NAGALAND UNIVERSITY

(A Central University established by the Act of Parliament no. 35 of 1989)

SCHOOL OF ENGINEERING AND TECHNOLOGY
https://nagalanduniversity.ac.in

CONTENTS

नागालैण्ड विश्वविद्यालय

NAGALAND UNIVERSITY

(संसद द्वारा पारित अधिनियम 1989, क्रमांक 35 के अंतर्गत स्थापित केंद्रीय विश्वविद्यालय)

(A Central University established by an Act of Parliament No.35 of 1989)

मुख्यालय : लुमामी, जिला : जुन्हेबोटो (नागालैण्ड), पिनकोड – 798627

Hqrs: Lumami, Dist. Zunheboto (Nagaland), Pin Code – 798627

वेबसाइट / Website : www.nagalanduniversity.ac.in

MESSAGE FROM THE VICE-CHANCELLOR'S DESK

It gives me immense pleasure to extend my warm greetings to all prospective students and their families as they explore academic opportunities at the School of Engineering and Technology (SET), Kohima Campus, Nagaland University.

Established with the vision of imparting quality technical education and fostering innovation, SET has emerged as a hub of academic excellence in the region. The School is committed to nurturing young minds into skilled professionals equipped to meet the evolving demands of science, technology, and industry. With a dedicated faculty, state-of-the-art laboratories, and a learner-centric curriculum, we ensure that our students receive a well-rounded education grounded in ethics, creativity, and critical thinking.

As we prepare to welcome a new cohort for the academic session 2025–26, I encourage aspiring engineers to seize the opportunities SET offers - not only in academics, but also in research, innovation, entrepreneurship, and holistic development. At Nagaland University, we aim to create an environment that is inclusive, inspiring, and intellectually vibrant.

I extend my best wishes to all applicants in their academic journey and future endeavours.

(JAGADISH KUMAR PATNAIK)

Vice-Chancellor
Nagaland University

MESSAGE FROM THE DESK OF DEAN

It is my pleasure to welcome you to the **School of Engineering and Technology**, a key constituent of **Nagaland University**, one of India's prominent Central Universities. Since its establishment in **2007**, the school has been committed to academic excellence by integrating **teaching, research, and industry engagement** through forward-looking, interdisciplinary programs.

In **September 2024**, the School transitioned to its **dedicated campus at Kohima, Meriema**, marking a new chapter in its journey. The campus now offers a vibrant academic environment, equipped with **modern infrastructure and cutting-edge technological resources**, attracting students from across the country and fostering a **diverse, inclusive community** of future engineers, researchers, and leaders.

The school's **dedicated faculty,** young, dynamic, and committed, play a pivotal role in nurturing student potential through quality teaching and mentorship. Our students have consistently excelled in competitive national-level exams such as **GATE, ICAR, and CSIR-UGC**, and many have pursued advanced studies at premier institutions like **IISc, IITs, NITs, and AIIMS**. Numerous alumni are also contributing significantly in both domestic and international spheres.

Comprising **five departments**, the school offers B.Tech, M.Tech/M.Sc. and Ph.D. programs in **Agricultural Engineering and Technology, Biotechnology**, and **Information Technology**, with all departments supported by **state-of-the-art laboratories**. To enhance learning, the school provides access to a **central library**, seamless **LAN and Wi-Fi connectivity**, and opportunities for academic engagement through seminars and workshops. Additionally, **all major technical journals and digital resources are available through the Government of India's "*One Nation One Subscription"* initiative**, ensuring broad access to global research for both students and faculty.

Beyond academics, the school promotes **holistic development** through a rich calendar of **technical events, sports, and cultural programs**. The campus also offers **residential facilities** with separate hostels for boys and girls, along with **transportation services** for added convenience. Looking ahead, the school is actively nurturing a culture of **entrepreneurship and innovation** through the development of **startup initiatives and a dedicated incubation centre**, empowering students and faculty to translate ideas into real-world impact.

Prof Sujata Dash
Dean, School of Engineering and Technology
Nagaland University

SET OFFICIALS AND IN-CHARGES

Vice Chancellor
PROF. J.K. PATNAIK

Dean:
PROF. SUJATA DASH

Registrar
Dr. ABEMO

Head, Dept. of Agricultural Engineering and Technology
PROF. PRABHAKAR SHARMA

Head (I/C) Dept. of Biotechnology
DR. HANUMANT SINGH RATHORE

Head (I/C) Dept. of Computer Science and Engineering
MR. AKANGJUNGSHI LONGKUMER

Head (I/C) Dept. of Electronics and Communication Engineering
MRS. BENDANGCHILA LONGKUMER

Head, Dept. of Information Technology
PROF. SUJATA DASH

I/C Basic Science & Humanity
DR.H. ROHEN SINGH

I/C Placement
MR. RAMESH SINGH

Warden, Girl's Hostel
MRS. BENDANGCHILA LONGKUMER

Warden Boy's Hostel
MR. WUNGSHIM ZIMIK

Associate Dean, Students' Welfare
DR. TEMSULEMBA WALLING

The Nagaland University is a Central University established by an act of parliament in 1989. It came into being on 6th September, 1994. The objective of the University is to disseminate knowledge by providing infrastructural and research facilities in such branches of learning as Humanities, Natural & Physical Science, Social Science, Agricultural Science, Engineering & Technology, and Management. The University has departments located on its campuses in Lumami, Kohima, and Medziphema

2. THE SCHOOL

School of Engineering & Technology was inaugurated on 29th October 2007 by the then Governor of Nagaland (Chief Guest) His Excellency Shri K. Sankaranarayanan and the then Hon'ble Chief Minister of Nagaland (Guest of Honor) Shri Neiphiu Rio. It was the first institution of Engineering education in the State of Nagaland with state-of-the-art infrastructure. The academic building is located at Kohima Campus of Nagaland University.

The school offers B.Tech, MSc, M.Tech. and Ph.D.programmes in the following departments.

Department	Offered Degree	Intake/Vacancy
Agricultural Engineering & Technology	B.Tech	30
	M.Tech	10
	Ph.D	*
Biotechnology	B.Tech	30
	M.Sc	10
	Ph.D	*
Computer Science & Engineering	B.Tech	30
Electronics & Communication Engineering	B.Tech	30
Information Technology	B.Tech	30
	M.Tech	10
	Ph.D	*

*Number of seats will be notified through the admission portal.

3. INFRASTRUCTURE AND FACILITIES

3.1 STUDENTS AMENITIES AND ACTIVITIES

3.1.1 HOSTEL

The School provides limited Hostel facilities for the students. There are two boys and two girl's hostels accommodating them on a sharing basis. All hostellers have to abide by the rules and regulations of the hostel.

3.1.2 SCHOOL MAGAZINE

The school publishes a school magazine annually to encourage the creativity of the students.

3.1.3 CAREER COUNSELLING AND PLACEMENT

The career counselling and placement cell guides the students regarding their future academic and employment careers. Training and Placement in charge updates the students regarding any placement activities from time to time.

3.1.4 GAMES AND SPORTS

Facilities like Table Tennis, Carom, Cricket, Chess games and Gym are available to the students residing in the Hostel.

3.1.5 STUDENT'S ACTIVITIES

The student organizes various activities from time to time on the campus.

3.1.6 INTERNET FACILITY

The Academic Complex is connected to the internet with about 100 Mbps broadband connection.

3.1.7 LIBRARY

The Library has a collection of the latest Textbooks, Reference books, and Journals on different streams of Science, Engineering and Technology. The Library has a study room where the students can interact with each other. In addition to this, the University has an e-library (INFLIBNET programme already accessible) which provides access to numerous books and national and International Journals online. The library has also subscribed to Scopus, Web of Science, Turnitin, Quill Bot, and many other useful databases and resources.

4. ACADEMIC PROGRAMMES

The School offers 4 years (Eight semesters) academic programmes approved by AICTE, leading to B.Tech. degrees on successful completion of the course. The School adopts a teaching pattern of course credit system in semesters. One academic year is divided into two semesters comprising approximately 20 weeks per semester. Major emphasis is laid on practical & industrial training. Two departments, namely Agricultural Engineering & Technology and Information Technology also offer M.Tech.degree andthe Department of Biotechnology offersan M.Sc. degree. Agricultural Engineering & Technology and Information Technology and the Department of Biotechnology also offer PhD degrees.

5. ELIGIBILITY CRITERIA FOR ADMISSION

5.1 B.TECH FRESH ENTRY (AFTER 10+2)

Passed 10+2 examination with Physics/ Mathematics / Chemistry/Computer Science/ Electronics/ Information Technology/ Biology/Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/Entrepreneurship, Agriculture stream (for Agriculture Engineering)

Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together.

OR

Passed min. 3 years Diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category) subject to vacancies in the First Year, in case the vacancies at lateral entry are exhausted.

Discipline-specific requirement of subject combinations in 10+2 level:

Sl. No.	Major Disciplines	Mandatory courses at 10+2 Level	Other relevant course(s) for this discipline	Required Bridge course (Will be offered in First Year of B.Tech)

1	Agriculture Engineering	Physics, Chemistry OR Agriculture stream	Maths/Biology/Biotechnology/Agriculture/ Agriculture stream	Mathematics for non-Math/Chemistry for non-Chem
2	Biotechnology	Physics, Chemistry	Biology/Biotechnology	Mathematics for non-Math
3	Computer Science and Engineering	Physics, Mathematics	For the remaining single course select any courses out of 14#	Chemistry for non-Chem
4	Electronics and Communication Engineering	Physics, Mathematics	For the remaining single course select any courses out of 14#	Chemistry for non-Chem
5	Information Technology	Physics, Mathematics	For the remaining single course select any courses out of 14#	Chemistry for non-Chem

#Physics/ Mathematics / Chemistry/ Computer Science/Electronics/Information Technology/ Biology/Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/Business Studies/Entrepreneurship

5.2 B.TECH LATERAL ENTRY (AFTER DIPLOMA/B.Sc)

The candidates seeking admission through lateral entry to any Discipline of Technology should secure in aggregate the minimum of 50% marks for the General Category and 45% marks in the case of the SC/ST Category along with the criteria given below.

1. Passed Diploma examination from an AICTE approved institution; with at least 50% marks (45% in case of candidates belonging to reserved category) in appropriate branch of Engineering/ Technology.

2. Passed B.Sc. degree from a recognized University as defined by UGC, with at least 50% marks (45% in case of candidates belonging to reserved category) and passed XII standard with mathematics as a subject.

3. Provided that in case of students belonging to the B.Sc. stream shall clear the subjects of Engineering Graphics/ Engineering Drawing and Engineering Mechanics of the first-year engineering program along with the second-year subjects.

4. Provided further that, the students belonging to the B.Sc. stream shall be considered only after filling the supernumerary seats in this category with students belonging to the diploma stream.

5. Provided further that students, who have passed a Diploma in Engineering & Technology from a university-approved institution or B.Sc. degree from a recognized University defined by UGC, shall also be eligible for admission to the first year engineering degree courses subject to vacancies in the first year class in as the vacancies at lateral entry are exhausted. However, the admission shall be based strictly on the eligibility criteria as mentioned in 1, 2, 3 and 4 above.

5.3 M.Sc. for Department of Biotechnology

An applicant must have passed a three-year Degree Course with Honours/Major in Biotechnology/ Botany/Zoology/Chemistry/ any other allied disciplines with 50% marks and for General stream students with 55% in the concerned subject in which admissionis sought. 5% marks relaxation for reserved category will be considered. Eligible students for Major streams (internally or externally) will be given preference over the General stream.

5.4 MTech. for the Department of Agricultural Engineering & Technology

Master of Technology or MTech. in the specialization of Land & Water Resources Engineering, Farm Machinery & Power Engineering, and Food Process Engineering are 2 years graduate courses in Agricultural Engineering & Technology at Nagaland University.Nagaland University's general rules and regulations are applied for admission criteria. More specifically, admissions to MTech in the specialization of Land & Water Resources Eng, Farm Machinery & Power Eng, and Food Process Eng in Agricultural Engineering & Technology would be processed by the School's admission committee (with a minimum of 60 % marks)conducted at the department level (GATE or CUET qualified candidates may be directly shortlisted with the cut-off marks decided by admission committee)followed by a counselling procedure by the department. The company/government-sponsored candidates may be directly shortlisted and selected by an interview process set up by the admission committee of the school. The intake capacity for each specialization is 10 students per year. MTech. thesis will be evaluated by an external examiner and the final defence/presentation will be conducted in the presence (online/offline) of an external examiner.

