

VOLUME 04 · 2025-26

Sanjog

RESPONSIBLE BY DESIGN

Practical systems, measurable decisions and a longer view of technology.

HOD
DR. MRINMOY CHAKRABORTY

CONVENER
DR. SOURAV MOITRA



Prof. (Dr.) Sanjay S Pawar

PRINCIPAL, DR. B.C. ROY ENGINEERING COLLEGE

INSTITUTE VISION

Creativity, innovation and discipline

The institute vision in the ME newsletter calls for a global centre of learning.

INSTITUTIONAL PERSPECTIVE

From the Principal's Desk

A department newsletter is a record of learning in motion. It brings together the questions raised in class, the work done in laboratories, and the conversations that continue through events and research.

The principal's message in the reference Mechanical Engineering newsletter encourages timely articles, more opportunities for contributors, and subjects that interest students and industry alike. Sanjog carries that editorial spirit into the Electronics and Communication Engineering record.

This issue gathers the documented activity of 2025-26 so that readers can follow the department's work and see where the next question might begin.

PRINCIPAL DURING THE REFERENCE PERIOD

Prof. (Dr.) Sanjay S Pawar

Principal identification and portrait: ME News Letter 2025-26, page 1. Text on this page is an editorial summary, not a direct quotation.

EDITORIAL DIRECTION

From the convener's desk

Sanjog is designed as a department record that can be read in more than one way. A student can open it at an event page, a faculty member can turn to the research record, and an external reader can see how the programme connects a laboratory question to a larger engineering context.

This volume gathers the documented activities and publication records for 2025-26. The short essays are written around those records so that the newsletter has a point of view without turning an event title into a claim it does not support.

The issue's editorial lens is **Responsible by design**. Its pages move from programme purpose to events, from faculty development to research, and then back to the people and cohorts that give the department its scale.

NEWSLETTER CONVENER

Dr. Sourav Moitra



Dr. Sourav Moitra

FACULTY OF ECE · BCREC

ISSUE AT A GLANCE

3
ECE events

82
publication records

29
faculty activities

254
students in represented cohorts

Issue theme

Responsible by design — Practical systems, measurable decisions and a longer view of technology.

EDITORIAL RULE

Every record stays close to the supplied source data, no invented numbers.

VOLUME LENS

Responsible by design

A Record
Gather the supplied exports and photographs.

B Review
Check dates, names and counts against the source.

C Edit
Write the short pieces around the record.

D Publish
Release as an editable issue for the next revision.

SANJOG · DEPARTMENT OF ECE
DR. B.C. ROY ENGINEERING COLLEGE · DURGAPUR



Dr. Mrinmoy Chakraborty

FACULTY OF ECE · BCREC

DEPARTMENT LEADERSHIP

Dr. Mrinmoy Chakraborty

Head of the Department, ECE

DEPARTMENT NOTE

From the HOD's desk

The ECE department works across devices, circuits, communication links, embedded systems and the research methods that connect them. A newsletter is useful when it shows that range without losing the thread between the parts.

For 2025-26, that thread is visible in the record of events and publications. Industry-facing sessions, higher-study conversations, device workshops and research outputs give students several ways to meet the discipline beyond a single course unit.

The department's responsibility is to keep those encounters academic, documented and connected to the programme outcomes. This issue places the PSOs beside the activities so the record can be read as more than a calendar.

HEAD OF THE DEPARTMENT

Dr. Mrinmoy Chakraborty



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COMMUNICATION LAB



VLSI DESIGN CENTER

Department note

Laboratories, events and a measurable publication record give the 2025-26 volume its spine; the pages that follow keep those records close at hand.

01 / PROGRAMME PROFILE

Why Electronics and Communication Engineering?

The department connects mathematical foundations, electronic devices, communication systems, computation and project practice.

VISION OF THE INSTITUTE

To transform the institution into a global centre of learning through the synergic application of creativity, innovation and discipline.

