



**JYOTHY**  
INSTITUTE OF TECHNOLOGY

**VOL 2, ISSUE 1**  
**JAN - JUNE 2024**

# TECH HERALD

REFLECTIONS & MILESTONES – A BIENNIAL MAGAZINE



**PRESENTED BY:**

**DEPARTMENT OF  
ELECTRONICS AND  
COMMUNICATION  
ENGINEERING**

## *From the Desk of Principal*



I am excited to share the news of the launch of the next biannual Technical Magazine by the Department of Electronics and Communication in coordination with IEEE student branch. This edition serves as a testament to the department's unwavering dedication to academic excellence and innovation. Within these pages, you will discover insightful perspectives, showcasing the remarkable achievements and advancements of our students and faculties. I commend the IEEE student branch and the department of Electronics and Communication for their tireless efforts in producing these insightful publications. I encourage everyone in our community to delve into the enriching content and celebrate the collaborative spirit that defines our institute. Together, let us continue to inspire and be inspired by the pursuit of knowledge.

**Dr. K Gopalakrishna**  
**Principal, JIT**

## *HOD's Message*



I am happy that the Department of Electronics and Communication is coming out with the second volume of Biannual Technical Magazine, which gives comprehensive information of activities that have happened in a semester. I strongly believe this magazine paves way to record and promote the activities in the related fields of our department. I appreciate the efforts of our students and faculty members who have taken keen interest in shaping this magazine. I congratulate and wish them all the best.

I wish all the students and faculties of the department all success.

**Dr. K Chandrasekhar**  
**Professor and Head**

## *About the Department*

The Department of Electronics and Communication Engineering (ECE) was established in 2011, offering an undergraduate program with an initial intake of 120 students. Known for its strong emphasis on research and teaching, the department boasts a unit of excellence dedicated to imparting knowledge in the field of Electronics and Communication. It is equipped with a well-established infrastructure, providing all the necessary tools and equipment for academic and research pursuits. Moreover, the department benefits from research facilities sponsored by esteemed agencies like KSCST, VGST, DST, and SAC-ISRO.

Department clubs, essential components of any educational institution, offer a dynamic nexus for students to deepen their academic engagement and personal growth. Beyond the classroom, they provide practical skill development, networking opportunities with professors and industry experts, and a supportive community where friendships are forged, and challenges are overcome. The Department of Electronics and Communication proudly hosts the e-Yantra Club, while also playing a pivotal role in the interdisciplinary IOT Club. Additionally, the department is an active participant in IEEE, a renowned global organization, further solidifying its commitment to advancing technology and fostering collaborations between academia and industry.

## *Vision*

To be a department of excellence at a global level in Electronics and Communication Engineering education, incorporating Research & Innovation and leadership training components.

## *Mission*

- **M1:** Strive to provide state of Art infrastructure in classrooms and laboratories.
- **M2:** Enable all-round development with individual attention and innovative teaching learning methodology.
- **M3:** Impart leadership qualities into the students by exposing them to industry and research in the global Electronics and Communication Engineering domain.

### ***Program Educational Objectives (PEO's)***

- **PEO1:** Graduates of Electronics & Communication Engineering will be able to utilize mathematics, science, engineering fundamentals, theoretical as well as laboratory-based experiences to identify, formulate & solve engineering problems and succeed in advanced engineering or other fields.
- **PEO2:** Graduates of Electronics & Communication Engineering will succeed in entry-level engineering positions in VLSI, Communication and Fabrication industries in regional, national, or global industries.
- **PEO3:** Graduates of Electronics & Communication Engineering will be prepared to communicate and work effectively on individual & team based engineering projects while practicing the ethics of their profession consistent with a sense of social responsibility.
- **PEO4:** Graduates of Electronics & Communication Engineering will be equipped to recognize the importance of, and have the skills for, continuous learning to become experts in their domain and enhance their professional attributes.

### ***Program Specific Outcomes (PSO's)***

- **PSO1:** Explore emerging technologies in the field of Electronics and Communication Engineering using the knowledge and skills gained.
- **PSO2:** Apply techniques in different domains to create innovative products and services in the Communication, VLSI, DSP, and Networking.
- **PSO3:** Work on various platforms as an individual/team member to develop useful and safe circuits, PCB, Power Management Systems and Automation for the society and nation.

### ***About IEEE and SPS***

IEEE, the Institute of Electrical and Electronics Engineers, has been a cornerstone of technological advancement since 1884, uniting professionals, researchers, and educators worldwide in fields like electrical engineering and computer science. Through its diverse societies and technical committees, IEEE facilitates collaboration, sets global standards, and fosters innovation across disciplines such as communication, robotics, and energy.

The Signal Processing Society (SPS) is dedicated to advancing the theory and practice of signal processing, essential for analyzing, modifying, and interpreting signals like sound, images, and data. Members from diverse fields such as engineering, mathematics, and computer science collaborate to develop cutting-edge techniques and technologies. Through conferences, workshops, and publications, SPS promotes knowledge sharing and fosters innovation in fields ranging from medical imaging to communication systems and data analysis, shaping transformative advancements that enrich our daily lives.

### ***Vision of IEEE SPS Student Branch***

To inspire and empower the next generation of engineers and technologists through innovation, collaboration, and leadership in signal processing and related fields.

### ***Mission of IEEE SPS Student Branch***

**Education and Skill Development:** Provide educational workshops and hands-on experiences to enhance members' proficiency in related technologies.

**Community Engagement:** Organize outreach programs and seminars to demonstrate the societal impact.

**Networking and Collaboration:** Facilitate connections with industry professionals, researchers, and other IEEE chapters to promote collaboration and knowledge exchange.

### ***Faculty Coordinators***

#### **IEEE-JIT Senior Member Dr. K Chandrasekhar**

IEEE Senior Member is a prestigious designation recognizing significant professional achievements in technology fields. It entails rigorous evaluation of contributions, technical proficiency, and leadership within IEEE. Senior Members mentor emerging professionals, contribute to disciplinary advancement, and embody a commitment to excellence and impactful global technical leadership.







## IEEE-JIT Branch Counselor Dr. Ashabharathi S



A Branch Counselor in IEEE, usually a faculty member, acts as a liaison between the student branch and the IEEE section. She guides and support student members in organizing activities, events, and engaging with IEEE initiatives. Branch Counselors facilitate communication, assist with administrative tasks, mentor student leaders, and ensure alignment with IEEE's objectives, crucially enhancing the student branch experience.



### *Student Coordinators - IEEE and SPS*

**Chairperson:** The Chairperson of an IEEE student branch oversees branch activities, leading the executive committee to ensure effective communication and collaboration. They organize events, workshops, and initiatives to foster a vibrant technical community, representing the branch in interactions with faculty, professionals, and IEEE sections. This role requires strong organizational skills, vision, and a dedication to promoting technical knowledge and professional development among members, contributing significantly to the branch's growth and success.


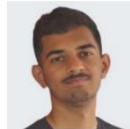
Designation	Name of the Student	
IEEE-JIT Chairperson	Sai Eshwar V R 3rd year, ECE	
IEEE-SPS Chairperson	Y P Sriranga Rao 3rd year, ECE	

**Vice Chair:** The Vice Chairperson of an IEEE student branch supports the Chairperson in planning and executing activities, often leading in their absence and assisting with strategic decisions. They coordinate events, foster team cohesion, and ensure smooth branch operations by engaging members and facilitating communication. The Vice Chairperson plays a crucial role in



leadership development and enhancing the IEEE student branch experience, promoting technical and professional growth among members.

