Entrepreneurship Development Centre

Assam Science and Technology University, Tetelia Road, Jalukbari, Kamrup (M), Guwahati-781013, Assam

Summary:

Assam Science and Technology University is basically a technical university which offers different science and engineering courses. Apart from that the university also offers courses in the area of pharmacy, management, design, vocational, horticulture, social work etc. The university offers courses on certificate, diploma, undergraduate, post-graduate and Ph D level. Apart from the regular courses, the university offers eight (8) number of courses on Digital Skills, seven (7) numbers on industry demanding technology courses and seven (7) numbers of Multi-disciplinary Courses. Assam Science and Technology University has established a Startup Cell with an objective to start the startup culture across all affiliated institutes of Assam Science and Technology University. ASTU is organizing continuously different events, conference, workshop and competition to encourage the student for innovation and start up. Under the HACKATHON 2018, North East HACKATHON 2019 and SANDHAN 2020, ASTU has selected the best innovative ideas, presented by the students to provide seed money for start-up. In each event, three ideas are selected as best idea to provide seed money for start-up.

To expose the students of higher educational institutions offering courses in the field of Science & Technology (S&T) and other professional courses to Entrepreneurship as an alternative career, ASTU has proposed to Establish, Develop and Manage an Entrepreneurship Development Centre and Incubation Centre at the university campus under the project “Establish, Develop and Manage Entrepreneurship Development Centre and Incubation Centres in North East Region’s Educational Institutions” – A project sponsored by North Eastern Council & implemented by Indian Institute of Entrepreneurship, Guwahati (An organization under Ministry of Skill Development and Entrepreneurship -Govt. of India. To motivate the students, different Entrepreneurship Awareness Camp, Entrepreneurship Development Programme, Hands on training programme, Faculty Development Programme, workshop will be conducted in the next two years at state government engineering colleges as well as in the Polytechnique colleges of entire Assam under the proposed

Entrepreneurship Development Centre and Incubation Centre. A good number of EACs will be conducted at different places of Assam in the next two years.

Entrepreneurship Development Programme will be conducted during the summer and winter back of the academic session in collaboration with different national organizations for the next two years such that the students can join in the proposed programme during their semester back. Expert from different industry, start up, NGO and academic institution will also be invited as resource person for the programme. Annual State Level awards competition will be organized for outstanding start-ups & innovations to recognise and motivate innovators and good entrepreneurs.

Faculty Development Programme will be conducted centrally for the faculty members of affiliated technical and non-technical colleges of Assam. The FDP will also be opened for the faculty members of other higher educational institutes of Assam. The main basic objective of the FDP is to promote entrepreneurship/self-employment among the students and to be a part of mission where more and more students may take up self-employment to contribute to the development of the region. FDP will be carried out to provide the overview of Entrepreneurship, Motivation & Personality issues of Entrepreneurship, Identification of Business Opportunity, Business Plan & Project Preparation, Financial Aspects of Entrepreneurship. At least four numbers of FDP (Two week) will be carried out within the next 2 years.

অসম বিজ্ঞান আৰু প্ৰযুক্তিবিদ্যা বিশ্ববিদ্যালয়

Assam Science and Technology University

Information Brochure

ACADEMIC SESSION: 2024-25

University Anthem

প্ৰযুক্তিৰ এই প্ৰান্ত প্ৰদেশ'
এই সাঁকো নিৰ্মাণৰ দেশ
প্ৰযুক্তিৰ এই প্ৰান্ত প্ৰদেশ'
এই সাঁকো নিৰ্মাণৰ দেশ
যি ভোগদৈখনি বোৱাই অনা কৃতিত্বৰ অৱশেষ
সাঁচিপাত, পাট-মুগা, কাহ পিতলৰ নিখুঁত নিৰ্মাণৰ ৰেশ
ৰূপহী অসমী- এই প্ৰান্ত প্ৰদেশ
ৰূপহী অসমী- এই প্ৰান্ত প্ৰদেশ।
আই অসমীৰ দুৰ্যোগো অশেষ
লাগে নতুন প্ৰযুক্তি, একাগ্ৰ আৱেশ
লৈ তাৰেই প্ৰেৰণা, তাৰেই আদেশ
নতুন প্ৰত্যয়েৰে থাপনা পাতিছো যি প্ৰযুক্তিৰ সমাৱেশ
যি জ্ঞানৰ প্ৰসাৰ আৰু সৃজনৰ লক্ষ্যেৰে
মানুহৰ সেৱাত নিৱেশ
মানুহৰ সেৱাত নিৱেশ।
গণ-সংযোগ, কৃত্ৰিম-বোধিৰ প্ৰসাৰিত শৌৰ্য
আমাৰ মুঠিত পৰমাণু-বক্ষৰ সন্সিত বীৰ্য
মহাকাশ আৰু ৰ'বট-প্ৰযুক্তিৰ বিশাল ঐশ্চৰ্য
শুনো কল্পনা-বাস্তৱ একাকাৰ কৰা নতুন প্ৰযুক্তিৰ তুৰ্য
নতুন প্ৰযুক্তিৰ তুৰ্য।
যন্ত্ৰেৰে হ'ব সেয়ে জীৱন উদযাপন জীবনৰ বিস্তৃতি
আৰু থাপনাই কঢ়িয়াব-মানুহৰ নিচান, হৃদয়ৰ কৃষ্টি
হ'ব পৰিৱেশ-অনুকূল সমূহৰ কল্যাণ- ভাঁহে সেই অপৰূপ দৃষ্টি
নতুন প্ৰত্যয়েৰে থাপনা পাতিছো যি প্ৰযুক্তিৰ সমাৱেশ
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মানুহৰ সেৱাত নিৱেশ
মানুহৰ সেৱাত নিৱেশ।

কথা: ড. অমৰজ্যোতি চৌধুৰী
সুৰ: প্ৰশান্ত কুমাৰ চৌধুৰী

অসম বিজ্ঞান আৰু প্ৰযুক্তিবিদ্যা বিশ্ববিদ্যালয়
Assam Science and Technology University

Message from the Vice Chancellor

Prof. Narendra S Chaudhari

Greetings from ASTU ……!!