MISSION OF THE INSTITUTE

01 Create an ideal ambience for learning and growth.

02 Help students inherit value systems and become creative, agile thinkers.

03 Build capabilities among students to lead and work as team players.

04 Develop a symbiotic relationship between institution, society and community.

05 Expand higher learning in technology and management.

Core language

Signals · devices · systems · communication · evidence

Department lens

Learn the fundamentals. Build the interface. Test the result.



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02 / EDUCATIONAL OBJECTIVES AND PSOS

Programme purpose

The programme outcomes are the bridge between a course, a project and the engineer who has to explain the result.

PEO 1

Core proficiency

Build professional competence through fundamentals in Electronics and Communication Engineering and deeper technological knowledge.

PEO 2

Professional development

Develop mathematics, science, management, teamwork, responsibility, professionalism and ethical values.

PEO 3

Lifelong learning

Adapt to a changing society through higher studies, quality research and careers in industry or entrepreneurship.

PROGRAMME-SPECIFIC OUTCOMES

Three questions for every project

PSO 1

Engineering knowledge and analysis

Analyze engineering problems relevant to Electronics and Communication Engineering by applying basic sciences, engineering mathematics and engineering fundamentals.

PSO 2

System design

Design electrical, electronic and communication systems containing devices, software and hardware by applying analytical knowledge and modern tools.

PSO 3

Society, environment and professional practice

Apply contextual knowledge to assess societal, environmental, health, safety, legal and cultural issues with professional ethics and work effectively in multidisciplinary projects.

ASSESSMENT RULE

Every PSO is answered with coursework, project and laboratory evidence.

PROGRAMME LENS

Objectives, outcomes and activities are read together, not separately.

03 / CONTENTS AND YEAR AT A GLANCE

Inside Volume 04

This issue follows the reference newsletter's rhythm: leadership, programme purpose, events, faculty development, publication record, department profile and closing notes.

08 Events and academic engagements

11 Faculty development and professional activity

14 Publications, patents and research themes

20 Student and project context

22 Faculty desk and department profile

24 Sources and editorial credits

26

A responsible system makes its benefits measurable and its limits legible.

3
ECE events

82
publication records

29
faculty activities

254
students in represented cohorts

Data sources: events (1).xlsx, PUBLICATIONS exports, faculty.csv, supplied student-batch workbooks and the Mechanical Engineering newsletter reference issue.



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04 / EVENTS

Academic year at a glance

The 2025-26 record includes an analog-VLSI alumni connect, an AI and Industrial IoT discussion on smart manufacturing, and an introduction to VLSI and analog IC design held in the Xilinx Lab.

01

DEPARTMENT EVENT · 31 OCT 2025

Opportunity For Analog VLSI

Venue: XILINX LAB- ECE DEAPRTMENT-ROOM NO 025
Association: IIPC, IEEE Student Branch

PHOTO RECORD ↗

02

TALK / SESSION · 16 JAN 2026

Interaction Session For Future Of AI, Industrial IoT In Smart Manufacturing

Venue: PRINCIPAL CONFERENCE ROOM
Association: IEEE Student Branch

PHOTO RECORD ↗

03

DEPARTMENT EVENT · 16 MAY 2026

Introduction To VLSI & Analog IC Design

Venue: XILINX LAB, ECE DEPARTMENT
Association: IIPC & IEEE Student Branch

PHOTO RECORD ↗

3 ECE records

Dates, locations, associations and photo-record links are taken from the supplied event workbook.

How to read this calendar

Each card carries the venue, the hosting association and the photo record link; together they show the academic year as a sequence of encounters, not a list.



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05 / EVENT FEATURE

Opportunity For Analog VLSI

The event record places this engagement in XILINX LAB- ECE DEAPRTMENT-ROOM NO 025, under DEPARTMENTAL ALUMNI COMMITTEE.

Its value in the newsletter is not a claim about outcomes that are not documented here. It is a clear marker of the department's working range: students and faculty met a topic, a tool or a professional context that sits beyond the routine lecture sequence.

Read beside the programme outcomes, the event becomes a prompt for the next question: what should a student be able to analyse, design or communicate after encountering this topic?

DATE
31 OCT 2025

ASSOCIATION
IIPC, IEEE Student Branch

PHOTO / EVIDENCE RECORD ↗

EVENT LENS

What motivated the session, what it used, what it left behind.

