry and biotechnology Microbial biotechnology.</i>
*Baruah, S., Ph.D. (PGIMER- Chandigarh), HoD.	<i>Innate Immunity and Immunogenetics ((heterogeneity and evolution of immune responses).</i>

Associate Professors

*Ray, S.K., Ph. D. (JNU)	<i>Molecular Plant Microbe Interactions.</i>
*Mandal, M., Ph.D. (DU [^])	<i>Probiotics and nutrition, Microbial biofilm, Bioenergy</i>
*Ramteke, A., Ph.D. (JNU)	<i>Cancer Genetics and Chemoprevention.</i>
*Doley, R., Ph.D. (TU)	<i>Anti-haemostatic proteins from snake venom and Hematophagus insect.</i>

Assistant Professors

*Medhi, T., Ph.D. (IITKgp)	<i>Enzymology and Bioprocess Engineering.</i>
#Kalita, E., Ph.D. (GU)	<i>Nanobiotechnology.</i>
Ponnam, S.P.G., Ph.D. (UH)	<i>Human Molecular Genetics.</i>
Borah, L., Ph.D. (GU)	<i>Microbial Biotechnology.</i>
Jha, A., Ph.D. (IISc)	<i>Computational Biophysics, Bioinformatics.</i>
*Mukhopadhyaya, R., Ph.D. (JU)	<i>Cellular and Molecular Biology (Sub Areas: Inflammation, Cardiovascular disease), Microbial Biotechnology.</i>
*Saha, S., Ph.D. (IISc)	<i>Cellular and Molecular Biology (Protein arginylation and its role in cellular function, Obesity).</i>
Namsa, N.D., Ph.D. (IISc)	<i>Molecular Biology of Rotavirus.</i>
Dasgupta S., Ph.D. (VB)	<i>Insulin resistance and type 2 diabetes.</i>
Satish Kumar, M.V., Ph.D. (IITG)	<i>Computational Biotechnology and Bioinformatics.</i>
Saikia, J. P., Ph. D (TU)- Ad-hoc	<i>Plant Biotechnology</i>

* Recognized Supervisor, # Recognized Supervisor

LEGENDS: IC- Imperial College, London, NU-Nagaland University, DU-Dibrugarh University, BU-Burdwan University, JNU-Jawaharlal Nehru University, GU- Gauhati University, TU-Tezpur University, VB- Visva Bharati, DU[^]- Delhi University, UH: University of Hyderabad, JU: Jadabpur University, PGIMER- Post Graduate Institute of Medical Education and Research, IITG- Indian Institute of Technology, Guwahati, IITKgp- Indian Institute of Technology, Kharagpur, IISc- Indian Institute of Science, HoD-Head of the Department.

Facilities

The Department houses sophisticated instruments like Automated DNA sequencer, RT PCR platform, Spectrofluorimeter, UHPLC, FPLC, HPLC systems, GC mass spectrometer and Fermenter. In addition to well equipped individual faculty research laboratories, the Department is equipped with a cold room, animal and plant cell culture facilities, animal experimentation laboratory and Bioinformatics facility.

Departmental Library

Besides basic and advanced text books in the Departmental library, additional books, collection of latest reference books, numbers of national and international journals –print and e-journals are available in the University Central library.

Research Activity

No. of papers published in the year 2013 (up to September): 43

No. of ongoing research projects : 22

The Department of MBBT is a UGC SAP Department

Selected Publications :

1. Sawian, C.E., Lourembam, S.D., Banerjee, A., Baruah, S. (2012) Polymorphisms and expression of TLR4 and 9 with malaria in two ethnic groups of Assam, Northeast India, *Innate Immunity*, 19 (2), 174–183.
2. Saikia, D., Bordoloi, N.K., Chattopadhyay, P., Chocklingam, S., Ghosh, S.S. and Mukherjee, A.K. (2012) Differential mode of attack on membrane phospholipids by an acidic phospholipase A₂ (RVVA-PLA₂-I) from *Daboia russelli* venom. *Biochimica et Biophysica Acta Biomembrane* 12, 3149-3157.

Courses offered in M. Sc. (Molecular Biology & Biotechnology):

First Semester :

Course Code	Course Name	Cr.
BT 401	Biochemistry	3
BT 402	Cell and Developmental Biology	3
BT 403	Molecular Biology	3
BT 404	Analytical Techniques	3
BT 405	Biostatistics and Computer Applications	3
BT 406	Seminar / Journal Club / Assignment	1
BT 407	Lab -I : Biochemistry and Analytical Techniques	3
BT 408	Lab-II: Molecular Biology	3
	CBCT	3

Second Semester :

Course Code	Course Name	Cr.
BT 411	Immunology	3
BT 412	Microbiology and Industrial Applications	3
BT 451	Genetic Engineering	3
BT 414	Genetics	3
BT 415	Genomics and Proteomics	3
BT 416	Seminar / Journal Club / Assignment	1
BT 417	Lab-III: Immunology	2
BT 418	Lab-IV: Microbiology	2
BT 419	Lab-V: Genetic Engineering	2

Third Semester :

Course Code	Course Name	Cr.
BT 420	Bioprocess Engineering and Technology	3
BT 421	Immunotechnology	2
BT 422	Molecular Virology	2
	Elective—I	3
	Elective—II	3
BT 424	Lab—VI : Bioprocess Engineering and Technology	3
BT 425	Project Proposal Presentation	1
	CBCT	3

Fourth Semester:

Course Code	Course Name	Cr.
BT 427	Project Work	12
	CBCT	3

**Elective Courses
(Any Two from the following)**

Course Code	Course Name	Cr.
BT 429	Microbial Technology	3
BT 433	Animal Biotechnology	3
BT 435	Plant Biotechnology	3
BT 437	Environmental Biotechnology	3
BT 439	Nanobiotechnology	3

Courses offered in Integrated M. Sc. in Bioscience and Bioinformatics:**First Semester :**

Course Code	Course Name	Cr.
PI 101	Physics—I	3
CI 101	Chemistry—I	4
BI 101	Biology—I	3
MI 101	Mathematics— I	3
	CBCT Elective—I	3
	CBCT Elective—II	3

Second Semester:

Course Code	Course Name	Cr.
PI 102	Physics—II	3
CI 102	Chemistry—II	4
BI 102	Biology—II	3
MI 102	Mathematics— II	3
	CBCT Elective—III	3
	CBCT Elective—IV	3
NSS 102	National Service Scheme	2

Third Semester :

Course Code	Course Name	Cr.
MI 211	Numerical Methods and Integrals	3
BI 221	Biochemistry	3
BI 223	Cell Biology	3
BI 225	Plant and Animal Physiology	3
BI 227	Lab for Biochemistry and Cell Biology	2
CI 201	Chemistry—III	3
	CBCT Elective—V	3

Fourth Semester :

Course Code	Course Name	Cr.
MI 212	Introductory Statistics	3
BI 222	Microbiology	3
BI 224	Ecology and Environmental Biology	3
BI 226	Basic in Biocomputing	3
BI 228	Laboratory in Microbiology	2
CI 202	Chemistry—IV	3
	CBCT Elective—VI	3

Fifth Semester :