Assam Science and Technology University (ASTU) a university by Govt. of Assam, has taken an initiative to start Honrs. Programs in Technical Education on self financing basis using existing resources.

With an aim for enhancing quality and standard in the uniform course curriculum leading to research in the field of technical education, Assam Science and Technology University was established in the State of Assam in 2010. The University has been affiliating engineering colleges and technology courses. His Excellency Governor of Assam is the Chancellor of Assam Science and Technology University.

As per recent Amendment of Assam Science and Technology University (ASTU) Act, 2023, the University is now (w.e.f. 19th June, 2023) a teaching, research and affiliating University of Science and Technology and other allied subjects.

ASTU has been tackling challenges for implementation of Technical Education courses under the National Education Policy (NEP) 2020. The quality indicators of different criteria determined by the UGC has been taken into consideration as a based to quality and to determine for future roadmaps for the institution in delivering technical education in Assam. ASTU has equally feel the mandate given by 'Viksit Bharat' by 2047 through transformation for teaching delivery in technical education in the State of Assam.

The University is fully committed to the highest ideals of NEP education by breezing the culture of innovation in learning methods. It aims at the skill development of each student and focuses on a comprehensive and balance education. The University strives ethical and moral values in the engineering and technology students and encourages them to become integrated and wholesome individuals capable of handling their careers and lives effectively. The mission of the university is given below:

i. *Knowledge creation for the societal growth and well-being through cutting edge research.*
ii. *Creation of industry fit entrepreneurial human resource for improving quality of life.*
iii. *Access to quality Higher Education for all.*
iv. *Reduction of inequalities by enhancing gender parity and environmental awareness towards*
v. *Sustainable Development Goals (SDGs).*
vi. *Internationalization of Higher Education.*
vii. *Achieve key learning outcomes from the core learning of science, technology disciplines through its curriculum.*
viii. *Development of ethical values, scientific temper, spirit of service and capabilities across a range of disciplines.*
ix. *Strengthen and promote multidisciplinary, cross-disciplinarily and inter-disciplinarily concept in mutually supporting inter-dependent learning avenues.*
x. *To promote students to think, understand and perform through skills and competencies to enable critical thinking, creative thinking, innovation and problem-solving attitude.*

Thanking you
Best wishes

Vice Chancellor,
Assam Science and Technology University

Location of the University

GENERAL

The designated campus for the project consists of a large area made available by the Assam Engineering College (AEC), Guwahati, within its main campus. The total available area for the entire development which consists proposed project is around 36.4 bighas in addition to 10 bighas plot of land.

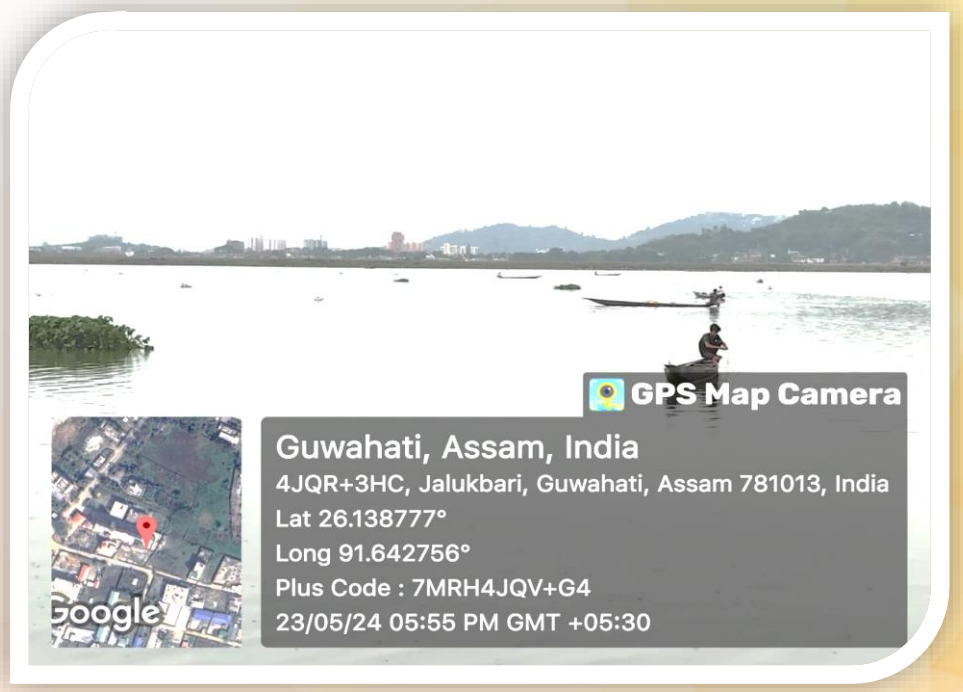
The location has one major access: a major road entering the site (as indicated in the Site Plans) across the railway track which runs along the southern border of the site, and which links this access point to the main AEC Campus further on. The topography is a mix of low-lying areas and higher ground, relatively flat throughout. There are no encumbrances to development.

The overall available area has been divided into three designated development zones -

ZONE S1: Deepar Beel Area.

ZONE S2: Tata Institute of Social Sciences, Guwahati

ZONE S3: The Site for University of ASTU.



Tetelia Road, Jalukbari, Guwahati,
Assam, Pin- 781013
Phone: (+91) 7637076370

Objectives of the University

1. Regulation of Courses and the Examination system for both Undergraduate and Postgraduates Programme including the degree leading to Ph.D. for Science and Technology discipline for all the Engineering Colleges in the state of Assam.
2. Introduction of Post Graduate Courses in identified thrust areas.
3. Establishment of Research and Development Activities.
4. Development of a Data Bank for Natural Resources. Assam Science and Technology University has been established to bring all the Engineering Colleges/Institutions of Assam under a single platform and to provide uniform standards of technical education.

Vision and Mission of the University

VISION:

- Give synchronized strategic and operational leadership to technical education of Assam through a unified structure.
- Create state of the art infrastructure and train excellent academic personnel to be with the international peers.

MISSION:

- Establish a platform to participate together by Government and Private organization under unified umbrella.
- Create facilities for all to participate; Interaction with industries.

