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Rewiring the Future.

**ELECTRONICS AND
TELECOMMUNICATION
ENGINEERING
DEPARTMENT**

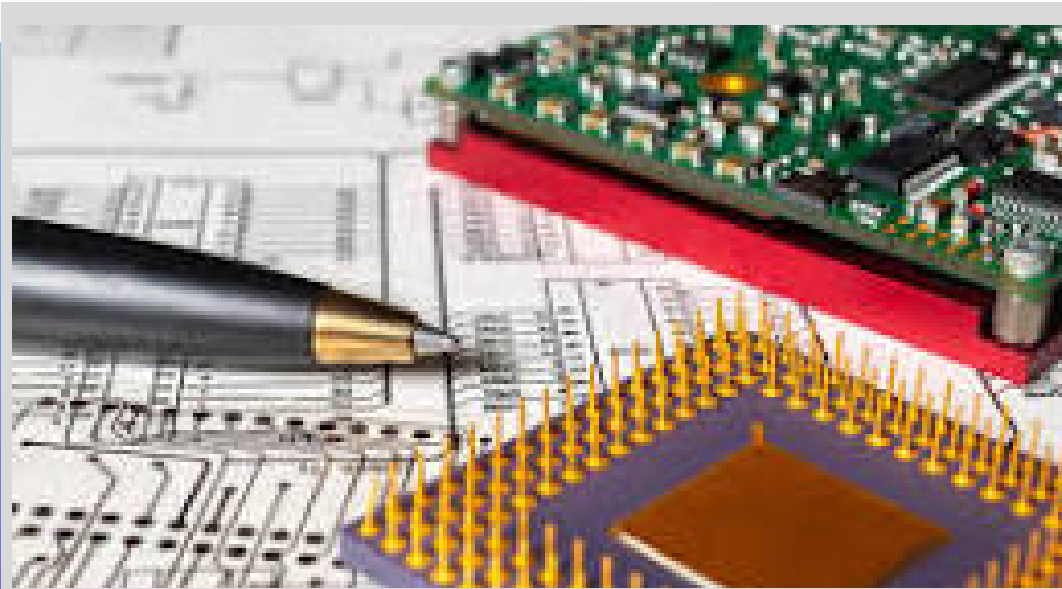
August, 2026

NEWSLETTER

Vol 1, Issue 1, Half yearly

**WELCOME TO THE FIRST DEPARTMENTAL NEWSLETTER OF
ETE, BVEC**

BARAK VALLEY ENGINEERING COLLEGE, SIRIBHUMI, ASSAM



DEPARTMENT OF ELECTRONICS AND TELE-COMMUNICATION

ABOUT THE DEPARTMENT

The department of Electronics and Communication Engineering was started in the year 2017 and it offers B.Tech degree with an annual intake capacity of 60 students. The department emphasizes on building technical, professional and research oriented skills. The course at the undergraduate level is at par with the AICTE curriculum, and is designed in such a manner so that various areas of Electronics and Communication Engineering are well covered with a better understanding of the concepts at the core level. The students are also made equipped with the experimental solutions of the physical problems, techniques & methods of design of the system relevant to the contemporary industrial world. The Department has qualified, dynamic and dedicated faculty members along with the excellent state-of-the-art infrastructure and serene atmosphere that grooms the prospective students to evolve with the best of their skill set that shapes their future. Knowledge and skills of faculties and staff are regularly updated through well planned and executed Faculty development programs.

Vision:

To become a centre of excellence and importance in all the fields of Electronics and Communication Engineering across the country and in the Globe along with a constant focus to impart education where the best of teaching-learning, state-of-the-art research and consultancy coincides.

Mission:

- The mission of the department of Electronics and Telecommunication Engineering are:
- To create academic excellence by imparting quality Education, and to carry out research and technology oriented development in the frontier areas of Electronics and Communication Engineering.
- To inculcate the spirit of innovation and creativity by active participation in development activities.
- To promote enterprising abilities for the benefit of society by imbibing professional skills.
- To have regular interaction with industry for promoting Academia Industry Collaboration which will lead to necessary Industry Exposure for the Students and offer solutions and consultancy services to real time problems.