5.5 MTech. for the Department of Information Technology

In the 2-year M. Tech in Information Technology Programme, students delve into advanced topics spanning IoT &Cloud Computing, Blockchain, Network Security, Information Processing, and Data Privacy. They gain insights into ongoing research endeavours and tackle open challenges within these domains, equipping themselves to embark on research pursuits in Information Technology. Nagaland University's general rules and regulations are applied for admission criteria. More specifically, admissions to MTech in Information Technology would be processed by the school's admission committee (with a minimum of 60 % marks) conducted at the department level (GATE or CUET qualified candidates may be directly shortlisted, with the cut-off marks decided by admission committee), followed by a counselling procedure by the department. The candidates sponsored by Companies or government organizations may be directly shortlisted and selected by an interview process set up by the school's admission committee.

5.6 PhD

As per the University Grants Commission (Minimum Standards and Procedures for Award of Ph.D. Degree, Regulations, 2022)

6. ALLOCATION OF SEATS

6.1 B.TECH FRESH ENTRY 10 + 2

The total number of seats in each discipline is 30. Seat allocation for each discipline for different states and other quotas is given below.

1. Nagaland   6
2. Arunachal Pradesh   1

3.	Meghalaya	1
4.	Mizoram	1
5.	Tripura	1
6.	Sikkim	1
7.	Assam	1
8.	Manipur	1
9.	Physically Challenged*	1
10.	University Quota	1
11.	Jammu & Kashmir	1
12.	All India Open Category	14

6.2 B. TECHLATERAL ENTRY

Diploma holders and BSc degree holders shall be eligible for admission to second year Engineering course(s) up to a maximum of 10% of the approved intake which shall be over above supernumerary to the "Approved intake" plus the unfilled vacancies of 1st year.

*   Unfilled seats will be added to the All India Open Category.

6.3M.Sc.

Sl. No.	Department	Vacancy
1	Biotechnology	10

6.4 M. Tech

Sl. No.	Department	Vacancy
1	Agricultural Engineering & Technology (for Food & Process Engineering specialization only)	10
2	Information Technology	10

6.5 Ph. D

Sl. No.	Department	Vacancy
1	Agricultural Engineering & Technology	*
2	Biotechnology	*
3	Information Technology	*

*Number of seats will be notified through the admission portal

7. SELECTION AND ADMISSION

SELECTION FOR ADMISSION INTO THE BTECH PROGRAM UNDER VARIOUS QUOTAS IS DONE AS MENTIONED BELOW:

7.1 B.Tech. (ALL INDIA OPEN CATEGORY)

- Aggregate compulsory subjects along with Physics, Chemistry, Mathematics, Biology for Biotechnology.
- Aggregate compulsory subjects along with Physics, Chemistry, and Mathematics for other departments.
- The merit list shall be prepared by considering 70% of 12th standard and 30% of the CUET / JEE main/advanced score for fresh entry.
- Selection will be based on marks obtained in the diploma examination for Lateral entry.

7.2 B.Tech. (UNIVERSITY QUOTA)

The University quota shall be taken care of as per rules.

7.3 B.Tech.(STATE QUOTA)

Selection for admission under the State quota is done by respective State Governments. On receipt of the list of nominated Candidates from the respective Government, admission formalities are completed by the school as per eligibility criteria.

7.4 B.Tech. (LATERAL ENTRY)

Selected for admission under lateral entry will be as per marks obtained in Diploma/B.Sc.

7.5 M.Sc.

SELECTION FOR ADMISSION INTO M.SC. PROGRAM IS DONE AS MENTIONED BELOW:

Selection will be based on their performance in Graduation

7.6. MTech.

SELECTION FOR ADMISSION INTO MTECH. FOR DEPARTMENT OF AGRICULTURAL ENGINEERING & TECHNOLOGY:

Nagaland University's general rules and regulations are applied for admission criteria. More specifically, admissions to MTech. in the specialization of Land & Water Resources Eng, Farm Machinery & Power Eng, and Food Process Eng in Agricultural Engineering & Technology would be processed by the school's admission committee followed by a counselling procedure by the department. The company/government-sponsored candidates may be directly shortlisted and selected by an interview process set up by the admission committee.

SELECTION FOR ADMISSION INTO MTECH. FOR DEPARTMENT INFORMATION TECHNOLOGY:

Nagaland University's general rules and regulations are applied for admission criteria. More specifically, admissions to MTech. in Information Technology would be processed by the school's admission committee followed by a counselling procedure by the department. The candidates sponsored by Companies or government organizations may be directly shortlisted and selected by an interview process set up by the school's admission committee.

7.7 Ph.D.

SELECTION FOR ADMISSION INTO PHD PROGRAM IS DONE AS MENTIONED BELOW:

1.An Entrance Test of 70 Marks shall be conducted by the Department. A candidate must obtain 50% marks in the entrance test to qualify for an interview.

2.A personal interview of 30 Marks shall be conducted for final Selection.

3.A student having UGC-NET (including JRF)/ UGC-CSIR NET (including JRF)/ICAR-NET/ GATE/ other relevant exams will be exempted from the entrance test and will be eligible for direct interview. The marks obtained in the personal interview will be extrapolated to 100 for preparing a merit list for such candidates.

7.8 FEES STRUCTURE

Fees to be paid at the time of admission/renewal of admission

FEES STRUCTURE TABLE

FOR B.TECH:

Sl. No.	FEES	PERIODICITY	AMOUNT (₹) (1st Semester)	AMOUNT (₹) (Subsequent Semester)
1	Admission fee	Once	1160/-	-
2	Registration fee	Once	440/-	-
3	Tuition fee	Every Semester	7700/-	7700/-
4	Laboratory fee (as applicable)	Every Semester	1160/-	1160/-
5	Library fee	Every Semester	360/-	360/-
6	Library caution Money (Refundable)	Once	550/-	-
7	Sports fee	Every Semester	70/-	70/-
8	Medical fee	Every Semester	130/-	130/-
9	Examination fee	Every Semester	900/-	900/-
10	Students' activity fee	Every Semester	360/-	360/-
11	Annual Magazine fee	Every Semester	130/-	130/-
12	Students' Aid fund	Once	240/-	-
13	Workshop/Seminar/Conference fee	Once	930/-	-
14	Industrial Interface& Technical Fest	Every Semester	550/-	550/-
15	Placement Activities	Once	1650/-	
16	Department Caution Money (Refundable)	Once	1740/-	-
17	University Development Fund	Once	110/-	-
	Sub Total		**18,180/-**	**11,360/-**
	FOR HOSTELLERS			
19	Hostel Admission	Once	220/-	
20	Hostel fee	Every Semester	3300/-	3300/-
21	Hostel Caution Money (Refundable)	Once	1740/-	-
	Sub Total		**5260/-**	**3300/-**

Note: The fees are revised occasionally as per university rules.

TRANSPORTATION CHARGES

TRANSPORTATION (THOSE AVAILING UNIVERSITY BUS FACILITY) - ₹660/- PER SEMESTER.

• Students who desire to withdraw his/her name from the roll of the University and claim any refund then the fees shall be dealt with as per the University /UGC/MHRD/AICTE/ICAR/NCTE guidelines.
• Hostel Fee does not include Mess Fee.
• The fee structures are subject to change from time to time.
• Fees should be deposited using Online State Bank I-Collect using Debit/Credit Card/Net-banking/SBI Power Jyoti.

The receipt can be generated from the same portal.

OTHERS		
1	Identity Card/Duplicate ID Card	Rs.150 per Card
2	Repeat of examination	Rs.300 per Paper
3	**Late fine** Beyond 7 days of starting of course (For 2nd Semester and Subsequent Semester)	Rs.100 per Day

FOR M.Sc.

Fees: Fee structure for M.Sc. Programmes will be as per the approved fee structure for other MSc courses offered by NU

Sl. No.	Particulars	1st Semester (₹)	Subsequent (₹)
1	Admission fee	1000	
2	Registration fee**	500	
3	Tuition fee	1400	1400
4	Laboratory fee	1400	1400
5	Library fee	450	450
6	Library Caution Money (Refundable)	600	-
7	Sport fee	200	200
8	Medical fee	150	150
9	Examination fee		
	a. Courses with practical*	1200	1200
	b. Courses without practical	900	900
10	Students' activity fee	250	250
11	Annual magazine fee	150	150
12	Students' aid fund	250	250
	Department Caution Money		
13	(Refundable)		-
	a. Courses with practical*	1000	
	b. Courses without practical	650	
14	University Development Fund	500	-
	TOTAL	**9050*/7000**	**5450*/3750**
	FOR HOSTELLERS		
15	Hostel admission	1000	-
16	Hostel fee	3000	3000
17	Hostel Caution Money (Refundable)	1800	-
	TOTAL	**5800**	**3000**
	OTHERS		
1	Identity Card/Duplicate ID Card	150 per card	
2	Repeat of Exams	450 per paper	
3	Late fine - Beyond 7 days of starting the course	110 per day	

*Students in Sciences etc, having Lab and Practical
**Only for migrated students from other University

For MTech:

Sl. No	Particulars	1st Semester	Subsequent
1.	AdmissionFee	2200	--
2.	Registration Fee	500	--
3.	TuitionFee	9000	9000
4.	LaboratoryFee	2500	2500
5.	Library fee	450	450
6.	LibraryCaution Deposit (Refundable)	600	--
7.	Sports Fee	200	200
8.	MedicalFee	150	150
9.	ExaminationFee	1200	1200
10.	StudentsActivityFee	250	250
11.	AnnualMagazineFee	150	150
12.	Students'AidFund	250	250
13.	DepartmentCaution Deposit (Refundable)	1580	
14.	UniversityDevelopmentfund	500	--
15.	Industrial Interface & Technical Fest	500	500
16.	Thesis/DissertationFee	2500	--
17.	Placement Activities Fee	1500	--
Total		**24030**	**14650**
ForHostelers			
18.	HostelAdmission	1000	--
18.	HostelFee	3000	3000
19.	HostelCautionMoney (Refundable)	1800	--
Total		**5800**	**3000**
OtherFees			
1.	IdentityCard/Duplicate ID Card	150percard	
2.	RepeatofExam	450per paper	
3.	LateFine–Beyond7daysof starting the course (For 2nd semesterandsubsequent semester)	110per day	

FOR Ph.D.:

Sl. No.	Particulars	1st Semester (₹)	Subsequent (₹)
1	Admission fee	2500	-
2	Registration fee	500	-
3	Tuition fee	3500	3500
4	Laboratory fee (as applicable)	3000	3000
5	Library fee	500	500
6	Library caution Money (Refundable)	1500	-
7	Sports fee	200	200
8	Medical fee	150	150
9	Examination fee	3500	-
10	Coursework fee		-
11	Dissertation/Thesis Evaluation fee	15000	-
12	Students' Aid fund	250	250
13	Department Caution Money (Refundable)	1800	-
14	University Development Fund	500	-
	Total:	**32,900*/29,900**	**7600*/4600**
15	Hostel admission	1000	-
16	Hostel fee	4200	4200
17	Hostel Caution Money (Refundable)	1800	-
	TOTAL	**7000**	**4200**

7.9 REGISTRATION IN VARIOUS STRUCTURE

SELECTION FOR ADMISSION INTO THE BTECH PROGRAM UNDER VARIOUS QUOTAS IS DONE

Candidate has to take admission by payment of prescribed fees immediately after selection. In case of failure to pay fees at the time of admission, the seat allotted to the candidate(s) will stand forfeited.

The physical presence of the candidates is mandatory for registration. Every student has to fill up prescribed course registration forms (3 copies).

7.10 EXAMINATION AND EVALUATION

The semester system with internal evaluation comprises continuous assessments, Mid-term exams, internal assessment and End - End-term theory& Practical Examinations. The performance of a student in a particular course is evaluated and expressed on a10 points grading scale which is converted to a letter grade as stated below:

MARKS OBTAINED	EQUIVALENT LETTER GRADE	CREDIT POINTS
91 to 100	O	10
81 to 90	A	9
71 to 80	B	8
61 to 70	C	7

51 to 60	D	6
45 to 50	E	5
Below 45	F	0

CGPA	CLASS
8.0 and above	First Class with Distinction
6.5 to 7.9	First Class
5.5 to 6.4	Second Class
5.0 to 5.4	Pass
Below 5.0	Failed

THE FINAL PERFORMANCE OF A STUDENT ON COMPLETION OF THE B. TECH. COURSE WILL DEPEND ON THE CUMULATIVE GRADE POINT AVERAGE (CGPA).