STRATEGY:

- Interfacing between ASTU and Government Institutes.
- Immediate formation of review committees for Syllabi from all experts from Assam, AEC, JEC, IITG & others (confidence building); Introduce in 2017-18 session.
- Review new courses.
- Participation in various univ. boards by Senior Faculties of Government Institution.
- Establish QA programme to define roles and responsibilities of all stakeholders.
- Ph.D guide for qualified faculties of these organizations.
- Bring in freshness by augmenting infrastructure to be at par with recognized establishments; share them to optimize utilization.
- Seminars, Workshops, Brain storming meetings among stakeholders.

Common Uniform Academic Curriculum

Advancing Education Through a Common Uniform Academic Curriculum

The Assam Science and Technology University has always been committed to fostering academic excellence and providing students with a comprehensive educational experience that prepares them for the challenges of the modern world. In pursuit of this goal, we have implemented a Common Uniform Academic Program across all departments and disciplines. This program represents a significant step forward in standardizing our academic offerings and ensuring consistency and quality across the university.

The Common Uniform Academic Program is designed to streamline the academic experience for students while maintaining the integrity and diversity of our curriculum. It encompasses a set of core courses and academic standards that are consistent across all departments, supplemented by specialized courses tailored to each discipline.

Key Features:

1. **Core Curriculum**
2. **Interdisciplinary Approach**
3. **Flexibility and Choice**
4. **Academic Support**

In conclusion, the implementation of the Common Uniform Academic Curriculum at Assam Science and Technology University represents a significant milestone in our ongoing pursuit of academic excellence. By providing students with a solid foundation in core knowledge and skills while fostering interdisciplinary learning and innovation, we are preparing them to succeed in an increasingly complex and interconnected world. We are proud of the impact that this program has had on our university community and look forward to building on its success in the years to come

National Academic Depository (NAD)

Assam Science and Technology University (ASTU) has started the process of digitalization of academic records with National Academic Depository (NAD), in accordance with the direction of the Ministry of Human Resource Development (MHRD), Government of India and University Grants Commission (UGC). The University is presently registered with DigiLocker NAD and uploaded more than 5000 numbers of original certificate data after the 1st Convocation.

Academic Activities

Academic Programs and Admission, 2022-23

The University provides education and research in the field of science & technology and other professional courses through its affiliated colleges in the disciplines of science, technology and professional programmes. At present all the government engineering colleges of Assam are affiliated with Assam Science and Technology University. The university also provides through its on-campus programs- M.Tech Energy Engineering and Doctoral Programs.

All the courses under the university are revised based on the recommendations of regulatory bodies such as AICTE, UGC, PCI, CAI, ICAR etc. The university has adopted the NEP 2020 in the curriculum of the University. The courses offered by the university in 2022-23 are as follows -

Sl. No.	Programme
1	Advance Diploma
2	Bachelor of Architecture
3	Bachelor of Pharmacy
4	Bachelor of Science (Hons.)
5	Bachelor of Technology
6	Bachelor of Business Administration
7	Bachelor of Computer Applications
8	Bachelor of Tourism Management
9	Diploma
10	Integrated M.Sc
11	Master of Pharmacy
12	Master of Planning
13	Master of Science
14	Master of Technology
15	Master of Vocational Courses
16	Masters in Hospital Administration
17	Master of Computer Applications
18	Master of Tourism Management
19	Undergraduate
20	Bachelor of Pharmacy(Practice)
21	MBA Trimester Mode

Research Infrastructure

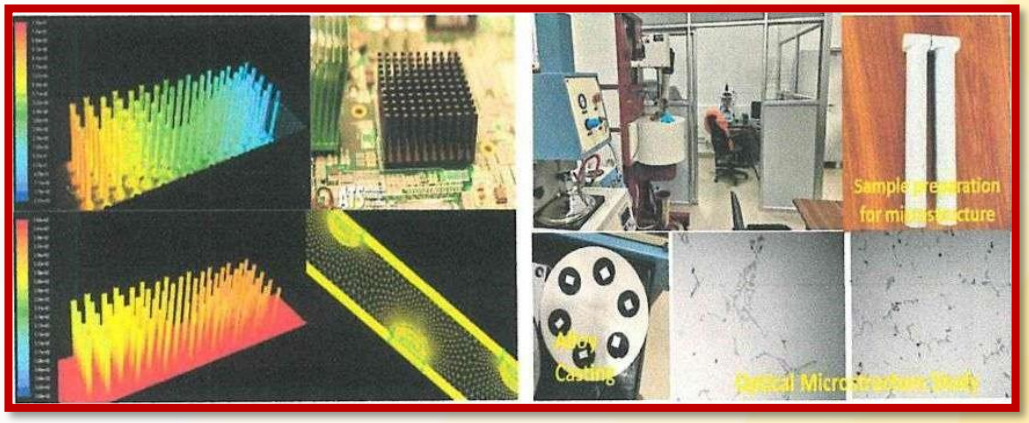
Lab-I: Multi-disciplinary Experimental and Testing Accessible Laboratory (METAL): On-going R&D activities under the lab are:

(i) Development of novel anti-corrosive coating (polymer to metal coating)
(ii) Development of Silicon thin film for photovoltaics application
(iii) Improve the seed germination and production yield of different seeds using cold air plasma technology
(iv) Synthesis of graphene-based battery material for electric vehicle
(v) Plasma Pyrolysis Process for municipal solid waste disposal

Available Facilities

- iPVD reactor: The state-of-the-art technology allows the deposition of metals, alloys, ceramic, and polymer thin films onto a wide range of substrate materials. The ultra-high vacuum iPVD reactor is designed by ASTU and fabricated at Excel Instruments, Maharashtra. The total cost of the whole set up is around 70.0 lakhs.
- EGDR: The Experimental Glow Discharge Reactor can be used to study for plasma agriculture, plasma nitriding and also for basic research. The reactor is designed by ASTU and fabricated at ETS, Ahmedabad. The total cost of the whole set-up is around 10.0 lakhs.
- TTO Derived Plasma Reactor: The set-up is designed by ASTU and fabricated at Excel Instruments, Maharashtra. The total cost of the whole set-up is around 1.0 lakhs. The reactor is designed to study the TTO film for biomedical applications.
- Other important instruments/equipment in the lab are HR Optical emission/absorption spectrometer, Contact angle measurement set up, High voltage DC power supplies, RF power supply, DSO, Function generator, Ultrasonicator, Magnetic stirrer, water analysis kit, Heating and cooling assembly, etc

Lab-II: Material Science Research Laboratory (MSRL): The main on-going Research activities in the lab is development of new aluminum and magnesium alloys Materials Science and Technology are advancing fast and are of particular relevance for industry and society as materials create added value in most products. At the same time, costs must be minimized, sustainability improved, and products rendered more attractive, portable, or usable by making them smaller and lighter. The establishment of this research laboratory at present will help the researchers to develop new alloys specially for aluminium and magnesium alloys, sample preparation for microstructure studies, mechanical property determination, characterization, heat treatment and composition analysis of alloys.