Designation	Name of the Student	
IEEE-JIT Vice Chair	Sinchana K S 3rd year, ECE	
IEEE-SPS Vice Chair	K Harshitha Saraswathi 3rd year, ECE	



**Secretary:** The Secretary of an IEEE student branch manages documentation, meeting minutes, and communications, ensuring smooth information flow and record-keeping. They collaborate with the executive committee to organize events, track membership, and support branch operations. Detail-oriented and organized, the Secretary plays a vital role in maintaining transparency, preserving institutional memory, and enhancing the efficiency of the IEEE student branch.

Designation	Name of the Student	
IEEE-JIT Secretary	R Sumukh Aryan 3rd year, ECE	
IEEE-SPS Secretary	Nitin A 3rd year, ECE	

**Treasurer:** The Treasurer of an IEEE student branch oversees budget management, expenses, and financial transactions, ensuring responsible practices and supporting event planning. They collaborate with the executive committee to create budgets, track expenditures, and report updates to members, playing a crucial role in maintaining financial sustainability. Their efforts enable successful execution of initiatives, enhancing the IEEE student branch experience.



Designation	Name of the Student	
IEEE-JIT Treasurer	Anirudh R 3rd year, ECE	
IEEE-SPS Treasurer	Shankarshana V 3rd year, ECE	

**Web Master:** The Webmaster of an IEEE student branch manages the branch's online presence and technological infrastructure, designing and maintaining the website for effective communication and information dissemination. They ensure easy access to resources, event details, and updates, and may oversee social media platforms and integrate digital tools. A tech-savvy role, the Webmaster enhances visibility, fosters engagement, and connects members within the IEEE student branch through innovative online strategies.








Designation	Name of the Student	
IEEE-JIT Web Master	Saharsha A 3rd year, ECE	
IEEE-SPS Web Master	Anirudh A Kulakarni 2nd year, ECE	












**Membership Development Chair:** The Membership Development Chair of an IEEE student branch focuses on attracting and retaining members through recruitment events, workshops, and networking opportunities. They collaborate with the executive committee to create initiatives catering to diverse interests, fostering community and professional growth. This role emphasizes effective communication, creativity, and creating a welcoming environment to encourage active participation in IEEE activities.





Designation	Name of the Student	
IEEE-JIT Membership Development Chair	Rohith P 3rd year, ECE	
IEEE-SPS Membership Development Chair	Jishnu P 2nd year, ECE	


### *Faculty List*

Sl.No	Name of the Faculty	Qualification and Designation	
1	Dr. K Chandrasekhar	B.E, M.E, PhD Professor & Head	
2	Dr. Geetha Priya M	B.E, M.Tech, PhD Professor	
3	Dr. H B M Ajjaiah	B.E, M.Tech, PhD Associate Professor	
4	Dr. Chethana K	B.E, M.Tech, PhD Associate Professor	
5	Dr. Asha Bharathi S	B.E, M.Tech, PhD Associate Professor	
6	Dr. Hamsa S	B.E, M.Tech, PhD Associate Professor	
7	Mr. Chandrashekar B M	B.E, M.E, [PhD] Assistant Professor	






8	Ms. Sumangala Gejje	B.E, M.Tech Assistant Professor	
9	Mr. Nagesh Kumar D N	B.E, M.Tech,[PhD] Assistant Professor	
10	Mr. Madhukar M	B.E, MSc - Tech, [PhD] Assistant Professor	
11	Mrs. Smita Agarwal	B.E, M.Tech, [PhD] Assistant Professor	
12	Mr. Deepak V Ingale	B.E, M.Tech Assistant Professor	
13	Mrs. Srilakshmi R	B.E, M.Tech, [PhD] Assistant Professor	
14	Mrs. Krithika P J	B.E, M.Tech Assistant Professor	
15	Mrs. Bhargavi N G	B.E, M.Tech Assistant Professor	
16	Mr. Shivaraj A	B.E, M.E Assistant Professor	
17	Mrs. Nami Susan Kurian	B.E, M.Tech, [PhD] Assistant Professor	
18	Mr. Prasanna Bhat	B.E, M.Tech, Assistant Professor	




19	Mr. Dayananda LN	B.E, M.Tech, [PhD] Assistant Professor	
20	Dr. Soumya Padukone G	B.E, M.Tech, PhD Assistant Professor	

### *Visiting Professor*

Sl.No	Name of the Faculty	Designation	
1	Prof. N Narasimha Swamy	B.E, M.Tech, Professor	

### *Staff list*

Sl.No	Name of the Staff	Designation	
1	Mr. Goutham C	B.E, Foremen	
2	Mr. Shashi Kumar S V	Diploma, HDSE, M.A Senior Instructor	
3	Mrs. Ranjitha Bhat	B.E, Senior Instructor	
4	Mr. Prabu S	Diploma, BCA(B.E) Senior Instructor	
5	Mrs. Chandana T V	B.E, Instructor	

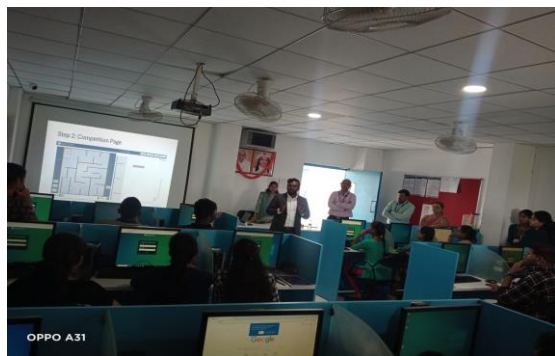
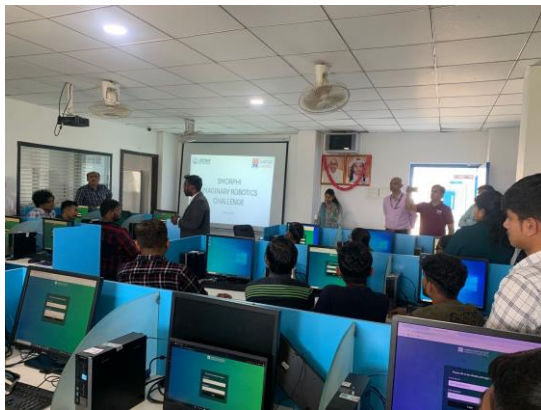
6	Ms. Medha Chowdhary M	B.E, Instructor	
7	Mr. Anand V Achar	Diploma,(B.E) Instructor	
8	Mrs. Shruthi M	B.B.M, M.B.A Second Divisional Clerk	

## *IEEE Events*

***Tech Talk on “Smorphy Educational Robotics”:*** On February 15, 2024, the Department of Electronics and Communication Engineering, in collaboration with Wefaa Robotics, Singapore, and the IEEE Student Chapter at Jyothy Institute of Technology, hosted a Tech Talk on "Smorphy Educational Robotics" for 3rd and 5th-semester students. Mr. Ganesh Sai Apuroop Koppaka led the session, showcasing innovative robots from the National Robotics Programme, including hTETRO, Smorphi, Panthera, Wasp, Dragonfly, and Naja. These robots featured applications ranging from shape-changing cleaning mechanisms to snake repellents utilizing sound and vibration technology. Mr. Koppaka emphasized the need for interdisciplinary skills and continuous learning in robotics, encouraging students to explore career opportunities in this field. The event aimed to inspire students to recognize the potential of robotics in addressing real-world challenges and to integrate innovation with practical applications in their studies and future careers.