*TO BE ELIGIBLE FOR APPEARING IN THE END TERM EXAMINATION, 75% ATTENDANCE IS MANDATORY IN ALL COURSE.

8. ACADEMIC REGULATION

8.1 CHANGE OF BRANCH/ DISCIPLINE (only for B.Tech)

Normally, a student admitted to a particular branch/ discipline of the undergraduate programme shall continue studying in that discipline till completion.However, in special cases, the School may permit a student to change from one discipline of studies to another after the first two semesters.Such changes shall be permitted, by the provisions laid down hereinafter, from a B. Tech. programme in any discipline to a B. Tech programme in any other discipline.Only those students shall be eligible for consideration of a change of discipline after the second semester, who have completed all the common credits required in the first two semesters of their studies, in their first attempt.

Applications for a change of discipline must be made by intending eligible students in the prescribed form. The Academic Section shall call for applications at the beginning of the odd semester of each academic year and the completed forms must be submitted by the last date specified in the notification. Students may enlist up to three choices of discipline, in order of preference, to which they wish to change over. It shall not be permissible to alter the choice after the application has been submitted.

Change of discipline shall be made strictly in order of merit of the applicants. For this purpose, the student must have a CGPA of atleast 7.5 obtained at the end of the second semester. In case of a tie the JEE (MAIN), Score of the applicants shall be considered. In the absence of a JEE (MAINS) score, the department may devise its strategy to select the candidates. The applicants may be allowed a change in discipline, strictly in order of merit, subject to the limitation that the strength of a branch should not fall below the existing strength by more than ten percent and should not go above the sanctioned strength by more than ten percent.

All changes of discipline made in accordance with the above rules shall be effective from the third semester of the applications concerned. No change of discipline shall be permitted after this.Allchanges of discipline shall be final and binding on the applicants. No student shall be permitted, under any circumstances, to refuse the change of discipline offered.

8.2 ATTENDANCE OF STUDENTS

Attendance in all classes (lectures, tutorials, laboratories, practical, studio, workshops etc) must be at least 75 percent of the total classes. A student shall be debarred from appearing in the End-Term Examination if Her/His attendance falls below 75 percent and shall be awarded an F Grade in that course.

The Dean may, on the recommendation of the Advisor/ Course In-charge, condone any attendance up to 5 per cent in a course(s) in exceptional circumstances as given below (in a and b) and shall allow the student with an attendance of 75 per cent or more to appear at the end term examination. No

condonation under any circumstances shall be granted to those having below 75 per cent of attendance in a course(s).

a. Authorized absence under official directives

The Dean of the School, on the recommendation of the concerned Head/ In-charge, may permit a student to represent the University/ School in the inter-university or at the National level/ Regional level curricular and co-curricular activities. The period for which the student is deputed for the above shall be treated as leave. The Head/ In-charge of the Department, Academic cell/In-charge Student Welfare as well as the student concerned shall, however, ensure that Her/His attendance does not fall short of the minimum. The Dean shall notify the name(s) of such student (s) to the Head/ In-charge of the Department for conveying the information to the teacher(s)/Instructor(s) concerned for the record. The Head/ In-charge of the Department, Academic Cell, shall convey the same to the Advisor of the student(s).

b. Serious illness

If a student is unable to attend classes owing to serious illness, the student concerned/guardian shall submit an application along with a medical certificate from the University Medical Officer stating clearly the period for which the student was advised for treatment and rest along with a recommendation of the hostel warden within 3 days from the date of reporting to the Dean. Such application shall be addressed to the Dean, who may grant leave for the days of absence.

It shall be the responsibility of the student to inform the Warden of the hostel in which She/He is residing, and the concerned instructors regarding Her/His absence before availing the leave.

8.3 CONDUCT AND DISCIPLINE

Students shall conduct themselves within and outside the precincts of the School in a manner befitting the students of an institution of national importance. Ragging in any form is banned: acts of ragging shall be considered as gross indiscipline and shall be severely dealt with.The following acts of omission and/or commission shall constitute a gross violation of the code of conduct and are liable to invoke disciplinary measures by the Student Disciplinary Action Committee.

    a. Ragging
    b. Lack of courtesy and decorum; indecent behavior anywhere within or outside the campus.
    c. Wilful damage or stealthy removal of any property/belongings of the School/Hostel or of fellow students.
    d. Stealing, Gambling, Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs.
    e. Immoral activities.
    f. Mutilation or unauthorized possession of library books.
    g. Noisy and unseemly behavior, disturbing studies of fellow students.
    h. Hacking in computer systems (such as entering another person's area without prior permission, manipulation and/ or damage of computer hardware and software etc.)
    i. Use of University/School premises for any purposes other than that for which it meant without the permission of the authority concerned.
    j. Breach of the University rules and regulations.
    k. Any other cause/act which may lower the prestige of the University/School.
    l. Organizing meetings by students inside the campus or calling outsiders to organize meetings inside the hostel campus without permission.
    m. Violation of hostel discipline.
    n. Any other act of gross indiscipline.

Commensurate with the gravity of the offence, the punishment may be reprimand, fine, expulsion from the hostel, debarred from examination, rustication for a specified period or even outright expulsion from the school.

8.4 HOSTEL RULES AND REGULATIONS

These Rules apply to all the students who are staying in the hostel of the School of Engineering &Technology, Nagaland University.

ROOMS

a) **Admission and Allotment:** Students who seek admission to the hostel have to apply separately in the Hostel Registration/Admission Form which can be obtained from the administrative office. Room allocations shall be done during the Hostel admission.

b) **Room Changes**
   i) Room allotments are normally valid for the entire academic year.
   ii) Students must occupy only those rooms specifically allotted to them.
   (iii) Students must not shift/ move to another room without the permission of the warden. If a room change is desired; a written request may be given to the Warden with proper justification. Approval of room change is the sole discretion of the Warden.

c) **Taking care of own room**
   i) Hostel rooms are equipped with furniture and fittings of appliances. Students occupying the room shall sign for the receipt of items in the Register. Students shall be responsible for handing over the items in their original serviceable condition to hostel authorities while leaving the rooms on closure of the academic session.
   ii) No furniture must be removed from respective rooms. Removal of furniture or furnishings shall invite disciplinary action. All university furniture must be in the room and in proper condition when a student moves out of the room.
   (iii) Any damage to the hostel property shall be replaced by recovering the cost of repair from the individual concerned. If the damaged item is irreparable, the actual cost of the property shallbe realized by the individual concerned. In cases where responsibility for such acts cannotbe determined, a common fine shall be imposed on all the occupants of the room/ hostel.

d) **Repairing works:** The hostel warden shall assist the students with repairs in the respective rooms. The Wardenshould be informed if there is any repair to be carried out in written form through the prefect**.**

PERSONAL PROPERTY

a) Each student shall safeguard their belongings and shall be responsible for their personal property.
b) Wardens may ask the students to shift their belongings/ vacate the room for maintenance work/ during an emergency/ during vacation.
c) Use of equipment such as electric heaters, video systems, loudspeakers, etc. is strictly prohibited inside the hostel rooms. Any defaulters, if found, shall be levied a fine of Rs. 200.00/- (Rupees Two Hundred Only) for the first time offender and expulsion beyond that.

ENERGY CONSERVATION

Conservation of energy and resources is a major concern of the University.
a) Lights and fans must be switched off at all times when no one is in the room.
b) Electrical problems in the room should be reported immediately to the Warden.
c) Water taps must be turned off when they are not in use.

CLEANLINESS

a) Hostellers shall be responsible for the cleanliness of their respective room and the premises. Rooms must be kept clean and tidy for health and safety reasons.

b) Students are advised not to leave any items like paper, covers of toilet soap, sanitary napkins etc. in the bathrooms. Any form of waste should not be flushed down the toilet and should be disposed properly.

c) Students should participate in mass social work from time to time as per the instruction laid down by the prefect or warden as an initiative of Swachh Bharat. Hostellers not participating shall be levied a fine of Rs.100.00/- (Rupees One Hundred Only) per person.

GENERAL DISCIPLINE

a) Ragging is strictly prohibited and anyone found guilty shall be punished as per rules and regulations laid down by the Supreme Court of India.

b) Students are not allowed to stay in the hostel during class hours unless it is unavoidable due to illness or any other valid reason.

c) Students who wish to stay back in the hostel during semester break with proper justification should take prior permission from the warden.

d) If the student decides to leave the hostel they should inform the warden.

e) The hostellers are not permitted to stay out of the hostel beyond the closing time. A student requiring stay beyond the closing time must obtain proper authorization from the Hostel Warden.

f) Prefects along with assistant prefects of the respective hostels shall take attendance at 8:00 PM every day and submit the weekly attendance report to the warden every Monday.

g) Any Hostellers wishing to stay out for the night/ weekend should submit an application to the Warden for permission. For girls, consent of the Guardian/ Parents must be communicated to the concerned Warden. Such permission shall be given once a month for a maximum period of two nights only, preferably during weekends. No student shall leave the hostel without prior permission of the hostel warden.

h) Any Hosteller staying out of the Hostel without obtaining prior permission from the Warden shall be liable to disciplinary action and expulsion. The first offence of this nature, if supported by a satisfactory explanation verified by the Parent/ Local guardian, may be considered after imposing a fine of Rs 200.00/- (Rupees Two Hundred Only). However, a repetition of the same offence shall result in expulsion.

i) In case a student requires hospitalization, His/ her parents/ guardian must be informed. Parents/guardians are required to communicate to the concerned Warden in this regard.

j) Students shall inform the warden of any extension of leave through verbal or written communication.

k) Students should refrain from any activity that is likely to infringe on the privacy of others or interfere with their studies.

l) The Warden/ Institute/ Hostel authorities shall conduct surprise checks periodically and if anyone is found violating the above rules, disciplinary action shall be taken against the defaulter. The hostel rooms are subject to inspection by the Institute/ Hostel authorities to make sure that they are kept neat and tidy. Unauthorized items like liquor, drugs, lethal weapons etc., are prohibited within the hostel premises.

m) Students are prohibited from consuming alcoholic drinks, drugs, cigarettes, tobacco products or any other intoxicants inside the hostel and are strictly prohibited from entering the hostel after consuming such items. Consumption of prohibited items shall be liable for strict disciplinary action, including expulsion/rustication from the Hostel/ Institute.

n) No Parent/ Guardian/ Visitor of a student shall be allowed to stay in their room without permission from the warden. Visitors are allowed to visit students in their common rooms, except in the girl's hostel. No hosteller is allowed to permit any visitor of the opposite sex in their room. If any visitor of the opposite sex is found, they shall be expelled from the institution without any warning.

o) No party/ social gathering shall be allowed within the premises of the hostel unless prior permission is taken from the Warden/ Campus in charge.

p) Study hours shall be strictly maintained for the welfare of all the students in the hostel. Students shall not visit rooms of other students after 8:00 PM.

q) Students who are detained from the college are not entitled to stay in the hostel and hence shall not be granted Hostel admission. However, depending on the availability of seats, the warden may admit the detained students based on their performance after full payment of the hostel admission fee.

r) A detained scholar under special circumstances may be permitted to stay in the hostel for a maximum period of 1 month during examination time based on the availability of a seat. Permission shall be granted based on the recommendation from the department HOD and with the knowledge of the parents. Students can write an application for such a stay to the Warden. They have to pay the Mess Fee to the Mess in charge on the basis of the daily rate prevailing at the time of application. During the stay in the hostel, the student should strictly adhere to the rules and regulations of the hostel.

