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K S Group of Institutions



K. S. INSTITUTE OF TECHNOLOGY
An Autonomous Institution under VTU
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#14, Raghuvanahalli, Kanakapura Road, Bengaluru – 560109



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

A Report on

“National Conference on Recent Innovations in Engineering (NCRIE–2025)”

Organized in association with



Event Type	National Conference
Event Name	National Conference on Recent Innovations in Engineering (NCRIE–2025)
Date/Duration	04/12/2025 / 4 hours
No. of research papers presented	38
Inauguration Venue	Silver Jubilee Auditorium, KSIT
Session Venue	OB308, OB309, OB310, OB311
Online link/Offline	Hybrid mode

Introduction:

The National Conference on Recent Innovations in Engineering (NCRIE–2025) was held on Thursday, 4th December 2025, at the KSIT, organized by the Department of Electronics and Communication Engineering, K. S. Institute of Technology, Bengaluru. The event served as a premier platform bringing together academicians, researchers, industry professionals, and students to exchange knowledge and showcase cutting-edge innovations in the fields of VLSI, Signal processing, Wireless communication, Robotics, Antenna Design, IoT, Biomedical instrumentation and emerging technologies. The conference was graced by the presence of esteemed dignitaries including Sri. R. Rajagopal Naidu, President of Kammavari Sangham, who presided over the event, and Ms. Ranjani Rajanikanth, Vice President – Engineering, Schneider Electric International Hub, Bengaluru, who served as the Chief Guest and delivered an inspiring address on technological advancements and sustainable engineering practices.

The leadership of Dr. Dilip Kumar K, Principal & Director, along with the active involvement of the Academic Advisory Board, Technical Committee, and Organizing Committee, ensured the successful execution of the conference. NCRIE–2025 provided a vibrant and collaborative environment that encouraged multidisciplinary research, innovation, and academic excellence aligned with KSIT’s vision of fostering quality education and societal development.

Objectives of the Session

The main objectives of the session were:

- To provide a platform for presenting recent innovations in engineering and technology.
- To encourage interdisciplinary collaboration among academia, industry, and research bodies.
- To promote research culture among students and faculty.
- To disseminate knowledge on VLSI, Signal processing, Wireless communication, Antenna Design, and emerging fields.
- To motivate young researchers to publish and contribute to scholarly literature.
- To align engineering innovations with societal, ethical, and environmental responsibilities.

Summarized Learning Outcomes

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www.ksit.edu.in

Cordially invites you all to the

NATIONAL CONFERENCE
ON
RECENT INNOVATIONS IN ENGINEERING
NCRIE-2025

Thursday, 4th December 2025

Chief Guest
Ms. Ranjani Rajanikanth
Vice President Engineering
International Hub Schneider Electric, Bengaluru

Presided By
Sri. R. Rajagopal Naidu
President, Kammavari Sangham

Will Grace the Occasion
Sri. R. Leelashankar Rao
Hon. Secretary, Kammavari Sangham

Sri. T. Neerajakshulu Naidu
Treasurer, Kammavari Sangham

Dr. KUSHAL KUMAR B. N
Chief Convener, KSIT

Dr. DILIP KUMAR. K
Principal/Director, KSIT

Venue: **KSIT Auditorium**
Time: **9.30 AM**

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K. S. DEGREE COLLEGE

Highlights of the Conference

Inaugural Ceremony

- Inspirational welcome by the Principal, Dr. Dilip Kumar K.
- Keynote reflections by the Chief Guest emphasizing the future of technological innovation.
- Address by the President of Kammavari Sangham on the importance of engineering and Advancements