Course Code	Course Name	Cr.
BI 321	Molecular Biology	3
BI 323	Development Biology	3
BI 325	Analytical Techniques	3
BI 327	Bioprogramming and Biostatistics	3
BI 329	Advance Biochemistry	2
BI 331	Lab on Enzymology	2
BI 333	Lab on Molecular Biology	2

Sixth Semester :

Course Code	Course Name	Cr.
BI 322	Genetics	3
BI 324	Genetics Engineering	3
BI 326	Immunology	3
BI 328	Biological Database Management	2
BI 330	Bioinformatics Software and Applications	2
BI 332	Credit Seminar	1
BI 334	Lab on Immunology	2
BI 336	Lab on Genetic Engineering	2

Seventh Semester :

Course Code	Course Name	Cr.
BI 421	Structural Bioinformatics	3
BI 423	Cell and Tissue Culture	3
BI 425	Computational Biology	3
BI 427/ BI 429/ BI 431/ BI 433	Elective—I : Animal Biotechnology / Microbial Biotechnology / Plant Biotechnology / Nano Biotechnology	3
BI 435	Fermentation and Bioprocess Engineering	2
BI 437	Lab on Cell & Tissue Culture	2
BI 439	Lab on Bioprocess Engineering	2
	CBCT Elective—VII	3

Eighth Semester:

Course Code	Course Name	Cr.
BI 422	Genomics and Proteomics	3
BI 424	Bioethics, Biosafety and IPR	2
BI 426	Elective—II : Metagenomics / Taxinology/ Pharamcogenomics / Evolutionary Genomics	3
BI 434	Virology	2
BI 436	Seminar and Mini Review	2
BI 438	Lab on Applied Bioinformatics	3
BI 440	Lab on Genomics and Proteomics	3
	CBCT Elective—VIII	3

Ninth Semester :

Course Code	Course Name	Cr.
BI 521	Project—I	16
BI 523	Seminar	1
	CBCT-IX	3

Tenth Semester :

Course Code	Course Name	Cr.
BI 522	Project—II	16
BI 524	Project Evaluation Seminar	2

Note: 1. CBCT Elective-I to CBCT Elective-VI are to be chosen from the list of CBCT courses given below.

Course Code	Course Name	Cr.
CS 535	Introduction to Scientific Computing	3
EG 101	Communicative English	3
ES 102	Elementary Environmental Science	3
EG 102	Communicative English—II	3
SC 102	Basic Sociology	3
ES 542	Laboratory Guidance and Safety	3
BM 101	Elementary Economics	3

Course Code	Course Name	Cr.
CL 121	Basic Chinese—I	3
FL 101	Basic French—I	3
GL 101	Basic German—I	3
DM 301	Disaster Management	3
CL 122	Basic Chinese—II	3
FL 102	Basic French—II	3
GL 102	Basic German—II	3

2. CBCT Elective-VII to CBCT Elective-IX are to be chosen from the general list of CBCT courses available for that particular semester.

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

PHYSICS

(Year of Establishment: 1998)

Started in 1998, the Department has strived to create an environment and enhanced resources for teaching at postgraduate level and research in forefront areas. Department has strong experimental and theoretical groups working in various areas of condensed matter physics, photonics, high energy physics, microwaves, plasma physics, astrophysics, neutrino physics and nanoscience and technology. Department offers specialization in condensed matter physics, high energy physics, photonics and electronics and astrophysics.

It also offers postgraduate degree in nanoscience and technology, integrated M.Sc. and B.Sc.-B.Ed programmes in Physics.

Many of our students are absorbed and doing well in other institutes. It's mandatory for all the students to do a project in the last year of post graduation level. Prior to starting research a rigorous course works offered by the Department.

Programmes offered

1. Integrated M. Sc. in Physics
2. Integrated B. Sc. B. Ed.
3. M. Sc. in Physics
4. M. Sc. in Nanoscience and Technology
5. Ph. D.

Faculty and Areas of Interest

Professors	
Sirohi, R.S., Ph.D. (IITD), Bharat Ratna Lokapriya Gopinath Bordoloi Chair Professor	<i>Optics, optical Instrumentation, laser application, optical metrology.</i>
*Choudhury, A., Ph.D. (OU), Pro V.C.	<i>Condensed matter physics, Laser physics, Quantum electronics, Nano-science.</i>
*Kumar, A., Ph.D. (IITK)	<i>Condensed matter physics, Solid state ionics.</i>
*Sarma, J. K., Ph.D. (GU)	<i>Theoretical high energy physics, Particle physics.</i>
*Bhattacharyya, N. S., Ph.D. (DU [^])- HoD	<i>Microwave Devices and EMI Shielding materials.</i>
*Das, N., Ph.D. (GU)	<i>Plasma Physics.</i>
Associate Professors	
*Ahmed, G. A., Ph.D. (GU)	<i>Laser physics, Optoelectronics.</i>
*Mohanta, D., Ph.D. (TU)	<i>Condensed matter physics and Nanoscience.</i>
*Deb, P., Ph.D. (JU)	<i>Nano science and Nano technology, Physics of materials.</i>
*Karmakar, P. K., Ph.D. (GU)	<i>Plasma physics, Astrophysics and Nonlinear dynamics.</i>
*Das, M. K., Ph.D. (GU)	<i>Theoretical High Energy Physics, Nuclear Physics.</i>
*Nath, P., Ph.D. (GU)	<i>Fiber optic sensors & system, SERS, Biomedical instrumentation.</i>
Bhuyan, P.J., Ph.D. (GU)	<i>Simulation in Plasma Physics, MHD, PLC,MD.</i>
Assistant Professors	
Francis, Ng. K., M. Sc. (DU [^])	<i>Particle Physics Phenomenology and Particle Cosmology.</i>
#Biswas, R., Ph.D. (DU)	<i>Fiber Optic Instrumentation, PCFs; Geophysical instrumentation.</i>
*Pathak, A., Ph.D. (G U [^])	<i>Molecular Astrophysics of Polycyclic Aromatic Hydrocarbons (PAHs), Interstellar Dust (Cosmic Dust), UV Astronomy.</i>
Gogoi, R., Ph.D. (GU)	<i>Infrared Astronomy, High Energy Physics.</i>
#Borah, D., Ph.D. (IITB)	<i>Elementary Particle Physics and Cosmology.</i>
*Das, S.K., Ph.D. (IIScB)	<i>Materials Science.</i>

* Recognized Supervisor, # Recognized Co-supervisor

LEGENDS: **OU**- Oxford University, **GU**-Gauhati University, **DU[^]**-Delhi University, **TU**-Tezpur University, **JU**-Jadavpur University, **DU**- Dibrugarh University, **GU[^]**-Gorakhpur University, **IISc**-Bangalore, **IITK**-Indian Institute of Technology, Kanpur, **IITB**-Indian Institute of Technology, Bombay, **IITD** -Indian Institute of Technology, Delhi

Facilities

The Department has a rich collection of devices 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 25MW pulsed, NdYAG laser, high vacuum coating, Xband Microwave Bench, Electrochemical Workstation, LCR HiTester Meter, AFM,PPMS, SEM, XRD, Double Distilled water treatment plant, hot air oven, semiconductor characterization set-up, DSP Kit and UV-VIS spectrophotometer, Millipore water purification system, LBM film deposition unit, FT-IR spectrophotometer as major research equipment. The Department also has ended computational facility to carry theoretical and astrophysics research work in addition to a departmental library. The department also offers its facilities to the students of other institutes and inter-departments.