RECORD RULE

Only the supplied event workbook fields are printed.

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06 / EVENTS CONTINUED

From the calendar to the lab

Three more records from the year, arranged as a visual event board.

01

TALK / SESSION · 16 JAN 2026

Interaction Session For Future Of AI, Industrial IoT In Smart Manufacturing

Venue: PRINCIPAL CONFERENCE ROOM
Association: IEEE Student Branch

PHOTO RECORD ↗

02

DEPARTMENT EVENT · 16 MAY 2026

Introduction To VLSI & Analog IC Design

Venue: XILINX LAB, ECE DEPARTMENT
Association: IIPC & IEEE Student Branch

PHOTO RECORD ↗

DATE	EVENT	LOCATION	CO-HOST / ASSOCIATION
31 OCT 2025	**Opportunity For Analog VLSI** Department event	XILINX LAB- ECE DEAPRTMENT-ROOM NO 025	IIPC, IEEE Student Branch
16 JAN 2026	**Interaction Session For Future Of AI, Industrial IoT In Smart Manufacturing** Talk / session	PRINCIPAL CONFERENCE ROOM	IEEE Student Branch
16 MAY 2026	**Introduction To VLSI & Analog IC Design** Department event	XILINX LAB, ECE DEPARTMENT	IIPC & IEEE Student Branch



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BOARD RULE

Every card repeats a row from the event table below it.

NEXT PAGE

Faculty development records continue the yearly activity calendar.

07 / FACULTY DEVELOPMENT AND PROFESSIONAL ACTIVITY

Faculty learning is part of the department record

The supplied professional-activities export records 29 ECE entries for this academic year. The list includes FDPs, seminars, workshops, short-term programmes and related learning activity.

29
RECORDED ACTIVITIES

10
FACULTY CONTRIBUTORS

4
ACTIVITY TYPES

29 JUN 2026

Edge AI, Tinyml And Intelligent IoT: Enabling The Next Generation Of Smart Connected Systems

Department of CSE(AI) and CSE (AI & ML), Institute of Engineering and Management, Newtown in association with HRDC, IEM-UEM Group

08 JUN 2026

Latex

Spoken Tutorial, EduPyramids, SINE IIT Bombay

08 JUN 2026

Python 3.4.3

Spoken Tutorial, EduPyramids, SINE IIT Bombay

Why it belongs here

Faculty development changes what enters the classroom: a new tool, a sharper example, a better test or a question that deserves research time.



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08 / PROFESSIONAL ACTIVITY REGISTER

Selected faculty development records

Selected entries from the supplied professional_activities.csv export.

DATE	ACTIVITY	ORGANIZER	LOCATION
08 JUN 2026	**Latex** FDP	Spoken Tutorial, EduPyramids, SINE IIT Bombay	Online
08 JUN 2026	**Python 3.4.3** FDP	Spoken Tutorial, EduPyramids, SINE IIT Bombay	Online
22 MAR 2026	**AI Tools Workshop** WORKSHOP	be10x	Online
16 JAN 2026	**Embedded System** STP	CENTRAL TOOL ROOM & TRAINING CENTRE, BHUBANESWAR	Dr B C Roy Engineering College, Durgapur
18 DEC 2025	**Session Chair In Ieee International Conference On Intelligent Computing And Systems At The Edge, 2025** SEMINAR	IISc Banglore & IEEE Banglore Section	IISc Banglore
08 DEC 2025	**Guest Speaker Of Lecture Series On 3D Printing And Additive Manufacturing** STP	CDAC Center - Dr B C Roy Engineering College, Fuljhore, Durgapur	CDAC Center - Dr B C Roy Engineering College, Fuljhore, Durgapur
08 DEC 2025	**Participated In National Level Smart India Hackathon As Mentor In Hardware Section As Project Mentor** WORKSHOP	Ministry of Education, AICTE and MoE's Innovation Cell	GITAM, Vishakhapattanam
31 OCT 2025	**Opportunity For Analog VLSI** SEMINAR	Department of Electronics and Communication Engineering (ECE), Dr. B. C. Roy Engineering College (BCREC), Durgapur in association with the IEEE Student Branch, BCREC (Branch Code: STB11473), IETE Student Forum BCREC (ISFC-1085), and the Alumni Association (Praktani) BCREC.	Department of Electronics and Communication Engineering (ECE), Dr. B. C. Roy Engineering College (BCREC), Durgapur
21 JUL 2025	**Introduction To Machine Learning - Iitkgp** STP	Introduction to Machine Learning - IITKGP,Prof. Sudeshna Sarkar	IIT KHARAGPUR