ADVISORS:-

Dr. Satyajit Das and Mr. Kamal Hassan Lashkar

EDITORS

Abhijit Roy (5Th Sem)

Simanta Deka (5th Sem)

Muskan Khatun (7th Sem)

Pradipta Senapati(7th Sem)

Panthadeep Paul (7th Sem)



WORDS FROM HOD

It gives me immense pleasure to present the department's first newsletter, which highlights the academic achievements, artistic endeavors, and teamwork of our teachers, and students. A newsletter is a reflection of our department's active spirit, advancements, and common goals. Our department has continued to promote learning, creativity, and professional development. I am proud of the accomplishments of our students and faculty in academics, research, co-curricular activities, and community engagement. These accomplishments provide witness to their dedication, perseverance, and commitment to excellence.

I extend my sincere appreciation to all faculty members, staff, and students whose enthusiasm and hard work have made these accomplishments possible. I also congratulate the editorial team for bringing together the diverse activities and achievements of our department in this newsletter.

Dr. Satyajit Das
Head of the Department

Electronics and Telecommunication Engineering Department
Barak Valley Engineering College

DEPARTMENTAL ACTIVITIES

Departmental Wall Magazine Competition (Frugal Engineering: Innovation with Purpose)

Our department came together to participate in the Departmental Wall Magazine Competition, exploring the inspiring theme of “Frugal Engineering.” The initiative brought together students’ creativity, technical knowledge, and collaborative spirit to showcase how engineering can create simple, affordable, and sustainable solutions to real-world problems.

Through creative illustrations, thought-provoking ideas, innovative concepts, and engaging content, the wall magazine reflected the true essence of frugal engineering — doing more with less, without compromising on impact.

More than just a competition, it became a celebration of teamwork, imagination, and engineering for the greater good, proving that great innovation doesn’t always require great resources—sometimes, it simply requires a great idea.

“Think Simple. Build Smart. Create Impact.”



Wall Magazine Display



Students engaged in Wall Magazine

DEPARTMENTAL ACTIVITIES

Intensity: A Celebration of Team Spirit & Triumph

Departmental Participation in the College Sports Fest

Our department came together with energy, determination, and an unbreakable team spirit at Intensity, the college's annual sports extravaganza. Competing across various disciplines, our students displayed exceptional sportsmanship, teamwork, and competitive spirit, bringing home several remarkable achievements.

🏆 Our Major Achievements

- 🏆 Cricket — Champions
- 🏆 Kho-Kho — Gold Medal
- 🥈 Football — Runners-Up
- 🏆 Multiple Individual Awards

Beyond the medals and trophies, Intensity was a celebration of unity and camaraderie. Every match reflected the dedication of our players and the support of the entire department.

From the cricket pitch to the Kho-Kho ground and the football field, our students proved that teamwork turns individual talent into collective triumph.

“Play together. Fight together. Win together.”



ETE Football Team 2026



ETE Cricket Team

DEPARTMENTAL ACTIVITIES

Marching into a New Tradition First-Ever Parade Competition



ETE Parade Team on Independence Day 2026



Marching towards Success on Independence Day 2026

A new chapter in our college's extracurricular journey began with the inaugural Parade Competition, and our department proudly stepped forward to be a part of it. With enthusiasm, discipline, and a strong sense of unity, our students took on the challenge of representing the department on the parade ground.

From the initial practice sessions to the final march, the team demonstrated dedication, coordination, discipline, and perseverance. Every synchronized step, formation, and command reflected the countless hours of preparation and the collective effort put in by every participant.

As this was the first-ever Parade Competition held in the college, being a part of it was a memorable experience in itself. It gave our students an opportunity to step beyond academics, embrace a new challenge, and showcase the strength of teamwork and discipline.

The parade was not just about marching in formation—it was about standing together as one team, carrying the pride of our department, and becoming part of a new tradition.

“One team. One rhythm. One proud march.”

DEPARTMENTAL ACTIVITIES

Advancing Knowledge Through IEP at NIT Silchar

Exploring the Frontiers of Analog & RFIC Design

As a part of our department's continuous effort to enhance technical knowledge and encourage academic excellence, a group of students and faculty members participated in an Instruction Enhancement Program (IEP) at NIT Silchar. The programme focused on the fascinating and highly relevant areas of Analog and RFIC (Radio-Frequency Integrated Circuit) Design.

The programme provided participants with an opportunity to gain deeper insights into the fundamentals, design methodologies, and practical aspects of analog and RF integrated circuits. Through expert-led sessions and technical discussions, participants were introduced to concepts that play a vital role in modern communication systems, semiconductor technology, and electronic circuit design.