MESS RULES

a) The term of Prefect and assistant prefect shall be 1 year only.

b) The term for Mess manager and assistant mess manager shall be 3 months only.

c) The Prefect and Mess manager shall be entitled to 100% concession in mess fee for the extra responsibility they perform during their tenure.

d) Every hosteller shall join the hostel mess. Meals/ food should not be cooked in the individual room. The timing of the mess shall be
i) Morning: 7:00-8:30 A.M
ii) Evening: 5:00-7:00 P.M.

e) All hostellers must pay the mess fees before 10th of every month. Defaulters shall be charged a fine of Rs.50.00/-(Rupees Fifty Only) per day till 15th of the month. After the 15th day, it shall be Rs.100.00/- (Rupees One Hundred Only) per day. A habitual offender shall be expelled from the hostel after recovering the due amount.

f) An audit of the mess account should be carried out at the end of every month. The audit committee shall consist of Prefect (convener), mess manager (Secretary) and one representative from every batch of students, the warden shall be part of the committee from time to time. The batch representative shall be rotated every month. The audit report should be submitted to the warden every month.

g) If a student is on leave from the hostel for continuously more than 10 days he/ she can apply for a deduction in the mess fee. This rule shall apply only to those who take leave as per the procedure.

8.5 Policies for Placement Hiring

1. Each admitted student in the final year has to register to appear in placement by filling up the registration form (online: google form) provided by the placement cell. If any student is not registered, it will be considered that the student is not interested in placement and will not be allowed to sit in any placement drive. Registration part will be done towards the end of the 6th semester.

2. The placement cell will update (placement statistics/recruiters' details) on the placement page from time to time on the university website to make sure interested recruiters can easily approach the placement cell.

3. Eligibility criteria will vary from company to company. The placement cell will inform the students through email/notice regarding eligibility criteria. Each student has to check the email regarding the same actively.

4. The placement cell will select two PR (placement representatives) every year to communicate easily with students. These PRs must be registered candidates (as mentioned in s.no.1). Each

PR must have 60% through (10, 12/diploma, B.Tech.). Each PR is nominated by dept. I/C.If more than two candidates are interested in PR for any department, then the placement coordinator will select the two based on academic performance.

5. The placement cell will follow the placement.set@nagalanduniversity.ac.in email ID for any communication related to placement activities. Every year placement cell will form a Google group with the following pattern, for example, in 2025 passing out students btech2025@nagalanduniversity.ac.in Group email ID will not be helpful for only the placement cell, it will also be easy for dept. in-charges for communicating with passed-out students. In this regard, System Admin service may be utilized.

6. A student who has registered with the placement cell and is eligible for a particular company must appear in all such placement drives organized by the placement cell. If a student is absent in two placement drives, they will not be eligible to sit in any placement drive organized by the placement cell. For each absence, a student must submit the reason for absence in writing. Further, if a student has two consecutiveabsences, He/she will not be allowed to sit for the next two placement drive. If a student is already placed in any placement drive organized by the placement cell may opt not to appear. In addition to this, the final decision will be taken by the placement committee set up by the Dean.

7. During a placement drive, students must attend interviews with all companies they are shortlisted for.

8. If a student gets selected by some company/organization, they can also sit in another company's placement drive provided that the company provides more packages.In addition to this, the final decision will be taken by the placement committee set up by the Dean.

9. In cases where the student wishes to reject/accept an on-campus/off-campus placement offer, they must inform the placement cell in writing.

10. Students caught indulging in fraudulent actions, vulgarity, or malpractice of any kind shall be debarred from the entire process. Serious disciplinary actions by appropriate authorities will be taken against such students.

11. The students are advised to act professionally and responsibly in all presentations, tests, group discussions, etc., that they attend. Students are expected to dress appropriately for online/offline interviews, discussions, presentations, etc.

12. A regular student having foreign nationality, who wishes to sit for campus placements, must inform the company about their nationality. Their application is subject to acceptance by the company /organization. Moreover, the student and the company will do the process of getting a work permit and other formalities.

13. If a student is selected by any company, then the student may join or not join the company.

14. When students are sent off campus, the placement cell will decide the list of students either based on academic performance or test.

15. Arrangement of food/lodging will be provided for recruiters in the campus guest house.

9. DEPARTMENTS

9.1. DEPARTMENT OF AGRICULTURAL ENGINEERING AND TECHNOLOGY

Head of Department:**Prof. Prabhakar Sharma**
E-mail: **agrienggtech@nagalanduniversity.ac.in**

The Department of Agricultural Engineering and Technology at Nagaland University is dedicated to advancing agricultural practices through innovative engineering solutions. With a focus on sustainability and efficiency, we integrate technology to enhance crop production, soil and water conservation, and resource management. The interdisciplinary approach of the department fosters collaboration and addresses the evolving challenges facing modern agriculture. The department deals with the use of engineering tools and practices to solve the real-world problem of crop production, handling and processing problems for the food and fibre industry. "Everything else can wait but not Agriculture" With this famous motto, the department envisages solving the problem with the

application of scientific knowledge in diverse and multi-disciplinary activities for the overall development of the farming community and better livelihood. The department offers BTech, MTech, and PhDprogrammes.

The Agricultural Engineering Department of the school came into existence in 2008. The department follows four four-year degree courses as adopted by the school.

Vision and Mission
- **Vision**: To create the trained and skilled human resources well versed in engineering aspects of Farm Machinery and Power, Soil and Water, and Food processing to cater the needs of the rapidly growing food processing sector.
- **Mission**:
    - Disseminate appropriate agricultural technology to the farming community and industries.

- Impart training, research, entrepreneurship abilities and skills to have all-round development of the students.
- Take care of global needs of sustainable food production through engineering interventions of farm mechanization and natural resource management.

Thrust Area of Research:
1. **Soil and Water Engineering,**
2. **Farm Power and Machinery Engineering**
3. **Processing and Food Engineering**
4. **Other interdisciplinary field.**

Objectives:
- To provide scientific knowledge to increase agricultural production and productivity through better management of land and water resources
- To encourage the design and use of appropriate and more efficient agricultural machinery,
- To provide better techniques of post-harvest technology
- To design improved methods of processing and preservation of foods.

Laboratories of Agricultural Engineering and Technology
- Agricultural Engineering Computing Lab
- Land and Water Engineering and Management Lab
- Water quality Lab
- Farm Power and Machinery Engineering Lab
- Processing and Food Engineering Lab
- Engineering Workshop Lab (Common for all the branches)

POSITION OF TEACHING FACULTY

Sl.No.	Name of the Faculty	Qualification	Designation	Subject Specialization/ Thrust Area of Research	Contact No. & email ID
1	Prabhakar Sharma	PhD	Professor	Soil & Water Engineering, Aquifer Characterization, Artificial Storage & Recovery, Contaminant Transport, Biochar Application, Microplastic Pollution	9341330340 prabhakar@nagalanduniversity.ac.in
2	Pramod Chandra Dihingia	PhD	Assistant Professor	Farm Machinery, and Power Engineering	6026853133 pramod@nagalanduniversity.ac.in
3	Wungshim Zimik	M.Tech, Ph.D. (pursuing)	Assistant Professor	Processing and Food Engineering	9774458568 wungshim@nagalanduniversity.ac.in
4	Ningthoujam Manda Devi	PhD	Assistant	Processing and Food	9898347749 mandaningthoujam@nagalandun

			Professor	Engineering	iversity.ac.in
5	Grace Singson	PhD	Guest Faculty	Soil & Water Engineering	98628 49819 grace.zamie@gmail.com
6	Liza Kiba	PhD	Guest Faculty	Soil & Water Engineering	9612759043 Lizakiba90@gmail.com

9.2. DEPARTMENT OF BIOTECHNOLOGY

Head of Department:Prof. Pranav Kumar Prabhakar
E-mail: **biotech@nagalanduniversity.ac.in**

The Department is presently offering B.Tech. Biotechnology course, a four years degree programme under which the students will. be taught on broad range of subjects related to Genetics, Microbiology, Molecular Biology, Bioenergetics, Tissue culture, Recombinant DNA Technology, Bioinformatics, Chemical engineering and Bioprocess engineering etc. The Department already has a Biotechnology lab which is equipped with modern biotechnological tools like PCR Thermal Cycle, Horizontal Electrophoresis Systems, Vertical Slab Gel Systems (Mini model), Vertical Slab Gel Systems (Slab Gel Regular Model), Transilluminator, Horizontal air flow cabinet, cold centrifuge, Distillation unit, Milipore water system, UV-visible spectrophotometer, Malvern zetasizer S90, etc. The Department has completed three projects sponsored by Department of Biotechnology, Government of India. The department also offer Ph.D and M.Sc programme.

Vision and Mission

- **Vision:** To prepare students with robust biotechnology concepts who can excel as Leaders in the fields of research, entrepreneurship, industry, management, and evolve as a pioneer to tackle biological issues.
- **Mission:**We aim to foster interdisciplinary collaboration, promote sustainable development, and contribute to the well-being of society through impactful teaching and transformative research.

Thrust Area of Research:
1. **Microbiology.**
2. **Biopharmaceuticals and drug delivery.**
3. **Molecular and cell biology.**
4. **Phytochemical Screening.**

Objectives:

- To develop a strong foundation in basic sciences, engineering principles, and both fundamental and advanced biological sciences.
- To apply biotechnological tools and techniques to analyse and solve complex problems in agriculture, environmental sustainability, and human health.
- To identify and investigate relevant research issues through comprehensive literature reviews, formulate research proposals, and apply integrated approaches to analyse complex biological problems, considering public health, societal needs, and environmental impacts.
- To cultivate the ability to work effectively both independently and collaboratively in multidisciplinary teams, demonstrating leadership, communication, and problem-solving skills to achieve productive and innovative outcomes.

Laboratory

- Watson Molecular Biology Lab
- JC Bose Plant Tissue Culture Lab
- Dayhoff Bioinformatics Lab
- Pasteur Microbiology Lab
- Mendel Genetics Lab
- Biochemical Engineering Lab (Under construction)

POSITION OF TEACHING FACULTY

Sl.No.	Name of the Faculty	Qualification	Designation	Subject Specialization/ Thrust Area of Research	Contact No. & email ID
1	Dr. Pranav Kumar Prabhakar	M.Sc. &Ph.D	Professor	Molecular biology, Metabolic & Clinical Bio Chemistry and Cellular Signalling	7696527883 pranav@nagalanduniversity.ac.in
2	Dr. Imlitoshi Jamir	M.Sc. &Ph.D	Associate Professor	Genetics and Cell biology	8464987538/imlitoshi@nagalanduniversity.ac.in
3	Dr. Rajkrishna Mondal	M. Tech &Ph.D, Post Doc	Associate Professor	Molecular Microbiology, Protein Sequence-Structure-function relationship, Bioinformatics	9402992654/rajkrishna@nagalanduniversity.ac.in

4	Dr. Hanumant Singh Rathore	M. Tech &Ph.D	Associate Professor	Tissue engineering and Drug delivery system	9402992640 hanumantsrathore @nagalanduniversity.ac.in
5	Mr. Thrilongse	M. Tech	Guest Faculty	Animal Biotechnology	9817342903 alongjingz333@gmail.com
6	Limasunep	M.Sc&Ph.D	Guest Faculty	Plant Biotechnology	8119006141 limasuneplkr@gmail.com

9.3. DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Department Incharge:**Mr. Akangjungshi Longkumer**

E-mail: **cse@nagalanduniversity.ac.in**

The Department of Computer Science & Engineering at the School of Engineering & Technology, Nagaland University, is dedicated to nurturing students through a balanced approach to both theoretical foundations and practical applications of computer science. The Department places strong emphasis on cultivating problem-solving skills and critical thinking abilities, ensuring that students are well-prepared to meet the demands of the industry and excel in diverse professional environments.

To support and enhance learning, the Department provides access to recorded video lectures by eminent professors from across the country. These lectures are part of the NPTEL (National Programme on Technology Enhanced Learning) initiative—a collaborative project by the seven Indian Institutes of Technology (IITs) and the Indian Institute of Science (IISc). NPTEL serves as an invaluable supplementary resources for students and also aids faculty in delivering high-quality education.

In addition, students are encouraged to enroll in SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) courses, which further enrich their academic experience and expose them to a wide array of contemporary topics and skills in the field of computer science.

The Department remains committed to academic excellence and holistic development, empowering students to become competent professionals and innovators in the ever-evolving tech landscape.