Records are listed as supplied. Dates and organizer names are not expanded beyond the export.



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09 / PROFESSIONAL ACTIVITY REGISTER

More learning outside the timetable

The second register page keeps the year visible as a sequence of people, topics and institutions.

DATE	ACTIVITY	ORGANIZER	LOCATION
08 JUN 2026	**Latex** FDP	Spoken Tutorial, IIT Bombay	Online
06 MAY 2026	**Future-Ready Teaching Practices** FDP	IIT, Mandi	Online
07 MAR 2026	**Nptel Spoc Awarenes Workshop** WORKSHOP	IIT Kharagpur	Kolkata
15 JAN 2026	**Hands-On VLSI Training Program In Collaboration With Cttc Bhubaneswar** STP	JOINTLY BY DBCREC ECE DEPT AND CTTC BHUBANESWAR	VLSI LAB, ECE DEPT, DBCREC.
18 DEC 2025	**Serve As Publicity Chair & Conference Core Committee In Ieee Conference International Conference In Icedge,2025** SEMINAR	IISc & IEEE	IISc Banglore
17 NOV 2025	**Emerging Trends And Challenges In Renewable Energy** FDP	Department of Electrical Engineering, Dr B C Roy Engineering College	Department of Electrical Engineering, Dr B C Roy Engineering College
17 NOV 2025	**FDP On "Emerging Trends & Challenges In Renewable Energy** FDP	Department of Electrical Engineering (NBA Accredited), Dr. B. C. Roy Engineering College, Durgapur.	Durgapur
14 OCT 2025	**Research And Publication Ethics** FDP	Jointly by IGNOU, New Delhi and NSOU, Kolkata	SWAYAM ONLINE COURSE
18 AUG 2025	**Quantum Intelligence: Integrating Quantum Technology With AI And MI** FDP	TECHNO MAIN SALT LAKE	TECHNO MAIN SALT LAKE

ACTIVITY LENS

Tools, pedagogy, emerging technology and professional practice.

EDITORIAL RULE

Only records present in the supplied export are counted.

Register rule

The second register page keeps the year visible as a sequence of people, topics and institutions; short lists stay short rather than padded.

A Select
Take the second half of the register.

B Read
People, topics and institutions in order.

C Print
Keep dates exactly as the export states.

D Check
Recount before the issue is released.

10 / PUBLICATION RECORD

Research in print

The publication exports give this issue a measurable research section. The cards below count ECE records by category for 2025-26.

JOURNAL ARTICLES	CONFERENCE PAPERS	BOOK CHAPTERS	ARTICLES	PATENTS
19 RECORDS	18 RECORDS	12 RECORDS	00 RECORDS	04 RECORDS

What the numbers contain

Across the four categories, the record moves between antennas, signal processing, embedded systems, AI, healthcare instrumentation, VLSI, communications and related engineering applications. The titles are varied; the common discipline is the need to state a problem clearly and defend a method.

A responsible system makes its benefits measurable and its limits legible.



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INDEX NOTE

Counts come from the publication export, grouped by the field supplied with each record.

READING RULE

Titles stay as exported; no venue or index is added where the record has none.

11 / JOURNAL ARTICLES

Journal record

19 journal-article records are mapped to 2025-26 in the supplied export.