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

Research Activity

No. of papers published in the year 2013 : 55

No. of ongoing research projects : 19

The Department of Physics is a UGC SAP Department

Selected publications

1. Choudhury, B. & Choudhury, A. Tailoring Luminescence properties of Tio₂ nanoparticles by Mn doping, *Journal of Luminescence*. **136** (2013) 339-346.
2. Sarmah, D., Bhattacharyya N. S. & Bhattacharyya, S. Study of graded composite (LDPE/TiO₂) material as substrate for microstrip patch antenna in X-band, *IEEE TDEI*, **20**(5), 1845-1850, 2013.

Courses offered in M. Sc. in Physics:

First Semester:

Course Code	Course Name	Cr.
PH 414	Advanced Quantum Mechanics	3
PH 416	Condensed Matter Physics and Material Science	3
PH 408	Electromagnetic Theory	3
PH 405	Semiconductor Devices	3
PH 450	Physics and Computational Lab.	5
	CBCT	3

Second Semester:

Course Code	Course Name	Cr.
PH 417	Advanced Mathematical Physics	3
PH 503	Atomic and Molecular Physics	3
PH 412	Digital Electronics and Microprocessor	4
PH 411	Statistical Physics	3
PH 455	Seminar	2
PH 499	Physics Lab.	5
	CBCT	3

Third Semester:

Course Code	Course Name	Cr.
PH 415	Nuclear Theory and Particle Physics	3
PH 500	Project Work - I	5
	Elective - I	3
	Elective - II	3
	Elective - III	3
	CBCT	3

Fourth Semester:

Course Code	Course Name	Cr.
PH 540	Advanced Analytical Techniques	3
PH 599	Project Work -II	8
	Elective—IV	3
	Elective—V	3
	Elective—VI	3

Elective Courses in Semester III and Semester IV:

Course Code	Course Name	Cr.
PH 510	Fiber Optics and Optoelectronics	3
PH 524	Digital Signal Processing	3
PH 525	Microprocessors and Digital Signal Processing based systems	3
PH 522	Communication Systems	3
PH 523	Microwaves	3
PH 513	Photonic Devices	3
PH 539	Advanced Condensed Matter Physics and Material Science	3
PH 514	Superconductivity and Critical Phenomena	3
PH 517	Physics of Solid State Devices	3
PH 542	Nanostructures	3

Course Code	Course Name	Cr.
PH 543	Surface Science	3
PH 519	Quantum Field Theory	3
PH 520	Modern Particle Physics	3
PH 521	Introduction to Parton Models	3
PH 532	Quantum Electrodynamics	3
PH 536	Basic Astronomy and Astrophysics	3
PH 533	General Theory of Relativity	3
PH 537	High Energy and Extragalactic Astrophysics	3
PH 538	Introduction to Cosmology	3
PH 541	Plasma and Astrophysics	3

Courses offered in M. Sc. Nanoscience and Technology:**First Semester:**

Course Code	Course Name	Cr.
NS 401	Quantum Mechanics	3
NS 408	Condensed Matter Physics	3
NS 404	Basic Polymer Science	3
NS 405	Cell and Molecular Architecture Cells	3
NS 400	Measurement, Analysis and Computational Lab	5
	CBCT-I	3

Second Semester:

Course Code	Course Name	Cr.
NS 413	Atomic and Molecular Physics	3
NS 402	Electronics	3
NS 410	Nanostructures	3
NS 411	Fundamental of Molecular Biology and Elements of Immunology	3
NS 455	Seminar	2
NS 499	Measurement and Analysis Lab	5
	CBCT-II	3

Third Semester :

Course Code	Course Name	Cr.
NS 501	Surface Science	3
NS 502	Optical Properties of Nanostructures	3
NS 507	Electromagnetics Theory	3
NS 504	Biosynthesis of Nanoparticles and Applications	3
NS 500	Project Work	5
	CBCT-III	3

Fourth Semester:

Course Code	Course Name	Cr.
NS 503	Electrical and Magnetic Properties of Nanostructures	3
NS 508	Photonic Devices	3
NS 599	Project Work—II	10

Courses offered in Integrated M. Sc. in Physics:

First Semester:

Course Code	Course Name	Cr.
PI 101	Physics—I	3
MI 101	Mathematics—I	3
CI 101	Chemistry -I	4
BI 101	Biology—I	3
EG 101	Communicative English	2
CS 101	Basic in Computer Applications	3

Second Semester:

Course Code	Course Name	Cr.
PI 102	Physics—II	3
MI 102	Mathematics—II	3
CI 102	Chemistry -II	4
BI 102	Biology—II	3
ES 102	Elementary Environmental Science	2
SC 102	Sociology :an Introduction	2
NS 102	NSS / NCC	2

Third Semester :

Course Code	Course Name	Cr.
PI 202	Introductory Quantum Mechanics (Common Paper)	3
PI 203	Classical Mechanics	4
PI 205	Electromagnetism	3
CI 201	Chemistry—III	3
MI 201	Introductory Statistics (Common Paper)	2
PI 207	Physics Lab—I (Physics Major)	3
PI 209	Physics—II (Non Physics Major)	2
CI 211	Chemistry Lab—II	2

Fourth Semester:

Course Code	Course Name	Cr.
PI 204	Atomic and Nuclear Physics	3
PI 214	Electronics (Physics Major)	3
PI 305	Thermodynamics and Statistical Physics	3
MI 204	Mathematical Methods and PDE	3
PI 212	Electronics (Non Physics Major)	3
PI 208	Physics Laboratory—III	3
PI 210	Physics Laboratory—IV (For Non Physics Major)	2
CI 212	Chemistry Laboratory—IV	2

Fifth Semester :

Course Code	Course Name	Cr.
PI 301	Mathematical Physics	3
PI 303	Physical and Geometrical Optics	3
PI 307	Basic Material Science	3
PI 309	Analog Electronics and Communication	3
PI 311	Waves and Acoustics	3
PI 349	Physics and Computational Lab—V	5

Sixth Semester:

Course Code	Course Name	Cr.
PI 302	Digital Electronics and Microprocessors	3
PI 308	Laser Physics	3
PI 310	Statistical Physics	3
PI 312	Advance Mathematical Physics	3
PI 314	Measurement Physics	3
PI 300	Minor Project	3

Seventh Semester :

Course Code	Course Name	Cr.
PI 403	Electrodynamics	3
PI 405	Semiconductor Devices	3
PI 306	Advanced Quantum Mechanics	3
PI 402	Nuclear and Particle Physics	3
PI 499	Physics Laboratory—VI	5
	Elective—I	3

Eighth Semester:

Course Code	Course Name	Cr.
PI 408	Molecular Spectroscopy	3
PI 410	Advanced Analytical Technique	3
PI 412	Plasma and Astrophysics	3
PI 400	Physics Laboratory—VII	5
PI 450	Seminar	2
	Elective—II	3

Ninth Semester :

Course Code	Course Name	Cr.
PI 599	Project—I	8
	Elective—III	3
	Elective—IV	3

Tenth Semester:

Course Code	Course Name	Cr.
PI 500	Project—II	10
	Elective—V	3
	Elective—VI	3

Elective Courses offered by the Department in Semester VII, VIII, IX & X :

Course Code	Course Name	Cr.
PI 501	Quantum Field Theory	3
PI 502	Quantum Electrodynamics	3
PI 503	Introduction to Parton Models	3
PI 504	Modern Particle Physics	3
PI 509	Fiber Optics and Optoelectronics	3
PI 507	Digital Signal Processing	3
PI 516	Microprocessors and Digital Signal Processing Based Systems	3
PI 508	Digital Communication Systems	3
PI 517	Microwave Systems and Antenna Propagation	3
PI 512	Photonic Devices	3

Course Code	Course Name	Cr.
PI 510	Advanced Material Science	3
PI 511	Superconductivity and Critical Phenomena	3
PI 513	Physics of Thin Film	3
PI 517	Physics of Solid State Devices	3
PI 520	Nanostructures	3
PI 519	Surface Science	3
PI 505	Basic Astronomy and Astrophysics	3
PI 518	General Theory of Relativity	3
PI 515	High Energy and Extragalactic Astrophysics	3
PI 506	Introduction to Cosmology	3

Note: Curriculum and Syllabi for Integrated B. Sc. B. Ed. in Physics has been going through a major revision. The same will be made available in the University website in an appropriate time.

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

SOCIAL WORK (Year of Establishment: 2013)

The Department of Social Work is among the latest additions to the University. The 2014 batch shall be the first batch admitted to its post graduate programme.

Programmes offered:

1. **M.A. in Social Work** (two year programme).

Objectives of the course

1. The creation of a just and equal society which ensures freedom from all forms of oppression and exploitation.
2. To develop human resources for competent and effective professional social work practice, teaching and research with diverse range of individuals, groups and communities by using a framework of social justice and human rights focused on sustainable and participatory development.
3. To impart education and training in Professional Social Work in order to provide human resources in the fields of social welfare, development, and allied areas.
4. To help students develop knowledge, skills, attitudes and values appropriate to the practices of social work profession.
5. To enable students to develop critical thinking and the ability to apply theory to field experience.
6. Evolve an interdisciplinary perspective to enhance understanding of social problems and development issues.

Course Structure :

Minimum Credits to be completed : 96

Minimum Duration : Four Semesters (Two years)

Maximum Duration : Six Semesters (Three Years)

Courses offered in the M. A in Social Work

First Semester

Course Code	Course Name	Cr.
SW 401*	Understanding Society	2
SW 402*	Human Behavior and Social Environment	2
SW 403*	Political Economy and Development	2
SW 411	Social Work Profession	2
SW 412	Social Work Methods: Working with Individuals and Families	2
	CBCT-I	3
	Elective-I	2
	Elective-II	2
SW 430	Fieldwork	8

Second Semester

Course Code	Course Name	Cr.
SW 431	Social Work Methods: Work with Groups	2
SW 432	Social Work Methods: Work with Communities	2
SW 433	Research and Statistics	4
SW 434	Development Administration and Governance	2
	CBCT-II	3
	Elective-III	3
	Elective-IV	3
SW 450	Fieldwork	8

* Any two of the Foundation courses SW 401/402/403 are to be chosen.

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

Course Code	Course Name	Cr.
SW 421	Community Health	2
SW 422	Social Work with Children	2
SW 423	Literacy and Education	2

Elective-III and Elective-IV are to be chosen from the following courses

Course Code	Course Name	Cr.
SW 441	Gender Issues	2
SW 442	Environment and Ecological Issues	2
SW 443	Work with Older Persons	2

Third Semester

Course Code	Course Name	Cr.
SW 501	Management of Non-Profit Organisations	2
SW 502	Social Policy and Planning	2
	CBCT-III	3
	Elective A/B/C	2+2
	Elective D	2
SW 549	Dissertation	2
SW 550	Fieldwork	8

Fourth Semester

Course Code	Course Name	Cr.
SW 551	Social Advocacy and Social Action	2
	CBCT-IV	3
	Elective A/B/C	2+2
	Elective D	2+2
SW 598	Dissertation	4
SW 599	Fieldwork	8

Elective Courses for third semester:

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

	Course Code	Course Name	Cr.
ELECTIVE A	SW 511	Social Work and Mental Health	2
	SW 512	HIV and Social Work Practice	2
ELECTIVE B	SW 521	Urban Community Development	2
	SW 522	Rural and Tribal Community Development	2
ELECTIVE C	SW 531	Occupational Social Work	2
	SW 532	Organizational Behavior	2
ELECTIVE D	SW 541	Personality Development	2
	SW 542	Development Communication	2
	SW 543	Human Rights	2

Elective Courses for fourth semester:

Both the Courses from any of Elective group A, B or C and any two courses from Elective group D

	Course Code	Course Name	Cr.
ELECTIVE A	SW 561	Therapeutic Counseling	2
	SW 562	Hospital Administration	2
ELECTIVE B	SW 571	Disaster Management	2
	SW 572	Peace Education and Conflict Resolution	2
ELECTIVE C	SW 581	Labour Legislation	2
	SW 582	H.R. Practices	2
ELECTIVE D	SW 591	Criminology and Correctional Administration	2
	SW 592	Disability Studies	2
	SW 593	Corporate Social Responsibility	2

SOCIOLOGY

(Year of Establishment: 2006)

The Department of Sociology at Tezpur University was established in 2006 with a Masters programme. Subsequently, it launched a Ph.D. programme in 2008. The Department is dedicated toward creating competent and socially sensitive graduates through rigorous teaching/training programmes, research and extension 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 and so on. The curriculum lays emphasis on teaching and learning of general concerns of sociology as well as issues of sociological significance in northeastern India 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 takes care 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 organisations.

Programmes offered

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

Faculty and Areas of Interest

Professors

Kalam, M.A., Ph.D.(UM) *Migration, Identity Politics, Ethnicity, Environment and Society.*

*Sharma, C.K., Ph. D(DU[^]) *Social Development, Culture and Media Studies, Environmental Sociology, Nationalism.*

Associate Professors

*Deka, R., Ph.D. (DU) *Sociological theories, Sociology of Movement, Agrarian Sociology.*

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

Assistant Professors

Das, A.K., M. Phil. (DU[^]) *Sociology of Development, Sociology of Health and Illness, Sociology of Governance.*

*Sumesh, S. S., Ph.D. (UK) *Research Methods, Social Stigma and Exclusion, Community Health, Environmental Movements.*

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

Das, S., M. Phil. (JNU) *Gender Studies, Sociology of North East India.*

Salah, P., M. Phil. (JNU) *Sociology of Conflict and Collective Violence, Political Sociology.*

* Recognized Supervisor

LEGENDS: UM-University of Madras, DU[^]-Delhi University, DU-Dibrugarh University, UK-University of Kerela, HoD-Head of the Department, NEHU-North Eastern Hill University, IITK-Indian Institute of Technology, Kanpur, JNU-Jawaharlal Nehru University

Facilities

The Department has a seminar cum screening hall with projection facilities and audio-visual teaching aids. Selected books and photocopied materials of seminal contributions in sociology are available in the Departmental Library. The Department also has a small Computer Laboratory for the use of students and research scholars.