Glimpse of the Inaugural Event





Technical Paper Presentations

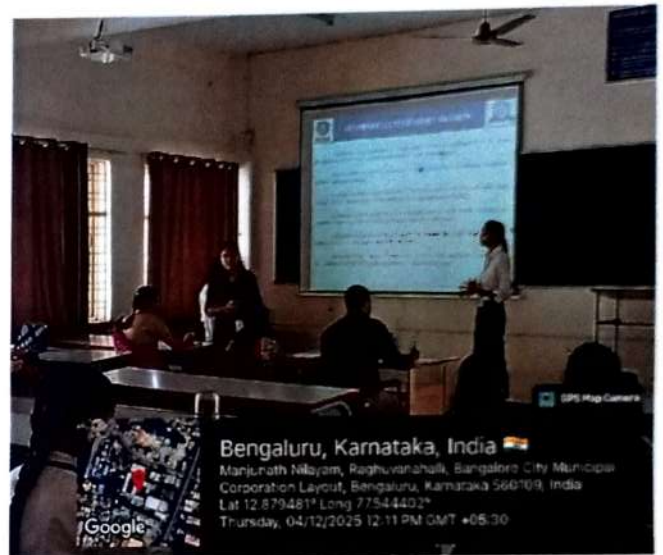
- The ECE department hosted four parallel sessions from 10:30 AM to 1:30 PM across multiple venues (OB308, OB309, OB310, OB311)
- A total of 38 research papers were presented across domains such as:
 - VLSI Design, MEMS, and Embedded Systems
 - Signal, Image, and Video Processing
 - Wireless Communication, 5G/6G Networks, and Optical Communication
 - IoT-based Communication Systems and Sensor Networks
 - Robotics and Automation Systems
 - Antenna Design and Microwave Engineering
 - Control Systems, Smart Devices, and Renewable Energy Integration
 - Biomedical Instrumentation and Smart Healthcare Devices

Invited Session Chairs:

Dr. Shreesha Kalkoor M
Department of ECE,
SIT, Bangalore

Dr. Shreesha Kalkoor M is an Associate Professor in the Department of Electronics and Communication Engineering at Sambhram Institute of Technology, Bangalore, with over 21 years of teaching and research experience. He holds a Ph.D. in ECE (2018) from VTU, Belagavi, and is a recognized VTU Research Supervisor and RAC Member, actively guiding Ph.D. research. His academic contributions include extensive reviewing roles for AICTE (ASLAP), IEEE, and other national and international forums. Dr. Shreesha has a strong research profile with publications in IEEE Xplore, Scopus-indexed and international journals, along with several conference papers, Indian patents, and a UK design patent. His research interests span Digital and Medical Image Processing, Digital Electronics, Communication Systems, Optical Fiber Communication, and Embedded Systems. He is also an accomplished author of three textbooks, serves on editorial boards of international journals, and is a lifetime member of ISTE. In addition to research, he has played key roles in academic leadership, including coordinating national conferences, serving as session chair and jury member, BOE member, and contributing to curriculum and evaluation activities at VTU. He has completed over 50 FDPs, earned NPTEL certifications, and received the Academic Excellence Award in 2023, reflecting his sustained commitment to excellence in teaching, research, and academic service.

Impse of the Sessions




Conclusion

NCRIE-2025 was a remarkable success, showcasing the strong research potential and technical excellence of participants across multiple engineering domains. The conference provided an enriching platform for students, faculty, and industry professionals to engage in meaningful discussions, present innovative ideas, and explore emerging technological trends. The high-quality research contributions presented across the three ECE tracks reflected a deep understanding of real-world problems and modern engineering approaches. A special highlight of the event was the Best Paper Awards, where four outstanding teams from various colleges were recognized for their exceptional research work, innovative problem-solving approaches, and impactful presentations. Their achievements added great value to the conference and inspired fellow participants toward academic excellence. Overall, NCRIE-2025 strengthened KSIT's commitment to fostering a vibrant research ecosystem and promoting multidisciplinary collaboration for societal and technological advancement.