DATE	TITLE / CONTRIBUTOR	VENUE
30 JUN 2026	**Cellular Automata Based Chaotic Image Encryption Scheme Implemented In Fpga** Sri Pradipta Sarkar · Scopus	Multimedia Tools and Applications (Springer Nature)
30 JUN 2026	**Cellular Automata Based Chaotic Image Encryption Scheme Implemented In Fpga** Dr. Anup Kumar Das · Scopus	Multimedia Tools and Applications
30 JUN 2026	**Cellular Automata Based Chaotic Image Encryption Scheme Implemented In Fpga** Dr. Aloke Saha · Scopus	Multimedia Tools and Applications
17 APR 2026	**Design And Deployment Of A Metamaterial-Inspired Low-Profile Dual-Band Microstrip Patch Antenna With Defected Ground Structures For Vehicular Communication** Dr. Tapas Mondal · ESCI	Electrica
17 APR 2026	**Design And Deployment Of A Metamaterial-Inspired Low-Profile Dual-Band Microstrip Patch Antenna With Defected Ground Structures For Vehicular Communication** Sri Soumendra Pain · ESCI	ELECTRICA
17 APR 2026	**Design And Deployment Of A Metamaterial-Inspired Low-Profile Dual-Band Microstrip Patch Antenna With Defected Ground Structures For Vehicular Communication** Dr. Aritra Bhowmik · ESCI	ELECTRICA
17 APR 2026	**Design And Deployment Of A Metamaterial-Inspired Low-Profile Dual-Band Microstrip Patch Antenna With Defected Ground Structures For Vehicular Communication** Dr. Abhijit Banerjee · ESCI	Electrica

JOURNAL ARTICLES **19** ECE FACULTY RECORDS



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INDEX TYPES

SCI, SCIE, Scopus and ESCI labels are printed exactly as exported.

COVERAGE

Journal records mapped to this academic year only; earlier years stay in their own volume.

12 / CONFERENCE PAPERS

Conference record

Conference entries show where ECE research meets peer discussion, technical communities and applied problems.

DATE	TITLE / CONTRIBUTOR	VENUE
27 JUN 2026	**Novel Fpga/Asic Implementation Of 3-Statetca For On-Chip Prng** Dr. Aloke Saha · Scopus	IEEE International Conference on Emerging VLSI and Semiconductor Technology for AI and Computing Applications (EVST)
26 JUN 2026	**Novel Fpga/Asic Implementation Of 3-State Tca For On-Chip Prng** Sri Pradipta Sarkar · Scopus	2026 IEEE 6th International Conference on Emerging VLSI and Semiconductor Technology for AI and Computing Applications (EVST)
26 JUN 2026	**Novel Fpga/Asic Implementation Of 3-Statetca For On-Chip Prng** Dr. Anup Kumar Das · Scopus	International Conference on Emerging VLSI and Semiconductor Technology for AI and Computing Applications (EVST), 2026
26 JUN 2026	**Novel Fpga/Asic Implementation Of 3-Statetca For On-Chip Prng** Sri Moloy Mukherjee · Scopus	2026 International Conference on Emerging VLSI Semiconductor Technology for AI and Computing Applications (EVST-2026)
06 APR 2026	**Implementation Of 3D Printed Novel Perturb Microwave Laminate Embedded With Identical Hexagonal Slots In Mesh Grid Fashion For Circularly Polarized Hexagonal Patch Antenna** Dr. Tapas Mondal · Other	4th International Conference on Recent Trends in Materials Science & Devices 2026 (ICRTMD-2026)
27 FEB 2026	**Chaos-Based Secure Colour Image Encryption Implemented In Microcontroller** Dr. Anup Kumar Das · Scopus	4th International Conference on Engineering Design and Computing (ICEDC) 2026
10 DEC 2025	**Suppression Of Higher-Order Harmonic Distortions In Rectangular Microstrip Antennas Through Optimized Single-Slot Design** Dr. Anirban Chattopadhyay · Scopus	13th International Conference on Intelligent Embedded, MicroElectronics, Communication and Optical Networks (IEMECON 2025)
08 DEC 2025	**Performance Comparison Of Siw Antennas With Cavity-Backed Structures And Integrated Symmetrical Slots For Satellite Communication Bands** Dr. Abhijit Banerjee · Scopus	International Conference on Intelligent Embedded, MicroElectronics, Communication and Optical Networks (IEMECON)
22 NOV 2025	**Investigation Of The Relationship Between Daily Pm2.5 And Meteorological Parameters In Kolkata: A Statistical Approach** Dr. Anirban Chattopadhyay · Scopus	2025 IEEE Conference on Applied Signal Processing (ASPCON)

CONFERENCE OUTPUT IN THIS ISSUE

18 records

Venue, index and contributor fields are retained where present in the supplied publication export.