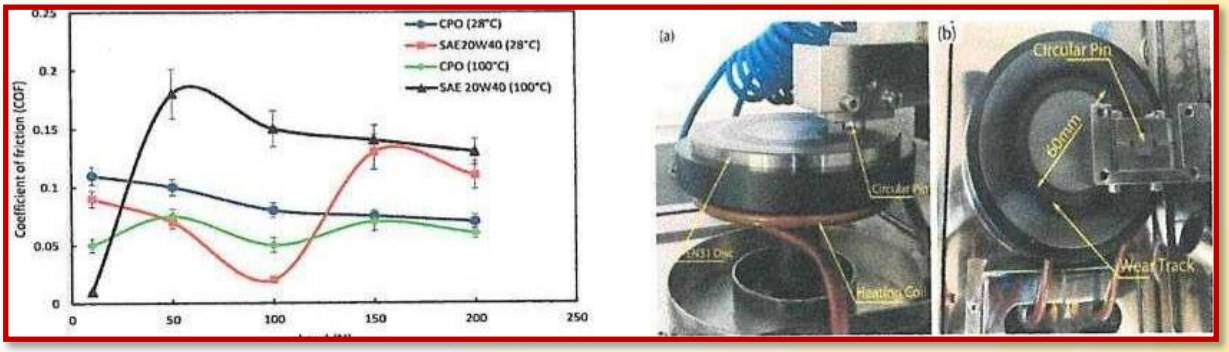
Available facilities are 1. Muffle Furnace (Programable) 2. Oven 3. Stir Casting Melting Furnace with vacuum die attachment (for aluminium and Magnesium alloys) 4. Diamond Sectioning Machine 5. Automatic Polishing Machine 6. Optical Emission Spectrometer (Fe and Al base) 7. Optical Microscope with image analyser 8. Micro-Hardness Tester with camera attachments 9. Mounting Press (cold and hot) 10. Rockwell Hardness teste

Lab-III: Energy Research Laboratory

The major types of equipment available in the Energy Research Laboratory are: Thermogravimetric Analyzer (TGA), Differential Scanning Calorimetry (DSC), Pyrolysis Unit (lab scale), Bomb Calorimeter, Rheometer, Flush Point and Fire Point Apparatus, Cloud Point and Pour Point Apparatus, Flue gas analyzer, Single Phase power Analyzer, Hot air oven, Muffle Furnace, Soxhlet Extraction Unit, Solar Cooker, Muffle Furnace, Soxhlet Extraction Unit, Solar Cooker, Biomass Cooking Stoves, Hybrid Solar PV Plant, Flat Plate Collector, Evacuated Tube Collector, Pyranometer, Sunshine Duration Recorder, Weather metering system, Water/Soil analysis kit, Electrical Shaker with Auger, Flame photometer, Centrifuge, Atomic absorption spectrometer, pH meter, IC Engine System

Lab-IV: Tribology Research Laboratory

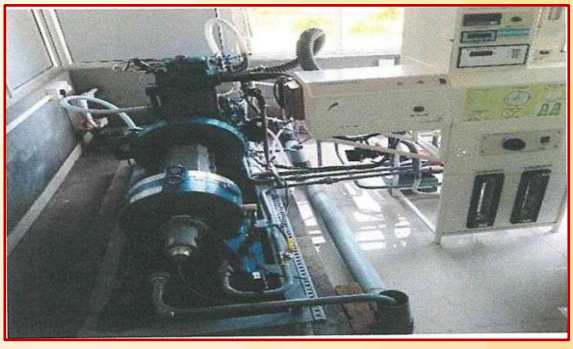
The major types of equipment available in the Tribology Research Laboratory are: Four Ball Tester, Pin Ball on Disc Tribometer, Journal Bearing.



Lab-V: Plasma Pyrolysis Laboratory (PPL)-On-going R&D activities in the lab are:

1. l. Examined the disposal efficiency of the plasma pyrolysis plant for a different kind of solid waste.
2. Study the utilization of the plasma pyrolysis residue

Available Facilities: Plasma pyrolysis is one of the efficient technologies for the safe disposal of municipal solid waste in an eco-friendly manner. In this technology high temperature is generated in a chamber in oxygen starved condition. Organic waste disintegrates into hydrogen, CO and lower hydrocarbon gases because of oxygen starved condition at high temperature. These high calorific gases are cleaned by gas cleaning system and then, it can be utilized for useful applications. A Plasma pyrolysis plant With a disposable capacity of 10 kg/hr is designed and installed at ASTU premises for the disposal of solid waste under Centre for Advance Research in Science and Technology (CARST).