**Technical Workshop on “Smorphy Imaginary Platform”:** The workshop organized by the Department of Electronics and Communication Engineering, in collaboration with Wefaa Robotics, Singapore, and the IEEE SPS Student Chapter at Jyothy Institute of Technology, took place from February 15 to 17, 2024. Dr. Prabakaran Veerajagadheshwar from Wefaa Robotics and SUTD, Singapore, discussed advancements in robotics under the National Robotics Programme. Participants took part in a competition to guide a Smorphi robot through a maze using predefined instructions and coding. This 2.5-hour challenge emphasized strategic thinking and problem-solving. Individual usernames and passwords provided a secure setup. The competition encouraged teamwork and technical skills, creating an engaging atmosphere. Overall, the Smorphi simulation competition enhanced participants' learning and innovation in robotics.



**Faculty Development Program on Engineering Curriculum on Robotics:** A three-day Faculty Development Program on the "Education Curriculum on Robotics" was held from February 15 to 17, 2024. Mr. Sai Ganesh Apuroop Koppaka from Wefaa Robotics and Mr. Arun Joshi, Founder & COO of Skandish Ventures, facilitated the sessions. Wefaa Robotics, based in Singapore, specializes in educational technologies and provides educational robots along with teaching components and virtual learning tools. Faculty members received training to assemble the Smorphi v2 Educational robot, which is modular, programmable, and can be configured into seven different shapes. This hands-on experience enabled participants to integrate their own sensors and customize



the robot for various educational contexts, enhancing their understanding of robotics in the curriculum.



**Industrial Visit:** On February 22, 2024, the Department of Electronics and Communication Engineering organized a visit to the Bureau of Indian Standards (BIS) for 5th-semester students. This visit aimed to provide students with an understanding of the role of BIS in setting quality standards and ensuring product safety and reliability. During the tour, students interacted with BIS officials, who shared insights on various standardization processes and the significance of quality control in industry. The experience not only enhanced the students' knowledge of regulatory practices but also emphasized the importance of adhering to standards in engineering and technology, enriching their academic and practical understanding of the field.





**Project Exhibition:** The Project Exhibition for the 2024 batch of the Department of Electronics and Communication Engineering took place on May 4, 2024. Judged by Mr. Tejesh and Mr. Panish DT from Loginware Softec Pvt Ltd, the event showcased 16 innovative projects from 8th-semester ECE students, covering areas such as robotics, embedded systems, IoT, and communication systems. Three projects were recognized with cash prizes of Rs 3000, Rs 2000, and Rs 1000, celebrating the students' achievements.

The exhibition was energized by the enthusiastic participation of lower-semester students, adding a vibrant atmosphere to the event. A valedictory function in the ECE seminar hall concluded the day, attended by juries, faculty, and 57 students. Prizes were awarded to the winners, and the juries shared insights on the importance of practical projects in enhancing learning and preparing students for real-world challenges. The success of the exhibition was supported by the college management, faculty, volunteers, and the entire ECE department community.



**Electrig 3.0:** On May 6, 2024, the Department of Electronics and Communication and IEEE SPS Student Chapter hosted "Electrig 3.0," a significant farewell event for the outgoing members of the IEEE Batch 2023-24 and the formal induction of the new committee for 2024-25. The evening featured heartfelt acknowledgments and inspiring speeches from key figures, including HOD Dr. Chandrasekhar K and Branch Counselor Dr. Ashabharathi S. Former secretary Mr. Kushadh highlighted the year's successful initiatives, such as technical workshops and collaborative events, setting a motivational tone for the new leadership.

The event included a ceremony honoring outgoing committee members with tokens of gratitude for their contributions. The new members were introduced and received their badges, marking the start of their responsibilities. Present Chair Sai Eshwar and SPS Chair Sriranga Rao energized the audience with an overview of the upcoming year's plans. Dr. Ashabharathi concluded the event by emphasizing the importance of unity and collaboration, urging all attendees to actively participate in the IEEE club. A total of 66 members attended, marking a successful transition for the organization.



**Industrial Visit:** The Department of Electronics and Communication Engineering organized an industrial visit to ISRO for 6th-semester students on June 8, 2024. This enriching experience provided students with an opportunity to explore the cutting-edge technologies and innovative projects undertaken by ISRO. The visit included informative sessions with experts, showcasing the organization's contributions to space research and satellite communication. Students engaged in discussions about ongoing projects, gaining valuable insights into the practical applications of their academic studies and the importance of teamwork and innovation in the field of electronics and communication.





***Talk on Water Conservation:*** Dr. Sreekeshava K S, serving as the resource person for third-semester students of the Department of Electrical and Communication Engineering, delivered an insightful talk on water conservation. His session, organized to enrich the students' understanding of environmental sustainability, emphasized the importance of responsible water usage and conservation practices. Dr. Sreekeshava's expertise illuminated key strategies and challenges in water conservation, inspiring the students to adopt proactive measures in their personal and professional lives. This initiative not only broadened their knowledge but also underscored the department's commitment to integrating critical social and environmental issues into their curriculum.



***MoU with Wefaa Robotics:*** The Department of Electrical and Communication Engineering has forged a significant partnership by signing an MOU with Wefaa Robotics and Smorphi in Singapore. This collaboration aims to advance research and development in robotics, automation, and artificial intelligence. By combining academic expertise with industry innovation, the partnership seeks to drive advancements that will impact sectors such as manufacturing, healthcare, and smart cities. This initiative underscores their shared commitment to pushing the boundaries of technological innovation and contributing to Singapore's role as a global hub for cutting-edge research and development in robotics.



## Student Achievements

**SAE Aero-Design Series West Competition 2024:** The SAE Aero-Design Series West Competition 2024 Advanced Series, organized by SAE International, organized from April 12th to 24th, 2024. Team Garuthmaan, with seventeen members, represented their club and college as ambassadors and presented their design online. Notably, Sriganesh Srikanth, Swathi Bhat, Manya, Hitha and Sameer from the ECE department were part of the team. In terms of achievements, the team ranked 12th globally. This competition provides practical engineering challenges for undergraduate and graduate students, mirroring real-world scenarios. Around 50 teams participated, competing for a single \$1,000 prize. This event showcased the participants' talent and professionalism.



**IEEE Student-Scholarship 2024:** Six students have received scholarships from Quest Global through the IEEE philanthropy initiative. Dr. Asha Bharathi, Associate Professor and Head of the Department of Electronics and Communication Engineering, provided valuable guidance and support, contributing to the success of the students and the department's commitment to academic excellence.



**Avishkar-2024:** Shivank, Prajwal, Divya, and Ameetha, students of the 8th semester of ECE, achieved a remarkable feat at the Avishkar - 2024 Inter College Project Exhibition held at Vemana Institute of Technology. Their project titled "Implementation of RFID based Smart Electric Vehicle Charging System" secured the 1st prize, accompanied by a cash award of 3000 INR.



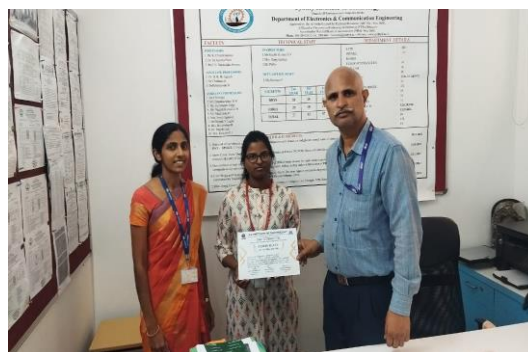
***Environmental Challenges Contest:*** Sriganesh S, Sai Eshwar V R, R Sumukh Aryan, and Saharsha V, 5th-semester students in the Department of Electronics and Communication Engineering, participated in “Kaalaniiray” at RV College of Engineering, representing the department in a collaboration with the Energy Swaraj Foundation. Their innovative display illustrated the relationship between carbon accumulation and temperature rise, emphasizing the urgent need for climate action. As part of this initiative, RVCE received a Climate Clock from the Energy Swaraj Foundation, highlighting the importance of limiting global warming to 1.5 degrees Celsius. This initiative showcases RVCE's commitment to promoting sustainable practices.



