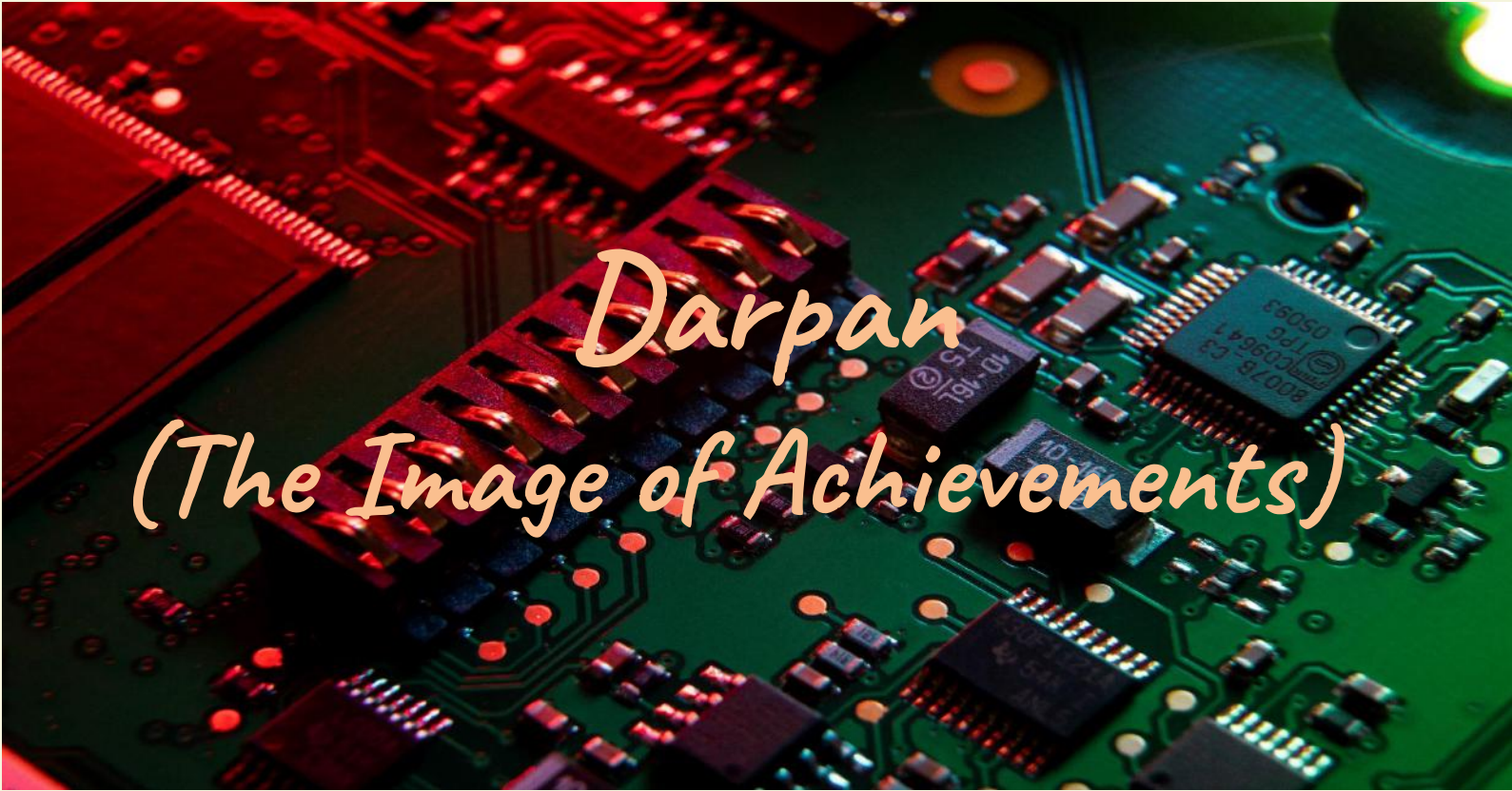




St. Thomas' College of Engineering & Technology

4 D.H. ROAD, Kolkata-700023

NEWSLETTER



Darpan
(The Image of Achievements)

DEPARTMENT OF
ELECTRONICS & COMMUNICATION ENGINEERING

-: April to June :-

VOLUME ECX - EDITION IV, JULY 24, 2025

For Further Information Contact: prasun.chowdhury@stcet.ac.in

For Feedback Contact: priyanka.saha@stcet.ac.in

Have a visit to our website:

www.stcet.ac.in



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4, D. H. Road, Kidderpore, Kolkata – 700023

Department of Electronics & Communication Engineering

Darpan

(The Image of Achievements)

Volume: ECX - Edition IV, 24th JULY, 2025

Editors:

1. Mr. Jishnu Bhadra
B.Tech 4th year,
2. Ms. Sumana Manna
B.Tech 4th year,
3. Mr. Kousik Sarkar
B.Tech 3rd year,
4. Miss. Rupsa Chakraborty
B.Tech 3rd year
5. Mr. Adrishikhar Chowdhury
B.Tech 2nd year
6. Ms. Adrika Sarkar
B.Tech 2nd year
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B.Tech 1st year
8. Mr. Raj Nandi
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Vision of the Department

To build a strong teaching and research environment to cater to the manpower needs in Industrial and Academic domains of the rapidly growing Electronics and Communication Engineering.