Lab-VI: IC Engine Research Laboratory

Instrumentation facilities at ASTU

S.No.	Name of equipment	Per sample fee For Affiliated institute/colleges under ASTU and other Government and private colleges of Assam		Per sample fee For National institute/ Government laboratory/Research institute of Sate and outside NE/ Private organization	
	Energy Research Laboratory				
1	Thermogravimetric analyzer (Temperature range: 25-1100^{0}C)	Rs 800 For low heating rate : 5-10^{0}C/min upto 500^{0}C)	Rs 1500 (For all heating rate upto temperature 1000^{0}C)	Rs 1500 For low heating rate : 5-10^{0}C/min upto 500^{0}C)	Rs 2000 (For all heating rate upto temperature 1000^{0}C)
2	Differential scanning calorimeter (Temperature range: 25-700^{0}C)	Rs 800		Rs 1500	
3	Rheometer	Rs 500		Rs 1200	
4	Refractometer	Rs150		Rs 450	
5	Cloud and pour point apparatus	Rs 250		Rs 600	
6	Cleveland open cup Fire and flash point apparatus	Rs 350		Rs 700	
7	Ultrasonicator	Rs 350		Rs 500	
8	Hot air oven	Rs 350 (for initial 2 hrs and Rs 100		Rs 500 (for initial 2 hrs and Rs 100	

		for additional per hour)	for additional per hour)
9	Volatile matter furnace	Rs 250	Rs 500
10	Digital viscometer	Rs300	Rs 600
11	Oil extraction unit	Rs 250 *(* Applicant has to bring the solvent)*	Rs 500 *(* Applicant has to bring the solvent)*
12	Bomb calorimeter	Rs 300	Rs 800
13	Centrifuge	Rs 150	Rs 350
	IC Engine laboratory		
14	IC engine with flue gas analyzer	Rs 800 for each engine run (After office hour extra 500 per hour) **** Fuel will not be provided by ASTU.*	Rs 1600 for each engine run (After office hour extra 500 per hour) **** Fuel will not be provided by ASTU*
	Tribology Research Laboratory		
15	Fourball tester	Rs 800(For wear preventive test) Rs1000(for extensive pressure test) Rs1500 (for rolling fatigue test)	Rs 1000(For wear preventive test) Rs1500(for extensive pressure test) Rs2500 (for rolling fatigue test)
16	Journal Bearing tester	Rs1000 *** Applicant has to bring the oil for testing*	Rs 2500 *** Applicant has to bring the oil for testing*
17	Pin/ball on disc	Rs 500 (for test in room temperature) Rs 800 (for test upto 450^{0}C) Rs 1200 (for test above 450^{0}C to maximum 800^{0}C)\ Rs 1800 (for test in vacuum condition) ***Applicant has to bring Pin/ ball and disc for the tests*	Rs 1000(for test in room temperature) Rs 1200(for test upto 450^{0}C) Rs 2000 (for test above 450^{0}C to maximum 800^{0}C)\ Rs 3000 (for test in vacuum condition) ***Applicant has to bring Pin/ ball and disc for the tests*
	Multidisciplinary Experimental and Testing Accessible Laboratories (METAL)		
	*** The target material should be arranged by the applicant.* ***Size*** *Dia- 10cm* *Thickness- 3mm*		
22	Atomic absorption spectroscopy	Rs 750	Rs 1500
23	Optical emission spectrometer	Rs 1000	Rs 1500
24	Sieve analyzer	Rs 150	Rs 300
	MATERIAL SCIENCE LAB		
25	Muffle furnace	Rs 100 per hour	Rs 200 per hour
26	Oven	Rs 100 per hour	Rs 200 per hour
27	Cold/hot mounting	Rs 50 per sample	Rs 100 per sample
28	Vacuum die casting	Rs 1000 per casting	Rs 2000 per casting
29	Micro-hardness	Rs 100 per sample	Rs 200 per sample
30	Optical microscopy	Rs 100 per sample	Rs 200 per sample
31	Sample polishing	Rs 200 per sample	Rs 400 per sample
32	Sample sectioning	Rs 50 per sample	Rs 100 per sample

LIBRARY

Library Profile: The ASTU Central Library, located on the ground floor of the academic building, serves as a hub for academic resources and a good environment for studying. Its location ensures easy accessibility for students and faculty alike. The library offers a welcoming ambiance conductive to focused study, providing a tranquil setting for academic pursuits. Overall, the ASTU Central Library stands as a vital resource centre supporting the academic endeavours of the university community.

Hours of Operation 9.30 a.m. to 5.00 p.m. All working days
Closed 2nd and 4th Saturday and Sunday.

Collection.

Books: We have expanded our book collection to **1664 titles**, encompassing a diverse range of subjects and genres to cater to the varied interests and academic pursuits of our users.

Dissertations: Our repository now houses **456** dissertations, providing valuable research resources for scholars and students alike.

Theses: We are pleased to announce the acquisition of **14** theses, further enriching our scholarly resources and supporting academic endeavours across disciplines.

Newspaper Collection: Our collection now includes 5 newspapers, offering comprehensive coverage of local, national, and international news to keep our users informed and engaged with current affairs.

The library also offers access to Employment news.

Journals/Periodicals /Magazine –Journals in the collection encompass Yojana, Current Science, University News,Manthan and Sikh Review**.**

Periodicals /Magazine such as Samachar, SainikSamachar, Right to Information Report, Connect and Education Law Cases also contribute to the wealth of resources**.**

Services offered by the Library.

ETD repository: Currently, ASTU has submitted five Ph.D. theses to Shodhaganga, showcasing our commitment to scholarly research and academic excellence.

Plagiarism Checking: In our commitment to academic integrity, we have implemented Plagiarism checking using **Drillbit** software, empowering users to uphold the highest standards of academic honesty and originality.

Previously, the university utilized Ouriginal by Turnitin for providing plagiarism reports to its users.

Circulation: Throughout the year, the university library typically has approximately 45 books checked out by users.

Number of visitors: A large number of visitors preferably students & researchers have been found in each and every year.

Library Management Software: The ASTU Central Library utilizes KOHA software as its library management system, with a total of **504** books catalogued in the system.

ERP (Enterprise Resource Planning) Library Module: ASTU's central library has an efficient Enterprise Resource Planning (ERP) module. Presently, it has recorded entries for **359** books.