***IEEE R10 ERM Student Contest 2024:*** Sinchana K, Sai Eshwar V R, Saharsha S, R Sumukh Aryan, Nitin A, Rohith P, Jishnu P, Harshitha K, and Shankarshana V from the ECE department participated in the IEEE R10 ERM Student Contest 2024 on June 28th, 2024. Their presentation demonstrated a strong understanding of the IEEE Code of Ethics, focusing on ethics and Enterprise Risk Management (ERM) and reflecting their commitment to professional standards and integrity.



**TECH VISTARA-2024:** Boomika S B, a fifth-semester student, secured second place in the Ideathon at TECH VISTARA, an inter-college technical competition organized by the Garut Aerobotics Club. Her project, guided by mentor Nami Susan Kurian, was recognized for its creativity and technical expertise, standing out among numerous participants.



**Work Readiness Mentoring Program(WRMP):** Monica C, a third-semester student in the Department of Electronics and Communication Engineering (ECE), received a Certificate of Appreciation for completing the Work Readiness Mentoring Program from November 2023 to June 2024. Under the mentorship of Archana Chavan, Associate Director of Operations at Mentor To Go, Monica developed key career skills and readiness during the program.

**Prodigy InfoTech Internship:** Jayashree MMJ has received a Certificate of Completion for a one-month internship in Data Science at Prodigy InfoTech, held from February 15th, 2024, to March 15th, 2024. Her participation in the internship demonstrated her focus on advancing her skills and knowledge in Data Science, earning recognition from Prodigy InfoTech.

**IStop AI Solutions Internship:** Shreya L, a third-semester student from the Department of Electronics and Communication Engineering, completed an internship on hybrid electric vehicles (hEV) at IStop.ai Solutions. This opportunity provided her with hands-on experience in electric vehicle technology.

**Project Exhibition Winners:** In collaboration with the IEEE JIT Student Branch and IEEE Bangalore Section, a project exhibition for final-year ECE students was held at JIT, showcasing 16 innovative projects. Three projects were awarded prizes of Rs. 3000, Rs. 2000, and Rs. 1000 for their merit. The event emphasized the importance of innovation and the practical application of engineering knowledge among students.

Position	Project Title	Name of the Guide	Name of the Students
1 <sup>st</sup>	Design and Implementation of Smart Hydroponics System using IoT for Agriculture	Ms. Nami Susan Kurian	Raksha V N Amrutha Yukta Sri Jeeru Kushadh A



2 <sup>nd</sup>	Design and Implementation of GPS Enabled Smart Heat Jacket with Long Range Communication	Mr. Deepak V Ingale	Harshitha N Aditya S V Venkatesh Nithish Rao H D
3 <sup>rd</sup>	IoT Based Intravenous Fluid Monitoring and Alerting	Dr. Chethana K	Sonika M Tanishaa Sastry Yashwanth B R

## ***Faculty Achievements***

**Dr. K Chandrasekhar**, Professor and Head of the Department of Electronics and Communication, has received AICTE approval for his **proposal under the AICTE-VAANI** scheme for the 2024-25 academic year in offline mode. This scheme, designed to boost educational quality through enhanced resources and infrastructure, will support impactful advancements in learning and development within the department.



**Dr. Geetha Priya**, professor, department of Electronics and Communication Engineering was honored as a Session Chair and Panel Discussion Member for National Conference on Himalayan Cryosphere, organized by IISc, Bangalore. She also made Himalayan field work expeditions for snow studies has been initiated and experiments commenced and completed during the month of January 2024 and Polar Cryospheric studies under 43 rd Indian Scientific Expedition to Antarctica (ISEA) was

carried out between 11th Nov 2023 and 8th Feb 2024. She have the following projects to her honor:

**Project title** - “Vulnerability of East Coastal Antarctica to surface melt and ponding” Project from - National Centre for Polar and Ocean Research (NCPOR), Ministry of Earth Sciences (MoES), Govt. of India (GoI) under the Indian Scientific Expedition to Antarctica (42nd, 43rd & 44th ISEA)

**Project title** - “Estimation of time series of AAR of Himalayan sub-basins” Project from – Space Application Centre (SAC), ISRO Ahmedabad under Cryosphere Science and Application Programme (CAP)

**Dr. Chetana K**, Associate Professor, served as the resource person for a program on Fiber Bragg Grating sensors for healthcare applications. Over three months, she provided **internships and hands-on training** at the Department of Electronics and Communication Engineering, JIT. Additionally, she facilitated internships **for students of MSRIT, RNSIT, RV College**, and Jyothy Institute of Technology, Bengaluru, thereby enriching students' practical experience and expertise in advanced sensor technologies for healthcare.



**Dr. Asha Bharathi S**, Associate Professor, Department of Electronics and Communication Engineering received a Certificate of Appreciation from the **IEEE Bangalore Section SAC** for her outstanding dedication, unwavering support, and exceptional leadership as Branch Counselor in the year 2023. She also holds the role of **branch counselor for the IEEE student branch at Jyothy Institute of Technology**.

**Dr. Hamsa S.**, Associate Professor in Department of Electronics and Communication Engineering has been honored as a **Conference Chair Member** at the International Conference on Multidisciplinary Research & Innovation (ICMRI) 2024. This prestigious conference, scheduled for March 27-28, 2024, is jointly organized by the Department of Mechanical Engineering at Radhakrishna Institute of Technology and Engineering, Bhubaneswar, Odisha, and RSP Conference Hub, Coimbatore, Tamil Nadu.



**Nami Susan Kurian**, Assistant Professor, Department of Electronics and Communication and Engineering, received honor for NPTEL Believer from January to April 2024. She also received the NPTEL Discipline Star by SWAYAM NPTEL from January to April 2024. She also **filed and published a patent titled Deep Learning-Driven Cloud Platform for Intelligent English Literature Analysis** during the month of March 2024. She was also honored at the 3rd World Conference on Multidisciplinary

Research and Innovation, Singapore organized by IFERP. On April 12th, 2024, she also led a **webinar** on "Design and Implementation of Networks using Cisco Packet Tracer" for Rajalakshmi Engineering College's Electronics and Communication Engineering department, offering valuable insights into network design and simulation.

### *Student paper publications*

Student Name	Research Article Name	Indexing	Date of Publish
Rakshita, C. & Krishna, L. & Yeshwanth, B.	Estimation of Glacier Velocity of Ny-Ålesund, Arctic Using Sentinel-1 Remote Sensing Data, pp 50-59. 10.1007/978-3-031-60725-7_5.	Scopus	June 2024
Advitha Chandrashekara H, Anurag Patil, Hitesh V Basri, Prasanna Vadiraja P	Design and implementation of Automated and Radio Controlled Rover with Object Detection using Raspberry, IJAEM, vol 6, issue 04, pp 1022-1027	Google Scholar	April 2024

### *Paid Internships*

Sl. No	Student Name	USN	Company	Amount Paid
1	Nithish Rao H D	1JT20EC028	Shine logic solutions Private Limited	5k per month
2	Anurag Patil	1JT20EC005	Celominds Solutions Private Limited	12k per month
3	Shreesha S	1JT20EC042	Celominds Solutions Private Limited	12k per month
4	Rakshitha V	1JT20EC037	Celominds Solutions Private Limited	12k per month
5	Shivank V	1JT20EC041	Celominds Solutions Private Limited	12k per month
6	Advitha Chandrashekar	1JT20EC002	Next Big Innovation Labs Pvt Ltd	15k per month