Research Activity

No. of papers published in the year 2013 (Upto September): **12**

No. of ongoing research projects: **05**

Selected Publications

A. Papers

1. Punathil, Salah. 'Kerala Muslims and shifting notions of religion in the public sphere', *South Asia Research*, Vol (33. 1), pp. 1-20, London: Sage Publications, 2013.
2. Das, Sarmistha. 'Re-examining the Kinship Organisations and Gender Roles', *Man and Society: A Journal of North-East Studies*, Vol X, Summer 2013, pp. 53-59, ICSSR NERC, Shillong, Meghalaya.

B. Books

1. Kikhi, Kedilezo (ed.) 2013; *The Dynamics of Development in North East India*; Bookwell Publishers, Delhi.
2. Sharma, Chandan Kumar and Manjeet Baruah (eds.) 2013; *History of the Frontier Areas Bordering on Assam: 1883-1941 by Robert Reid, 1942 (with an Introduction)*, Bhabani Books, Guwahati.

Courses offered in M. A. (Sociology):

First Semester:

Course Code	Course Name	Cr.
SC 411	Classical Sociological Traditions	4
SC 412	Research Methodology	4
SC 413	Sociology of Family and Kinship	4
SC 414	Sociology of India	4
	CBCT-I	3

Second Semester:

Course Code	Course Name	Cr.
SC 415	Contemporary Theoretical Perspectives in Sociology	4
SC 416	Economic Sociology	4
SC 417	Social Stratification	4
	Elective— I	3
	CBCT-II	3

Third Semester :

Course Code	Course Name	Cr.
SC 510	Political Sociology	4
SC 511	Sociology of Development	4
SC 512	Sociology of Northeast India	4
	Elective—II	3
	CBCT- III	3

Fourth Semester:

Course Code	Course Name	Cr.
SC 513	Sociology of Religion	4
SC 514	Social Movements in India	4
SC 515	Project	8
	Elective—III & IV	3
	CBCT - IV	3

Elective—I (Any One from the following)

Course Code	Course Name	Cr.
SC 431	Fieldwork Practicum	3
SC 432	Social Statistics	3
SC 433	Population and Society	3

Elective—II (Any One from the following)

Course Code	Course Name	Cr.
SC 550	Gender and Society	3
SC 551	Industrial Sociology	3
SC 552	Sociology of Health and Illness	3

Elective III & IV (Any Two from the following)

Course Code	Course Name	Cr.
SC 553	Environmental Sociology	3
SC 554	Sociology of Culture and Mass Media	3
SC 555	Sociology of Governance	3

Course Code	Course Name	Cr.
SC 556	Sociology of Education	3
SC 557	Identity and Violence	3
SC 558	Sociology of Science	3

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

ANNEXURE- I

IMPORTANT DATES

1	Issue of Printed Application Form for B. Tech. Programmes	February 20 to April 26, 2014
2	Issue of Printed Application Form for other Programmes	February 20 to April 01, 2014
3	Online application remains open for B. Tech. Programmes	February 20 to May 06, 2014
4	Online application remains open for other Programmes	February 20 to April 07, 2014
5	Last date of receipt of Application at the office of the Controller (for B. Tech Programmes)	May 07, 2014
6	Last date of receipt of Application at the relevant Department (for non- B.Tech programmes)	April 08, 2014
7	Issue of Admit card (wherever applicable)	April 22, 2014
8	Tentative date of release of the list of eligible candidate for Entrance Examination in the University website	April 29, 2014
9	Entrance Examination schedule	May 31 to June 2, 2014
10	Admission Test for Ph. D. Programmes	June 12 and 13, 2014
11	Dates for Group Discussion and Personal Interview (wherever applicable)	June 17 and 18, 2014
12	Commencement of New Session	August 1, 2014

*** No complaint shall be entertained after the specified date**

ANNEXURE II

SCHEDULE OF ENTRANCE EXAMINATIONS

1. All P.G. Degree/Diploma/Certificate Programmes/Integrated M.Sc./M.A./M.Com. /B.Sc.B.Ed. /B.A.B.Ed.:

May 31, 2014 (10 AM to 12 Noon)	May 31, 2014 (2 PM to 4 PM)
<ul style="list-style-type: none"> • M.A. in Cultural Studies • M.Sc. in Chemistry • M.A./M.Sc. in Mathematics • Integrated M.A. /Integrated B.A.B.Ed. in English • Integrated M.Com. • Integrated M.Sc./Integrated B.Sc.B.Ed. in Mathematics 	<ul style="list-style-type: none"> • M.Tech. in Bioelectronics • M.Sc. in Nanoscience and Technology • P.G. Diploma in Tourism Management • Integrated M.Sc./Integrated B.Sc.B.Ed. in Physics • M. Tech. in Mechanical Engineering
June 1, 2014 (10 AM to 12 Noon)	June 1, 2014 (2 PM to 4 PM)
<ul style="list-style-type: none"> • Integrated M.Sc./Integrated B.Sc.B.Ed. in Chemistry • Master of Computer Application (MCA) • M.Tech. in Energy Technology • M.A. in Hindi • M.A. in Sociology • M.Sc. in Environmental Science 	<ul style="list-style-type: none"> • M.Tech. in Electronics Design and Technology • Post B. Sc. Integrated M. Tech. in Food Engineering and Technology • M.A. in Mass Communication and Journalism • M. Tech. in Polymer Science and Technology • Integrated M.Sc. in Bioscience and Bioinformatics
June 2, 2014 (10 AM to 12 Noon)	June 2, 2014 (2 PM to 4 PM)
<ul style="list-style-type: none"> • Certificate in Chinese • M.Tech. in Food Engineering and Technology • P.G. Diploma in Mobile and Multimedia Communication • MA in Linguistics and Language Technology • M.A. in Social Work 	<ul style="list-style-type: none"> • M.Tech. in Information Technology • M.Sc. in Physics • M.A. in English • M.Sc. in Molecular Biology and Biotechnology (for NE domicile) • P.G. Diploma in Translation (Hindi)

2. **B.Tech. Programme:** The admissions to all B.Tech. Programmes of Tezpur University will be based on the merit list prepared using JEE (Main) - 2014 All India Rankings. For further details of JEE (Main) – 2014 examination, please visit:

http://jeemain.nic.in/jeemainapp/pdf/JEE_Main_bulletin_2014_19_12_13.pdf.

3. **Ph.D. Programme:** Written test will be held in the respective departments on **June 12 and 13, 2014** followed by personal interview.

Note: Group Discussion/Personal Interview will be held for short listed candidates for the programmes of M.A. in Mass Communication and Journalism, M.A. in English, M.Tech in Food Engineering and Technology (for selection based on GATE), M.A. in Social Work and P.G. Diploma in Tourism Management. Group discussion and/or Personal interviews (wherever applicable) will be held on **June 17 and 18, 2014**.

