

SCHOOL OF ENGINEERING & TECHNOLOGY

Office Address: Nagaland University Residential Campus, Land Mark Colony, Dimapur, Nagaland-797112 **Campus Address:** DIMAPUR, DC COURT JUNCTION NAGALAND - 797112





ADMISSION BROCHURE 2016 -2017

Contents

Message from the desk of Vice Chancellor	<u>3</u>
Message from the desk of Dean	4
University Officials and In-charges	
1. THE UNIVERSITY	<u>6</u>
2. THE SCHOOL	<u>6</u>
3. INFRASTRUCTURE AND FACILITIES	6
3.1 STUDENTS AMENTIES ATIVITIESND AC	6
4. ACADEMIC PROGRAMMES	
5. ELIGIBILITY CRITERIA FOR ADMISSION	
5.1 Fresh Entry (after 10+2)	8
5.2 Lateral Entry (after diploma/B.Sc)	
6. ALLOCATION OF SEATS	8
7. SELECTION AND ADMISSION	<u>9</u>
7.1 Fees Structure:	<u>9</u>
7.2 Enclosures to be submitted along with each application form	10
7.3 Registration in various Courses	11
7.4 Examination and Evaluation	11
8.DEPARTMENTS	
8.1. Department of Agricultural Engineering and Technology	
8.2. Department of Biotechnology	14
8.3. Department of Computer Science & Engineering	16
8.4. Department of Electronics & Communication Engineering	17
8.5. Department of Information Technology	18
9.COURSE STRUCTURE	
9.1. Course Structure for B.Tech. First Year (common to all branches)	
9.2. Course Structure for B.Tech in Agricultural Engineering and Technology	
9.3. Course Structure for B.Tech. in Biotechnology	
9.4. Course Structure for B.Tech in Computer Science & Engineering	
9.5. Course Structure for B.Tech. in Electronics and Communication Engineering	32
9.6. Course Structure for B.Tech in Information Technology	35
10. ACADEMIC CALENDER.	<u>40</u>
CONTACT US	<u> 41</u>
IMPORTANT DATES	41



Message from the desk of Vice Chancellor



Dear Aspiring students,

Welcome to Nagaland University family. Nagaland University is one of the forty Central Universities of the country having four campuses at Lumami (HQ), Meriema (Kohima Campus), Medziphema (School of Agricultural Science and Rural Development), and Dimapur (School of Engineering Technology and School of Management). It is our privilege and pleasure to invite every aspiring student to become a part of the University academia in the State of Nagaland. The beaconing beauty of all four campuses blesses and grooms each and every one under its wings. All the campuses are evergreen, always lively and pollution free. Its serenity inculcates value, humbleness and positive vibes in each and every member.

The prospectus will guide you on the B.Tech programs offered by the University in five disciplines. The duration of each discipline is 4 years.

University faculty members are friendly and supportive. Our expectation is that you would devote your time and energy dedicatedly to make yourself knowledgeable and skilled to serve your motherland more efficiently, provided you are selected for a seat.

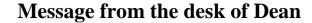
The University has made all out efforts to create necessary infrastructure facilities in all four campuses to provide you a comfortable atmosphere. Infrastructures such as modern classrooms, libraries with standard books and journals, internet connectivity, computer centres, practical and research laboratories, modern equipment and implements, boys' and girls' hostels, concrete and tarred roads, drinking water facility, canteens, auditorium with 900 sitting capacity at its Headquarters Lumami, Bank (SBI) and Post Office in the campuses, gymnasium, play grounds etc. are some of the amenities created for students and campus dwellers.

Passed out students from Nagaland University are getting jobs across the country as well as abroad. Each member of Nagaland University Alumni Association is the flag bearer and ambassador of the University. We are happy as you have chosen Nagaland University to be your Alma Mater.

Once again, welcome,

(B.K. Konwar)

Vice Chancellor





I take the chance to welcome you in the School of Engineering and Technology, Dimapur. The School being the first technical school in the state, was established on 29th October, 2007 by the Nagaland University. We have young and enthusiastic faculty committed to the cause of excellence in the field of Engineering & Technology education. Teachers are readily accessible by the students in the system.

The School offers B.Tech. degree programmes in Agricultural Engineering and Technology, Biotechnology, Computer Science & Engineering, Electronics and Communication Engineering and Information Technology. In the school, we give emphasis to on overall personality development and organize various co-curricular, cultural and sport activities at different occasions round the year in addition to course work (class room teachings). Our obligation is on the establishment of amicable atmosphere for the study. We have hostels for girls and boys, library, auditorium, Medical Inspection room in the campus to meet the essential requirements while students are in the cover of Nagaland University. School of Engineering & Technology (SET), Dimapur wishes you a meaningful stay for carving a bright future.

(D.P CHATURVEDI)

openatures.

DEAN

University Officials and In-charges

Vice Chancellor Prof. B. K. Konwar

Dean Prof. D. P. Chaturvedi

Assistant Registrar Mr. Kahoshe Sumi

I/C Academic & Exams Mr. Ayangla Jamir

I/C Student Welfare Mr. Shanchamo Yanthan

System Administrator Mr. Anthony Visa

Library professional Assistant Mr. Jevito Shohe

Coordinator, Training & Placement Mr. Teisovi Angami

I/C Sports & Game Mr. Chenlep Yakha Konyak

1. THE UNIVERSITY

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 in Humanities, Natural & Physical Science, Social Science, Agricultural science, Engineering & Technology and Management. The University has departments located in its campuses in Lumami, Kohima, Medziphema and Dimapur.

2. THE SCHOOL

The School of Engineering & Technology was inaugurated on 29th October by the Governor of Nagaland (Chief Guest) and Hon'ble Chief Minister of Nagaland (Guest of Honor). It is the first School of Engineering in the State of Nagaland with state-of-the-art infrastructure. It is located at D.C. Court Junction, Dimapur. The School is housed in a single four storied building with a carpet area of 35500 sq.ft. The Residential Complex is situated at P.W.D. Colony, Dimapur which is a walking distance from the Academic Complex.

The School offers following undergraduate (B.Tech.) programs at present

- Agricultural Engineering and Technology
- Biotechnology
- **Computer Science & Engineering**
- Electronics and Communication Engineering
- > Information Technology

The Campus is well connected by train, air service as well as road transportation. The Campus is networked with all the other campuses of Nagaland University. The University has a Residential Complex which houses the Staffs and the Students. There are boys and girls hostels. The Complex has facilities such as Sports & Recreational Facilities and Health Care Facilities including Gym. One Block is furnished as a Guest House. The Students are provided with regular Bus Service.