## *Placements*

Sl.No	USN	Student Name	Company
1	1JT20EC001	Aditya S	S2D Process Solutions Pvt Ltd
2	1JT20EC002	Advitha Chandrashekara.H	Loginware
3	1JT20EC005	Anurag patil	SG Technologies
4	1JT20EC007	Chaitanya G S	A3 Technologies
5	1JT20EC009	Chandana K S	Loginware
6	1JT20EC011	Dhanyashree C	Loginware
7	1JT20EC011	Dhanyashree C	SG Technologies
8	1JT20EC012	Divya M	Loginware
9	1JT20EC012	Divya M	S2D Process Solutions Pvt Ltd
10	1JT20EC014	Harshitha N	S2D Process Solutions Pvt Ltd
11	1JT20EC015	Hemanth S	Catalysts
12	1JT20EC016	Hitesh K V	SmartBrains Engineers & Technologist Pvt Ltd
13	1JT20EC019	Janhavi N	Loginware
14	1JT20EC021	Keerthana.S	Loginware
15	1JT20EC022	Kushadh A	S2D Process Solutions Pvt Ltd
16	1JT20EC022	Kushadh A	Loginware
17	1JT20EC023	M.B Chaithanya	SG Technologies
18	1JT20EC024	Manikanta R	Loginware
19	1JT20EC030	Prajwal Gowda L	Loginware
20	1JT20EC030	Prajwal Gowda L	S2D Process Solutions Pvt Ltd
21	1JT20EC035	Raksha V	S2D Process Solutions Pvt Ltd
22	1JT20EC036	Rakshith S	Loginware
23	1JT20EC040	Sharathkumar C	Loginware
24	1JT20EC040	Sharath Kumar C	S2D Process Solutions Pvt Ltd
25	1JT20EC041	Shivank V	A3 Technologies
26	1JT20EC043	Sonika M	Loginware
27	1JT20EC043	Sonika M	S2D Process Solutions Pvt Ltd
28	1JT20EC044	Srinivas T	SG Technologies
29	1JT20EC046	Sudharshan R	ECE Catalysts

30	1JT20EC049	Susheela B P	S2D Process Solutions Pvt Ltd
31	1JT20EC050	Tanishaa Sastry	Loginware
32	1JT20EC050	Tanishaa Sastry	S2D Process Solutions Pvt Ltd
33	1JT20EC053	V Venkatesh	Loginware
34	1JT20EC053	V Venkatesh	S2D Process Solutions Pvt Ltd
35	1JT20EC054	Yashwanth B R	S2D Process Solutions Pvt Ltd
36	1JT20EC056	Yashwanth Krishna L	S2D Process Solutions Pvt Ltd
37	1JT20EC056	Yashwanth Krishna L	Loginware
38	1JT20EC059	Yuktha D R	Loginware
39	1JT20EC059	Yuktha D R	S2D Process Solutions Pvt Ltd

### ***Toppers of the semester***

Semester	Name and USN	% and CGPA
8 <sup>th</sup>	1. Hitha Dathananda [1JT20EC018]	90.4 %
	2. Ameetha Mumtaj SH [1JT20EC002] & Sandhya P [1JT20EC039]	90.0 %
	3. Chandana K S [1JT20EC009]	89.8 %
6 <sup>th</sup>	1. Bhoomika S B [1JT21EC010]	88.6 %
	2. Nirmitha D [1JT21EC046]	85.8 %
	3. Mahesh [1JT21EC035]	84.9 %
4 <sup>th</sup>	1. Karanam Naveen Kumar [1JT22EC042]	87.0 %
	2. Anushree S K [1JT22EC012]	84.2 %
	3. N. Rishitha Choudhary [1JT22EC065] & Vinod Kashyap [1JT22EC118]	82.9 %

### ***Faculty paper publications***

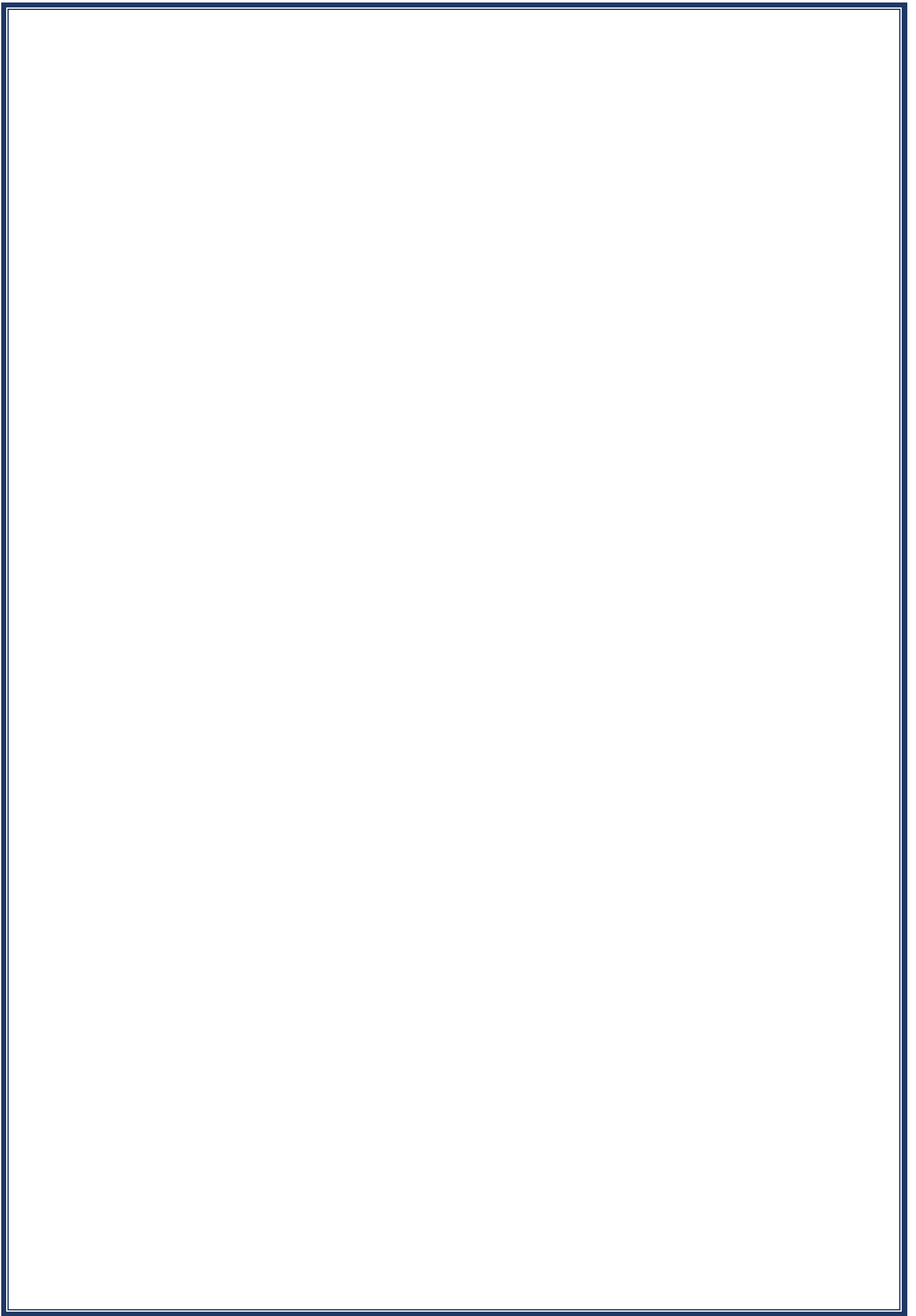
Name of the Staff	Research Article Name	Indexing	Date of Publish
Dr. Geetha Priya M	Exploring the frozen frontier: unmanned aerial vehicles and multispectral sensors unveiling cryosphere dynamics in East Antarctica's Dronning Maud Land. GIScience & Remote Sensing.	Scopus	January 2024
Dr. Geetha Priya M	Estimation of Glacier Velocity of Ny-Ålesund, Arctic Using Sentinel-1 Remote Sensing Data.	Scopus	March 2024