The experience served as a valuable platform for learning beyond the classroom, interacting with experts, and exploring emerging technologies in the field of electronics. Such programmes not only strengthen technical understanding but also inspire students to pursue innovation, research, and advanced learning in the rapidly evolving world of semiconductor and communication technologies.



Students and Faculties During IEP at NIT Silchar

FACULTY ACTIVITIES

Dr. Satyajit Das

1. State Award to Teacher 2025 by Govt. of Assam

2. Dr. Satyajit Das has given responsibility Head of the Department, ETE in March 2025.

3. Granted a National patent on “Black Fungus Detection kit based on Inter-digital planer paper capacitance” Application no: 202331007131/ 567133, Granted Date:04/06/2025.

4. Book chapter on “A Numerical Approach to Investigate the Effect of Work Function on the Important Cell Parameters of Heterojunction Solar Cells” Nanoscale Devices

From Electronics to Photonics Hard ISBN: 9781779640567 E-Book ISBN: 978-1-77964-057-4 Apple Academic Press Inc. 1265 Goldenrod Circle NE Palm Bay, Florida 32905 U.S.A

5. Conference paper by Ray, A.K., Das, K., Ngente, L., Nunia, R., Das, S., Sarma, D., Laskar, K.H., Barman, P., Boruah, D., Dutta, A. and Azzopardi, B., 2025, October on “IoT-based Home Automation System for Energy Conservation” in 2025 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe) (pp. 1-5). IEEE.

6. Satyajit Das attended workshop on “Capacity Building for Internationalization of Higher Education” conducted by the British Council in collaboration with the Ministry of Education, Government of India held from 15th to 19th September 2025.

7. Visited Assam Engineering College in May 2025 as an External Evaluator for the Final year project in ETE branch.

8. Visited Tezpur university, Tezpur in May 2025 as an External Evaluator for the Mini project and Lab external examiner in ETE branch.

9. Teacher member to BOG, Barak Valley Engineering College for session 2025 to 2026

10. Satyajit Das has given responsibility for member & co coordinator for organizing Induction Programme for the academic sessions 2025-26 and 2026-27.

11. Satyajit Das has Visited Semiconductor plant in Jagi Road.



State award to Teacher 2025



Visit the Semiconductor plant, Jagiroad

FACULTY ACTIVITY

Dr. Debajit Sarma

JOURNALS:

1. Sharma, Ananda, Souvik Ghosh, Bhaswat Kalita, Abhinab Kashyap, Anjan Kumar, Jatinder Kaur, Malatesh Akkur, Jayant Jagtap, Debajit Sarma, and Sagar Bhattarai. "Enhancing efficiency in organic solar device with exclusive study using PC-1D simulator." Journal of Optics, pp. 1-8, 2024.

2. Naik, R. P., Bhowal, A., Lakshmi, S., Shetty, S., and Sarma, D. "Phase Optimization and Performance Evaluation of Multi STAR-RIS Aided Underwater Optical Wireless Communication System", IEEE Internet of Things Journal, 2025.

3. Bhowal, Anirban, Ramavath Prasad Naik, Pratima Das, Deepak Kumar, Shubh Lakshmi, Md Sakir Ahmed, and Debajit Sarma. "Channel Estimation, Resource Optimization, and Experimental Validation of Multi STAR-RIS Aided UOWC System." IEEE Transactions on Vehicular Technology (2026).

4. Biswash, Soumodeep, Raihan Ahmed Sadiyal, Kamalika Roy, Deep Acharjee, Debajit Sarma, Ruhul Amin Laskar, and Abhijit Boruah. "Single-channel EEG-based drowsiness detection using attention mechanism and ensemble learning." Network Modeling Analysis in Health Informatics and Bioinformatics 15, no. 1 (2026): 81.

5. Boruah, A., Gogoi, K., Sarma, D., Paul, S., & Kakoty, N. M. (2026). From representation to segmentation: A scene-understanding driven review and benchmark of underwater vision methods. Engineering Applications of Artificial Intelligence, 181, 115531.