13 / BOOK CHAPTERS AND ARTICLES

Long-form contributions

Book chapters and article records add another scale to the department's research presence.

Book chapters · 12

DATE	TITLE / CONTRIBUTOR	VENUE
01 MAY 2026	**Multi-Threshold 2:1-Multiplexer-Based Novel Ut-Vedic 4 ×4-Bit Multiplier** Dr. Aloke Saha	Next-Generation High-Speed Electronics and Optoelectronics
01 APR 2026	**Na** Dr. Anirban Chattopadhyay	International Conference on Intelligent Electrical Systems and Industrial Automation
04 MAR 2026	**Chapter 8 Computer-Aided Design And Simulation Of Planar Mpa: Design Methodology, Parametric Analysis, And Scope Of Al Integration ..... 93** Dr. Aritra Bhowmik	Intelligent Systems in Solid-State Electronics and Communication Engineering
24 DEC 2025	**Metamaterial Inspired Hexagonal Split Ring Resonator-Based Low Profile Stacked Rectangular Microstrip Antenna For Dedicated Short-Range Communication System Applications** Dr. Tapas Mondal	Emerging Electronics and Automation, Volume 1
11 DEC 2025	**Metamaterial Inspired Hexagonal Split Ring Resonator-Based Low Profile Stacked Rectangular Microstrip Antenna For Dedicated Short-Range Communication System Applications** Sri Soumendra Pain	Emerging Electronics and Automation, Volume 1

Articles · 00

DATE	TITLE / CONTRIBUTOR	VENUE

A blank title or incomplete venue field has not been replaced with invented copy.



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A Question — Name the real problem.

B Method — Choose evidence that can answer it.

C Result — Show what changed.

D Limit — State where it stops working.

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14 / PATENTS AND APPLIED RESEARCH

Ideas that leave the paper

Patent records in the supplied export point to applied work across healthcare, IoT, energy, safety and assistive systems.

24 JUN 2026

Data Analysis Device For Predicting Consumer Satisfaction

Dr. Anirban Chattopadhyay
patent granted

Design No. 454967-001

05 DEC 2025

Surgical Robotic Arm Assembly With Integrated AI Camera Housing

Dr. Tribeni Prasad Banerjee
Registered

6488891

23 OCT 2025

AI-Powered Bionic Spine Support Device

Dr. Abhijit Banerjee
Registered (Active Design Registration)

6479911

17 OCT 2025

Door View Camera

Dr. Abhijit Banerjee
Registered

6476616

04 patent records mapped to this academic year in the supplied ECE export.



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15 / RESEARCH THEMES

Four research lanes

The publication titles form a readable map of the department's research interests. The lanes below are an editorial grouping of the records, not a new institutional classification.

01

VLSI and devices

Circuits, filters, adder design, metamaterials and device-level questions.

02

Antennas and communication

Microstrip antennas, GNSS, wireless systems, phased arrays and connected mobility.

03

AI, signal and data

Signal fusion, prediction, image compression, reinforcement learning and analytics.

04

Healthcare and society

Biomedical signals, monitoring, assistive devices, safety and human context.

A Question
Name the real problem.

B Method
Choose evidence that can answer it.

C Result
Show what changed.

D Limit
State where it stops working.

Research rule

The four lanes are an editorial grouping of the exported titles; they help a reader find a thread without inventing a new department classification.

EVIDENCE LENS

Every lane above resolves to records printed on the register pages of this issue.

NEXT STEP

New records enter the register first; the lanes are revised only after that.