3. INFRASTRUCTURE AND FACILITIES

3.1 STUDENTS AMENTIES AND ACTIVITIES

3.1.1 HOSTE

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

3.1.2 SCHOOL MAGAZINE

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

3.1.3 CAREER COUNSELLING AND PLACEMENT STUDENT

The career counseling and placement cell guide the students regarding their future academic and employment career. Training and Placement in-charge updates.

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 CULTURAL AND LITERARY PROGRAMME

The student organizes cultural and literary programme from time to time in the campus.

3.1.6 AUDITORIUM

The school has a spacious auditorium where various cultural activities, lectures of specialists and renowned person in their fields etc. are organized in addition to academic seminars and symposia.

3.1.7 INTERNET FACILITY

The Academic Complex is connected to the internet with 100 mbps broadband connection from NKN.

3.1.8 LIBRARY

The Library has collection of latest Textbooks, Journals on different streams of Science, Engineering and Technology. The Library has a spacious study room where the students can interact with each other. In addition to this, the University has elibrary (INFLIBNET programme already accessible) which provides access to numerous books, National and International Journals on-line. The Library has arranged book fairs of different National and International publishers.

4. ACADEMIC PROGRAMMES

The school offers 4 years (8 semesters) academic programmes approved by AICTE/University 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.

5. ELIGIBILITY CRITERIA FOR ADMISSION

5.1_Fresh Entry (after 10+2)

The candidates seeking admission to any Discipline of Technology should secure in aggregate the minimum of 50% marks for General Category and 45% marks in case of SC/ST Category. Students should have passed Physics, Chemistry and Mathematics in their 10+2 Exam. Students opting for Biotechnology programme should have passed Physics, Chemistry Mathematics and Biology in their 10+2 Exam.

5.2 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 General Category and 45% marks in case of SC/ST Category along with the criteria give 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 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.
- Provided that in case of students belonging to 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 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 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.

6. ALLOCATION OF SEATS

The total number of seats in each discipline is 30. Seat allocation for each discipline for different states and other quota should be as 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	1
11. All India (through JEE - Main)	15

^{*} Unfilled seats will be added to All India Quota.

7. SELECTION AND ADMISSION

Selection for admission under various quotas is done as mentioned below:

1. ALL INDIA QUOTA THROUGH JEE (MAIN):

The candidates will be considered for admission on the basis of their scores in JEE (main) examinations of all India Competition. The reservation of seats will be as per the University Policy adopted and mentioned in the Regulation of School of Technology.

2. UNIVERSITY QUOTA:

The university quota shall be taken care as per University Ordinance.

3. STATE QUOTA:

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

4. Vacant seats will be filled up based on 10+2 marks for regular category and Diploma/B.Sc marks for lateral entry.

7.1 Fees Structure:

FEES TO BE PAID AT THE TIME OF ADMISSION/RENEWAL OF ADMISSION FOR B.TECH PROGRAM AT SCHOOL OF ENGINEERING & TECHNOLOGY, NAGALAND UNIVERSITY

Sl.No.	FEES	PERIODICITY	AMOUNT (1 st semester)	AMOUNT (All semesters)
1	Admission fee	Once	1000/-	-
2	Registration fee	Once	200/-	
3	Semester Enrolment fee	Every semester	100/-	100/-
4	Tuition fee	Every semester	7,000/-	7,000/-
5	Laboratory fee	Every semester	1,000/-	1,000/-
6	Library fee	Every semester	300/-	300/-
7	Sports fee	Every semester	100/-	100/-
8	Medical fee Every semester 100/-		100/-	100/-
9	Examination fee	Every semester	700/-	700/-
10	Students' activity fee	Every semester	300/-	300/-
11	Annual Magazine fee	Every semester	100/-	100/-
12	Students' Aid Fund	Once	200/-	-
13	University Development Fund	Once	2000/-	-
14	Workshop/ Seminar/ Conference Fee	Once	800/-	-
15	Industrial Interface & Technical Fest	Every semester	500/-	100/-
16	Placement Activities	Once	1500/-	-
17	Internet Fee	Every semester	100/-	100/-
18	Department Caution Money (Refundable)	Once	1,500/-	-
19	Library Caution Money (Refundable)	Once	1,000/-	-
	Sub Total		18,500/-	9,900/-
	Fo	r Hostellers		
20	Hostel fee*	Every semester	3,000/-	3,000/-
23	Hostel Caution Money (Refundable)	Once	1500/-	-
24	Transportation fee	Every semester	500/-	500/-
	Grand Total		23,500/-	13,400/-

BACK PAPER EXAMINATIONS FEE WILL BE RS.100/ PAPER

^{*}Hostel fees do not include mess fees.

Note:

- All fees are subject to revision from time to time by the University/Department.
- Fees should be deposited into the Account No. 33797581389, Account Name: NU Fees/Revenue
- The Students who desires to withdraw his/her name from the roll of the University cannot claim any return of the fees
 paid except caution deposit.

7.2 Enclosures to be submitted along with each application form

Photo copies of the following Documents duly self attested must be submitted along with the online printed application form.

- i. Copy of High School Leaving Certificates showing the age of the candidate.
- ii. Mark sheets of all examinations passed by the candidate from HSLC or equivalent onwards.
- iii. Three copies of a recent passport size photograph.
- iv. Migration Certificate from the Board where the candidates have passed their last Examination. A candidate who is not in a position to attach a Migration Certificate along with the application form shall have to produce within six weeks after the commencement of the session.
- v. Copy of a Schedule Tribe / Schedule Caste / Other Backward Classes / any other relevant Certificates issued by an Appropriate Authority.
- vi. Diploma passed certificate (only for lateral entry) and documents related to eligibility criteria.
- vii. Receipt of application fees payment (printed online fees receipt or original challan issued by bank)
- viii. Copy of CBSE JEE score card (if appeared)

N.B.: Original certificates and mark-sheets shall have to be produced at the time of Admission for verification.

7.3 Registration in various courses

Admission shall be subjected to the candidate being medically fit by the University Medical Officer or a Medical Board constituted for the purpose. Subject to declaration of Physical fitness by Medical Board, a 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.

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

7.4 Examination and Evaluation

Semester system with internal evaluation comprises of continuous assessments, two Minor examinations and End - Term Theory & Practical Examinations. The performance of a student in a particular course is evaluated and expressed in a 10 points grading scale which are converted to letter grade as stated below:

Marks Obtained	Equivalent Letter Grade	Credit Points
91to 100	0	10
81 to 90	A	9
71 to 80	В	8
61to 70	С	7
51 to 60	D	6
45 to50	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).

The commencement of classes for the fresh batch (2016-17) will be from 1st August 2016.