Dr. Asha Bharathi S, Dr. Hamsa S	Green Steel: A Sustainable Solution for Low-Carbon Building Construction, Lecture notes in Civil Engineering, vol 464, pp 301-312, 2024, Springer, doi: 10.1007/978-981-97-0910-6_25	Scopus	April 2024
Dr. Asha Bharathi S & Dr. Hamsa S	“Monitoring of Smart Greenhouse using Internet of Things (IoT)”, Lecture notes in Civil Engineering, vol 457, pp 213-225, 2024, Springer, doi: 10.1007/978-981-99-9610-0_19	Scopus	March 2024
Dr. Asha Bharathi S	Design and implementation of Automated and Radio Controlled Rover with Object Detection using Raspberry, IJAEM, vol 6, issue 04, pp 1022-1027	Google Scholar	April 2024
Dr. Hamsa S, Dr. Asha Bharathi S	“IoT Driven Civil Engineering Solutions for Smart Integrated Agriculture in Controlled Environment”, Lecture notes in Civil Engineering, vol 459, pp 347-358, 2024, Springer, doi: 10.1007/978-981-97-0072-1_31	Scopus	March 2024
Dr. Hamsa S,	“Development of Artificial Intelligence of Things and Cloud Computing Environments Through Semantic Web Control Models”, Emerging Technologies for Securing the Cloud and IoT, IGI Global, 2024, pp 112-143, doi: 10.4018/979-8-3693-0766-3.ch005	Scopus	April 2024

### *Projects sanctioned under KSCST*

Faculty Name	Student Name	Project Title	Total Amount Sanctioned
Mrs. Srilakshmi R & Dr. Sreekeshava KS	Srinivas T Chandana KS Harikishan K Sudeep KS	Secure Step: Advanced Home Security with Doormat Sensors Using IoT	5000
Dr. Chethana K	MB Chaitanya Anusha M Kudur Susheela BP	Design Development and Calibration of Pulse Rhythmic Dilation using fiber bragg grating for patient care	5000
Mrs. Smitha Agrawal	Sreesha S Rakshitha V Hemanth S Punyashree BM	Smart Jacket for back posture detection and alert with image analysis	5000
Dr. Chethana K	Tanishaa Sastry Sonika M Yashwanth BR	IoT based intravenous fluid monitoring and alerting	4500
Mrs. Sumangala Gejje	Darshan P Manoj KB Tejas B Shreyas SN	Lung capacity and health analyzer using IoT	4500





# Department of Electronics and Communication Engineering

## Editorial Board



**Dr. K Chandrasekhar**  
Professor and Head



**Dr. Hamsa S**  
Associate Professor

## Student Editors



**Udhayashree K, 3<sup>rd</sup> year**  
[1JT21EC081]



**Shreya L, 2<sup>nd</sup> year**  
[1JT22EC092]



**Banashree K S, 3<sup>rd</sup> year**  
[1JT21EC009]



**Rohith P, 3<sup>rd</sup> year**  
[1JT21EC059]



**JYOTHY**  
INSTITUTE OF TECHNOLOGY

**VOL 20**  
**JAN-JUNE 2024**

# VIDYUNMANA

A BIENNIAL NEWS LETTER



**PRESENTED BY:**

**DEPARTMENT OF ELECTRONICS AND  
COMMUNICATION ENGINEERING**

## *From the Desk of Principal*

I am happy that Department of ECE, Jyothy Institute of Technology (JIT), is bringing out a Newsletter biannually. This Newsletter will help to show case the activities that are happening in the department. It also helps in building up teamwork which is very much needed today in the world of competition. It provides a platform for exposing the merits and academic achievements of the faculty as well as students. This enhances the documentation culture of the institute. This would create an impact in the minds of readers, by way of providing larger visibility and dimension to the department. All credits and thanks go to the dedicated staff and their teamwork.



**Dr. Gopalakrishna K**  
Principal, JIT

## *HOD's Message*



I am happy that the department is coming out with next new edition of Newsletter - Vidyunmana, which gives comprehensive information of non-technical events and activities that has happened in a semester along with showcasing talents in many ways. I strongly believe this Newsletter paves way to record and promote the activities in the related fields of our department. I appreciate the efforts of our students and faculty members who have taken keen interest in shaping this Newsletter. I congratulate and wish them all

the best.

I wish all the students and faculties of the department all success.

**Dr. K Chandrasekhar**  
Professor and Head  
Senior IEEE Member

## ***Vision of the Institute***

To be an Institution of Excellence in Engineering education, Innovation and Research and work towards evolving great leaders for the country's future and meeting global needs.

## ***Mission of the Institute***

The Institution aims at providing a vibrant, intellectually and emotionally rich teaching-learning environment with the State of the Art Infrastructure and recognizing and nurturing the potential of each individual to evolve into one's own self and contribute to the welfare of all.

## ***About the Department***

The Department of Electronics and Communication Engineering (ECE) was established in 2011, offering an undergraduate program with an initial intake of 60 students later increased to 120 since 2020. Known for its strong emphasis on research and teaching, the department boasts a unit of excellence dedicated to imparting knowledge in the field of Electronics and Communication. It is equipped with a well-established infrastructure, providing all the necessary tools and equipment for academic and research pursuits. Moreover, the department benefits from research facilities sponsored by esteemed agencies like KSCST, VGST, DST, and SAC-ISRO.

Department clubs, essential components of any educational institution, offer a dynamic nexus for students to deepen their academic engagement and personal growth. Beyond the classroom, they provide practical skill development, networking opportunities with professors and industry experts, and a supportive community where friendships are forged, and challenges are overcome. Department of Electronics and Communication proudly hosts the e-Yantra Club. Additionally, the department is an active participant in IEEE, a renowned global organization, further solidifying its commitment to advancing technology and fostering collaborations between academia and industry.

## ***Vision of the Department***

To be a department of excellence at a global level in Electronics and Communication Engineering education, incorporating Research & Innovation and leadership training components.

## ***Mission of the Department***

- **M1:** Strive to provide state of Art infrastructure in classrooms and laboratories.
- **M2:** Enable all-round development with individual attention and innovative teaching learning methodology.
- **M3:** Impart leadership qualities into the students by exposing them to industry and research in global Electronics and Communication Engineering domain.

## ***Program Educational Objectives (PEO's)***

- **PEO1:** Graduates of Electronics & Communication Engineering will be able to utilize mathematics, science, engineering fundamentals, theoretical as well as laboratory-based experiences to identify, formulate & solve engineering problems and succeed in advanced engineering or other fields.
- **PEO2:** Graduates of Electronics & Communication Engineering will succeed in entry-level engineering positions in VLSI, Communication and Fabrication industries in regional, national, or global industries.
- **PEO3:** Graduates of Electronics & Communication Engineering will be prepared to communicate and work effectively on individual & team based engineering projects while practicing the ethics of their profession consistent with a sense of social responsibility.
- **PEO4:** Graduates of Electronics & Communication Engineering will be equipped to recognize the importance of, and have the skills for, continuous learning to become experts in their domain and enhance their professional attributes.







## ***Program Specific Outcomes (PSO's)***












- **PSO1:** Explore emerging technologies in the field of Electronics and Communication Engineering using the knowledge and skills gained.