Declaration of TUEE Results: *Fourth Week of June, 2014 in Tezpur University website: www.tezu.ernet.in. No separate call letter will be sent to the selected/waitlisted candidates for admission.*

ANNEXURE III

Admission Schedule - 2014

Programmes	Admission and counselling	
All B.Tech. Programmes	21 and 22 July, 2014 (09:30 AM to 05:00 PM)	
All programmes other than B. Tech (Admission will be held in respective Department)	Main List	Waiting list
	23 and 24 July, 2014 (09:30 AM to 3:30 PM)	28 July 2014 (Reporting at the designated venue <u>sharp</u> at 9:30 AM)
Ph.D. (Admission will be held in respective Department)	23 and 24 July 2014 (9:30 AM to 3:30 PM)	

Note: The notification indicating the vacant seats in different programmes will be uploaded by July 26, 2014. The wait listed candidates may avail chance admissions on the stipulated date and time in the Specified common admission venue. **Waitlisted candidates fail to report at 9.30 am may not be considered for admission irrespective of their position in the waiting list.**

ANNEXURE IV

STATEMENT OF SEMESTER-WISE FEE (NORMAL)

Programmes	1 st Sem.	2 nd Sem.	3 rd Sem.	4 th Sem.	5 th Sem.	6 th Sem.	7 th Sem.	8 th Sem.	9 th Sem.	10 th Sem.	Refund-able
B. Tech.	32406.00	23700.00	24106.00	23700.00	24106.00	23700.00	24106.00	23700.00	-	-	6500.00
Certificate in Chinese	16806.00	8600.00	-	-	-	-	-	-	-	-	6500.00
Integrated M.A. Intgd. M.Com. / Intgd. B.A.B.Ed	18506.00	9800.00	10206.00	9800.00	10206.00	9800.00	10206.00	9800.00	10206.00	9800.00	6500.00
Integrated M.Sc./ B.Sc.B.Ed	21406.00	12200.00	12606.00	12200.00	12606.00	12200.00	12606.00	12200.00	12606.00	12200.00	7000.00
M.A	18506.00	9800.00	10206.00	9800.00	-	-	-	-	-	-	6500.00
M. Tech.	28006.00	19300.00	19706.00	19300.00	19706.00	19300.00	19706.00	19300.00	-	-	6500.00
MCA	24006.00	15300.00	15706.00	15300.00	15706.00	15300.00	-	-	-	-	6500.00
M. A. in MCJ	29006.00	19300.00	19706.00	19300.00	-	-	-	-	-	-	6500.00
M. Sc.	19206.00	10500.00	10906.00	10500.00	-	-	-	-	-	-	6500.00
PGD in Mobile & Multimedia Communication	23006.00	13800.00	-	-	-	-	-	-	-	-	6500.00
PGD in Translation (Hindi)	17006.00	8800.00	-	-	-	-	-	-	-	-	6500.00
PGD in Tourism Management	23006.00	14300.00	-	-	-	-	-	-	-	-	6500.00

This is inclusive of Hostel Admission/Re-admission fee of Rs. 2000/- (payable per Semester), and Refundable Fees of Rs. 4500/- (payable only in the First Semester)

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

B. Tech. in Food Engineering and Technology

Integrated M. Sc. / Integrated B.Sc. B.Ed. in Chemistry and Bioscience and Bioinformatics programmes.

M. Tech. in Food Engineering and Technology

M. Tech. in Energy Technology

M. Tech. in Polymer Science and Technology

M. Sc. in Chemistry

M. Sc. in Molecular Biology and Biotechnology

M. Sc. in Nanoscience and Technology

M. Sc. in Environmental Science

ANNEXURE V

STATEMENT OF SEMESTER-WISE FEE UNDER SSS

Programmes	1 st Sem.	2 nd Sem.	3 rd Sem.	4 th Sem.	5 th Sem.	6 th Sem.	7 th Sem.	8 th Sem.	9 th Sem.	10 th Sem.	Refund-able
B. Tech.	82706.00	73400.00	73806.00	73400.00	73806.00	73400.00	73806.00	73400.00	-	-	6500.00
Certificate in Chinese	26956.00	18150.00	-	-	-	-	-	-	-	-	6500.00
Integrated M.A. Intgd. M.Com./ Intgd. B.A.B.Ed	32956.00	23650.00	24056.00	23650.00	24056.00	23650.00	24056.00	23650.00	24056.00	23650.00	6500.00
Integrated M.Sc./ B.Sc.B.Ed	46956.00	37150.00	37556.00	37150.00	37556.00	37150.00	37556.00	37150.00	37556.00	37150.00	7000.00
M. Tech.	39456.00	30150.00	30556.00	30150.00	30556.00	30150.00	30556.00	30150.00	-	-	6500.00
M.A	32956.00	23650.00	24056.00	23650.00	-	-	-	-	-	-	6500.00
MCA	39456.00	30150.00	30556.00	30150.00	30556.00	30150.00	-	-	-	-	6500.00
M. A. in MCJ	59206.00	48900.00	49306.00	48900.00	-	-	-	-	-	-	6500.00
M. Sc.	35456.00	26150.00	26556.00	26150.00	-	-	-	-	-	-	6500.00
PGD in Mobile and Multimedia Communication	50456.00	40650.00	-	-	-	-	-	-	-	-	6500.00
PGD in Tourism Management	37956.00	28650.00	-	-	-	-	-	-	-	-	6500.00

This is inclusive of Hostel Admission/Re-admission fee of Rs. 2000/- (payable per Semester), and Refundable Fees of Rs. 4500/- (payable only in the First Semester)

NOTE: Candidates of the following programmes will be required to pay an additional fee of **Rs. 6000/-** per semester on account of consumables:

- B. Tech. in Food Engineering and Technology**
- Integrated M. Sc. / Integrated B.Sc. B.Ed. in Chemistry and Bioscience and Bioinformatics programmes.**
- M. Tech. in Food Engineering and Technology**
- M. Tech. in Energy Technology**
- M. Tech. in Polymer Science and Technology**
- M. Sc. in Chemistry**
- M. Sc. in Molecular Biology and Biotechnology**
- M. Sc. in Nanoscience and Technology**
- M. Sc. in Environmental Science**

ANNEXURE VI

Fees Structure for the Ph.D. Programme w.e.f. AUTUMN SEMESTER, 2014

Particular Fee	Mode	Ph.D. Full time	Ph.D. (Part Time/ Spon.)
Admission	Once on admission	500	500
Registration	Once on admission	150	150
Identity card	Once on admission	50	50
Convocation	Once on admission	500	500
Provisional certificate	Once on admission	100	100
Alumni Association	Once on admission	500	500
Caution deposit (Library and Laboratory)	Once on admission	2000	2000
Hostel Caution deposit	Once on admission	3000	3000
Hostel Mess Advance	Once on admission in case of Hostel boarder	1500	1500
Hostel admission/re-admission (Single seater for Ph.D. students)	Per semester in case of Hostel boarder	3000	3000
Enrollment	Per semester (<i>w.e.f. 2nd sem. Onward</i>)	500	500
Tuition	Per semester	1500	2000
Library	Per semester	350	350
Students' activity	Per semester	500	500
Medical	Per Semester	250	250
Transport	Per semester	1000	1000
Laboratory (including computer usage)	Per semester	1000	1000
Research Fee	Per semester	3000	4000
Infrastructure and amenity	Per semester	1000	1000
Fan, Electricity and Water charge	Per semester	300	300
Students' Welfare Fund	Per semester	150	150
Development Fund	Per semester	1500	1500
Thesis Examination Fee	At the time of submission of thesis	5000	5000
Consumable Charge <i>(Additional fee for the students of the Depts. of Chem. Scs., MBBT, Physics, Env. Sc. and FET)</i>	Per semester	2000	2000
** Health Insurance	Per annum <i>(Students above 35 yrs. of age are not covered in this scheme)</i>	406	406

* Candidates admitted to the Ph.D. programme in the Departments of Chemical Sciences, Molecular Biology and Biotechnology, Physics, Environmental Science and Food Engineering and Technology will be required to pay an additional fee of **Rs. 2,000/- (Rupees Two thousands)** per semester on account of consumables .