8.DEPARTMENTS

8.1. Department of Agricultural Engineering and Technology

Department Incharge: Wungshim Zimik **E-mail** : zimik.w@gmail.com

Contact : 9774458568

The Department of Agricultural Engineering and Technology focuses and deals with the use of engineering tools and practices to solve the real world problem of crop production, handling and processing problems for food and fiber industry. "Everything else can wait but not Agriculture" with this famous motto, the department envisages to solve the problem with the application of scientific knowledge in diverse and multi-disciplinary activities for overall development of farming community and better livelihood.

The Agricultural Engineering Department of the school came in to existence in 2008. The department follows four years degree course as adopted by the school.

Core field of Agricultural Engineering

- Soil and Water Engineering,
- Farm Power and Machinery Engineering
- Processing and Food Engineering
- Other interdisciplinary field.

Aims and 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

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

To develop their self-confidence to handle technical matters (Mandatory for the award of degree)

• Industrial training for 30 days during pre-final year.

• Opportunity to do research through final year project.

Poster Presentation

• Class presentation (PPT)

• Industrial Workshop Visit (FMP, SWE, PFE related)

Ongoing Projects:

• Fabrication of Portable solar unit for heating and drying.

• Effects of blanching methods on drying kinetics of King chilli.

• Optimization of drying parameter of ginger.

• Assessment of rain water harvesting pond in Nagaland.

• Best fit probability distribution of meteorological parameter of Nagaland.

8.2. Department of Biotechnology

Department Incharge: Rajkrishna Mondal

E-mail : rajkrishna.mondal@gmail.com

Contact : 9402992654

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, BOD, Deep freezer, cold centrifuge, Distillation unit, Milipore water system, etc. The Department having collaborating project with National Research Centre on Mithun, (Indian Council of Agricultural Research) Jharnapani, Medziphema, Nagaland and Department of Biological Sciences, BITS,Pilani (K. K. Birla Goa Campus) to conduct research on *Vibrio cholera* and *Bosfrontalis* sponsored by Department of Biotechnology, Government of India.

14

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)

Thrust Areas of Research:

- Molecular characterization of *Vibrio cholerae* transcription factors and also on the gene regulation of *Vibrio cholerae*.
- Characterization and application of Mithun (Bosfrontalis) Milk protein.

Research projects:

Ongoing:

• "An effective treatment approach of T-cell induced autoimmune diabetes through sitagliptin-anti CD4 immuno-nano Conjugates in BALB/c mice" funded by DBT PI: Mr.Hanumant Singh Rathore

Completed:

- "Characterization and purification of Lactoferrin from Mithun (Bosfrontalis) milk and its antimicrobial potency on different pathogenic bacteria of Mithun", DBT, Govt of India (Completed)-PI: Dr.RajkrishnaMondal
- "Physicochemical characterization of the primary sigma factor of Vibrio cholerae", DBT, Govt of India (Completed)-PI: Dr.RajkrishnaMondal

8.3. Department of Computer Science & Engineering

Department Incharge: Chenlep Y Konyak

E-mail : chenlip.salym@gmail.com

Contact : 8731895353

The Department of Computer Science & Engineering emphasizes on the all-round development of the student, both in the theoretical and practical knowledge. The Department also takes special care in developing problem solving attitude in students and prepare them to be mentally equipped to join any organization.

Vision :

- To be a front runner in Technology
- The Department not only aims to produce industry ready graduates but also entrepreneurs.

Thrust Areas

- Multimedia
- Web Technology
- System Software
- Wireless Technology
- Networking
- Software Engineering

8.4. Department of Electronics & Communication Engineering

Department Incharge: Ayangla Jamir

E-mail : ayang4_jamir@yahoo.com

Contact : 9436831373

Electronics & Communication Engineering is about electronic components, integrated circuits and microprocessors and consists of designing, fabrication, testing, maintaining and supervising the manufacture of electronic equipments. The Department of Electronics and Communication Engineering focuses to impart education and training at the Undergraduate levels 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 fountain head of new ideas and innovations in Science and Technology and who shall contribute its growth in partnership with industries and develop and harness it for

the welfare of the Nagas and the nation.

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.

Thrust areas of Research:

• Integrated electronics and circuits

• Tele-communication

Computer technology

Power electronics

• GPS systems

Communication Systems

Antennas

• Satellite transponders

• Signal processing based biomedical instruments

VLSI chips

17

8.5. Department of Information Technology

Department Incharge: Sudipta Patowary

E-mail : sudiptapatowary.ist@gmail.com

Contact : 8257032445

The Department of Information Technology focuses in training students in the creation of Computer Based Information Systems for efficient storage, processing, analyzing and dissemination of information to cater to the needs of the people in making decision making process more effective.

Vision:

Information Technology has been the driving force for economic growth which has uplifted many all around the world. For reasons best known, Nagaland as such has not benefited by this economic growth. The Department of Information Technology, Nagaland University endeavors to bridge this gap which hopes to reduce the digital divide and hopefully bring about economic growth to the people of Nagaland in the near future. It is hoped that a new way of work culture will emerged in the state through IT. Our students will play an effective role as Technologists and make notable contribution to the development of our society.

Thrust Areas of Research:

- Information Systems Development
- Computer Networks
- Distributed Systems
- Web Technology
- Programming
- Image Processing
- Knowledge Representation
- Artificial Neural Networks
- Ontology Dynamic

Objectives:

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

9. COURSE STRUCTURE

9.1. B.Tech. First Year (common to all branches)

1st Semester

S. N.	Subject Code	Subject Code Course name		Contact Hours p	er week	Credits
5.14.	Subject Code	Course name	${f L}$	T	P	Credits
THEOR	Y					
1	G1T01	Engineering Mathematics –I	3	1	-	4
2	G1T02	Engineering Physics-I	3	-	-	3
3	G1T03	Technical English	3	1	-	4
4	G1T04	Electrical Engineering	3	-	-	3
5	G1T05	Fundamentals of Computing	3	-	-	3
6	G1T06	Engineering Graphics	3	-	-	3
	1			Total	Credits (Theory)	20
PRACTI	ICAL					
6	G1L01	Physics –I Lab	-	-	2	1
7	G1L02	Programming Lab	-	-	2	1
8	G1L03	Engineering Graphics Lab	-	-	4	2
<u> </u>	l			Total (Credits (Practical)	4
					Total Credits	24

S. N.	Subject Code	Course name	Contact		er week	Credits
	Subject Code	Course name	L	T	P	Credits
THEOR	Y	·				
1	G2T01	Engineering Mathematics –II	3	1	-	4
2	G2T02	Engineering Physics-II	3	-	-	3
3	G2T03	Engineering Chemistry	3	-	-	3
4	G2T04	Basic Electronics	3	-	-	3
5	G2T05	Engineering Mechanics	3	1	-	4
6	G2T06	Environmental Science	3	-	-	3
	-			Total (Credits (Theory)	20
PRACTI	ICAL				•	
6	G2L01	Workshop Practice	-	-	4	2
7	G2L02	Basic Electronics Lab	-	-	2	1
8	G2L03	Chemistry Lab	-	-	2	1
9	G2L04	Physics II Lab			2	1
'	-			Total Cı	redits (Practical)	5
					Total Credits	25