Vision and Mission

- **Vision:** To emerge as a premier center for excellence in computer science education, research, and innovation. The Department envisions expanding its academic horizon by introducing postgraduate (M.Tech) and doctoral (Ph.D.) programs and enhancing research infrastructure with dedicated laboratories in Artificial Intelligence, Internet of Things (IoT), Computer Vision, High-Performance Computing, and other emerging domains. Through a commitment to cutting-edge knowledge, practical training, and interdisciplinary research, the Department aspires to nurture competent professionals and future leaders capable of addressing global technological challenges.
- **Mission:** The mission of the Department of Computer Science & Engineering is to provide high-quality education and training in computer science, fostering innovation, critical thinking, and problem-solving skills. The Department is dedicated to preparing students for successful careers in industry, research, and academia by equipping them with a strong foundation in computing principles, practical experience, and a commitment to lifelong learning and ethical practices in the rapidly evolving field of technology.

Thrust Areas:
1. **Computer System (Operating System, Distributed System and Database Management System)**
2. **Software Engineering and Software Testing**
3. **Applicable & System software**
4. **Wireless Technology**
5. **Networking and Security**
6. **Data Structure, Algorithms and Programming**
7. **Internet and Web technology**
8. **Computer Architecture and Organization**
9. **Artificial Intelligence and Machine Learning**
10. **Internet of Things**
11. **Edge Computing**

Objectives
- To provide a strong foundation in the principles and practices of computer science and engineering.
- To develop analytical and problem-solving skills essential for designing, implementing, and evaluating computing systems.
- To promote practical learning through laboratories, projects, and industry-relevant training.
- To encourage research and innovation in emerging areas of computer science and technology.
- To foster ethical values, leadership, and teamwork in both academic and professional settings.
- To prepare students for successful careers in industry, entrepreneurship, academia, and research.
- To support continuous learning and professional development through modern educational tools and online platforms like NPTEL and SWAYAM.
- To collaborate with industry and academic institutions for knowledge exchange and skill enhancement.
- To contribute to societal development by applying computing solutions to real-world problems.

Laboratories of Computer Science & Engineering
- Basic Programming Lab
- Database Management Lab
- Algorithm and Graphics Lab

- Advanced Research Lab

POSITION OF TEACHING FACULTY

Sl.No.	Name of the Faculty	Qualification	Designation	Subject Specialization/Thrust Area of Research	Contact No. & email ID
1	Akangjungshi Longkumer	M. Tech PhD -Pursuing at NITN	Assistant Professor	Networking, Image processing, Machine Learning and Algorithms	7005137685 akangjungshi@nagaland university.in
2	ChenlepYakha Konyak	M. Tech MA (Soc.) PhD (CSE - Pursuing at NITNagaland)	Assistant Professor	Image Processing, IOT, NLP, Computer Vision and Online Social Network.	8731895353 chenlep@nagalanduniversity.in
3	Ramesh Singh	PhD -Pursuing at IIIT Guwahati	Assistant Professor	IOT, Edge Computing & Systems, Algorithm and parallel programming	9863199788 ramesh@nagaland university.ac.in
4	Aosungkum	M. Tech	Guest Faculty	Database management systems, theory of automata	8794479678 lkrsungkum@gmail.com
5	Imlitoshi Jamir	M. Tech	Guest Faculty	Database Systems, Programming Languages, Security Systems, Networking	8414846555 imlitoshi.jamir87@gmail.com
6	Angelin J. Robin	M. Tech	Guest Faculty	Fuzzy Logic, Neural network, Artificial Intelligence, Programming languages	9446178824 jolly.jr@gmail.com

9.4. DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Department In-charge: **Mrs. BendangchilaLongkumer**
E-mail: **ec@nagalanduniversity.ac.in**

Electronics & Communication Engineering is about electronic components, integrated circuits, and microprocessors and consists of designing, fabrication, testing, maintaining and supervising the

manufacture of electronic equipment. The Department of Electronics and Communication Engineering focuses on imparting education and training at the Undergraduatelevel with special emphasis on design aspects of electronic systems. The training imparted to the students would be such that it will make them competent enough to be the fountainhead of new ideas and innovations in Science and Technology and who shall contribute to its growth in partnership with industries and develop and harness it for the welfare of the Nagas and the nation.

Vision and Mission

- **Vision:**To bring about a cultural revolution through digital technology and demonstrate the spirit of sharing, and caring by people who will create, collaborate and make Nagaland a better knowledgeable State.
- **Mission:**
    - To excel in education and research in Electronics & Communication Engineering.
    - To educate the students with the state of art technologies to meet the growing challenges of the industry
    - To carry out research through constant interaction with research organizations and industry.
    - To equip the students with strong foundations to enable them for continuing education

Thrust Area of Research

1. **Integrated electronics and circuits**
2. **Tele-communication**
3. **Computer technology**
4. **Power electronics**
5. **GPS systems**
6. **Communication Systems**
7. **Antennas**
8. **Satellite transponders**
9. **Signal processing-based biomedical instruments**
10. **VLSI chips**

Objectives
- Deliver **Core Knowledge:** Provide a strong foundation in electronic systems, circuits, microprocessors, and communication technologies.
- Promote **Practical Expertise:** Emphasize hands-on training in designing, testing, and maintaining electronic and communication systems.
- Foster **Innovation:** Encourage creativity and innovation to develop solutions that address technological and societal challenges.

- Strengthen **Industry Relevance:** Build industry-oriented skills and exposure through collaboration and real-world application.
- **Serve Society and Nation:** Inspire students to contribute to the development of Nagaland and the nation through ethical, impactful engineering practices.

Laboratories of Electronics & Communication Engineering

- Basic and Advanced Electronics Lab
- Simulation lab

POSITION OF TEACHING FACULTY

Sl.No.	Name of the Faculty	Qualification	Designation	Subject Specialization/Thrust Area of Research	Contact No. & email ID
1	Mrs. BendangchilaLongkumer	M.Tech	Assistant Professor	Microelectronics	9774066061 bendangchila@nagalanduniversity.a.c.in
2	Mrs. Ayangla Jamir	M.Tech	Assistant Professor	Communication Systems	8119020134 ayanglajamir@nagalanduniversity.ac.in
3	Mrs. Imesangla Ao	M.Tech	Assistant Professor	Digital Electronics & Communication	9615826725 imessangla@nagalanduniversity.ac.in
4	Mr.Thungchanthungovung	M.Tech	Guest Faculty	VLSISystems	ovungs12345@gmail.com
5	Ms. Catherine Kent	M.Tech	Guest Faculty	Communication Engineering	catherinekent97@gmail.com
6	Ms.Arisenla Jamir	M.Tech	Guest Faculty	VLSISystems	arisenla1117@gmail.com

9.5. DEPARTMENT OF INFORMATION TECHNOLOGY

Head of Department : **Prof. Sujata Dash**
E-mail: **it@nagalanduniversity.ac.in**

The **Department of Information Technology**, under the **School of Engineering and Technology, Nagaland University**, is a centre of academic excellence and technological innovation. With a mission to empower students through quality education and research, the department offers a comprehensive curriculum designed to bridge the gap between theoretical knowledge and practical application. Core areas of focus include Artificial Intelligence, Machine Learning, Deep Learning, Data Analytics, Cybersecurity, Cloud Computing, and Software Engineering. The department boasts well-equipped laboratories, experienced faculty members, and a collaborative learning environment that encourages creativity and problem-solving. Through academic-industry linkages, student development programs, and interdisciplinary research, the department aims to produce skilled IT professionals who are capable of addressing real-world challenges and contributing to regional and national development in the digital era. The department offers BTech, MTech and PhD programmes.

Vision and Mission

- **Vision**: To emerge as a leading academic and research centre in Information Technology, contributing to the socio-economic and digital development of the region and the nation.
- **Mission**:
    - To impart holistic and industry-relevant education in Information Technology.
    - To promote interdisciplinary research and innovation.
    - To develop competent professionals equipped with ethical values and global perspectives.

Thrust Areas of Research
1. Artificial Intelligence & Machine Learning
- Deep Learning Architectures (CNNs, RNNs, Transformers)
- Reinforcement Learning and Generative Models (e.g., GANs, Diffusion Models)
- Explainable AI (XAI) and Ethical AI
- AI for Decision Support in Healthcare, Finance, and Cybersecurity
2. Data Science & Big Data Analytics
- Large-scale data mining and pattern recognition
- Predictive analytics and real-time data processing
- Data visualization and storytelling
- Edge and Fog analytics
3. Bioinformatics and Health Informatics
- Computational genomics and proteomics
- AI in medical diagnosis and personalized medicine
- Smart healthcare systems and wearable technologies

- EHR (Electronic Health Record) analytics and interoperability

4. Natural Language Processing (NLP)
- Multilingual and low-resource NLP
- Large Language Models (LLMs) and prompt engineering
- Sentiment and emotion analysis
- NLP in legal, medical, and social domains

5. Internet of Things (IoT) and Cyber-Physical Systems
- Smart cities, homes, and industries
- Sensor networks and real-time monitoring
- Energy-efficient and resilient IoT infrastructures
- 5G/6G integration with IoT

6. Cloud, Edge, and Quantum Computing
- Serverless and scalable architectures
- Edge computing for latency-sensitive applications
- Cloud-native applications and orchestration (e.g., Kubernetes)
- Quantum algorithms and hybrid quantum-classical systems

7. Cybersecurity and Privacy
- Cryptography and secure communications
- Privacy-preserving computation (e.g., homomorphic encryption, federated learning)
- Threat detection using AI
- Blockchain for cybersecurity

Objectives
- To foster innovative thinking among the students in the field of IT
- To orient students with the skills required in the IT industry
- To motivate students in the field of research
- To equip the students with cutting-edge IT Technologies

Laboratories of Information Technology
- Basic Programming Lab
- Database Management Lab
- Algorithm and Graphics Lab
- Advanced Research Lab

POSITION OF TEACHING FACULTY

Sl. No.	Name of the Faculty	Qualification	Designation	Subject Specialization/Thrust Area of Research	Contact No. & email ID
1.	Dr. Sujata Dash	PhD	Professor	Healthcare, Machine Learning, Deep Learning, Image Processing, NLP, Bioinformatics	8599001215 sujata@nagalanduniversity.ac.in
2	Dr. HeisnamRohen Singh	Ph.D	Assistant Professor	Data Mining, Data Science, Machine Learning	9085068097 rohenheisnam@nagalanduniversity.ac.in
3.	Mr. Teisovi Angami	Ph.D (Pursuing)	Assistant Professor	Natural Language Processing	9856053315 teisovi@nagalanduniversity.ac.in
4.	Mr. Sourav Hazarika	Ph.D (Pursuing)	Assistant Professor	Internet of Things	8837303893 souravhazarika@nagalanduniversity.ac.in
5	Mr.	Ph.D(Purs	Assistant	Image Processing	9641874407

	SudiptaPatow ary	uing)	Professor		sudipta@nagalanduniversit y.ac.in
6	Mr. ShanchamoY anthan	Ph.D (Pursuing)	Assistant Professor	Web Services Security	7005914202 syanthan@nagalandunivers ity.ac.in

9.6 BASIC SCIENCE & HUMANITIES
In-charge: **Dr. H. Rohen Singh**
E-mail: **cp_set@nagalanduniversity.ac.in**

The School of Engineering & Technology has Basic Science & Humanity section which teaches the common Engineering courses like Engineering Mathematics, Physics, Chemistry, Basic Electronics, Basic Electricals, Engineering Mechanics etc. The Common Pool section has a computer lab with a capacity of 30 computers to conduct practical courses for the First Year students. The Central Workshop offers practical courses like welding, fitting, carpentry, sheet metal etc. in the First Year Engineering as well as for other semesters in the Agricultural Engineering & Technology Department.