Mission of the Department

- To produce certified industry-ready professional in Electronics and Communication Engineering, through innovative educational programs incorporating laboratory practices and project-based teaching-learning processes, in a modern environment.
- To create knowledge base of advanced technologies through research in the area of Electronics and Communication, for competitive and sustainable development of the country.
- To groom the department as a learning centre to inculcate advancement of technology in Electronics and Communication Engineering with social values and environmental awareness.

Program Educational Objectives (PEO)

- Possess design skills and core proficiency in Electronics & Communication Engineering for employment in relevant industries.
- Possess strong core and advanced knowledge Electronics & Communication Engineering to pursue higher studies.
- Exhibit leadership, ethical values, and social commitment to contribute in academia, industry and/or entrepreneurial ventures, both nationally and globally.



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Recent Technology Trend

Autonomous Vehicle integrating Google Map API: An IoT based Applications

In today's fast-paced world, road traffic congestion, accidents, and inefficient transportation systems are significant challenges faced by urban societies. Traffic-related issues contribute to long commute times, environmental pollution, and an increased risk of accidents, leading to economic losses and a decline in the quality of life. Furthermore, human error in driving is one of the leading causes of road accidents, resulting in thousands of fatalities annually. To address these challenges, the development of autonomous driving systems has emerged as a promising solution. By integrating the Google Maps API, the system will calculate and choose the shortest, least time consuming, and most efficient routes between multiple locations, dynamically adjusting to real-time traffic conditions. This will help minimize congestion, reduce travel time, and optimize fuel consumption, contributing to a more sustainable transportation system.

Dr. Prasun Chowdhury

HOD, Department of Electronics and Communication Engineering

Departmental Milestones

STUDENTS' ACHIEVEMENTS

MOOCS:

No. of students successfully completed MOOCS: 23

UNIVERSITY RESULT:

- Top three Final year students who completed Degree course in 2024-25.

Name	DGPA
PABONI BHATTACHARYA	9.23
RAJORITA ROY	9.16
SOUMIK PAL	9.13

- Top three performers in 3rd Year (6th Semester) Exam

Name	YGPA
RUPSA CHAKRABORTY	8.90
RUPSA SAHA CHOWDHURY	8.65
SUPRATIM BANERJEE	8.57

- Top three performers in 2nd Year (4th Semester) Exam

Name	YGPA
SUPRIO DUTTA	9.09
PRADIP MANDAL	8.48
TIYASA PAL	8.39



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STUDENT PLACED IN IT COMPANY:

- Number of offer received by the students of Batch 2024-25: 66.

CORE COMPANY RECRUITMENT:

- **Mr. Souvik Banik**, Batch 20124-25 has been selected as **DRDO Scientist B**.

STUDENTS PUBLICATION:

- **Rajorita Roy, Diganta Roy, Prashnatit Pal, Rituparna Bhattacharya: Coloured Chain: A Blockchain Based Supply Chain System**, International Conference on Recent Advancements in Computing Technology and System Design (In5nRACS 25). organized by the Department of Electronics and Communication Engineering, College of Engineering Vadakara. 16-17 June 2025.

PATENT GRANTED :

Patent Title: Ein maschinelles Lernsystem zur Schätzung des Schilddrüsenprofils aus korrelierten klinischen Daten (A machine learning system for estimating thyroid profile from correlated clinical data)

Owners' Name: **Bhadra, Jishnu**, Kolkata, West Bengal, IN; **Chowdhury, Prasun, Dr.**, Kolkata, West Bengal, IN; **Dutta, Rohan**, Kolkata, West Bengal, IN; **Khamaru, Niladri**, Parganas, West Bengal, IN; **Koley, Romit**, Howrah, West Bengal, IN

Accepted, granted and registered by German Patent and Trade Mark Office as German Utility Model on 7th May, 2025 and published in Patent Gazette on 12th June, 2025.