9.2. Agricultural Engineering and Technology

3rd Semester

S.N.	Subject Code	Subject Code Course Name		week	Credits		
			L	T	P	Total	
1	MAT3T1	Mathematics – III	3	1	-	4	4
2	AE3T01	Strength of Material	3	-	-	3	3
3	AE3T02	Soil Mechanics	3	-	-	3	3
4	AE3T03	Farm Power	3	-	-	3	3
5	AE3T04	Surveying and Leveling	2	-	-	2	2
6	AE3T05	Engineering properties of Biological Material & Food Quality	2	-	-	2	2
7	AE3T06	Engineering Thermodynamics & Heat	3	-	-	3	3
		engines					
<u> </u>			<u> </u>	Total T	heory	20	20
Practical					1		
1	AE3L01	Soil Mechanics Lab	-	-	2	2	1
2	AE3L02	Farm Power Lab	-	-	2	2	1
3	AE3L03	Surveying and Leveling Lab	-	-	2	2	1
4	AE3L04	Engineering properties of Biological	-	-	2	2	1
		Material & Food Quality Lab					
			,	Total Pra	ctical	8	4
			To	tal of Sen	ıester	28	24

S. N.	Subject Code	Subject Code Course Name		Contact h	ours per	week	Credits
			L	T	P	Total	
1	AE4T01	Heat & mass Transfer	3	-	-	3	3
2	AE4T02	Theory of Machines	2	1	-	3	3
3	AE4T03	Design of structures	2	-	-	2	2
4	AE4T04	Watershed hydrology – I	2	1	-	3	3
5	AE4T05	Fluid Mechanics	2	1	-	3	3
6	AE4T06	Crop Process Engineering	3	-	-	3	3
7	AE4T07	Agriculture for Engineers	3	-	-	3	3
				Total Tl	neorv	20	20

Practica	al						
1	AE4L01	Watershed Hydrology -I Lab	-	-	2	2	1
2	AE4L02	Crop Process Engineering Lab	-	-	2	2	1
	Total Practical					4	2
	Total of Semester					24	22

S. N.	Subject Code	oject Code Course Name	Contact hours per week				Credits
			L	T	P	Total	
1	AE5T01	Workshop Technology	2	-	-	2	2
2	AE5T02	Machine Design	2	1	-	3	3
3	AE5T03	Electrical Machine & Power utilization	3	-	-	3	3
4	AE5T04	Farm Machinery & Equipment	3	-	-	3	3
5	AE5T05	Ground Water, Wells & Pumps	2	-	-	2	2
6	AE5T06	Drying & Storage Engineering	3	-	-	3	3
7	AE5T07	Soil & water Conservation Engg.	3	-	-	3	3
l	<u> </u>			Total	Theory	19	19
Practical							
1	AE5L01	Farm Machinery & Equipment Lab	-	-	2	2	1
2	AE5L02	Ground Water, Wells & Pumps Lab	-	-	2	2	1
3	AE5L03	Drying & storage engineering Lab	-	-	2	2	1
4	AE5L04	Soil & Water conservation Engineering	-	-	2	2	1
<u>l</u>				Total P	ractical	8	4
			T	otal of Se	mester	27	23

S.N.	Subject Code	Course Name		Credits			
			L	T	P	Total	
1	AE6T01	Agricultural Structure & Environmental	2	1	-	3	3
		Control					
2	AE6T02	Refrigeration & Air conditioning	2	1	-	3	3
3	AE6T03	Transfer Process in Food Engineering	3	1	-	4	4
4	AE6T04	Tractor systems & controls	2	-	-	2	2
5	AE6T05	Machine drawings & Computer graphics	2	-	-	2	2
6	AE6T06	Irrigation and Drainage Engineering -I	2	-	-	2	2
7	AE6EL	Elective-I	3	-	-	3	3
<u> </u>			ı	Total '	Theory	19	19

1	AE6L01	Tractors systems & controls Lab	-	-	2	2	1
2	AE6L02	Machine drawing & Computer graphics	-	-	4	2	1
		lab					
3	AE6L03	Irrigation and Drainage Engineering I	-	-	2	2	1
				Total P	ractical	6	3
			T	otal of So	emester	25	21

Elective papers-I:

- 1. (AE6EL01) Agribusiness management and trade.
- 2. (AE6EL02) Entrepreneurship development and communication skills.
- 3. (AE6EL03) Design and maintenance of green house.

7th Semester

S. N.	Subject Code	Course Name		Contac	t hours per	week	Credits
			L	Т	P	Total	
1	AE7T01	Irrigation and Drainage Engineering -II	2	-	-	2	2
2	AE7T02	System Engineering	2	1	-	3	3
3	AE7T03	Mechanics of Tillage & Traction	2	-	-	2	2
4	AE7T04	Unit Operation in Dairy and Food Engineering	3	-	-	3	3
5	AE7T05	Watershed Hydrology – II	2	1	-	3	3
6	AE7T06	Industrial Training	-	-	-	3	2
7	AE7T07	Project	-	-	8	8	4
8	AE7EL	Elective-II	3	-	-	3	3
		1		Total	Theory	28	23
Practical							
1	AE7L01	Mechanics of Tillage & Traction Lab	-	-	2	2	1
2	AE7L02	Unit Operation in Dairy and Food	-	-	2	2	1
		Engineering Lab					
				Total P	ractical	4	2
			Т	otal of Se	emester	32	25

Elective papers-II:

- 1. (AE7EL01) Remote sensing and GIS application.
- 2. (AE7EL02) Environmental Engineering.
- 3. (AE7EL03) Development of processed products and equipment.
- 4. (AE7EL04) Waste and by-product utilization.
- 5. (AE7EL05) Food Processing Plant Design & Layout

S. N.	Subject Code	Course Name		Contact	hours per	week	Credits
			L	T	P	Total	
1	AE8T01	Tractor Design & Testing	3	-	-	3	3
2	AE8T02	Food Process and Packaging Technology	3	-	-	3	3
3	AE8T03	Watershed planning & Management	2	-	-	2	2
4	AE8EL	Elective – III	3	-	-	3	3
5	AE8T04	Project	-	-	1	16	8
6	AE8T05	Renewable Energy Source	2	1	-	3	3
•	<u>.</u>	·		Total '	Theory	30	22
Practical					•		
1	AE8L01	Tractor design & testing Lab	-	-	2	2	1
2	AE8L02	Food Process and packaging technology	-	-	2	2	1
		Lab					
3	AE8L03	Seminar	-	-	2	2	1
	•		· ·	Total P	ractical	6	3
			To	otal of Se	mester	36	25

Elective papers-III:

- 1. (AE8EL01) Human Engineering and safety.
- 2. (AE8EL02) Biomass management for fodder and energy.
- 3. (AE8EL03) Production technology of agricultural machines.

