



St. Thomas' College of Engineering and Technology

4, Diamond Harbour Road, Kidderpore, Kolkata- 700023

NEWSLETTER

DARPAN

(THE IMAGE OF ACHIEVEMENTS)

DEPARTMENT

VOLUME: VII, EDITION: II, 24TH JULY 2022

ECE

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.

Editors:

1 Sudipta Dutta
Assistant Professor,

2. Prashnatita Pal
Assistant Professor

3. Paramita Ghosh,
3rd Yr ECE

4. Tiasha Santara,
3rd Yr ECE

RECENT TECHNOLOGY TREND

IoT Security & Vulnerabilities

IoT has been a major research topic for almost a decade now, where physical devices would interconnect using existing network technologies. Due to its rapid progression many threats in security and privacy exists, which hinder its development. IoT devices are vulnerable mostly because they lack the necessary built-in security controls to defend against threats. The key reason is the constrained environment and the limited computational capacity of these devices. IoT devices are usually low-power devices, and their abilities permit only certain functions to be executed. As a result, they cannot withstand the inclusion of security controls and mechanisms and data protection schemes. Vulnerabilities in IoT devices may allow cyber criminals to hijack them and to further launch attacks against other critical systems. The criticality of connected devices and the impact of an attack against them determines the importance of manufacturing these devices with a security-by-design approach.

Dr. Prasun Chowdhury

HOD, Department of Electronics and Communication Engineering

For
Further
Information

Contact:

sudipta_45@yahoo.com

DEPARTMENTAL MILESTONE

STUDENT ACHIEVEMENT

Himadri Singh, Abhranil Aich ,Ankita Singh of 2nd year achieved first and **Soumi Saha** also from 2nd year occupied second position in internal hackathon of STCET held at college in Jan, 2022;

Sreemoyee Ghosh of 2nd year is the winner in CHITRANK mandala Art competition organized by Kalyani Government Engineering College and also the winner of Environment Day competition organized by Linc India.

Atri Polley, Mohima Biswas of 1st year and **Himadri Singh** of 2nd year obtained 1st prize in IEEE Poster Competition.

Achievement in Sports

- **Kirti Bhushan Ganguly** of 4th year occupied Second position in Shot-Put event.
- **Noirrit Banerjee** of 4th year occupied third position in 200m Flat Race for Boys.
- **Aritra Adak** of 2nd year stood first in 100m Flat Race for Boys.
- **Tiyasa Dey** of 4th year became first in the event of Hitting the Wicket.
- **Chirasree Roy** of 3rd year and **Akangsha Mukherjee** of 4th year occupied 2nd and 3rd position, respectively, in 50m Flat Race for Girls.
- **Chirasree Roy** of 3rd year stood first in 100m Flat Race for Girls.
- **Akangsha Mukherjee** of 4th year and **Chirasree Roy, Priyanka Dutta Majumder** and **Tiyasa Chakraborty** of third year, all of them occupied first position in Relay Race for Girls.
- **Aritra Paul and Debarshi Banerjee** of 3rd Year is the winner of Inter departmental TT tournament



EVENT ORGANIZED:

On 25th February, 2022 a webinar organized by Professional Development Cell (Students) & Institution's Innovative Council (IIC) on **“Recent Trends in Innovative Technology”**, All ECE students participated in online mode.



On 12th March 2022, Engineering Model Making Exhibition, organized By Software Club(AICTE SPICES) & IIC Cell of College where 2nd Year and 3rd Year ECE students Participated .



FACULTY ACHIEVEMENT



Prof.(Dr.) Shila Ghosh Participated at the workshop on “Women in Photonics”, in Jena, Germany on May 22nd -25th, 2022.

FACULTY DEVELOPMENT PROGRAMME

Prashnatit Pal attended and completed successfully

i) Five days FDP on "Machine Learning Application in Signal Processing and Communication Engg" jointly organized by at **Indian Institute of Technology Guwahati and Electronics & ICT Academy** on 3rd to 8th January, 2022

ii) Ten days FDP on “Block Chain Technology” and Its Applications organized by **EDuxLabs (Esoir Business Solution LLP_ in Association with Mechanica IIT Madras** on 24th May -7th June 2022

Tanusree Dutta and **Sudipta Dutta** attended and completed successfully **One-Week** Online Faculty Development Programme on “*IoT and its application in Instrumentation*” organized by **E&ICT Academy IIT Guwahati** held from 21 to 26 March, 2022 in association with **Department of Instrumentation and USIC, Gauhati University** and support from **Uniconverge Technologies Pvt. Ltd.**

Sudipta Dutta successfully completed **one 8 week “Technology Enabled Learning and Life-long Self –Learning”** of **National Initiative for Technical Teachers Training** from 1st April 2022 to 31st May 2022 .

PUBLICATION DETAILS:

Juin Acharjee, Kaushik Mandal, and Sujit Kumar Mandal,, “Slotted Patch and Ground Plane for Reduced Side Lobe Level of Planar Antenna under Higher Order Mode of Operation,” *Annals of Telecommunications*, February 2022 (Accepted) [**I.F-1.563, Indexing: SCIE; Publisher: SPRINGER NATURE**].

Rahul Das, **Ankush Chattopadhyay**, Manash Chanda, Chandan K. Sarkar, Chayanika Bose, "Analytical Modeling of sensitivity parameters influenced by practically feasible arrangement of bio-molecules in Dielectric Modulated FET biosensor", **Silicon**, (28 January 2022), **Impact Factor: 2.941**, doi: <https://doi.org/10.1007/s12633-021-01617-z>