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PERFORMANCE IN “INNOVATION COMPETITION” CONDUCTED BY EDC, STCET:

- A **Final year project based Innovative Hardware Project Competition** Session was organized jointly by the **Entrepreneurship Development Cell (EDC)** and the **Institution's Innovation Council (IIC)**, STCET on June 18, 2025. Selected final year projects from students across all departments of STCET were showcased, highlighting their creative and innovative ideas across various domains. The Prize Distribution Ceremony was held on June 23, 2025, to recognize and celebrate the winning teams. The students **Sayak Ghosh, Shizan Atique Khan, Indrasis Sadhukhan and Sanket Sett** secured 1st position for their innovative project work “IoT and AI based Smart Petrol Pump” from ECE department.



CELEBRATION OF NATIONAL TECHNOLOGY DAY 11 TH MAY, 2025

A **Technical Report Writing Competition** Session was organized as part of **National Technology Day Celebration**, organized by the IEEE Student Branch of STCET, IEEE Student Chapter (CIS, IES), IEEE WIE, Publication Cell, St. Thomas' College of Engineering & Technology, STCET in association with Institution's Innovation Council (IIC) & NDLI Club of STCET, held on May 14, 2025.

Bushra Meruj, student of 2nd Year, have been awarded certificate of appreciation in recognition of securing 3rd Place.



 INTELLECTUAL PROPERTY INDIA भारतीय औद्योगिक संपदा कार्यालय भारतीय सरकार		 भारत सरकार Government of India		ORIGINAL Serial No.: 200921	
पेटेंट कार्यालय, भारत सरकार The Patent Office, Government Of India					
डिजाइन के पंजीकरण का प्रमाण पत्र Certificate of Registration of Design					
डिजाइन सं. / Design No.		461252-001			
तारीख / Date		04/06/2025			
पारस्परिकता तारीख / Reciprocity Date*					
देश / Country					
प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो SMART CRADLE से संबंधित है, का पंजीकरण, श्रेणी 06-02 में Dr. Prasun Chowdhury के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।					
Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 06-02 in respect of the application of such design to SMART CRADLE in the name of Dr. Prasun Chowdhury.					
डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अधीन प्रावधानों के अनुसार मैन।					
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.					
 उच्चा न्यायधीश महानिर्देशक पेटेंट, डिजाइन और व्यापार चिह्न Controller General of Patents, Designs and Trade Marks					
*पारस्परिकता तारीख (यदि कोई हो) जिसकी अनुमति दी गई है तथा देश का नाम। डिजाइन का स्वत्वधिकार पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के निर्धारण के अन्तर्गत, पांच वर्षों की अतिरिक्त अवधि के लिए किया जा सकता है। इस प्रमाण पत्र का उपयोग विधिक कार्यवाहीओं अथवा विदेश में पंजीकरण प्राप्त करने के लिए नहीं हो सकता है।					
The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.					



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PARTICIPATION IN FACULTY DEVELOPMENT PROGRAMME (FDP):

Dr. Prasun Chowdhury	Successfully completed Five days Online FDP/STTP on " Air Pollution Control and Management (CU38C)" (26 to 30 May, 2025); NITTTR, Kolkata
	Successfully completed Five days hybrid Mode FDP " Exploring AI Landscape in Multidisciplinary Contexts " June 23rd – 27th 2025, STCET, Kolkata
Dr. Dipankar Kundu	Successfully completed the Faculty Development Program on ' AI Mastery for Educators ' organized by Vishlesan i-HUB IIT Patna from 15th May to 7th June, 2025.
	Successfully completed 5 day Faculty Development Program on ' Semiconductor: Devices Applications and Prospects ' organized by NITTTR, Kolkata from 19th to 23rd May, 2025
Dr. Juin Acharjee	Successfully completed the Faculty Development Program on ' AI Mastery for Educators ' organized by Vishlesan i-HUB IIT Patna from 15th May to 7th June, 2025.
	Successfully completed a 40-hour Online Faculty Development Program on ' Artificial Intelligence for 5G/6G Communication Systems & Digital Processing Applications ' organized by E&ICT Academy, NIT Warangal in association with IIIT Naya Raipur from 15th May to 26th May, 2025
	Successfully completed the Faculty Development Program on ' Statistical Analysis with Excel ' organized by the Research Foundation of India in association with Parul University from 2nd June to 6th June, 2025.
Dr. Priyanka Saha	Successfully completed 5 day Faculty Development Program on ' Semiconductor: Devices Applications and Prospects ' organized by NITTTR, Kolkata from 19th to 23rd May, 2025
	Successfully completed Five days hybrid Mode FDP " Exploring AI Landscape in Multidisciplinary Contexts " June 23rd – 27th 2025, STCET, Kolkata
Dr. Tuhina Halder	Successfully completed 5 day Faculty Development Program on ' Semiconductor: Devices Applications and Prospects ' organized by NITTTR, Kolkata from 19th to 23rd May, 2025
	Successfully completed Five days hybrid Mode FDP " Exploring AI Landscape in Multidisciplinary Contexts " June 23rd – 27th 2025, STCET, Kolkata
Dr. Pravanjan Samanta	Successfully completed 5 day Faculty Development Program on ' Semiconductor: Devices Applications and Prospects ' organized by NITTTR, Kolkata from 19th to 23rd May, 2025
	Successfully completed Five days hybrid Mode FDP " Exploring AI Landscape in Multidisciplinary Contexts " June 23rd – 27th 2025, STCET, Kolkata
Sudipta Dutta	Successfully completed the Faculty Development Program on ' AI Mastery for Educators ' organized by Vishlesan i-HUB IIT Patna from 15th May to 7th June, 2025.
	Successfully completed Five days hybrid Mode FDP " Exploring AI Landscape in Multidisciplinary Contexts " June 23rd – 27th 2025, STCET, Kolkata
Tanusree Dutta	Successfully completed the Faculty Development Program on ' AI Mastery for Educators ' organized by Vishlesan i-HUB IIT Patna from 15th May to 7th June, 2025.
	Successfully completed 5 day Faculty Development Program on ' Semiconductor: Devices Applications and Prospects ' organized by NITTTR, Kolkata from 19th to 23rd May, 2025
	Successfully completed 5 day Faculty Development Program on ' Semiconductor: Devices Applications and Prospects ' organized by NITTTR, Kolkata from 19th to 23rd May, 2025