- **PSO2:** Apply techniques in different domains to create innovative products and services in the Communication, VLSI, DSP, and Networking.
- **PSO3:** Work on various platforms as an individual/team member to develop useful and safe circuits, PCB, Power Management Systems and Automation for the society and nation.


### *Faculty List*

Sl.No	Name of the Faculty	Qualification and Designation	
1	Dr. K Chandrasekhar	B.E, M.E, PhD Professor & Head	
2	Dr. Geethapriya M	B.E, M.Tech, PhD Professor	
3	Dr. H B M Ajjaiah	B.E, M.Tech, PhD Associate Professor	
4	Dr. Chethana K	B.E, M.Tech, PhD Associate Professor	
5	Dr. Asha Bharathi S	B.E, M.Tech, PhD Associate Professor	
6	Dr. Hamsa S	B.E, M.Tech, PhD Associate Professor	
7	Mr. Chandrashekar B M	B.E, M.E, [PhD] Assistant Professor	





8	Ms. Sumangala Gejje	B.E, M.Tech Assistant Professor	
9	Mr. Nagesh Kumar D N	B.E, M.Tech,[PhD] Assistant Professor	
10	Mr. Madhukar M	B.E, M.Sc - Tech, [PhD] Assistant Professor	
11	Mrs. Smita Agarwal	B.Tech, M.Tech, [PhD] Assistant Professor	
12	Mr. Deepak V Ingale	B.E, M.Tech, Assistant Professor	
13	Mrs. Srilakshmi R	B.E, M.Tech, [PhD] Assistant Professor	
14	Mrs. Krithika P J	B.E, M.Tech, Assistant Professor	
15	Mrs. Bhargavi N G	B.E, M.Tech, Assistant Professor	
16	Mr. Shivaraj A	B.E, M.E, Assistant Professor	
17	Mrs. Nami Susan Kurian	B.E, M.Tech, [PhD] Assistant Professor	
18	Mr. Prasanna Bhat	B.E, M.Tech, Assistant Professor	





19	Mr. Dayananda LN	B.E, M.Tech, [PhD] Assistant Professor	
20	Dr. Soumya Padukone G	B.E, M.Tech, PhD Assistant Professor	

### *Visiting Professor*

Sl.No	Name of the Faculty	Designation	
1	Prof. N Narasimha Swamy	B.E, M.Tech, Professor	

### *Staff list*

Sl.No	Name of the Staff	Designation	
1	Mr. Goutham C	B.E, Foremen	
2	Mr. Shashi Kumar S V	Diploma, HDSE, M.A Senior Instructor	
3	Mrs. Ranjitha Bhat	B.E, Senior Instructor	
4	Mr. Prabu S	Diploma, BCA(B.E) Senior Instructor	

5	Mrs. Chandana T V	B.E, Instructor	
6	Ms. Medha Chowdhary M	B.E, Instructor	
7	Mr. Anand V Achar	Diploma,(B.E) Instructor	
8	Mrs. Shruthi M	B.B.M, M.B.A Second Divisional Clerk	

## *Department Events*

**Republic Day Celebration:** Jyothy Institute of Technology proudly celebrated Republic Day on the 26th of January with great enthusiasm and patriotic fervor. The event commenced with the hoisting of the national flag by the esteemed chief guest, marking the beginning of the celebrations. This was followed by an impressive parade conducted by the NCC students, showcasing their discipline and dedication. The event paid a heartfelt tribute to the freedom fighters who laid down their lives for the country's independence, reminding everyone of their sacrifices and the importance of upholding the values they fought for.

A notable highlight of the celebration was the significant contribution from the students of the Electronics and Communication Engineering (ECE) department. Their relentless efforts and meticulous planning ensured the smooth execution of the event, from organizing the parade to coordinating the tributes. Their commitment and hard work were evident in every aspect of the celebration, making the Republic Day event a memorable and inspiring occasion for all attendees.



***Leadership Development Programme:*** The Leadership Development Programme (LDP) for Chairpersons, Directors, and Members of Co-operative Societies, held on February 10, 2024, was a resounding success. Sponsored by the National Co-operative Union of India and organized by the Department of ECE, Jyothy Institute of Technology in collaboration with Sri. Maheshwaramma Credit Cooperative Society Ltd. (SMCCS), Bengaluru, the event commenced with a prayer song by Ms. Bhumika N.G. and a ceremonial lamp lighting. Dr. K. Gopalakrishna, Principal of JIT, delivered the inaugural address, emphasizing the importance of cooperative societies and leadership. Key sessions included Mr. Y. Kumar's talk on the collaborative nature of cooperative societies and Dr. Nagarjuna's insights into strategic vision, decision-making, and resource management within these organizations.

Post-lunch, participants visited Pyramid Valley, providing excellent networking opportunities. The day concluded with a high tea and a valedictory function, where participants received certificates and feedback was collected. The event, supported by SMCCS, JIT's ECE Department, Principal, and college management, highlighted the crucial role of leadership in the success and sustainability of cooperative societies.





***Farewell Celebrations:*** On the 25th of May, Jyothy Institute of Technology bid a heartfelt farewell to its B.Tech students with a grand celebration filled with joy, nostalgia, and recognition. The farewell event was marked by a series of engaging games that brought laughter and camaraderie among the students, creating lasting memories. To add a touch of fun and creativity, caricature artists were invited to the event, delighting everyone with their quick and lively 2-minute portraits, capturing the essence of each student in a unique and humorous way.

In a ceremony honoring the achievements and excellence of the graduating class, two students from each department were selected as the Best Outgoing Students and awarded a prestigious silver ring. Among these twelve distinguished students, one exceptional individual was awarded a gold ring after a rigorous interview process, highlighting their outstanding accomplishments. Additionally, four students from the

Department of Electronics and Communication Engineering (ECE) received Special Achievers Awards for their remarkable contributions and achievements during their tenure at the institute. As a token of appreciation, all graduating students were presented with a special gift from their respective departments, symbolizing the end of their academic journey and the beginning of their professional careers.



***ELECTRIG 3.0*** : Jyothy Institute of Technology recently hosted a significant event to honor the outgoing IEEE ExeCom members and induct the new leadership team. The ceremony was a heartfelt occasion, marking both the farewell of the previous ExeCom members and the introduction of the new team who will steer the IEEE chapter forward.

The event began with the felicitation of the outgoing ExeCom members, recognizing their hard work, dedication, and achievements over the past year. Each member was presented with a token of appreciation, commemorating their valuable contributions to the chapter's success. The new ExeCom members were then formally inducted, receiving jackets and badges symbolizing their new roles and responsibilities. The



newly appointed chairman delivered an inspiring speech outlining the vision and upcoming activities for the IEEE chapter. His address focused on fostering innovation, expanding outreach programs, and enhancing the overall impact of the IEEE community at Jyothy Institute of Technology. The event was a blend of gratitude, celebration, and anticipation, setting a positive tone for the future endeavors of the IEEE chapter.



**International Women's Day:** Jyothy Institute of Technology celebrated International Women's Day with great enthusiasm and respect on the 8th of March. The event was graced by the presence of the esteemed chief guest, Tejaswini Ananth Kumar, whose inspiring words resonated deeply with everyone present. Her speech emphasized the importance of gender equality, women's empowerment, and the vital roles women play in various spheres of life.

The celebration included a series of engaging activities and performances that highlighted the achievements and talents of women within the college community. From thought-provoking discussions to cultural performances, the event showcased the strength and diversity of women. Students and faculty members participated actively, making the event a memorable and empowering experience for all. The celebration of International Women's Day at Jyothy Institute of Technology served as a powerful reminder of the progress made and the journey ahead in the pursuit of equality and empowerment for all women.