অসম বিজ্ঞান আৰু প্ৰযুক্তিবিদ্যা বিশ্ববিদ্যালয়
Assam Science and Technology University
(A State University by Govt. of Assam & UGC Recognized)

New in Campus Courses (AICTE & Assam State Government Approved)

For the Academic session 2024-25

Brochure 2024-25

Self Financing Scheme:

1) Considering the fact that these courses are in self -financing mode, the University reserves the right not to start the courses if student enrollment in the specific course is less then 50% of the intake capacity.
2) No financial support/scholarship will be provided to the students from the University funds.
3) Candidate and his/her parent /guardian should submit a declaration in the prescribed form before commencement of class.
4) Special fees, including development fees, etc. once paid by the student, will not be refunded under any circumstances.
5) The admitted students should obey the rules and regulations in force, and the University reserves the right to dismiss a student in case of disobedience.
6) The University is not responsible for any accident to the students due to careless handling of equipment/chemical.
7) No hostel facility will be provided. The students need to bear the cost for his/ her personal accommodation, and transport.
8) Application for extension of time for payment of fees will neither be acknowledged nor entertained.
9) Admission secured on false statements / by suppression of facts, etc. is liable to be cancelled at any time, without giving any explanation/argument.
10) It is responsibility of the applicants to satisfy themselves that they are eligible for admission to the course they seek.
11) The Self-Financing International Students Scheme provides facilities to those students who would like to fully finance their students, stay and meet all expenses by themselves.
12) Foreign students are required to apply directly to the university concerned, which would then issue a provisional admission letter, depending upon the eligibility. Based on the admission letter, a student visa is issued by the Consulate. No international student can be admitted to the university without a student's visa. A valid residential permit in India, granted for studies by Ministry of external Affairs, Govt. of India, is treated at par with a student's visa.

Notes:

a) In exceptional situations, the University reserves the right not to offer the course(s) without assigning any reason. In such case, no student would be admitted for the concerned course(s).
b) The admitted students are encouraged to seek the financial support from non-university funds.

A) B.Tech in Computer Science and Engineering (B.Tech. CSE) –

▪ B.Tech Computer Science and Engineering (Artificial Intelligence and Machine Learning)	30 seats
▪ B.Tech Computer Science and Engineering (Artificial Intelligence)	30 seats
▪ B.Tech Computer Science and Engineering (Cyber Security)	30 seats
▪ B.Tech Computer Science and Engineering (Data Science)	30 seats
▪ B.Tech Computer Science and Engineering (Internet of Things)	30 seats
▪ B.Tech Computer Science and Engineering (VLSI)	30 seats

B) M.Tech in Computer Science and Engineering - 18 seats

C) The Proposed General Course Structure# for 4 Years B.Tech Courses in Engineering Streams are as follows-

SEMESTER- I

Sl No	Category	Course Title	L	T	P	Hrs	Credit
1	BSC	Physics	3	1	2	6	5
2	BSC	Mathematics-1	3	1	0	4	4
3	ESC	Basic Electrical Engineering	2	1	2	5	4
4	ESC	Engineering Graphics	1	0	4	5	3
5	HSMC	Technical Report Writing	2	0	2	7	3
6	ESC	Design Thinking	0	0	2	2	1
7	ESC	IDEA Lab Workshop	2	0	4	6	0
	TOTAL					**32**	**20**

*BSC – Basic Science Course
*ESC – Engineering Science Course
*HSMC – Humanities, Sociology and Management Courses

#Note: Subject to revision by university from time to time. The University reserves its right to update/ change the course structure/ course.

SEMESTER- II

Sl No	Category	Course Title	L	T	P	Hrs	Credit
1	BSC	Chemistry	3	0	2	5	4
2	BSC	Mathematics-II	3	1	0	4	4
3	ESC	Programming for problem solving	1	0	4	6	3
4	BSC	Biology for Engineers	3	0	0	3	3
5	ESC	Digital fabrication/ Workshop/ Manufacturing	0	0	4	4	2
6	HSMC	Universal Human values	2	1	0	3	3
7	MS	Sports and Yoga “OR” NSS/NCC “OR” Literature, Music, Art, Dance	2	0	0	2	0
		TOTAL				**32**	**20**

*BSC – Basic Science Course
*ESC – Engineering Science Course
*HSMC – Humanities, Sociology and Management Courses
*MC – Mandatory Courses

SEMESTER- III

Sl No	Category	Course Title	L	T	P	Hrs	Credit
1	PCC	Core -I	3	0	0	3	3
2	PCC	Core -I Laboratory	0	0	2	2	1
3	PCC	Core - II	3	0	0	3	3
4	PCC	Core – II Laboratory	0	0	2	2	1
5	PCC	Core – III	3	0	0	3	3
6	PCC	Core – IV	3	0	0	3	3
7	BSC	Basic Science Course	3	0	0	3	3
8	HSMC	Social Internship	0	0	6	2	3
		TOTAL				23	20

*PCC – Program Core Courses
*BSC – Basic Science Course
*HSMC – Humanities, Sociology and Management Courses

SEMESTER- IV

Sl No	Category	Course Title	L	T	P	Hrs	Credit
1	PCC	Core -I	3	0	0	3	3
2	PCC	Core -I Laboratory	0	0	2	2	1
3	PCC	Core - II	3	0	0	3	3
4	PCC	Core II- Laboratory	0	0	2	2	1
5	PCC	Core III	3	0	0	3	3
6	PCC	Core III-Laboratory	0	0	2	2	1
7	EP	Skill-based Training	0	0	4	4	2
8	ESC	Numerical Technique	2	0	0	2	0
9	HSMC	Humanities & Management Course	3	0	0	3	3
10	MC	Environmental Studies	2	0	0	2	0
		TOTAL				28	30

*PCC – Program Core Courses
*EP – Engineering Projects
*ESC – Engineering Science Course
*HSMC – Humanities, Sociology and Management Courses
*MC – Mandatory Courses

SEMESTER- V

Sl No	Category	Course Title	L	T	P	Hrs	Credit
1	PCC	Core -I	3	1	0	4	4
2	PCC	Core -I Laboratory	0	0	2	2	1
3	PCC	Core - II	3	1	0	4	4
4	PCC	Core II- Laboratory	0	0	2	2	1
5	PCC	Core – III	3	0	0	3	3
6	PCC	Core – IV	3	0	0	3	3
7	PCC	Core IV- Laboratory	0	0	2	2	1
8	PCC	Core – V	3	0	0	3	3
9	EP	Academic Internship	0	0	4	4	2
10	ESC	Professional Courses like AI, 3D Machining, big analysis, etc.	0	0	2	2	1
		TOTAL				26	23

*PCC – Program Core Courses
*EP – Engineering Projects
*ESC – Engineering Science Course