EO-PO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2
National Conference on Recent Innovations in Engineering	3	3	3	3	2	-	-	2	3	2	2	3	2


Co-Ordinator


HOD-ECE
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Dept. of Electronics & Communication Engg
K.S. Institute of Technology
Bengaluru - 560 109


Principal
PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109











K. S. Institute of Technology
National Conference on Recent Innovations in Engineering 2025
Department of Electronics & Communication Engineering



Registration Details

Date: 04-12-2025

Sl. No.	Paper ID	Paper Title	Name of college	Author name	author phone number	Author Mail-ID	No. of participants	Signature
1	NCRIE_ ECE01	IOT-Enabled Smart Manhole Management System	Sri Krishna Institute of Technology				Online	
2	NCRIE_ ECE03	Design and Analysis of Circular Shaped Microstrip Patch Antenna for C- Band application	K S Institute of Technology	Keerthana.K	9019313785	keerthana.kullug -ouda@qmail.com	4	
3	NCRIE_ ECE05	Face Recognition Based Attendance Marking System using Machine Learning	Sri Krishna Institute of Technology				Online	
4	NCRIE_ ECE06	AI-Driven Crop Health Monitoring via IOT Sensor	Sri Krishna Institute of Technology	Aarvind Prajwal.P	7204869645	aarvindprajwal.p. eee@skit.org.in	2	
5	NCRIE_ ECE08	Design and Development of Agricultural Robot for Spraying Pesticide	Jyothy Institute of Technology	Rakshadham	7975003591	1jt22e020 @jyothyit. ac.in	4	
6	NCRIE_ ECE09	Railway Gate Automation	Sri Krishna Institute of Technology	Bhoomika.P	8792035648	bhoomikap.eee @skit.org.in	03	

Sl. No.	Paper ID	Paper Title	Name of college	Author name	author phone number	Author Mail-ID	No. of participants	Signature
7	NCRIE_ ECE13	Nex Flow Wireless Aqua Meter	K S Institute of Technology	Khushi Fogatep	9022921900	khushifogatep56@gmail.com	4	
8	NCRIE_ ECE14	GSM Based Prepaid Smart Energy Meter	K S Institute of Technology	Kanya. M	6361981923	kanyam2609@gmail.com	3	
9	NCRIE_ ECE15	AI-Based Human Intruder Detection and Alert System Using Tensor Flow Lite	K S Institute of Technology	SHARINI.S	9066999910	sharinisdevanay52004@gmail.com	4	
10	NCRIE_ ECE16	Trust Vote : A Secure Voting System	K S Institute of Technology	V.LIKHITH	9113896028	likhith.v.ece@kstit.edu.in	4	
11	NCRIE_ ECE17	AI-Based Hydroponics in IOT	K S Institute of Technology	Nayun	7795247512	nayun12@gmail.com	4	
12	NCRIE_ ECE18	Bipedal Humanoid Robotic Leg	K S Institute of Technology	Madhu. Haranuda -da	7019653516.	madhuharanuda-craadi@kstit-ese.edu.in.	4.	
13	NCRIE_ ECE19	Development of IOT Based Patient Health Monitoring System	Jyothy Institute of Technology	Savitrya.TS	8447161694	jits88ec08@gmail.com	3	
14	NCRIE_ ECE20	Tyre Volt : Motion Powered Wireless Charging For EV	K S Institute of Technology	Shilpa .T.R	6381272275	shilpatr1208@gmail.com	4	

Sl. No.



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National Conference On Recent Innovations in Engineering (NCRIE - 2025)