Teacher Along with Internship Group

FACULTY ACTIVITIES

CONFERENCES:

1. Paul, S., Boruah, A., Mukherjee, P., Basfore, B., Sarma, D., & Saikia, M. J. (2024, September). Semantic Segmentation and Scene Understanding Using RGBD Data. In International Conference on Data, Electronics and Computing (pp. 97-114). Singapore: Springer Nature Singapore.
2. Gogoi, K., Baruah, S. K., Konwar, U., Mahanta, R., Boruah, A., Sarma, D., Kakoty, N. M., An Analytical Review of Underwater Image Enhancement Techniques. Procedia Computer Science, 258, 2703-2712, 2025.
3. Nayak, N. K., Deb, K., Dutta, A., Debbarma, S., Barman, P., Azzopardi, B., & Sarma, D. (2025, October). Assessment of Electric Vehicle Charging Demand through Trip-Chain Modelling. In 2025 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe) (pp. 1-5). IEEE.
4. Ray, Abhishek Kumar, Karan Das, Lalsiemkam Ngente, Raju Nunia, Satyajit Das, Debajit Sarma, Kamal Hassan Laskar et al. "IoT-based Home Automation System for Energy Conservation." In 2025 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe), pp. 1-5. IEEE, 2025.
5. Deep Senchowla, Deepjyoti Kalita, Priyakshi Bordoloi, Abhijit Boruah, Debajit Sarma, "Semantic Spatial Object Interpretation for Indoor Environments using Sensor Fusion" 2025 IEEE 4th International Conference on Smart Technologies for Power, Energy and Control (STPEC 2025).
As Resource Person: delivered a talk titled "Basics of AI, ML, DL - From a Researcher's Perspective" in the Dept of ECE, Assam Don Bosco University on 19th May, 2025.

Served as Mentor for Summer Internship Program in 2025 and 2026 at Technology Innovation Hub (TIH), IIT Guwahati.



Academic Internship Group in TIH, IITG

FACULTY ACTIVITIES

Kamal Hassan Laskar

1. Successfully completed the two day faculty induction program organised by DTE, Assam at Assam Administrative Staff College, Khanapara, Guwahati from 14th oct 2025 to 15th oct 2025

2. Successfully completed one week faculty development program on “Student Evaluation for Effective Curriculum Implementation” conducted by Curriculum Development Centre Department from 08th Sept, 2025 to 12th Sep, 2025 (One Week) at NITTTR, Chandigar

3. Successfully completed a 2-week Induction Training Programme conducted by NITTTR, Kolkata from 20th July, 2026 to 31st July, 2026

4. Participated in ONE-WEEK BOOTCAMP ON DRONE TECHNOLOGY AND RELATED APPLICATIONS

5. Organized by BVEC-Sribhumi in association with NIT-Silchar, Jet Aerospace & supported by IHFC- Technology innovation hub of IIT-Delhi from 9th Feb, 2026 to 13th Feb, 2026

6. Successfully conducted an awareness program on “AI for Better Future” at Marjatkandi Public HS School, Marjatkandi, Assam on 25th June, 2026

7. Co-authored one research paper with Dr. Satyajit Das, Dr. Debajit Sarma and others on “IoT-based Home Automation System for Energy Conservation” Published in 2025 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe)



Attending the Induction program

FACULTY ACTIVITIES

Sudip Gorlosa

1. Attended Induction Training Programme for the newly appointed Assistant Professors of State Engineering Colleges organized by Directorate of Technical Education, Assam during 25th-26th November 2024
2. Attended Induction Training organized by NITTTR, Kolkata from 15th June to 26th June, 2026 (Two weeks)
3. Attended FDP on Cryogenic Temperature and Nano Scale Semiconductor Devices: Challenges of Self Heating, Variability and Reliable Computing organized by Electronics and ICT Academy, NIT Patna and IIIT Senapati, Manipur from 9th July to 14th July 2026 (One week)
4. Attended FDP on AI and IoT for Next Generation Systems organized by NITTTR, Chandigarh from 27th July to 31st July 2026 (One Week)
5. Attended FDP on Outcome based Education and Teaching Pedagogy organized by Rural Development Department, NITTTR, Chandigarh from 20th January to 24th January 2025 (One week)
6. Attended FDP on Outcome based Education for Technical Education organized by Department of Electronics and Telecommunication Engineering, Department of Computer Science and Engineering, Assam Engineering College, Guwahati in collaboration with Assam Science and Technology University from November 4 to November 9, 2024 (One Week)
7. Attended FDP on Sustainable Innovation in New Ventures organized by Department of Mechanical Engineering & Institute Innovation Council, Assam Engineering College from 27th October to 1st November 2025 (One week)



Leading the Sanchar Satthi Team

FACULTY ACTIVITIES

Mr. Debajit Sarma

Publication:

1. Accepted: D. Sarma, A. V, S. Banerjee, T. Mehta, and S. Dey, "Compact Implantable Antenna Integrated with Rectifier for ISM-band Wireless Intracranial Pressure Monitoring System," IEEE International Microwave and Antenna Symposium (IMAS), Jeddah, Saudi Arabia, 19-22 October 2026.