N.B: SC/ST students are exempted from paying hostel seat rent.

ANNEXURE VII

Prescribed Format of OBC NCL Certificate

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

This is to certify that Shri/Smt./Kum.....
Son/Daughter of Shri/Smt.....
of Village/ TownDistrict/Division.....
inthe.....Community which is recognized as a backward class under:

- (i) Resolution No. 12012 / 68 / 93-BCC(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 / 94-BCC 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 / 94-BCC 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 / 97-BCC dated 03 / 12 / 97.
- (vii) Resolution No. 12012 / 99 / 94-BCC dated 11 / 12 / 97.
- (viii) Resolution No. 12012 / 68 / 98-BCC dated 27 / 10 / 99.
- (ix) Resolution No. 12012 / 88 / 98-BCC 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 / 99-BCC 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 / 99-BCC 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 / 2000-BCC dated 06 / 09 / 2001.
- (xiii) Resolution No. 12012 / 1 / 2001-BCC dated 19 / 06 / 2003.
- (xiv) Resolution No. 12012 / 4 / 2002-BCC 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.36012/22/93-Estt.(SCT) dated 08/09/93 which is modified vide OMNo.36033/3/2004 Estt.(Res.) dated 09/03/2004.

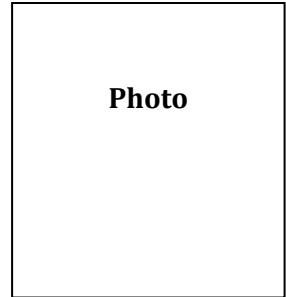
Dated:.....District Magistrate/Deputy Commissioner/
Competent Authority

Seal

NOTE :

- (a) The term ordinarily used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.
- (b) The authorities competent to issue Caste Certificate are indicated below:
 - (i) District Magistrate/Additional Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/Deputy Collector/1st Class Stipendiary Magistrate/Sub Divisional Magistrate/Taluka Magistrate/Executive Magistrate/Extra Assistant Commissioner (not below the rank of 1st Class Stipendiary Magistrate)
 - (ii) Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate.
 - (iii) Revenue Officer not below the rank of Tehsil dar and
 - (iv) Sub-Divisional Officer of the area where the candidate and/or his family resides.

ANNEXURE VIII



Seal of the issuing
office

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

Ref Petition No.

Date:.....

PERMANENT RESIDENCE CERTIFICATE

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

ANNEXURE -IX

AFFIDAVIT BY PARENT/GUARDIAN

- I, Mr./Mrs./Ms. (full name of parent/guardian) father/mother/guardian of..... (full name of student with admission/registration/enrolment number), having been admitted to(name of the institution), have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (hereinafter called the "Regulations"), carefully read and fully understood the provisions contained in the said Regulations.
2. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.
3. I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against my ward in case he/she is found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.
4. I hereby solemnly aver and undertake that
- a) My ward will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.
 - b) My ward will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.
5. I hereby affirm that, if found guilty of ragging, my ward is liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against my ward under any penal law or any law for the time being in force.
6. I hereby declare that my ward has not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, the admission of my ward is liable to be cancelled.

Declared this ___day of _____ month of ____year.

Signature of deponent

Name:
Address:
Telephone/Mobile No.:

VERIFICATION

Verified that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at(place) on this the(day) of(month) , (year) .

Signature of deponent

Solemnly affirmed and signed in my presence on this the (day) of (month), (year) after reading the contents of this affidavit.

OATH COMMISSIONER

ANNEXURE -X

AFFIDAVIT BY THE STUDENT

1. I, (*full name of student with admission/registration/enrolment number*) s/o d/o Mr./Mrs./Ms., having been admitted to (*name of the institution*), have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (*hereinafter called the "Regulations"*) carefully read and fully understood the provisions contained in the said Regulations.
2. I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.
3. I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against me in case I am found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.
4. I hereby solemnly aver and undertake that
 - a) I will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.
 - b) I will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.
5. I hereby affirm that, if found guilty of ragging, I am liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against me under any penal law or any law for the time being in force.
6. I hereby declare that I have not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, I am aware that my admission is liable to be cancelled.

Declared this ___ day of _____ month of ___ year.

Signature of deponent

Name:

VERIFICATION

Verified that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at(place) on this the(day) of(month),..... (year) .

Signature of deponent

Solemnly affirmed and signed in my presence on this the (day) of (month), (year) after reading the contents of this affidavit.

OATH COMMISSIONER

ANNEXURE -XI

O.M.R. ANSWER SHEET & INSTRUCTIONS

Sr. No.: 17286



TEZPUR UNIVERSITY, TEZPUR, ASSAM
TEZPUR UNIVERSITY ENTRANCE EXAMINATION
ANSWER SHEET

Roll no.											
2	0	6	1	0	8	0	0	2	6		
0	1	2	3	4	5	6	7	8	9	0	1
2	0	6	1	0	8	0	0	2	6		
0	1	2	3	4	5	6	7	8	9	0	1
2	0	6	1	0	8	0	0	2	6		
0	1	2	3	4	5	6	7	8	9	0	1
2	0	6	1	0	8	0	0	2	6		
0	1	2	3	4	5	6	7	8	9	0	1
2	0	6	1	0	8	0	0	2	6		
0	1	2	3	4	5	6	7	8	9	0	1

Programme Code		
2	0	6
0	1	2
2	0	6
0	1	2
2	0	6
0	1	2
2	0	6
0	1	2
2	0	6
0	1	2

Examination Center Code		
1	0	8
0	1	2
1	0	8
0	1	2
1	0	8
0	1	2
1	0	8
0	1	2
1	0	8
0	1	2

Booklet No.
167
Programme
Master of Computer Application (MCA)
Examination Center
Diphu

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D
5	A	B	C	D
6	A	B	C	D
7	A	B	C	D
8	A	B	C	D
9	A	B	C	D
10	A	B	C	D
11	A	B	C	D
12	A	B	C	D
13	A	B	C	D
14	A	B	C	D
15	A	B	C	D
16	A	B	C	D
17	A	B	C	D
18	A	B	C	D
19	A	B	C	D
20	A	B	C	D
21	A	B	C	D
22	A	B	C	D
23	A	B	C	D
24	A	B	C	D
25	A	B	C	D

26	A	B	C	D
27	A	B	C	D
28	A	B	C	D
29	A	B	C	D
30	A	B	C	D
31	A	B	C	D
32	A	B	C	D
33	A	B	C	D
34	A	B	C	D
35	A	B	C	D
36	A	B	C	D
37	A	B	C	D
38	A	B	C	D
39	A	B	C	D
40	A	B	C	D
41	A	B	C	D
42	A	B	C	D
43	A	B	C	D
44	A	B	C	D
45	A	B	C	D
46	A	B	C	D
47	A	B	C	D
48	A	B	C	D
49	A	B	C	D
50	A	B	C	D