16 / STUDENT CONTEXT

The cohort is part of the story

Student names are not printed as a public roll list here. The supplied batch workbooks are used to keep the issue anchored to the size and progression of the student community.

BATCH REGISTER

2021–2025

127

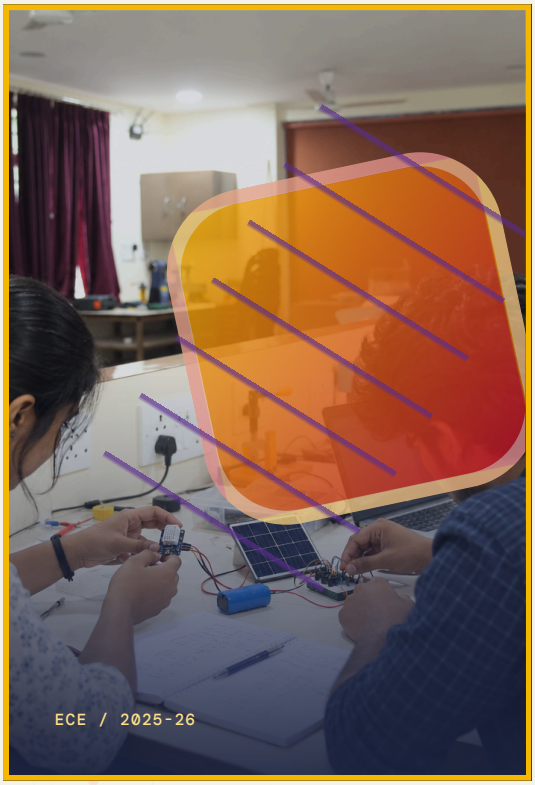
STUDENTS REPRESENTED

BATCH REGISTER

2022–2026

127

STUDENTS REPRESENTED



ECE / 2025-26

STUDENT-FACING EDITORIAL

Learning becomes visible when a project has a boundary.

A project gives a student a boundary: a sensor to read, a signal to clean, a link to stabilise or a device to explain. The boundary makes decisions visible. It also makes teamwork necessary, because the circuit, the code, the report and the demonstration cannot be separated for long.

The event and publication records in this volume provide different routes into that practice. A workshop can supply a new tool; a visit can add context; a paper can show how a narrow question is defended.

Cohort note

The counts above come from the supplied batch workbooks: they describe who the issue is written for, not a ranking of any student or batch.

A Read
Start from the supplied batch workbook.

B Count
Take the cohort size the workbook states.

C Context
Set the count beside events and publications.

D Revise
Update only when the workbook changes.

17 / FEATURE ARTICLE

The best circuit knows why it exists

Performance is one measure of a design. Purpose is the measure that tells us whether the performance is worth building.

A low-power sensor node, a wearable monitor and a communication gateway can look like separate projects. They share a more important question: what does the system need to do, and what is the smallest dependable way to do it? That question keeps the design close to the people and environments it is meant to serve.

Responsible design is visible in the details. It appears in a power budget that includes the battery's end of life, in an enclosure that can be opened, in a test plan that includes the edge case and in an interface that does not force a user to guess what a warning means.

The ECE engineer's toolkit is therefore wider than components and code. It includes clear documentation, honest uncertainty, teamwork, ethical judgement and the willingness to revise a design when the evidence changes.

PROJECT TRANSLATION

Four ways to begin

01 **Measure**
Start with a signal, a reference and a question.

02 **Connect**
Define the source, channel and context around the message.

03 **Compute**
Make the algorithm answer a physical requirement.

04 **Account**
Test the edge case and state the limitation.

> **A responsible system makes its benefits measurable and its limits legible.**

DESIGN LENS

Purpose, power, enclosure and test plan are design decisions, not afterthoughts.

EDITORIAL RULE

Interpretive essays are labelled; the record pages stay with the source data.

18 / FACULTY DIRECTORY

The people at the desk

Faculty names and designations are taken from the supplied faculty.csv file. Contact details are kept out of this public layout.