2. Accepted: D. Sarma, T. Mehta, and S. Dey, "Design of a Compact Dual-Band Circularly Polarized Implantable Integrated with RF Rectifier for Blood Pressure Monitoring," Progress in Electromagnetics Research Symposium (PIERS), 2026.

3. D. Sarma, A. O. Asok, A. K. Gupta and S. Dey, "Optimized 433 MHz Implantable and Ingestible Conformal Antenna for Advanced ECG Biotelemetry," 2025 IEEE Wireless Antenna and Microwave Symposium (WAMS), Chennai, India, 2025, pp. 1-5, doi: 10.1109/WAMS64402.2025.11158582.

- Successfully completed the two day faculty induction program organised by DTE, Assam at Assam Administrative Staff College, Khanapara, Guwahati from 14th oct 2025 to 15th oct 2025
- Successfully completed a 2-week Induction Training Programme conducted by NITTTR, Kolkata from 20/07/26 to 31/07/26.
- Successfully conducted an awareness program on "AI for Better Future" at Marjatkandi Public HS School, Marjatkandi, Assam on 25/06/2026
- Successfully completed faculty development programme on machine learning based applications in signal processing and robotics, conducted by NIT Warangal.



Conduction of Awareness Program on "AI for better future"

STUDENT ACHIEVEMENTS

1. Our department proudly congratulates **Anant Kumar Mandal** for his achievements in national-level youth initiatives:

- Selected to represent Assam in the Viksit Bharat Vibrant Village Programme, Ladakh (2026), under the Ministry of Youth Affairs & Sports, Government of India.
- State Finalist (Personal Interview) in the Viksit Bharat Young Leaders Dialogue (December 2025), Ministry of Youth Affairs & Sports, Government of India.

His achievements reflect leadership, dedication, and a strong spirit of youth participation. "Leading today, shaping tomorrow."

2. During 2025-2026, **Benudhar Saikia** demonstrated strong technical initiative through hands-on work in VLSI, FPGA, PCB design, and emerging AI-VLSI applications.

- Developed VLSI projects using Cadence Virtuoso and Verilog.
- Designed PCB projects using EasyEDA/KiCad, including an AC-to-DC converter PCB.
- Developed FPGA/Verilog projects such as a Full Adder and Traffic Light Controller using Vivado.
- Explored AI + VLSI project ideas and contributed technical content in electronics and VLSI.

His work reflects a strong commitment to practical learning, innovation, and electronics design.

3. **Sayantana Bhattacharjee** brought pride to the department by securing 1st position in the Inter-College Debate Competition at RESPLANDOR 2026, showcasing exceptional communication skills, confidence, critical thinking, and persuasive expression.

4. **Ritatapa Chakraborty** secured Gold in solo Singing competition and Silver in Solo dance Competition Held in Resplendor.

5. **Debanjan Roy** secured Gold in both Break the circuit and Algomaze competition held during the college fest, these are the technical events of our college.

6. **Shamim Ahmed** secured Gold in Discuss Throw and Shoutput Throw and Bronze in Arm wrestling competition held during Intensity.

8. **Simanta Deka** received 3rd prize in both Doodle art competition and Claytopia.

7. **Ananya Kachari** Secured 1st prize in Dance battle, 2nd prize in Chitraकथा and 3rd Prize in Claytopia.

9. **Sayantana Bhattacharjee** received 1st position in Inter College debate competition, Resplendor

10. Team of **Rikiraj Kashyap, Hrishikesh barman, Rituparna borah, Bishal pratim borah** secured 3rd Position Link Bridge.

11. **Jnaandeep Hazarika** secured 2nd position in Sell your Idea.

12. Team of **Rikiraj kashyap, Jinku Borpujari, Poran Borkakoty and Swaraj deep borah** achieved 1st position in 100x4 relay run held during Intensity.