51	A	B	C	D
52	A	B	C	D
53	A	B	C	D
54	A	B	C	D
55	A	B	C	D
56	A	B	C	D
57	A	B	C	D
58	A	B	C	D
59	A	B	C	D
60	A	B	C	D
61	A	B	C	D
62	A	B	C	D
63	A	B	C	D
64	A	B	C	D
65	A	B	C	D
66	A	B	C	D
67	A	B	C	D
68	A	B	C	D
69	A	B	C	D
70	A	B	C	D
71	A	B	C	D
72	A	B	C	D
73	A	B	C	D
74	A	B	C	D
75	A	B	C	D





76	A	B	C	D
77	A	B	C	D
78	A	B	C	D
79	A	B	C	D
80	A	B	C	D
81	A	B	C	D
82	A	B	C	D
83	A	B	C	D
84	A	B	C	D
85	A	B	C	D
86	A	B	C	D
87	A	B	C	D
88	A	B	C	D
89	A	B	C	D
90	A	B	C	D
91	A	B	C	D
92	A	B	C	D
93	A	B	C	D
94	A	B	C	D
95	A	B	C	D
96	A	B	C	D
97	A	B	C	D
98	A	B	C	D
99	A	B	C	D
100	A	B	C	D




Signature of Candidate

Signature of Invigilator

INSTRUCTION FOR USING THE O.M.R. ANSWER SHEET

- This answer sheet shall be processed using electronic means. Invalidation of Answer Sheet due to incomplete or incorrect filing of the OMR is the sole responsibility of the candidate.
- Use a **black or blue ball point pen** for darkening the ovals. No other colour shall be allowed.
- Write your roll number, programme code and examination centre code in boxes provided for these. Then **darken the appropriate oval** below each digit. **This is mandatory.** *If you fail to mark these three important components correctly, your OMR sheet will be summarily rejected (see the example given below).*
- Examination Centre codes and programme codes are given in the OMR sheet.
- Also write the Question Booklet number, Programme applied for, and Examination Centre in **words** in the blank boxes provided. There is no provision for darkening of digit/alphabets for these.
- Darken the correct answer against the respective question. There are only four probable answers for a question in the form of A, B, C & D. Chose the correct answer carefully and darken the same.
- Chose **ONLY ONE** answer. If you chose more than one answer for a particular question, your answer shall be treated as **WRONG**.
- DO NOT OVER-WRITE.** Over-written answers will also be marked as wrong.
- Sign at the end of the OMR sheet in the box provided.
- Make sure that the invigilator also signs the OMR sheet.
- While marking your answers, darken the appropriate oval as shown below.

CORRECT  A  B  C  D

WRONG  A  B  C  D

- Example of correct way of marking roll number, programme code and Examination centre code.

Roll no.	Programme Code	Examination Centre Code
2 0 6 1 0 8 0 2 6	2 0 6	1 0 8

Centre	Code	Centre	Code	Centre	Code
Agartala	101	Guwahati	109	Mumbai	117
Bangalore	102	Hyderabad	110	North Lakhimpur	118
Barpeta Road	103	Imphal	111	Patna	119
Bhubaneswar	104	Itanagar	112	Shillong	120
Chennai	105	Jorhat	113	Silchar	121
Delhi	106	Kokrajhar	114	Siliguri	122
Dibrugarh	107	Kolkata	115	Tezpur	123
Diphu	108	Lucknow	116		

PROGRAMME CODES

P.G. Diploma in Tourism Management (PGDTM)	201	M.Tech. in Food Engineering and Technology	218
Integrated M.Com.	202	MA in Hindi	219
M.Sc. in Chemistry	203	P.G. Diploma in Translation (Hindi)	220
Integrated M.Sc. in Chemistry/ Integrated B.Sc.B.Ed. (Major-Chemistry)	204	M.A. in Mass Communication and Journalism	221
M. Tech. in Polymer Science and Technology	205	P.G. Diploma in Mobile and Multimedia Communication	222
Master of Computer Application (MCA)	206	M.A./M.Sc. in Mathematics	223
M.Tech. in Information Technology	207	Integrated M.Sc. in Mathematics/ Integrated B.Sc.B.Ed. (Major-Maths.)	224
M.A. in Cultural Studies	208	M. Tech. in Mechanical Engineering	225
M.Tech. in Electronics Design and Technology	209	M.Sc. in Molecular Biology and Biotechnology	226
M.Tech. in Bioelectronics	210	Integrated M.Sc. in Bioscience and Bioinformatics	227
M.Tech. in Energy Technology	211	M.Sc. in Physics	228
M.A. in English	212	M.Sc. in Nanoscience and Technology	229
M. A. in Linguistics and Language Technology	213	Integrated M.Sc. in Physics/ Integrated B.Sc.B.Ed. (Major-Physics)	230
Integrated M.A. in English / Integrated B.A.B.Ed. (Major- English)	214	M.A. in Social Work	231
One year Certificate in Chinese	215	M.A. in Sociology	232
M.Sc. in Environmental Science	216		
Post B. Sc. Integrated M. Tech. in FET	217		

CONTACT ADDRESSES

All enquiries about academic programmes and requisite qualification should be directed to the office of the Department concerned. Enquiries relating to receipt of applications, entrance examination centre and other matters relating to the entrance examinations should be directed to the Controller of Examinations at 03712-267114.

The EPABX extension numbers of all the Departments and of the Controller of Examinations are given below. Please dial (03712) 27xxxx, where xxxx is the extension number.

Controller of Examinations,
Tezpur University, Napaam,
Tezpur-784028
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03712273332
E-mail : boral@tezu.ernet.in
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Department/Office	Extension number	Mobile number * (HoDs)	e-mail
Business Administration	5000	9435015074	hod_ba@tezu.ernet
Chemical Sciences	5050	9957184354	hod_chem@tezu.ernet.in
Civil Engineering	5950	9435085338	hod_civil@tezu.ernet.in
Computer Science and Engineering	5100	9435084468	hod_cse@tezu.ernet.in
Cultural Studies	5150	9954449460	hod_cul@tezu.ernet.in
Electronics and Communication Engineering	5250	9954449462	hod_ece@tezu.ernet.in
Energy	5300	9957184356	hod_ene@tezu.ernet.in
English and Foreign Languages	5200	9954449463	hod_efl@tezu.ernet.in
Environmental Science	5600	9954449464	hod_env@tezu.ernet.in
Food Engineering and Technology	5700	9435408396	hod_fet@tezu.ernet.in
Hindi	5750	9435384799	hod_hin@tezu.ernet.in
Mass communication and Journalism	5450,		hod_mcj@tezu.ernet.in
Mathematical Sciences	5500	9957191528	hod_ms@tezu.ernet.in
Mechanical Engineering	5850	9435170182	hod_mech@tezu.ernet.in
Molecular Biology and Biotechnology	5400	9957184351	hod_mbbt@tezu.ernet.in
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Sociology	5800	9954449471	hod_soc@tezu.ernet.in

*Mobile Number should be used during office hours only in case of emergency.