Track 2 : Electronics and Communication Engineering

Feed back from Session Chairs

Timestamp	Name(In CAPITAL)	Contact number	E-mail ID	Department	Name of the College/Industry	1. How well do the conference topics align with your professional interests?	2. The Presenter/Speaker(s) communicated their research work effectively.	3. The hospitality provided during the conference (refreshments, seating, etc.) was	4. The networking opportunities provided during the session were beneficial.	5. How would you rate the overall organization and experience of the conference?	Any suggestions for future conferences?
2025/12/04 2:44:01 PM GMT+5:30	Dr. DINEESH KUMAR D S	8722497866	dineshkumards@ksit.edu.in	ECE	KSIT	Excellent	Excellent	Excellent	Strongly Agree	Excellent	Nil
2025/12/04 2:50:21 PM GMT+5:30	Dr. SHREESHA KALKOOR M	6360057013	shreesha133984@gmail.com	ECE	Sambhram Institute of Technology, Bangalore	Good	Good	Excellent	Strongly Agree	Excellent	Keep conducting this kind of national conference in future
2025/12/04 2:55:44 PM GMT+5:30	Dr. Ramya K R	9916901204	ramyavr@ksit.edu.in	ECE	K S Institute of Technology	Excellent	Good	Excellent	Strongly Agree	Excellent	
2025/12/04 6:31:27 PM GMT+5:30	V.SANGEETHA	9980099247	sangeetha.v@ksit.edu.in	ECE	KSIT	Excellent	Excellent	Excellent	Agree	Excellent	Very nice Teamwork
2025/12/04 6:34:57 PM GMT+5:30	Dr. Abhay Deshpande	9980815636	abhayadeshpande@rvce.edu.in	ECE	RVCE	Excellent	Excellent	Excellent	Strongly Agree	Excellent	Excellent
2025/12/04 8:49:58 PM GMT+5:30	SALEEM S TEVARAMANI	9844022686	saleemstevaramanl@ksit.edu.in	ECE	KSIT Bengaluru	Excellent	Excellent	Excellent	Strongly Agree	Excellent	It was wonderful.
2025/12/04 8:55:15 PM GMT+5:30	SANTHOSH KUMAR.B.R	9845532660	santhoshkumarbr@ksit.edu.in	ECE	KSIT	Good	Excellent	Excellent	Agree	Good	
2025/12/08 3:06:29 PM GMT+5:30	Dr. M Jayanthi	9740557704	jayanthisathish1012@gmail.com	ECE	New Horizon college of engineering	Excellent	Excellent	Excellent	Strongly Agree	Excellent	



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National Conference On Recent Innovations in Engineering (NCRIE - 2025) Track 2 : Electronics and Communication Engineering Feed Back from Authors

Timestamp	Name/(in CAPITAL)	Paper id	Contact number	E-mail ID	Department	Name of the College/Institutions	Participant's	1. Gained valuable insights from this session.	2. How well do the conference topics align with your professional interests?	3. The hospitality provided during the conference (refreshments, seating, etc.) was	4. The networking opportunities provided during the session were beneficial.	5. How would you rate the overall organization and experience of the conference?	Any suggestions for future conferences?
2025/12/04 11:32:34 AM GMT+5:30	Shreya Shetty	NCRIEEC32	8971926763	shreyashetty504@gmail.com	ECE	KSIT	Student	Agree	Good	Good	Agree	Good	
2025/12/04 11:38:19 AM GMT+5:30	SANJAY S	NRICE_EC47	7483695676	sanjayshanthraju123@gmail.com	Computer Science and Engineering	KS School of Engineering and Management	Student	Agree	Excellent	Excellent	Strongly agree	Excellent	NTG
2025/12/04 11:50:37 AM GMT+5:30	LAVANYA C S	NCRIE_ECS1	9448542469	lavanyacs0465@gmail.com	ELECTRONICS AND COMMUNICATION ENGINEERING	K S INSTITUTE OF TECHNOLOGY, BANGALORE	Student	Strongly Agree	Excellent	Excellent	Strongly agree	Excellent	The session was good
2025/12/04 11:56:36 AM GMT+5:30	MANASA CHOWDARY	NCRIE_ECE_03	8310482196	chowdarymanasa758@gmail.com	ECE	K S Institute of technology	Student	Strongly Agree	Excellent	Excellent	Strongly agree	Excellent	Nope
2025/12/04 11:57:45 AM GMT+5:30	RAKESH K	NCRIE_ECS0	8904186032	rakeshreddy887@gmail.com	ECE	KS school of engineering and management	Student	Agree	Excellent	Excellent	Strongly agree	Excellent	Nothing
2025/12/04 11:59:34 AM GMT+5:30	NIRANJAN P	NCRIE_EC50	8050318874	niranjaniruj1211@gmail.com	Ece	Kssem	Student	Strongly Agree	Excellent	Excellent	Strongly agree	Excellent	
2025/12/04 12:00:16 PM GMT+5:30	ARAVIND PRAJWAL P	NCRIE_ECE06	7204869645	aravindp246aravi@gmail.com	Electronics and communication Engineering	Sri Krishna institute of technology	Student	Agree	Good	Excellent	Agree	Excellent	