SEMESTER- VI

Sl No	Category	Course Title	L	T	P	Hrs	Credit
1	PCC	Core -I	3	0	0	3	3
2	PCC	Core -I Laboratory	0	0	2	2	1
3	PCC	Core - II	3	0	0	3	3
4	PCC	Core II- Laboratory	0	0	2	2	1
5	PCC	Core – III	3	0	0	3	3
6	PEC	Program Elective -I	3	1	0	4	4
7	OEC	Open Elective -I	4	0	2	2	1
8	EP	Mini Project	1	0	2	3	2
		TOTAL				**28**	**21**

*PCC – Program Core Courses
*PEC - Program Elective Courses
*OEC – Open Elective Courses
*EP – Engineering Projects

SEMESTER- VII

Sl No	Category	Course Title	L	T	P	Hrs	Credit
1	PCC	Core	4	0	0	4	4
2	PEC	Program Elective - 2	4	0	0	3	4
3	PEC	Program Elective - 3	4	0	0	3	4
4	OEC	Open Elective - 2	4	0	0	4	4
5	OEC	Open Elective - 3	4	0	0	4	4
6	HSMC	Slot for HSM	3	0	0	3	3
7	EP	Project	0	0	8	12	4
		TOTAL				29	27

*PCC – Program Core Courses
*PEC - Program Elective Courses
*OEC – Open Elective Courses
*HSMC – Humanities, Sociology and Management Courses
*EP – Engineering Projects

SEMESTER 8

Sl No	Category	Course Title	L	T	P	Hrs	Credit
1.	EP	Real time Industry Internship/research Project/ Entrepreneur ship & Start – up development	0	0	20	20	10
		TOTAL				**20**	**10**

***EP – Engineering Projects**

- A course can have a combination of lecture credits, tutorial credits, and practicum credits. For example, a 4-credit course with three credits assigned for lectures and one credit for practicum shall have three I-hour lectures per week and one 2-hour duration field-based learning/project or lab work, or workshop activities per week.
- In a semester of 15 weeks' duration, a 4-credit course is equivalent to 45 hours of lectures and 30 hours of practicum similarly, a 4-credit course with 3- credits assigned for lectures and one credit for tutorial shall have three l-hour lectures per week and one I- hour tutorial per week. In a semester of 15 weeks' duration, a four-credit course is equivalent to 45 hours of lectures and 15 hours of tutorials

D) The course structure for M.Tech program would be as per the model curriculum designed by the regulatory authority namely All India Council of Technical Education and as adopted by the University.

Proposed Fee Structure for the session 2024-25

B.Tech Course

Sl No.	Semester	Admission Fee (non-refundable) (Rs.)	Campus Development Fee (non-refundable) (Rs.)	Course Fee (Rs.)	Total (Rs.)
1	1st	10000	10000	50000	70000
2	2nd	10000	10000	40000	60000
3	3rd	10000	10000	50000	70000
4	4th	10000	10000	40000	60000
5	5th	10000	10000	40000	60000
6	6th	10000	10000	40000	60000
7	7th	10000	10000	40000	60000
8	8th	10000	10000	40000	60000

M.Tech Course

Sl No.	Semester	Admission Fee (non-refundable) (Rs.)	Campus Development Fee (non-refundable) (Rs.)	Course Fee (Rs.)	Total (Rs.)
1	1st	10000	10000	20000	40000
2	2nd	10000	10000	25000	45000
3	3rd	10000	10000	20000	40000
4	4th	10000	10000	25000	45000

Note:

1) Fees once deposited, will not be refunded. However, in case the student wishes to withdraw the admission fee for taking admission to other Institute/University, he would be eligible for the refund of the "Course fee" component after producing valid evidence of his/her admission to the other AICTE Recognized Institute/University.

ASTU's school of Engineering has two departments –

1. **Department of Computer Science and Engineering (new from 2024) and**
2. **Department of Energy Engineering (since 2016)**

Department of Energy Engineering is the first on-campus department of ASTU started in 2016 with the objective to develop technically competent human resources and environmentally benign sustainable technologies in the energy sector. This department focuses on the establishment of a research platform to carry forward R&D activities in distinguished fields of renewable energy. The establishment of the Energy Engineering department in the university is a part of the initiative to develop a roadmap for research to solve energy and environment-related relevant engineering and technological challenges. This is in accordance with IMPRINT INDIA's (Government of India's scheme launched on 5th November 2015) aim of directing research in the premier institutions into areas of societal relevance. The department has been offering M.Tech (Energy Engineering) & PhD (Energy Engineering) since the academic session 2020-21.

Major Thrust Areas: Biofuels & Bioenergy, Biomass Conversion Technologies, Advanced Biofuel Technologies, Fuel Technology, Solar Photovoltaic Conversion, Solar Thermal Conversion, Other Renewable Energy Technologies, Energy Conservation and Management, Energy Modeling& Simulation Study, Waste to Energy Conversion, Environment and climate change study etc.

Currently Available Research Facilities: IC Engine Set up, Bomb Calorimeter, Flash & Fire Point Apparatus, Cloud & Pour Point Analyzer, Sohxlet Extraction Set up, Rotary Vacuum Evaporator, Solar Sunshine Duration Recorder, Pyranometer, Single Phase Power Analyzer, Pyrolysis set up, Solar Water Heaters (FPC, EPC), Biomass Cooking stoves, TGA, DSC, Rheometer, Viscometer ASTU has established a School of Engineering (SoE) at its own campus at Jalukbari, Guwahati

AICTE Approved Academic Programmes at Dept of Energy Engg, ASTU: The following academic programmes are presently undergoing at the Department of Energy Engineering, ASTU, Jalukbari, Guwahati. These programmes are approved by the All India Council for Technical Education (AICTE), New Delhi:

Programme Name	Approved Intake	Particulars
i. **M.Tech (Energy Engineering)**	18 (eighteen)	M.Tech (Energy Engineering) course in the Department of Energy Engineering of ASTU was started in the academic session 2016-17. The course curriculum is developed based on the latest guidelines of AICTE Model curriculum for Postgraduate Degree in Engineering and Technology.
i. **Ph.D (Energy Engineering)**	05 (five)	ASTU receives approval from AICTE to conduct Ph.D programmes in Energy Engineering, Chemical Engineering, Mechanical Engineering and Computer Engineering disciplines under 'AICTE Doctoral Fellowship (ADF) Scheme' since the academic session 2020-21. ASTU is among the 41 (forty-one) technical institutions of the country and the only university in Assam besides Tezpur University which is selected by AICTE to conduct the doctoral programme under ADF scheme.