LABORATORY:

- Physics Lab
- Chemistry Lab
- Engineering Drawing Lab
- Workshop
- Computer Lab for programming and Internet

POSITION OF TEACHING FACULTY

Sl.N o.	Name of the Faculty	Qualificatio n	Designatio n	Subject Specialization/Thr ust Area of Research	Contact No. & email ID
1	Mr. MaongtemsuPo ngener	M. Tech	Guest Faculty	Mechanical Engineering	kineklili@gmail.com
2	Dr. PelesakuoKehe i	Ph. D, NET	Guest Faculty	Chemistry	asakuokehie4u@gmail.com
3	Mr. Shokom	M Sc	Guest	Physics	athromshokomsalym@gmail.c

	Salim		Faculty		om
4	Mr. KevisevolThore	M Sc	Guest Faculty	Mathematics	kevmst13@gmail.com
5	Dr. Sanjay Sarkar	Ph.D	Guest Faculty	Applied Mathematics	asanjaysarkar@gmail.com
6	Mr. MedozhautuoKense	M. Tech	Guest Faculty	Power System Engineering	ajaboukense@gmail.com
7	Dr. ImlirenlaLongkumer	Ph.D	Guest Faculty	English	liimrenlkr@gmail.com
8	Mr. Imsumanen S Jamir	MPES	Guest Faculty	Physical Education	msujamir@gmail.com

10. COURSE STRUCTURE FOR B.TECH. PROGRAM

10.1. B.TECH. FIRST YEAR (COMMON TO ALL DISCIPLINE)

FIRST YEAR

Semester 1 (Common to all the Branches)

CourseNo./Code	TitleofCourse	Credit(s)
THEORY		
BSH101	Physics	3
BSH102	Mathematics -I	4
BSH103	Basic Electrical Engineering	3
BSH104	Engineering Graphics and design	1
BSH105	Technical English	2
BSH106	Environmental Science	3
BSH107	IDEA lab Workshop	0
Total Credits (Theory)		**16**
PRACTICAL		
BSH111	Physics Lab	1
BSH112	Engineering Graphics and design lab	2
BSH113	Design Thinking	1
BSH114	Technical English Lab	1
BSH115	IDEA lab Workshop	0
Total Credits(Practical)		**5**
Total Credits		**21**

Semester 2 (Common to all the Branches)

CourseNo./Code	TitleofCourse	Credit(s)
THEORY		
BSH201	Chemistry	3
BSH202	Mathematics-II	4
BSH203	Programming for Problem solving	3
BSH204	Basic Electronics	3
BSH205	Manufacturing Practices	1
BSH206	Sports and Yoga	0
BSH207	Universal Human values-II: Understanding Harmony and Ethical Human Conduct	3

Total Credits (Theory)		**17**
PRACTICAL		
BSH211	Chemistry Lab	1
BSH212	Programming for Problem solving lab	2
BSH213	Basic Electronics Lab	1
BSH214	Manufacturing Practices Lab	2
Total Credits (Practical)		**6**
Total Credits		**23**

10.2 AGRICULTURAL ENGINEERING AND TECHNOLOGY (THIRD SEMESTER ONWARDS]

SECOND YEAR

3rd Semester		
Theory		
Subject Code	Course Name	Credits
MAT3T1	Mathematics - III	3
AE3T01	Strength of Material	3
AE3T02	Soil Mechanics	3
AE3T03	Farm Power	3
AE3T04	Electrical Machine & Power utilization	2
AE3T05	Engineering properties of Biological Material & Food Quality	2
AE3T06	Machine drawings & Computer graphics	2
		18
Practical		
AE3L01	Soil Mechanics Lab	1
AE3L02	Farm Power Lab	1
AE3L03	Engineering Properties of Biological Material & Food Quality Lab	1
AE3L04	Machine drawing & Computer graphics lab	1
		4
		22
Semester 4th		
Theory		
Subject Code	Course Name	Credits
AE4T01	Surveying and Leveling	2
AE4T02	Theory of Machines	3
AE4T03	Design of structures	2

AE4T04	Watershed hydrology		3
AE4T05	Fluid Mechanics		3
AE4T06	Crop Process Engineering		3
AE4T07	Engineering Thermodynamics and Heat Engine		2
			18
Practical			
AE4L01	Watershed Hydrology Lab		1
AE4L02	Crop Process Engineering Lab		1
AE4L03	Surveying and Leveling Lab		1
			3
			21

5th Semester

Theory

Subject Code	Course Name	Credits
AE5T01	Workshop Technology	2
AE5T02	Machine Design	2
AE5T03	Heat & Mass Transfer	2
AE5T04	Farm Machinery & Equipment	3
AE5T05	Ground Water, Wells & Pumps	2
AE5T06	Drying & Storage Engineering	3
AE5T07	Soil & Water Conservation Eng.	3
	Total	17

Practical

Subject Code	Course Name	Credits
AE5L01	Farm Machinery & Equipment Lab	1
AE5L02	Ground Water, Wells & Pumps Lab	1
AE5L03	Drying & Storage engineering Lab	1
AE5L04	Soil & Water Conservation Eng. Lab	1
		4
	Total	21

6th Semester

Theory

Subject Code	Course Name	Credits

AE6T01	Agriculture for Engineers	3
AE6T02	Refrigeration & Air conditioning	3
AE6T03	Transfer Process in Food Engineering	3
AE6T04	Tractor systems & controls	2
AE6T06	Irrigation and Drainage Engineering -I	2
AE6EL	Elective-I	3
		16
Practical		
AE6L01	Tractors Systems & Controls Lab	1
AE6L02	Irrigation and Drainage Engineering I Lab	1
		2
		18
	6th Semester Elective courses* (Any 1 course to be opted)	
AE6EL01*	Agribusiness Management and Trade	3
AE6EL02*	Entrepreneurship Development and Communication Skills	3
AE6EL03*	Design and Maintenance of Greenhouse	3
AE6EL04*	Soil & Water Conservation Structure	3
AE6EL05*	Environmental Pollution	3

7th Semester

Theory

Subject Code	Course Name	Credits
AE7T01	Irrigation and Drainage Engineering -II	2
AE7T02	Mechanics of Tillage & Traction	2
AE7T03	Unit Operation in Dairy and Food Engineering	2
AE7T04	Statistical Hydrology	2
AE7T05	Industrial Training	2
AE7T06	Project - I	4
AE7EL	Elective-II	3
		17
Practical		
AE7L01	Mechanics of Tillage & Traction Lab	1
AE7L02	Unit Operation in Dairy and Food Eng. Lab	1
		2
		19
	7th Semester Elective courses# (Any 1 course to be opted)	
AE7EL01#	Remote Sensing & GIS Application	3
AE7EL02#	Tea Technology	3

AE7EL03#	Development of Processed Products & Equipment		3
AE7EL04#	Waste and By-product Utilization		3
AE7EL05#	Food Processing Plant Design & Layout		3
AE7EL06#	Contaminant Hydrology		3
8th Semester			
Theory			
Subject Code	Course Name		Credits
AE8T01	Tractor Design & Testing		2
AE8T02	Food Process and Packaging Technology		3
AE8T03	Watershed Planning & Management		2
AE8T04	Project - II		4
AE8EL	Elective – III		3
G8T01	Indian Constitution		NC
			14
Practical			
AE8L01	Tractor Design & Testing Lab		1
AE8L02	Food Process & Packaging Technology Lab		1
AE8L03	Seminar		1
			3
			17
	8th Semester Elective courses$ (Any 1 course to be opted)		
AE8EL01$	Human Engineering & Safety		3
AE8EL02$	Biomass Management for Fodder and Energy		3
AE8EL03$	Production Technology of Agricultural Machines		3
AE8EL04$	Renewable Energy Source		3
AE8EL05$	Organic Farming for Sustainable Agricultural Production		3

10.3 BIOTECHNOLOGY (THIRD SEMESTER ONWARDS)

SL/No	Subject Code	CourseName	Credits
1	BTB301	Biostatistics	3
2	BTB302	Biochemistry	3
3	BTB303	Microbiology	3

4	BTB304	Thermodynamics and Kinetics	3
5	CSB302	Data Structures & algorithm	3
6	BTB305	EngineeringEconomics	2

Practical			
1	BTB311	BiochemistryLab	2
2	BTB312	MicrobiologyLab	2
3	CSB312	Data Structures &algorithmLab	1.5

4thSemester

Theory

SL/No	Subject Code	CourseName	Credits
1	BTB401	Cellular Metabolism And MetabolicEngineering	3
2	BTB402	PlantBiotechnology	3
3	BTB403	Cell&MolecularBiology	3
4	BTB404	Genetics	3
5	BTB405	GreenBiotechnologyand PollutionAbatement	3
6	BTB406	StructuralBiology	3

Practical			
1	BTB411	Molecular Biology Lab	2
2	BTB412	Plant Biotechnology Lab	2

5thSemester

SL/No	Subject Code	CourseName	Credits
1	BTB501	Bioinformatics& ComputationalBiology	3
2	BTB502	EnzymeTechnology	3
3	BTB503	Immunology& Immunotechnology	3
4	BTB504	PROFESSIONAL ELECTIVECOURSE[PE]-I	3

5	BTB505	OPENSUBJECT-I	3
6	BTB505	Entrepreneurshipand Startups	2

Practical			
1	BTB511	Bioinformatics& ComputationalBiologyLab	2
2	BTB512	Immunology & ImmunotechnologyLab	1.5
3	BTB513	Training	2

6thSemester

Theory

SL/No	Subject Code	CourseName	Credits
1	BTB601	Recombinant DNA Technology andApplications	3
2	BTB602	Bioseparation Engineering	3
3	BTB603	Synthetic &SystemsBiology	3
4	BTB604	AnimalBiotechnology	3
5	BTB605	PROFESSIONAL ELECTIVECOURSE[PE]-II	3
6	BTB606	OPENSUBJECT-II	3

Practical			
1	BTB611	Bioseparation EngineeringLab	2
2	BTB612	Recombinant DNA TechnologyLab	2

7thSemester

Theory

SL/No	Subject Code	CourseName	Credits
1	BTB701	Intellectual PropertyRights(IPR)& Regulatory	3
2	BTB702	BioprocessEngineering	3

3	BTB703	PROFESSIONAL ELECTIVECOURSE[PE]-III	3
4	BTB704	OPEN SUBJECT-III	3
5	BTB705	AnalyticalTechniques	3

Practical

1	BTB711	BioprocessEngineering Lab	2
2	BTB712	Project-I	2
3	BTB713	Colloquium	1

8thSemester

Theory

SL/ No	Subject Code	CourseName	Credits
1	BTB801	ConstitutionofIndia*	0
	BTB802	PROFESSIONALELECTIVE COURSE[PE]-IV	3
	BTB803	OPENSUBJECT-IV	3

Practical

1	BTB811	Project-II(BiotechIndustrialorBiotechIn-houseProjector Bio-Entrepreneurship)	9

10.4 COMPUTER SCIENCE & ENGINEERING (THIRD SEMESTER ONWARDS)

3rd Semester			
S.N.	**Course Code**	**Course Name**	**Total Credits**
THEORY			
1	CSB301	Object Oriented Programming	3
2	CSB302	Data Structures & Algorithm	3
3	CSB303	Computer Graphics & Virtual Reality	3
4	MAT3T2	Differential Calculus	4
5	EC3T03	Digital Electronics & Logic Design	3
PRACTICAL			

1	CSB311	Object Oriented Programming Lab	1.5
2	CSB312	Data Structures & Algorithm Lab	1.5
3	EC3L02	Digital Electronics & Logic Design Lab	1.5
Total Credits			**20.5**

4th Semester

S.N.	Course Code	Course Name	Total Credits
THEORY			
1	CSB401	Design & Analysis of Algorithms	3
2	CSB402	Web & Internet	3
3	CSB403	Formal Language & Automata Theory Automata Theory	3
4	CSB404	Computer Organization & Architecture	4
5	MAT4T2	Discrete Mathematics	4
PRACTICAL			
1	CSB411	Design & Analysis of Algorithms Lab	1.5
2	CSB412	Web & Internet Lab	1.5
3	CSB413	Computer Organization & Architecture Lab	1
Total Credits			**21**

5th Semester			
S.N.	Course Code	Course Name	Total Credits
THEORY			
1	CSB501	Graph Theory	3
2	CSB502	Operating System	3
3	CSB503	Database Management Systems	3
4	CSB504	Software Engineering	3
5	MAT5T1	Numerical Analysis & Probability	4
PRACTICAL			
1	CSB511	Software Engineering Lab	1.5
2	CSB512	Operating System Lab	1.5
3	CSB513	Database Management Systems Lab	1.5
Total Credits			**20.5**

6th Semester			
S.N.	Course Code	Course Name	Total Credits

1	CSB601	Compiler Design	4
2	CSB602	Computer Networks	3
3	CSB62X	Elective-I	3
4	CSB62X	Elective-II	3
5	HSB601	Project Management & Entrepreneurship	2
PRACTICAL			
1	CSB611	Computer Networks Lab	1.5
2	CSB612	Compiler Design Lab	1.5
3	CSB613	Application Programming Lab	2.5
Total Credits			**20.5**