	Dr. Tapas Mondal	Associate Professor
	Smt. Moutusi Mondal	Assistant Professor
	Smt. Keka Hajra	Assistant Professor
	Sri Samujjwal Ray	Assistant Professor
	Sri Pradipta Sarkar	Assistant Professor
	Sri Surajit Batabyal	Assistant Professor
	Sri Moloy Mukherjee	Assistant Professor
	Sri Tapas Roy	Assistant Professor
	Dr. Aritra Bhowmik	Assistant Professor
AS	Dr. Aloke Saha	Professor
	Dr. Mrinmoy Chakraborty	Associate Professor

	Dr. Sourav Moitra	Associate Professor
	Sri Nilkamal Bhunia	Assistant Professor
	Dr. Tribeni Prasad Banerjee	Associate Professor
KM	Dr. Khondekar Mofazzal Hossain	Vice Principal & Professor
	Dr. Anup Kumar Das	Assistant Professor
	Smt. Subhadra Debroy	Assistant Professor
SP	Sri Soumendra Pain	Assistant Professor
DC	Smt. Dipta Chaudhuri	Assistant Professor
	Dr. Anirban Chattopadhyay	Assistant Professor
	Dr. Abhijit Banerjee	Associate Professor
RR	Dr. Ramkrishna Rakshit	Assistant Professor

HOD Dr. Mrinmoy Chakraborty
CONVENER Dr. Sourav Moitra
DEPARTMENT Electronics & Communication Engineering

DIRECTORY RULE

Designations follow the supplied faculty export; photographs are the official BCREC portraits.

OFFICE HOURS

Departmental contact details are shared through the college office, not printed here.

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19 / DEPARTMENT PROFILE

How the record is assembled

The event and activity exports show a department working through committees, co-hosts, labs, seminar rooms, industry sites and higher-study conversations.

Event committees

01	DEPARTMENTAL ALUMNI COMMITTEE
01	INDUSTRY INSTITUTE PARTNERSHIP CELL (CENTRAL)
01	TRAINING, MOOCS, HIGHER STUDIES

Associations and co-hosts

01	IIPC, IEEE Student Branch
01	IEEE Student Branch
01	IIPC & IEEE Student Branch

3 documented ECE events

Each event card in this issue points back to the supplied workbook. The newsletter keeps the record human-readable without changing the source fields.



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Assembly rule

Committee and co-host fields are counted as exported; where a field is blank the issue prints a note instead of a guess.

WHERE RECORDS LIVE

Events, activities, publications and cohorts each keep their own supplied export.

WHAT CHANGES NEXT

Verified photographs and captions can be added without touching the counts.

20 / EDITORIAL RECORD

Sources and credits

This volume is designed to be revised as verified photographs, student project notes and approved departmental messages become available.

PRIMARY SOURCES

Records used in this issue

- events (1).xlsx, filtered to Department = ECE.
- PUBLICATIONS exports: journal articles, conferences, book chapters, articles, patents and professional activities.
- faculty.csv, filtered to Department = ECE.
- Student batch workbooks used only for cohort counts.
- Mechanical Engineering newsletter PDF used as the structural and page-rhythm reference.
- Official BCREC ECE webpage images used as visual references for the generated project imagery.

EDITORIAL METHOD

What has been kept visible

Dates, titles, venues, contributors, counts and source links remain close to the records that supplied them. Interpretive articles are labelled as editorial pieces. Missing fields are not replaced with invented details.

Sanjog

Department of Electronics & Communication Engineering
Dr. Sourav Moitra · Convener
Dr. Mrinmoy Chakraborty · HOD

Prepared as an editable HTML newsletter layout. Add approved event photographs, student project captions and final institutional messages before public release.

NEXT REVISION

Verified photographs, project captions and approved messages can be added without changing the layout.

CONTACT

Department of Electronics & Communication Engineering, Dr. B.C. Roy Engineering College, Durgapur.

A Collect
Gather photographs and captions as they are approved.

B Verify
Check each record against its source file.

C Credit
Name the source beside every printed figure.

D Revise
Rebuild the issue; the layout keeps its structure.



DR. B.C. ROY SOCIETY ENGINEERING

Sanjog

Responsible by design

Department of Electronics & Communication Engineering

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