Total Credits for entire course: 189

9.3. Biotechnology

3rd Semester

S.No.	Subject Code	Course Name		eek	Credits		
			L	T	P	Total	
1	BT3T01	Biostatistics	3	1	-	4	4
2	BT3T02	Biochemistry	3	1	-	4	4
3	BT3T03	Microbiology	3	1	-	4	4
4	BT3T04	Thermodynamics and Kinetics	3	1	-	4	4
5	CS3T04	Data Structures and algorithms	3	1	-	4	4
				Tota	l Theory	20	20
Practical							
1	BT3L01	Biochemistry Lab	-	-	2	2	1
2	BT3L02	Microbiology Lab	-	-	2	2	1
3	CS3L02	Data Structures and algorithms Lab	-	-	2	2	1
ı				Total	Practical	6	3
				Total of	Semester	26	23

S.N.	Subject Code	Course Name		Credits			
			L	T	P	Total	
1	BT4T01	Cellular	3	1	-	4	4
		Metabolism					
2	BT4T02	Cell and	3	1	-	4	4
		Developmental					
		Biology					
3	BT4T03	Molecular	3	1	-	4	4
		Biology					
4	BT4T04	Genetics	3	1	-	4	4
5	AT4T05	Fluid Mechanics	3	0	-	3	4
<u>l</u>		I I	l.	Te	otal Theory	19	19
Practical							
1	BT4L01	Molecular	-	-	2	2	1

		Biology Lab					
2	AT4L02	Fluid Mechanics	-	-	2	2	1
		Lab					
				Tot	al Practical	4	2
				Total	of Semester	23	21

S./N.	Subject Code	Course Name		Contac	t hours per we	eek	Credit
			L	T	P	Total	
1	BT5T01	Biophysics	3	1	-	4	4
2	BT5T02	Enzyme Technology	3	1	-	4	4
3	BT5T03	Immunology	3	1	-	4	4
4	BT5T04	Plant Biotechnology	3	1	-	4	4
5	IT5T05	Database Management System	3	1	-	4	4
•		<u>. </u>	•	Tota	al Theory	20	20
Practical					l		
1	BT5L01	Plant Biotechnology-Lab	-	-	2	2	1
2	BT5L02	Immunology Lab	-	-	2	2	1
3	IT5P03	Database Management System Lab	-	-	2	2	1
		I L		Total	Practical	6	3
				Total of	Semester	26	23

Theory								
S.N.	Subject Code	Course Name		Contact hours per week				
			L	T	P	Total		
1	BT6T01	Recombinant DNA Technology and Applications	3	1	-	4	4	
2	BT6T02	Bioinformatics	3	1	-	4	4	
3	BT6T03	Heat and Mass	3	0	-	3	3	

		Transfer					
4	BT6T04	Production and	3	0	-	3	3
		operations					
		managements					
5	BT6E01	Elective-I*	3	0	-	3	3
		<u>, </u>		Т	otal Theory	17	17
Practica	l						
1	BT6L01	Bioinformatics	-	-	2	2	1
		Lab					
2	BT6L02	Recombinant	-	-	2	2	1
		DNA Technology					
		Lab					
		-		Tot	al Practical	4	2
				Total	of Semester	21	19

*Elective-I:

- 1. Stem cell in health care
- 2. Bio-pharmaceutical technology
- 3. Proteomics and Genomics

S.N.	Subject Code	Course Name		Credits			
			L	T	P	Total	
1	BT7T01	Food	3	1	-	4	4
		Biotechnology					
2	BT7T02	Pollution Control	3	1	-	4	4
		& Environmental					
		Biotechnology					
3	BT7T03	Bioreactor	3	1	-	4	4
		Design and Analysis					
4	BT7T04	Animal	3	1	-	4	4
		Biotechnology					
5	BT7E02	Elective-II**	3	0	-	3	3
				Total	Theory	19	19

1	BT7L01	Food	-	-	2	2	1
		Biotechnology Lab					
2	BT7L02	Biochemical Lab	-	-	2	2	1
3	BT7P01	Seminar(Review	-	-	-	-	1
		and presentation by					
		PPT)					
				Tot	al Practical	4	3
				Total	of Semester	23	22

** Elective-II:

- 1. Therapeutic hormone and growth factor
- 2. Microbial process engineering
- 3. Industrial biotechnology

8th Semester

SL/No	Subject Code	Course Name	Contact hours per week			eek	Credits
			L	T	P	Total	
1	BT8T01	Biosafety, Bioethics and Intellectual property rights in Biotechnology	3	1	-	4	4
2	BT8T02	Agricultural Biotechnology	3	1	-	4	4
3	BT8E03	Elective-III***	3	0	-	3	3
				Total	l Theory	11	11
Practical							
1	BT8P02	Project	-	-	20	20	10
		I		Total I	Practical	20	10
				Total of S	Semester	31	21

*** Elective-III:

- 1. Diagnostic Techniques
- 2. Bio analytical Techniques
- 3. Protein Modeling

Elective Papers:

- 1. Stem cell in health care
- 2. Bio-pharmaceutical technology
- 3. Proteomics and Genomics
- 4. Therapeutic hormone and growth factor
- 5. Regulatory factors
- 6. Microbial process engineering
- 7. Diagnostic Techniques
- 8. Protein Modeling
- 9. Commercialization, marketing and management of biotechnological products
- 10. Biosensor
- 11. Bioanylytical Chemistry
- 12. Biotransformation and Biocatalyst
- 13. Writing Skills for technical purpose

Total Credits for entire course: 187

9.4. Computer Science & Engineering

S.N.	Subject	Course Name	Credits	L	Т	Practical				
	Code									
THE	THEORY									
1	EC3T03	Digital Electronics & Logic Design	3	2	1	-				
2	CS3T01	Object Oriented Programming	3	2	1	-				
3	CS3T02	Graph Theory	3	2	1	-				
4	CS3T03	Discrete Mathematics	3	2	1	-				
5	CS3T04	Data Structures through C	3	2	1	-				
6	CS3T05	System Analysis & Design	3	2	1	-				
PRAC	CTICAL									

7	CS3L01	Object Oriented	1	-	-	2
		Programming using C++ Lab				
8	CS3L02	Data Structures through C	1	-	-	2
9	EC3L02	Digital Electronics & Logic	1	-	-	2
		Design Lab				
			21	12	6	6