PhD Programme

PhD Research Centres

Sl. No.	Name of the Centres	PhD Disciplines
1	Assam Engineering College	Civil Engineering, Electrical Engineering, Mechanical Engineering, Chemical Engineering, Computer Science and Engineering, Electronics and Communications Engineering and Chemistry
2	Assam Institute of Management	Business Administration
3	NIPS, MIRZA	Pharmacy
4	Jorhat Engineering College, Jorhat	Mechanical Engineering, Computer Science and Engineering, Instrumentation Engineering, Civil Engineering, Electrical Engineering
5	Jorhat Institute of Science and Technology, Jorhat	Physics, Chemistry. Mathematics
6	School of Engineering	Energy Engineering, Mechanical Engineering, Chemical Engineering, Computer Science and Engineering,
7	NERIWALM, Tezpur	Water Resource Management

Name of the NSS cell: Assam Science and technology University, Guwahati

ASTU has received approval from the Director, Sports and Youth Welfare, Assam on 29th February and sanctioned its 10 units on 11th and 16th March, 2020.

Number of current NSS Units: 8

Sl. No.	Name of the Units
1	Assam Engineering College, Guwahati
2	Jorhat Institute of Science and Technology
3	Barak Valley Engineering College
4	Bineswar Brahma Engineering College
5	NETES Institute of Pharmaceutical Sciences
6	Pratiksha Institute of Pharmaceutical Sciences (PIPS)
7	Golaghat Engineering College
8	Dhemaji Engineering College

Number of Programme Officers: 8

Total number of enrolled Volunteers for 2022-23: 800

Number of **Female** volunteers: 283

Number of **Male** volunteers: 517

Units situated at 6 districts of Assam (Kamrup, Kamrup Metro, Jorhat, Karimganj, Dhemaji and Golaghat)

Viksit Bharat@2047: Initiative by ASTU

Establishment of Viksit Bharat Cell@2047:

Viksit Bharat@2047 represents the government of India's ambitious vision to transform the nation into a developed entity by the centenary of its independence in 2047. ViksitBharat@2047 was launched by the Prime Minister of India, Shri Narendra Modi, on 11th Dec. 2023, through a video conference with the Vice Chancellors of Universities, Heads of Institutes and faculty members in workshops organized by Raj Bhawan across the country. The representatives of Assam Science and Technology University joined the ViksitBharat@2047 event, conducted by Raj Bhavan Assam on 11th December, 2023 at IIT-Guwahati. With the Hon'ble Vice Chancellor, the faculty members and students of Assam Science and Technology University were participated the Viksit Bharat @ 2047 event, conducted by Raj Bhavan Assam with an attempt to engage students to give suggestions for Viksit Bharat@2047.

To fulfil the vision of the Hon'ble prime Minister of India, Assam Science and Technology University has established a ViksitBharat@2027 Cell to make India as developed country by 2047 by engaging the students to suggest their ideas for the development of the country. Apart from that the university has circulated a notification to establish the ViksitBharat @2047 Cell at all the affiliated institutes/Colleges and requested to the principals of the affiliated colleges to encourage the students to take part in the competition for Viskit Bharat @2047.

Affiliated Institutes under ASTU

1	National Institute Of Electronics And Information Technology, Dibrugarh Extension Centre, Dibrugarh
2	National Institute of Electronics and Information Technology, jorhat extension centre, Rowriah Jorhat
3	National Institute of Electronics and Information Technology, kokrajhar extension centre, Kokrajhar
4	National Institute Of Electronics And Information Technology, Tezpur Extension Centre, Tezpur
5	Daffodil College of Agriculture and Technology, Guwahati
6	Seva Bharati Institute of Fire, Safety and Disaster Management , North Guwahati
7	Daffodil College of Horticulture, Guwahati
8	Dona International Institute of Assam , Guwahati
9	National Institute of Electronics and Information Technology, Guwahati
10	Tocklai Tea Research Institute, Jorhat
11	Silapathar Science College, Silapathar
12	Dibrugarh Hanumanbax Surajmall Kanoi College, Dibrugarh
13	Daffodil College of Agriculture, Vidyanagar, Khetri
14	North East Institute Of Management SciencE (NEIMS), Jorhat
15	Dhemaji Engineering College, Dhemaji
16	Girijananda Chowdhury Institute of Pharmaceutical Science, Tezpur
17	C.T.College, Tinsukia
18	Rahman Institute of Pharmaceutical Sciences and Research, Guwahati
19	Pub Kamrup College, Guwahati
20	North Eastern Regional Institute of Water and Land Management, Tezpur
21	Golaghat Engineering College, Golaghat
22	Pratiksha Institute of Pharmaceutical Sciences, Guwahati
23	Scholars Institute of Technology and Management, Guwahati
24	Barak Valley Engineering College, Karimganj
25	NERIM, Mangaldoi
26	NERIM, Guwahati
27	Netes Institute of Pharmaceutical Science, Mirza
28	Assam Institute of Management, Guwahati
29	Guwahati College of Architecture and Planning, Azara
30	Bineswar Brahma Engineering College, Kokrajhar
31	Jorhat Institute of Science & Technology, Jorhat
32	Jorhat Engineering College, Jorhat
33	Assam Engineering College, Guwahati
34	Girijananda Chowdhury Institute of Pharmaceutical Science, Guwahati
35	Girijananda Chowdhury Institute of Management and Technology, Azara
36	Netes Institute of Technology and Science, Mirza

Photo Gallery

Photo Gallery

Photo Gallery

Photo Gallery

ASTU Officials

ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY
Tetelia Road, Near Assam Engineering College, Jalukbari,
Guwahati, Assam 781013
Telephone: 8811079300
Email: admission@astu.ac.in