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Prashnatit Pal	Successfully completed 7 days Faculty Development Program on ' Deep learning & AI based Healthcare systems ' organized by Coimbatore Institute of technology 18th to 24th December 2023.
	Successfully completed 5 days Faculty Development Program on, " Emerging Technologies and Security Recent Trends " organized by Techno India University 11th to 15th November 2024.
	Successfully completed 7 days Faculty Development Program on " Introduction to Data Science " organized by NITTTR, Kolkata from 12th to 16rd June, 2023.
Sumani Mukherjee	Successfully completed 5 day Faculty Development Program on ' Semiconductor: Devices Applications and Prospects ' organized by NITTTR, Kolkata from 19th to 23rd May, 2025
	The One-Week Online FDP on " Empowering Academic Research through AI: Tools, Trends & Techniques ", organized in association with the IQAC, HITK and the Instrument Society of India (ISOI), Bangalore, Karnataka, from June 30 to July 4, 2025.

PUBLICATION DETAILS:

• PUBLISHED JOURNAL & CONFERENCE PAPERS

- Bhattacharya S, Poray J, **Pal P**, Bhattacharya R. **PATIENT-CARE: A ML based Real-Time Decision Support System for Public Health, integrating Epidemiological Modeling and Blockchain Technology**. J Clin Biomed Sci , 2025.
- **Tanusree Dutta**, Saheli Sarkhel, Soham Banerjee, Soumya Pandit, "**A Statistical Approach to Analyze the Impact of Random Discrete Dopant (RDD) and Oxide Thickness Variation (OTV) on the Performance of a Low Power Folded Cascode OTA**", 6th International Conference "2025 Devices for Integrated Circuit (DevIC)", Kalyani Government Engg. College, Kalyani, Date: 5-6 April, 2025
- Nayanika Mukherjee, Deepraj Chakraborty, Tripty Kumari, Rittik Ghosh, **Priyanka Saha**, Saheli Sarkhel, Soumya Pandit, "**InAs/Si based Heterojunction TFET as improved in-situ breast cancer biomarker (C-erbB-2) detector**", 6th International Conference on 2025 Devices for Integrated Circuit (DevIC 2025), Kalyani Government Engineering College, India, page nos, 5th -6th April, 2025
- **Prashnatita Pal**, Bikash Chandra Sahana, Jayanta Poray, **MORSA: An innovative Modified and Optimized RSA Framework using Parallel Computing Environment: Mathematical Modelling of Engineering Problems** Journal published by International Information and Engineering Technology Association, Canada.28 May 2025
- R Bhattacharya, **P Pal**, and J Poray "**Revamping Pattachitra Art Through Digitization and Blockchain-Based Copyright Protection**", 13th Computing Conference 2025 London, United Kingdom.
- Smriti Gupta, Abhijit Pandit, Simran Riyaz, Ayan Banerjee, **Prashnatit Pal: Contemporaneous Secured Information Transfer by using Extended and Modified RSA Cryptosystem**, International Conference on Recent Advancements in Computing Technology and System Design (In5nRACS 25). organized by the Department of Electronics and Communication Engineering, College of Engineering Vadakara.16-17 June 2025.



“

“Innovation in Electronics is about making the complex simple, and the invisible visible.”

*Robert Noyce,
Co-Inventor of the Integrated Circuit*