S.N.	Subject Code	Course Name	Credits	L	T	Practical
THEO	RY				ı	
1	CS4T01	Principle of programming Language	3	2	1	-
2	CS4T02	Theory of Automata	3	2	1	-
3	CS4T03	Computer Graphics	4	3	1	-
4	CS4T04	Computer Organization &	4	3	1	-
5	EC4T03	Microprocessor	4	3	1	-
6	CS4T05	Computer Based Numerical &	3	2	1	
		Statistical Techniques				
PRACT	ΓICAL		.			
6	CS4L01	Computer Graphics Lab	1	-	-	2
7	CS4L02	Computer Based Numerical &	1	-	-	2
		Statistical Techniques Lab				
8	EC4L01	Microprocessor Lab	1	-	-	2
			24	15	6	6

S. N.	Subject Code	Course Name	Credits	L	T	Practical
THEORY	Y .					
1	CS5T01	Web Technology	3	2	1	-
2	CS5T02	Operating System	4	3	1	-
3	CS5T03	Computer Networks	4	3	1	-
4	CS5T04	System Programming	3	2	1	-
5	CS5T05	Database Management Systems	4	3	1	-
6	CS5T06	Operation Research	3	2	1	
PRACTI	CAL	-		I		
7	CS5L01	Web Technology Lab	1	-	-	2
8	CS5L02	Operating System Lab	1	-	-	2
9	CS5L03	Database Management Systems Lab	1	-	-	2
			24	15	6	6

Sl. No.	Subject	Course Name	Credits	L	T	Practical			
	Code								
THEORY	THEORY								
1	CS6T01	Algorithm Analysis & Design	3	2	1	-			
2	CS6T02	Software engineering	3	2	1	-			
3	CS6T03	Compiler Design	3	2	1	-			
4	CS6T04	Distributed Systems	3	2	1	-			
5	CS6T05	Advanced Computer Network	4	3	1	-			
6	CS6T06	Principle of Economics & Accountancy	3	2	1	-			
PRACTIO	CAL		•						
6	CS6L01	Algorithm Analysis & Design Lab	1	-	-	2			
7	CS6L02	Compiler Design Lab	1	-	-	2			
			21	13	6	4			

Sl. No.	Subject Code	Course Name	Credits	L	T	Practical
THEOR	Y					
1	CS7T01	Advance Computer Architecture	4	3	1	-
2	CS7T02	Cryptography & Network Security	3	2	1	-
3	CS7T03	Industrial Organization & management	3	2	1	-
4		Elective-I	4	3	1	
PRACT	ICAL		1			
5	CS7L01	.NET Programming Lab	1	-	-	2
6	CS7CO1	Colloquium*	1	-	-	2
7	CS7PJ1	Project #	4	-	-	8
			20	10	4	12

^{*}The student will give presentation (Colloquium) on the summer/winter/industrial training (4 – 6 weeks) that She / He underwent during the vacation period after 4th, 5th or 6th semester. The credit will be awarded in the 7th Semester under Colloquium.

#The student will submit a synopsis for their Project at the beginning of the semester in a specified format which should be approved by the departmental committee. The student will also have to present the progress of their project through seminars and progress reports.

8th Semester

Sl. No	Subject Code	Course Name	Credits	L	T	Practical
THEOR	Y	<u> </u>				
1	CS8T01	Artificial Intelligence	3	2	1	-
2	CS8T02	Software Testing	3	2	1	-
3		Elective-II	4	3	1	-
4		Elective-III	4	3	1	
PRACT	TICAL					
5	CS8L01	Software Testing Lab	1	-	-	2
6	CS8L02	Artificial Intelligence	1	-	-	2
5	CS8PJ1	Project *	8	-	-	16
			24	10	4	20

^{*}The student will continue the project work carried over from the previous semester. The student will submit the final report/thesis of the project in the format specified by the School.

Electives:

S. N.	Subject code	Course Name	Credits	Lectures	Tutorials	Practical
1	CSE01	Mobile Computing	4	3	1	-
2	ECE02	Digital Image Processing	4	3	1	-
3	CSE03	Embedded Systems	4	3	1	-
4	CSE04	E-Commerce & ERP	4	3	1	-
5	CSE05	Real Time System	4	3	1	-
6	CSE06	Linux Internal	4	3	1	-
7	CSE07	Multimedia Technologies	4	3	1	-
8	CSE08	Data Mining	4	3	1	-
9	CSE09	.NET & C# Programming Languages	4	3	1	-
10	CSE10	Distributed Database	4	3	1	-
11	CSE11	Wireless Network	4	3	1	-
12	CSE12	Fuzzy Logic and Neural Network	4	3	1	-

Total Credits for entire course: 183

9.5. Electronics and Communication Engineering

3rd Semester

S. N.	Subject Code	Course name	Credits	L	T	P
THEORY			1	JI .		1
1	EC3T01	Network Theory	4	3	1	-
2	EC3T02	Electronic Devices & Circuits	3	3	-	-
3	EC3T03	Digital Electronics & Logic Design	4	3	1	-
4	EC3T04	Signals and Systems	4	3	1	-
5	IT3T3	Data Structures & Algorithm	3	3	-	-
6	MAT3T1	Mathematics-III	4	3	1	-
PRACTICAL	L			•	•	•
7	EC3L01	Electronic Devices & Circuits Lab	1	-	-	2
8	EC3L02	Digital Electronics & Logic Design Lab	1	-	-	2
9	EC3L03	Data Structures Lab	1	-	-	2
		Total Credits	25			

S. N.	Subject Code	Course name	Credits	L	T	P
THEORY			•	•	•	•
1	EC4T01	Control Engineering	4	3	1	-
2	EC4T02	Electromagnetic Field Theory	4	3	1	-
3	EC4T03	Microprocessor	4	3	1	-
4	EC4T04	Linear Integrated Circuits	3	3	-	-
5	EC4T05	Electronic Measurements & Instrumentation	3	3	-	-
6	MAT4T1	Mathematics –IV	4	3	1	-
PRACTICAL	Ĺ			•	•	
7	EC4L01	Microprocessor Lab	1	-	-	2
8	EC4L02	Linear Integrated Circuits Lab	1	-	-	2
		Total Credits	24			

S. N.	Subject Code	Course name	Credits	L	T	P
THEORY		·	•	•		•
1	EC5T01	Antenna & Wave Propagation	4	3	1	-
2	EC5T02	Digital System Design	3	3	-	-
3	EC5T03	Analog Communication	4	3	1	-
4	EC5T04	Microcontroller	3	3	-	-
5	EC5T05	Information Theory & Coding	4	3	1	-
6	EC5T06	Management & Entrepreneurship	3	3	-	-
PRACTICA	AL			•		
7	EC5L01	Microcontroller Lab	1	-	-	2
8	EC5L02	Digital System Design Lab	1	-	-	2
		Total Credits	23			