7th Semester			
S.N.	**Course Code**	**Course Name**	**Total Credits**
THEORY			
1	CSB701	Distributed System	3
2	CSB702	Machine Learning	3
3	CSB72X	Elective-III	3
4	CSB72X	Elective-IV	3
PRACTICAL			
1	CSB711	Project-I #	6
2	CSB712	Machine Learning Lab	1.5
3	CSB713	Colloquium-I*	0 (No credit)
Total Credits			**19.5**

8th Semester			
S.N.	**Course Code**	**Course Name**	**Total Credits**
THEORY			
1	CSB82X	Elective-V	3
2	CSB83X	Open Elective-I	3
3	G8T01	Constitution of India	0 (No credit)
4	HSB801	Human Relations at work	2
PRACTICAL			

1	CSB811	Project-II	8
Total Credits			**16**

Total no. of Credits from 1st to 8th Semester: 160 (One Hundred Sixty)

List of Elective				
Sl. No.	**Course Code**	**Semester**	**Course Title**	**Total Credits**
1	CSB621	6	Data Mining	3
2	CSB622	6	Data Analytics	3
3	CSB623	6	Information Retrieval	3
4	CSB624	6	Multimedia Technology	3
5	CSB625	6	Software Testing	3
6	EC6T06	6	Information Theory & Coding	3
7	EC8T01	6	Digital Image Processing	3
8	MAT6T1	6	Operations Research	3
1	CSB721	7	Design & Management of Computer Network	3
2	CSB722	7	Human Computer Interaction	3
3	CSB723	7	Cloud Computing	3
4	CSB724	7	Wireless Sensor Networks	3
5	CSB725	7	Internet-of- Things	3
6	CSB726	7	Real Time Systems	3
7	CSB727	7	Advanced Computer Architecture & parallel programming	3
8	EC7EL1	7	Embedded Systems & Design	3
1	CSB821	8	Distributed Database	3
2	CSB822	8	Artificial Intelligence	3
3	CSB823	8	Speech & Natural Language Processing	3
4	CSB824	8	Neural Networks & Deep Learning	3
List of Open Elective				
1	CSB831	8	Cryptography & Network Security	3
2	CSB832	8	Mobile Applications & Services	3
3	CSB833	8	Cyber Law & Ethics	3
4	CSB834	8	Linux Internal	3

10.5. ELECTRONICS & COMMUNICATION ENGINEERING (THIRD SEMESTER ONWARDS)

Course No./Code	Title of Course	Credit(s)
G1T01	Engineering Mathematics –I	4
G1T02	Engineering Physics-I	3
G1T03	Technical English	3
G1T04	Basic Electrical Engineering	3
G1T05	Engineering Chemistry	3
G1T06	Engineering Graphics	1
G1L01	Engineering Physics –I Lab	1
G1L02	Engineering Chemistry Lab	1

G1L03	Engineering Graphics Lab	2
G2T01	Engineering Mathematics –II	4
G2T02	Engineering Physics-II	3
G2T03	Fundamentals of Computing	3
G2T04	Basic Electronics	3
G2T05	Engineering Mechanics	3
G2T06	Environmental Science	(No Credit)
G2L01	Workshop Practice	2
G2L02	Basic Electronics Lab	1
G2L03	Fundamentals of Computing	1
G2L04	Engineering Physics II Lab	1
EC3T01	Network Theory	3
EC3T02	Electronic Devices & Circuits	3
EC3T03	Digital Electronics & Logic Design	3
EC3T04	Electrical Engineering Material	2
ITB303	Data Structures & Algorithm	3
MAT3T1	Mathematics-III	3
EC3L01	Electronic Devices & Circuits Lab	1
EC3L02	Digital Electronics & Logic Design Lab	1.5
ITB312	Data Structures Lab	1.5
EC4T01	Signals and Systems	3
EC4T02	Electromagnetic Field Theory	3
EC4T03	Microprocessor	3
EC4T04	Linear Integrated Circuits	3
EC4T05	Electronic Measurements & Instrumentation	3
MAT4T1	Mathematics –IV	3
EC4L01	Microprocessor Lab	1.5
EC4L02	Linear Integrated Circuits Lab	1.5
EC5T01	Antenna & Wave Propagation	3
EC5T02	Introduction to VHDL	3
EC5T03	Analog Communication	3
EC5T04	Microcontroller	3
EC5T05	Control Systems	3
EC5T06	Management & Entrepreneurship	3
EC5L01	Microcontroller Lab	1.5
EC5L02	VHDL Lab	1.5
EC6T01	Digital Communication	3
EC6T02	Digital Signal Processing	3
EC6T03	VLSI Technology	3
EC6T04	Computer Communication Networks	3
EC6T05	Wireless Communication	3
EC6T06	Information Theory Coding	3
EC6L01	Communication Systems Engineering Lab	1.5
EC6L02	Digital Signal Processing *Lab*	1.5
EC7T01	Microwave Engineering	3
EC7EL1/2/3	Elective I	3
EC7EL4/5/6	Elective II	3
EC7SM	Colloquium*	1
EC7L01	*Microwave Engineering* Lab	1
EC7PJ	Project**	6
EC8T01	Digital Image Processing	3
EC8EL7/8/9	Elective III	3

EC8EL10/11/12	Elective IV	3
G8T01	*Constitution of India(MC)*	(No Credit)
EC8PJ	Project	8
EC7EL1	Embedded System & Design	3
CSB502	Operating Systems(SWAYAM)	3
EC7EL3	Biomedical Instrumentation	3
EC7EL4	Multimedia Communication	3
EC7EL5	Optical Fiber Communication	3
EC7EL6	Power Electronics	3
EC8EL7	Body Area Network	3
EC8EL8	Nano Technology	3
EC8EL9	Speech Processing	3
EC8EL10	Wireless Cellular and LTE 4G Broadband	3
CSB831	Cryptography & Network Security	3
EC8EL12	Fundamentals of MEMS	3

10.6 INFORMATION TECHNOLOGY (THIRD SEMESTER ONWARDS)

Semester-3		
CourseNo./Code	TitleofCourse	Credit(s)
THEORY		
ECB303	Digital Electronics & Logic Design	3
ITB301	Object Oriented Programming	3
ITB302	Computer Organization & Architecture	3
ITB303	Data Structures	3
MAT3T2	Differential Calculus	4
Total Credits (Theory)		**16**
PRACTICAL		
ITB311	Object Oriented Programming Lab	1.5
ITB312	Data Structures Lab	1.5
ECB313	Digital Electronics & Logic Design Lab	1.5
Total Credits (Practical)		**4.5**
Total Credits		**20.5**

Semester-4		
CourseNo./Code	TitleofCourse	Credit(s)
THEORY		
MAT4T2	Discrete Mathematics	4
ITB401	Computer Graphics & Virtual Reality	3
ITB402	Operating System	3
ITB403	Algorithm Analysis and Design	3
ITB404	Formal Language & Automata Theory	3
Total Credits (Theory)		**16**
PRACTICAL		
ITB411	Algorithm Analysis and Design Lab	1.5
ITB412	Operating System Lab	1.5
ITB413	Computer Graphics Lab	1.5
Total Credits (Practical)		**4.5**
Total Credits		**20.5**

Semester-5		
CourseNo./Code	**TitleofCourse**	**Credit(s)**
MAT5T1	Numerical Analysis & Probability	4
ITB501	Computer Networks	3
ITB502	Database Management Systems	3
ITB503	Compiler Design	3
	Elective I	3
ITB520	Internship I	1
	Total Credits (Theory)	**17**
PRACTICAL		
ITB511	Database Management Systems Lab	1.5
ITB512	Compiler Design Lab	1.5
ITB513	Network Lab	1.5
	Total Credits (Practical)	**4.5**
	Total Credits	**21.5**
Semester-6		
CourseNo./Code	**TitleofCourse**	**Credit(s)**
THEORY		
ITB601	Industrial Economics & Principles of Management	3
ITB602	Web Technology	3
ITB603	Software Engineering	3
	Elective II	3
	Total Credits (Theory)	**12**
PRACTICAL		
ITB611	System Programming Lab	2.5
ITB612	Web Technology Lab	1.5
ITBPJ1	Project (Minor)	3
	Total Credits (Practical)	**7**
	Total Credits	**19**
Semester-7		
CourseNo./Code	**TitleofCourse**	**Credit(s)**
THEORY		
ITB701	Machine Learning	3
	Elective III	3
	Elective IV	3
	Open Elective I	3
ITB720	Internship II	1
	Total Credits (Theory)	**13**
PRACTICAL		
ITBCQ1	Colloquium*	-
ITBPJ2	Project (Major) #	6
	Total Credits (Practical)	**6**
	Total Credits	**19**
Semester-8		
CourseNo./Code	**TitleofCourse**	**Credit(s)**
THEORY		
	Elective V	3
	Open Elective II	3

G8T01	Constitution of India (Mandatory Course)	-
Total Credits (Theory)		**6**
PRACTICAL		
ITB811	Communication Skills Lab	1.5
ITBPJ3	Project (Major) **	10
Total Credits (Practical)		**11.5**
Total Credits		**17.5**

LIST OF ELECTIVE COURSES

CourseNo./Code	TitleofCourse	Credit(s)
ITBEL1	Distributed Database	3
ITBEL2	Mobile Computing (SWAYAM)	3
ITBEL3	Cloud Computing (SWAYAM)	
ITBEL4	Advanced Computer Architecture	3
ITBEL5	Management Information System and Knowledge Management	3
ITBEL6	Statistical Modeling and Tools	3
ITBEL7	Mobile Application Development	3
ITBEL8	Network Protocols	3
ITBEL9	XML and Web Services	3
ITBEL10	Service Oriented Architecture	3
ITBEL11	System Analysis and Design	3
ITBEL12	Decision Support System	3
ITBEL13	Advanced Java Technology	3
ITBEL14	.Net Technology	3
ITBEL15	Natural Language Processing	3
ITBEL16	Distributed Computing	3
ITBEL17	Multimedia Technologies	3
ITBEL18	Mobile Communications	3
ITBEL19	Cryptography and Information Security	
ITBEL20	Software Quality Assurance	3
ITBEL21	Soft Computing	3
ITBEL22	Blockchain Architecture & Design	3
ITBEL23	Advanced Database Systems	3
ITBEL24	Data Science	3
ITBEL25	Environmental Studies and Green IT	3
ITBEL26	Bioinformatics	3
EC8T01	Digital Image Processing	3

LIST OF OPEN ELECTIVE COURSESE

CourseNo./Code	TitleofCourse	Credit(s)
ITBOE1	Artificial Intelligence	3
ITBOE2	Internet-of-Things	3
ITBOE3	Big Data Analytics	3
EC7EL1	Embedded Systems	3
ITBOE4	E-Business (SWAYAM)	3

CourseNo./Code	TitleofCourse	Credit(s)
SETP01	Research methodology	[4-0-0] =4
CPE-RPE	Research And Publication Ethics	[1-0-1] =2
ITPEL0*	Elective I	[3-0-0] =3

ITPEL0*	Elective II	[3-0-0] =3
ITPEL01	Big Data Analytics	[3-0-0] =3
ITPEL02	Foundations of Data Science	[3-0-0] =3
ITPEL03	Deep Learning for Computer Vision	[3-0-0] =3
ITPEL04	Neuro-fuzzy systems	[3-0-0] =3
ITPEL05	Intelligent systems	[3-0-0] =3
ITPEL06	Image Processing and Computer Vision	[3-0-0] =3
ITPEL07	Fundamentals of Internet of Things	[3-0-0] =3
ITPEL08	Computational Geometry	[3-0-0] =3
ITPEL09	Statistical methods	[3-0-0] =3

11. COURSE STRUCTURE FOR M.Sc. PROGRAM in BIOTECHNOLOGY

1st Semester

Theory

Course No./Code	Title of Course	Credit(s)
BTM101	Biochemistry	3
BTM102	Immunology	3
BTM103	Bioinformatics	3
BTM104	Microbiology	3
BTM105	Research Methodology and Scientific Communication Skills	2
BTM106	Basics of Mathematics and Statistics	2
BTM107	Basics of Chemistry and Physics	2

Practical

Course No./Code	Title of Course	Credit(s)
BTM111	Biochemistry and Analytical Techniques Lab	2
BTM112	Microbiology Lab	2
BTM113	Immunology Lab	2