STUDENT ALUMNI

1. **Soumodeep Biswash (Batch 2025)** : Pursuing **M.TECH** at **NIT,SIKKIM**

Achievement:

- Recipient of ASTU Gold Medal for securing the highest CGPA in B. Tech degree across all branches under ASTU in 2025.
- Recipient of ASTU Programme Topper award for securing highest CGPA in the branch of Electronics and Telecommunication Engineering in 2025.
- Recipient of Satyendra Sarma Memorial Award by Institute of Engineers (India) Assam State Center for achieving the highest CGPA in B. Tech degree across all branches under ASTU in 2025.
- Published a journal article titled "Single-channel EEG-based drowsiness detection using attention mechanism and ensemble learning" in the journal of "Network Modeling Analysis in Health Informatics and Bioinformatics" in 2026.
- Qualified GATE 2024 on my first attempt during my 3rd year in B Tech Degree in 2024.
- Recipient of AICTE PG Scholarship Scheme from the year 2025

2. **Suvham Verma (Batch 2024)** is working as a Subject Matter Expert at **Tata technology**.

3. **Shikha Deka (Batch 2024)** is working as a Technical Assistant (TA) at **All india radio**.

4. **Anoy Paul (Batch 2023)** : Pursuing **M.TECH** at **NIT, Kurukshetra**.

Achievement:

He belongs to Department of VLSI Design and Systems Engineering . His research interest are mainly in Embedded Cryptography , FPGA and Embedded Systems , Low Power VLSI Design, Wireless Sensor Networks and Hardware Software Co- Design , the research work that he did in NIT Kurukshetra are mentioned below. I had done the projects under the supervision of Dr. Dheeraj Kumar Sharma , Assistant Professor , Grade 1 , NIT Kurukshetra , Department of ECE .

Conferences

- Research 1 : Software Implementation of WBZUC-128 Stream Cipher (Done in Verilog)
- Research 2: Design Synthesis and Analysis of WBZUC-128 Stream Cipher for hardware realisation(Done in Synopsys Design Compiler)
- Research 3 : Comparative Analysis of ARX, HIGHT and LWARX Stream Cipher (Done in Verilog)
- Research 4 : Hardware Level Throughput Evaluation of lightweight ciphers , got best paper award here .

I had also worked in International Journal mainly in Springer Nature indexed in SCOPUS , SCIE , they are now under peer review, hoping to get acceptance soon .

- Journal work 1 : Hardware - Software Co - design of lightweight ciphers (done in Verilog , Embedded C)
- Journal work 2 : Cross platform study of lightweight cryptography (Done in Verilog, Embedded C (Arduino Uno) , Python (Raspberry Pi) (Thonny IDE)
- Hoping my research work motivates BVEC ian to pursue higher education in VLSI and Embedded Systems .

STUDENT ALUMNI

5. **Abhijit Ghosh (Batch 2021)** : Works at **Globalfoundries** as a **Sr Integration Engineer DEVICE** .
Achievement:

- 1. Satyendra Sarma Memorial Award 2021 (The institute of Engineers)
- 2. Gold medal 2021 (ASTU)
- 3. Silver medal 2024 (IIT Hyderabad)
- 4. Publication : Effect of different top electrodes and magnetic field on HfOX based RRAM devices(Journal of Physics D: Applied Physics)

6. **Sagnik Dey (Batch 2025)** Works at **Asteretechnologies**.

7. **Hirokkyoti Dutta (Batch 2025)** Works at **Asteretechnologies**.

8. **Aminur Rahman (Batch 2025)** Works at **Asteretechnologies**.

9. **Biswajit Choudhury (Batch 2025)** works as a **GIS Assistant in Department of Revenue , Revenue Circle**.

10. **Nilabrho Kanta Paul (Batch 2025)** Studies at **IIIT Kalyani**.

11. **Raihan Ahmed Sadiyal (Batch 2025)** studies at **Goa institute of management**.

12. **Ankita Goswami (Batch 2025)** Works at **Semiconductor secctor** is Noida.

13. **Semima Nazmin Sultana (Batch 2025)** is pursuing **M.Tech** in Electronics Design and Technology (ELDT) programme at **Tezpur University**.



Suvham Verma



Shikha Deka



Ankita Goswami



Biswajit Choudhury



Soumodeep Biswash



Semima Nazmin Sultana

COMMITTEE MEMBERS



Dr. Satyajit Das



Kamal Hassan Laskar



Pradipta Senapati
7th Sem



Muskan Khatun
7th Sem

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Simanta Deka
5th Sem



Panthadeep Paul
7th Sem



Abhijit Roy
5th Sem