S. N.	Subject Code	Course name	Credits	L	T	P
THEOR	RY		l .	ı		
1	EC6T01	Digital Communication	4	3	1	-
2	EC6T02	Microwave Engineering	3	3	-	-
3	EC6T03	VLSI Technology	3	3	-	-
4	EC6T04	Power Electronics	3	3	-	-
5	EC6T05	Microelectronics Circuits	3	3	-	-
6	EC6T06	Digital Switching System	3	3	-	-
PRACT	ICAL		l .	ı		
7	EC6L01	Communication Systems Engineering Lab	1	-	-	2
8	EC6L02	Power Electronic Lab	1	-	-	2
		Total Credits	21			
Summer	training	1	I	1	Г	
		Industrial Training*	-	-	-	1

^{*4-6} weeks training will be held after 6^{th} semester. However, viva-voce will be conducted in the 7^{th} semester and the credit will be added as a part of the colloquium.

S. N.	Subject Code	Course name	Credits	L	T	P
THEOR	NY			ı		
1	EC7T01	Computer Communication Networks	3	3	-	-
2	EC7T02	Digital Signal Processing	4	3	1	-
3	EC7T03	Wireless Communication	4	3	1	-
4	EC7EL1/2/3	Elective I	3	3	-	-
5	EC7EL4/5/6	Elective II	3	3	-	-
PRACT	ICAL		1	<u> </u>		l.
6	EC7SM	Colloquium*	1	-	-	1
7	EC7L01	Microwave Engineering Lab	1	-	-	2
8	EC7L02	Digital Signal Processing Lab	1	-	-	2
9	ЕС7РЈ	Project**	4			
		Total Credits	24			

^{*}The student will submit a synopsis for their seminars on any technical topic at the beginning of the semester in a specified format which should be approved by the departmental committee. The student will also have to present the progress of their project through seminars and progress reports.

Elective I and II

Subject code	Course Name	Credits	L	T	P
EC7EL1	Embedded System and Design	3	3	-	-
EC7EL2	Operating Systems	3	3	-	-
EC7EL3	Optical Fiber Communication	3	3	-	-
EC7EL4	Multimedia Communication	3	3	-	-
EC7EL5	Body Area Network	3	3	-	-
EC7EL6	GSM	3	3	-	-

Sl. No.	Subject Code	Course name	Credits	L	T	P
THEOR	Y					
1	EC8T01	Biomedical Instrumentation	3	3	-	-
2	EC8T02	Digital Image Processing	3	3	-	-
3	EC8EL7/8/9	Elective III	3	3	-	-
4	EC8EL10/11/12	Elective IV	3	3	-	-
PRACTI	CAL		<u> </u>	l	·	I
5	EC8PJ	Project	8	-	-	16
·		Total Credits	20			

^{**}The student will have to submit a synopsis and do the literature survey for their major project in this semester.

Elective III and IV

Subject code	Course Name	Credits	L	T	P			
THEORY								
EC8EL7	Medical Imaging System	3	3	-	-			
EC8EL8	Wireless Sensor Network	3	3	-	-			
EC8EL9	Nano Technology	3	3	-	-			
EC8EL10	Ad Hoc Wireless Networks	3	3	-	-			
EC8EL11	Network Security	3	3	-	-			
EC8EL12	Fundamentals of MEMS	3	3	-	-			

Total Credits for the Entire Course – 186

9.6. Information Technology

3rd Semester

S. N.	Subject	Course name	Contact Hours per week			Credits
S. IV.	Code		Lectures	Tutorials	Practical	Credits
THEOI	RY		I	1	ı	
1	EC3T03	Digital Electronics & Logic Design	3	1	-	4
2	IT3T1	Object Oriented Programming	3	-	-	3
3	IT3T2	Computer Architecture	3	-	-	3
4	IT3T3	Data Structures	3	-	-	3
5	IT3T4	Software engineering	3	-		3
6	MAT3T1	Mathematics III	3	1	-	4
Total C	Credits (Theory)		I	1	ı	20
PRACT	ΓICAL					
6	IT3P1	Object Oriented Programming Lab	-	-	2	1
7	IT3P2	Data Structures Lab	-	-	2	1
8	EC3L03	Digital Electronics & Logic Design Lab	-	-	2	1
Total (al)				3
Total (Credits					23

S. N.	Subject Code	Course name	Contact Ho	urs per week		Credits	
5.14.	Subject Code		Lectures	Tutorials	Practical	Credits	
THEO	RY						
1	MAT4T1	Discrete Mathematics	3	1	-	4	
2	IT4T1	Computer Networks	3	-	-	3	
3	IT4T2	Operating System	3	-	-	3	
4	IT4T3	Algorithm Analysis and Design	3	1	-	4	
5	IT4T4	Database Management Systems	3	-		3	
6	IT4T5	Management Information System and	3	-	-	3	
		Knowledge Management					
Total (Credits (Theory)		-	-		20	
PRAC	TICAL						
6	IT4P1	Network Lab	-	-	2	1	
7	IT4P2	Algorithm Analysis and Design Lab	-	-	2	1	
8	IT4P3	Operating System Lab	-	-	2	1	
Total (Total Credits (Practical)						
Total (Credits					23	

S. N.	Subject Code	Course name	Contact Hor	Contact Hours per week		
D. 14.	Subject Code		Lectures	Tutorials	Practical	Credits
THEO	RY		-	-	1	
1	IT5T1	Web Technology	3	-	-	3
2	IT5T2	Theory of Automata	3	-	-	3
3	IT5T3	Distributed Computing	3	-	-	3
4	IT5T4	Compiler Design	3	-	-	3
5		Elective I	3	-		3
6	MAT5T1	Numerical Methods	3	1	-	4
Total (Credits (Theory)					19
PRAC	TICAL					
6	IT5P1	Web Technology Lab	-	-	2	1
7	IT5P2	Compiler Design Lab	-	-	2	1
8	IT5P3	Communication Skills Lab	-	-	2	1
Total (Credits (Practical))				3
Total (Credits					22