2nd Semester

Course No./Code	Title of Course	Credit(s)
BTM201	Genetic Engineering	3
BTM202	Cell and Molecular Biology	3
BTM203	Plant and Animal Biotechnology	3
BTM204	Genomics and Proteomics	3
BTM205	Molecular Diagnostics	2
BTM206	Genetics	2
BTM207	Elective I	2

Practical

Course No./Code	Title of Course	Credit(s)
BTM211	Seminar	2
BTM212	Molecular Biology and Genetic Engineering Lab	2
BTM213	Plant and Animal Biotechnology Lab	2

3rd Semester (Theory)

Course No./Code	Title of Course	Credit(s)
BTM301	Bioprocess Engineering and Technology	3

BTM302	Emerging Technologies	3
BTM303	Critical Analysis of Classical Papers	3
BTM304	Bioentrepreneurship	2
BTM305	Intellectual Property Rights, Biosafety and Bioethics	3
BTM306	Project Proposal Preparation and Presentation	2
BTM307	Elective II	2

Practical

Course No./Code	Title of Course	Credit(s)
BTM311	Bioprocess Engineering and Technology Lab	2
BTM312	Bioinformatics Lab	2
BTM313	Dissertation-I	2

4th Semester

Course No./Code	Title of Course	Credit(s)
BTM411	Dissertation-II	24

12. COURSE STRUCTURE FOR M.Tech. PROGRAM

12.1. AGRICULTURAL ENGINEERING AND TECHNOLOGY

SPECILIZATION: FOOD PROCESS ENGINEERING

Semester 1		
Course No./Code	Title of Course	Credit(s)
AELT501	On-farm water management	4
AELT502	Climate change and water resources	4
AELT503	Integrated Watershed Management and Modelling	4
AELT504	Stochastic Hydrology	4
AELE5**	Elective 1	4
AELE5**	Elective II	4
	Total	24
Semester 2		
AELT505	Groundwater Hydrology	4
AELT506	Open Channel Hydraulics	4
AELT507	Water Resources System Analysis	4
AELT508	Geoinformatics for Land and Water Management	4
AELT509	Geoinformatics for Land and Water Management Lab	2
AELE5**	Elective III	4
	Total	22
Semester 3		
AELT601	Research Methodology & Proposal Writing	4
AELE6**	Elective IV	4

AELE6**	Skill Enhancement Elective V	4
AELT602	Seminar	3
AELT603	M.Tech. Thesis (Part I)	10
	Total	25
Semester 4		
AELT604	M.Tech. Thesis (Part II)	10
AELT605	Comprehensive Viva-Voce	8
	Total	18
	Total credit	**89**
AELE501	Hydrological Modelling of Small Watersheds	4
AELE502	Surface Water Hydrology	4
AELE503	Human Resource Management	4
AELE504	Flow Through Porous Media	4
AELE505	Statistical Methods in Agriculture	4
AELE506	Water Resources Planning and Management	4
AELE601	Pumping Systems	4
AELE602	River Basin planning and management	4
AELE603	Disaster Management	4
AELE604	Project Management	4
AELE605	Application of Computer Programming in Land and Water Resources Engineering	4

12.2. INFORMATION TECHNOLOGY

Semester 1

Course No./Code	Title of Course	Credit(s)
ITPG501	Foundations of Computing Science	4
ITPG502	Algorithm Design and Analysis	4
ITPGE500*	Elective -I	4
ITPGE500*	Elective -II	4
ITPGT514	Advanced Algorithms Lab	3
ITPGT505	Seminar-I	3

Semester 2

Course No./Code	Title of Course	Credit(s)
ITPG503	Advanced Computer Architecture (ACA)	4
ITPG504	Database Engineering	4
ITPGE500*	Elective III	4
ITPGE500*	Elective IV	4
ITPGT515	Advanced Database Lab	3
ITPGT506	Seminar-II	3

Semester 3

Course No./Code	Title of Course	Credit(s)
ITPGTH1	M.Tech Thesis	10

ITPGE6**	Discipline Specific: Elective -V	4
ITPG610	Research Methodology & Proposal Writing	4
ITPGE6**	Skill Enhancement Course Elective –VI	4
ITPGE6**	Multidisciplinary Elective -VII	3

Semester 4

Course No./Code	Title of Course	Credit(s)
ITPGTH2	M.Tech Thesis	10
ITPGVV1	Comprehensive Viva -Voce	8

13. COURSE STRUCTURE FOR PhD PROGRAM

13.1. AGRICULTURAL ENGINEERING AND TECHNOLOGY

Course No./Code	Title of Course	Credit(s)
SETP01	Research methodology	4
SETP02	Research And Publication Ethics	2
AEPEL	Elective I	3
AEPEL	Elective II	3
AEPT01	Seminar	2
AEP EL 01	Stochastic Hydrology	3
AEP EL 02	Simulation and Modelling of Soil and Water Systems	3
AEP EL 03	Application of Geoinformatics in Natural Resource Management	3
AEP EL 04	Climate Change and Impact on Water Resource	3
AEP EL 05	Advance Techniques in Watershed Management	3
AEP EL 06	Application of Computer in Agriculture	3
AEP EL 07	Advances in Farm Mechanization and Management	3
AEP EL 08	Ergonomics in Agriculture	3
AEP EL 09	Precision Agricultural Machinery	3
AEP EL 10	Instrumentation on Farm Agricultural Application	3
AEP EL 11	Advances in Farm Machinery and Power Engineering	3
AEP EL 12	Advances in Bio-Energy Resources	3
AEP EL 13	Energy Management and Planning in Farm Machinery	3
AEP EL 14	Interfacial Phenomenon of Nanomaterials	3
AEP EL 15	Advances in Synthesis, Application, and Adaptation of Biochar	3
AEP EL 16	Transport Phenomena in Food Processing	3
AEP EL 17	Emerging Food Processing Technologies	3
AEP EL 18	Recent Trends in Food Product Development and Packaging	3

13.2. BIOTECHNOLOGY

Course No./Code	Title of Course	Credit(s)
SETP01	Research Methodology	4

CourseNo./Code	TitleofCourse	Credit(s)
SETP02	Research and Publication Ethics	2
BTP103	Elective-I	3
BTP104	Elective-II	3
BTP111	Seminar	2

13.3. INFORMATION TECHNOLOGY

CourseNo./Code	TitleofCourse	Credit(s)
SETP01	Research methodology	[4-0-0] =4
SETP02	Research And Publication Ethics	[1-0-1] =2
ITPEL0*	Elective I	[3-0-0] =3
ITPEL0*	Elective II	[3-0-0] =3
ITPEL01	Big Data Analytics	[3-0-0] =3
ITPEL02	Foundations of Data Science	[3-0-0] =3
ITPEL03	Deep Learning for Computer Vision	[3-0-0] =3
ITPEL04	Neuro-fuzzy systems	[3-0-0] =3
ITPEL05	Intelligent systems	[3-0-0] =3
ITPEL06	Image Processing and Computer Vision	[3-0-0] =3
ITPEL07	Fundamentals of Internet of Things	[3-0-0] =3
ITPEL08	Computational Geometry	[3-0-0] =3
ITPEL09	Statistical methods	[3-0-0] =3

3rd International Conference on Biologically Inspired Techniques in Many-Criteria Decision-Making (BITMDM-2024) Technologies organized by School of Engineering & Technology, Nagaland University held during Dec. 6-7, 2024 (Proceeding published in Springer).
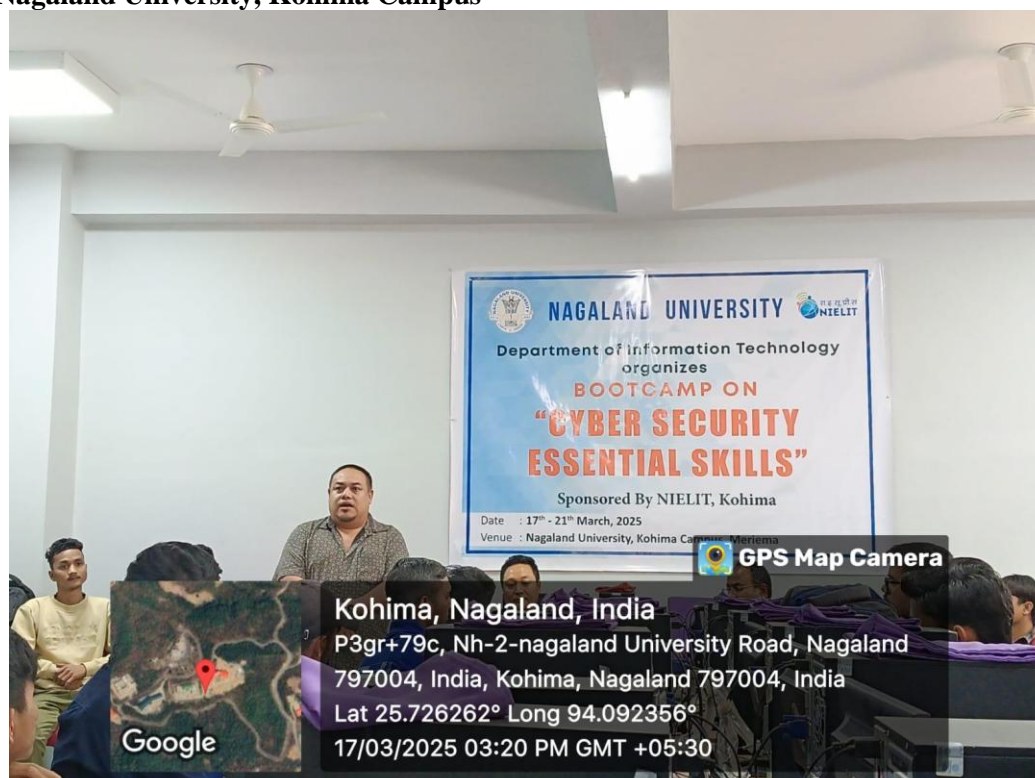
Two-Day Workshop on NLP for Indigenous Languages of Northeast India

The Two-Day Workshop on NLP for Indigenous Languages of Northeast India was organized by the Department of Information Technology and Computer Science & Engineering, School of Engineering and Technology, Nagaland University, during March 18–19, 2025 at the Conference Hall, Dept. of Commerce, Nagaland University, Kohima Campus.

A total of 28 participants which includes faculty members and scholars participated in the workshop from Departments of IT, CSE, ECE, Tenyidie, Linguistics and CNTLS of Nagaland University and NIT Nagaland. The resource persons for the workshop were: Prof. Niladri Sekhar Dash, ISI Kolkata; Dr. Amalesh Gope, Tezpur University; Prof. Sujata Dash, Dept. of IT, Nagaland University and Dr. LasishramBijenkumar Singh, CNTLS, Nagaland University.

Bootcamp on "Cyber Security essential skills" organized by the Department of Information Technology, SET-NU and sponsored by NIELIT, Kohima held during 17-21 March, 2025 at SET, Nagaland University, Kohima Campus

ACADEMIC COMPLEX:
SCHOOL OF ENGINEERING & TECHNOLOGY
NAGALAND UNIVERSITY KOHIMA CAMPUS
MERIEMA, KOHIMA – 797004, NAGALAND

Admission Convenor: Prof. Prabhakar Sharma
Admission Co-convenor: Dr. Rajkrishna Mondal
Admission committee member:
                Dr. Pramod Ch. Dihingia
                Ms. Ayangla Jamir
                Mr.Ramesh Singh

Email:
set.admin@nagalanduniversity.ac.in
Website: www.nagalanduniversity.ac.in
Online Application Link:
https://nagalanduniversity.ac.in/English/Admission

IMPORTANT DATES AND APPLICATION FEES

Starting of online Application (B.Tech.)	10th May, 2025
Last date for online form submission (B.Tech)	18th July, 2025
Declaration of merit list(B.Tech.)	29th July 2025
Date of Counselling and Admission(B.Tech.)	4th August 2025, 10 am, SET Building, Nagaland University, Kohima Campus
Date of Lateral Candidate Admission (B.Tech.)	4th August 2025, 10 am, SET Building, Nagaland University, Kohima Campus
Starting of classes for B.Tech. / M.Sc. / M.Tech.	11st August, 2025
Application fees	FOR B. TECH: Rs.250 (GEN/OBC) Rs. 200 (SC/ST) FOR M.Sc/M.Tech.: Rs. 200 (GEN/OBC) Rs. 150 (SC/ST)