S. N.	Subject Code	Course name	Contact Hor	urs per week		Credits	
5. 14.	Subject Code	Course name	Lectures	Tutorials	Practical	Credits	
THEO	RY		<u> </u>				
1	IT6T1	Industrial Economics & Principles of	3	-	-	3	
		Management					
2	IT6T2	Computer Graphics and Virtual Reality	3	-	-	3	
3	IT6T3	Unix Internals	3	-	-	3	
4	IT6T4	Software Quality Assurance	3	-	-	3	
5	IT6T5	Multimedia Technologies	3	-		3	
6		Elective II	3	-	-	3	
Total (Credits (Theory)		.			18	
PRAC	TICAL						
6	IT6P1	Unix Lab	-	-	2	1	
7	IT6P2	Multimedia Technologies Lab	-	-	2	1	
8	IT6P2	Computer Graphics Lab	-	-	2	1	
Total (Total Credits (Practical)						
Total (Total Credits 2						

S. N.	Subject Code	Course name	Contact Hours per week			Credits
5. 14.	Subject Code		Lectures	Tutorials	Practical	Credits
THEO	RY		II.			-
1	IT7T1	Mobile Communications	3	-	-	3
2	IT7T2	Cryptography and Information Security	3	-	-	3
3	IT7T3	Software Testing	3	-	-	3
4		Elective III	3	-	-	3
5		Elective IV	3	-		3
Total (Credits (Theory)		II.			15
PRAC'	TICAL					•
6	IT7P1	Cryptography & Information Security Lab	-	-	2	1
7	IT7C01	Colloquium*	-	-	2	1
8	IT7PJ1	Project #	-	-	8	4
Total (Total Credits (Practical)					
Total (Credits					21

*The student will give presentation (Colloquium) on the summer/winter/industrial training (4-6 weeks) that She/ He underwent during the vacation period after 4^{th} , 5^{th} or 6^{th} semester. The credit will be awarded in the 7^{th} Semester under Colloquium.

#The student will submit a synopsis for their Project at the beginning of the semester in a specified format which should be approved by the departmental committee. The student will also have to present the progress of their project through seminars and progress reports.

8th Semester

S. N.	Subject Code	Course name	Contact Hor	ırs per week		Credits		
5. 14.	Subject Code	Course name	Lectures	Tutorials	Practical	Credits		
THEORY								
1	IT8T1	Soft Computing	3	-	-	3		
2		Elective V	3	-	-	3		
3		Elective VI	3	-	-	3		
Total (Total Credits (Theory)							
PRAC'	TICAL							
4	IT8P1	Software Testing Lab	-	-	2	1		
5	IT8P2	Neural Network Lab using Matlab	-	-	2	1		
6	IT8PJ1	Project**	-	-	16	8		
Total (Total Credits (Practical)							
Total (Total Credits							

^{**}The student will continue the project work carried over from the previous semester. The student will submit the final report/thesis of the project in the format specified by the School.

LIST OF ELECTIVE COURSES

S. N.	Subject code	Course Name	Credits	Lectures	Tutorials	Practical
THEORY		1	· · · · · · · · · · · · · · · · · · ·			- 1
1	ITEL1	Distributed Database	3	3	-	-
2	ITEL2	Mobile Computing	3	3	-	-
3	ITEL3	Embedded Systems	3	3	-	-
4	ITEL4	Advanced Computer Architecture	3	3	-	-
5	ITEL5	Cloud Computing and Services	3	3	-	-
6	ITEL6	Statistical Modeling and Tools	3	3	-	-
7	ITEL7	Big Data Analytics	3	3	-	-
8	ITEL8	Mobile Application Development	3	3	-	-
9	ITEL9	Network Protocols	3	3	-	-
10	ITEL10	XML and Web Services	3	3	-	-
11	ITEL11	Service Oriented Architecture	3	3	-	-

12	ITEL12	System Analysis and Design	3	3	-	-
13	ITEL13	Decision Support System	3	3	-	-
14	ITEL14	Advanced Java Technology	3	3	-	-
15	ITEL15	.Net Technology	3	3	-	-
16	ITEL16	Artificial Intelligence	3	3	-	-
17	ITEL17	E-commerce & ERP	3	3	-	-
18	EC8T02	Digital Image Processing	4	3	1	-

Total Credits for the Entire Course - 178

10. ACADEMIC SCHEDULE (July - Dec, 2016)

Academic Calendar scheduled for B. Tech. Degree Programme of Agricultural Engineering & Technology, Biotechnology, Computer Science & Engineering, Electronics & Communication Engineering and Information Technology for the Semesters I, III, V and VII beginning from July 2016 is as per detail given below:

1	Date of Registration for III, V & VII – Semester	18 th - 19 th July 2016
2	Starting of Classes	19 th July 2016
3	Date of Admission for I – Semester	27 ^h and 28 th July 2016
4	Starting of Classes for I Semester	1 st August 2016
5	Minor-I Examination	30 th Aug – 2 nd September. 2016
6	Minor – II Examination/MidTerm (for 2015 Batch)	3 rd -7 th Oct. 2016
7	Techaura 2016	1 st -4 th Nov. 2016
8	End Semester Examination (Practical)	23 rd - 30 th Nov 2016
	(Theory)	2 nd - 17 th Dec. 2016
9	Winter Break	18 th Dec. 2016 – 10 th Feb. 2017
10	Last Date of Submission of Corrected Answer scripts	19 th Dec 2016
11	Scrutiny of Answer Scripts	16 th - 20 th Jan 2017
12	Tabulation of Marks	23 rd - 25 th Jan 2017
13	Result Recommendation Meeting	27 th Jan 2017
13	Result Declaration	10 th Feb 2017
14	Semester Admission for II, IV, VI and VIII Semesters	13 th - 14 th Feb 2017
15	Starting of Classes	14 th Feb 2017

Sd/-

(D.P. CHATURVEDI)

Dean

SET,NU

CONTACT US

ADRESS:

OFFICE: NAGALAND UNIVERSITY RESIDENTIAL CAMPUS,

LANDMARK COLONY, DIMAPUR – 797112, NAGALAND

CAMPUS: SCHOOL OF ENGINEERING & TECHNOLOGY, NAGALAND UNIVERSITY,

D.C COURT JUNCTION, DIMAPUR – 797112, NAGALAND

Admission Convener: **07085123217** Office Personnel: **09615990867** Admission Committee members:

08731895353, 09862669712, 08057253391

Email: convenoradmissions2016@gmail.com Website: www.nagalanduniversity.ac.in

Online Application Link: http://www.admissions.nagalanduniversity.ac.in/

Brochure team: Admission Committee

IMPORTANT DATES AND APPLICATION FEES

Availability of Online Application	15 th June 2016
Last date of online form submission	15 th July 2016
Last date for receiving printed online	19 th July 2016
application form along with enclosures	
Declaration of selected list	22 nd July 2016
(List of selected candidates shall be	
notified on university website)	
Date of admission	27th and 28 th July 2016
Starting of Classes	1 st August 2016
Application Fees	Rs.250 (GEN/OBC)
	Rs.200 (SC/ST)