***Inter College Faculty Sports :*** The faculty members of Jyothy Institute of Technology recently showcased their athletic prowess and team spirit at the International Staff Tournament hosted by PES University, Hosakerehalli. This prestigious event brought together staff from various institutions, fostering a sense of camaraderie and healthy competition.

Our faculty participated in a range of sports and games, demonstrating their dedication to fitness and teamwork. The tournament provided an excellent platform for networking and building relationships with peers from different universities. The enthusiasm and sportsmanship displayed by our faculty members were commendable, making the event a memorable experience. The participation in the International Staff Tournament not only highlighted the athletic talents of our faculty but also reinforced the importance of maintaining a balanced and active lifestyle.





***Outbound Activity for Students:*** On January 3, 2024, third-semester students from the Department of Electronics and Communication Engineering participated in an enriching outbound educational activity at the Art of Living campus. This excursion provided the students with valuable insights into sustainable practices, focusing on waste management and organic farming. The session highlighted the importance of environmental stewardship and the practical implementation of eco-friendly technologies. Through interactive demonstrations and hands-on activities, students learned about composting, recycling, and organic farming techniques. This experience not only broadened their understanding of environmental sustainability but also emphasized the role of engineering in promoting greener practices. The visit was both educational and inspiring, encouraging students to integrate sustainable practices into their future professional endeavors.





## *Student Achievements*



Institution.

### *Best Outgoing Students 2023:*

Adithya received a distinguished honor on farewell bidding which was organized on 25th May 2024 as he was nominated as the best outgoing student for the batch of 2024. In recognition of his outstanding academic achievements and contributions, he was awarded the prestigious silver ring by the



Harshitha received a prestigious accolade as she was nominated as the best outgoing student for the batch of 2024, on farewell bidding which was organized on 25th May 2024. In acknowledgment of her exceptional academic achievements and significant contributions, the institution bestowed upon her the esteemed silver ring.



Yashas, 6th semester from the department of Electronics and Communication Engineering, along with his group, made an outstanding folk dance performance at the VTU Fest 2024 held at SJGIT during the month of May-June. Their dedication and talent were evident, earning admiration and applause from all attendees and received appreciation from VTU.

Jyothy Institute of Technology organized the Jyothy Premier League (JPL) on 6th and 7th of March 2024. The League had many games like Volleyball, Throw ball, Cricket, Badminton and many more. Having 13 teams across the branches and 12 matches were played for each of the games. The team from department of Electronics and Communication Engineering bagged the first prize winning trophies for their victory in Tug of war.





Sriganesh, Sumukh Aryan, and Sanjay from the 5th semester, department of electronics and communication at JIT triumphed in the cricket tournament at Jyothy Premier League held in March. Their skill and teamwork helped them grab the winners of the tournament by being the winners in cricket and runner up in tug of war.

Kushalini and Thrupthi Patel, 2nd semester from department of Electronics and Communication are among six of our students who have been awarded scholarships by Quest Global as part of the IEEE philanthropy activity. Their hard work and dedication have earned them this prestigious recognition.



Varadaraj, Pravalik, 6th semester and Sudharshan, 8th semester, department of Electronics and Communication Engineering actively participated in the VTU South Zone Hockey Tournament which was held during the month of May-June 2024 and emerged as runners. Their exceptional skill and teamwork on the field led them to this prestigious victory.

Udith Kumar AK, 5th semester, Electronics and Communication Engineering actively participated in most of the games in Jyothy Premier League





(JPL) and showcased outstanding performance. He was awarded the Player of the Tournament of JPL 2024.



Sriranga Rao and Harith, 5th semester Electronics and Communication Engineering, participated in singing on the occasion of Purandara Tyagaraja Smarane during the month of February 2024, earning high praise and accolades. Their melodious performance captivated the audience and showcased their exceptional talent and received appreciation award from the principal of JIT.

Harith C M, 5th semester, department at Jyothy Institute of Technology, showcased his musical prowess by delivering a captivating guitar performance at Bugle Rock in the month of January 2024. His melodic talents continue to inspire and represent our college community with excellence.



Pravalik, Harith, and Sriranga Rao from the 5th semester Electronics and Communication Engineering, participated in the cricket tournament at the Jyothy Premier League (JPL) 2024 held in the month of March. Their team were the runners up in cricket, Their teamwork and skill were commendable, leading them to a well-deserved podium finish.

### *Student paper publications*

Student Name	Research Article Name	Indexing	Date of Publish
Rakshita, C. & Krishna, L. & Yeshwanth, B.	Estimation of Glacier Velocity of Ny-Ålesund, Arctic Using Sentinel-1 Remote Sensing Data, pp 50-59. 10.1007/978-3-031-60725-7_5.	Scopus	June 2024
Advitha Chandrashekar H, Anurag Patil, Hitesh V Basri, Prasanna Vadiraja P	Design and implementation of Automated and Radio Controlled Rover with Object Detection using Raspberry, IJAEM, vol 6, issue 04, pp 1022-1027	Google Scholar	April 2024

### *Paid Internships*

Sl. No	Student Name	USN	Company	Amount Paid
1	Nithish Rao H D	1JT20EC028	Shine logic solutions Private Limited	5k per month
2	Anurag Patil	1JT20EC005	Celominds Solutions Private Limited	12k per month
3	Shreesha S	1JT20EC042	Celominds Solutions Private Limited	12k per month
4	Rakshitha V	1JT20EC037	Celominds Solutions Private Limited	12k per month
5	Shivank V	1JT20EC041	Celominds Solutions Private Limited	12k per month
6	Advitha Chandrashekar	1JT20EC002	Next Big Innovation Labs Pvt Ltd	15k per month

### *Placements*

Sl.No	USN	Student Name	Company
1	1JT20EC001	Aditya S	S2D Process Solutions Pvt Ltd
2	1JT20EC002	Advitha Chandrashekar.H	Loginware
3	1JT20EC005	Anurag patil	SG Technologies
4	1JT20EC007	Chaitanya G S	A3 Technologies
5	1JT20EC009	Chandana K S	Loginware



6	1JT20EC011	Dhanyashree C	Loginware
7	1JT20EC011	Dhanyashree C	SG Technologies
8	1JT20EC012	Divya M	Loginware
9	1JT20EC012	Divya M	S2D Process Solutions Pvt Ltd
10	1JT20EC014	Harshitha N	S2D Process Solutions Pvt Ltd
11	1JT20EC015	Hemanth S	Catalysts
12	1JT20EC016	Hitesh K V	SmartBrains Engineers & Technologist Pvt Ltd
13	1JT20EC019	Janhavi N	Loginware
14	1JT20EC021	Keerthana.S	Loginware
15	1JT20EC022	Kushadh A	S2D Process Solutions Pvt Ltd
16	1JT20EC022	Kushadh A	Loginware
17	1JT20EC023	M.B Chaithanya	SG Technologies
18	1JT20EC024	Manikanta R	Loginware
19	1JT20EC030	Prajwal Gowda L	Loginware
20	1JT20EC030	Prajwal Gowda L	S2D Process Solutions Pvt Ltd
21	1JT20EC035	Raksha V	S2D Process Solutions Pvt Ltd
22	1JT20EC036	Rakshith S	Loginware
23	1JT20EC040	Sharathkumar C	Loginware
24	1JT20EC040	Sharath Kumar C	S2D Process Solutions Pvt Ltd
25	1JT20EC041	Shivank V	A3 Technologies
26	1JT20EC043	Sonika M	Loginware
27	1JT20EC043	Sonika M	S2D Process Solutions Pvt Ltd
28	1JT20EC044	Srinivas T	SG Technologies
29	1JT20EC046	Sudharshan R	ECE Catalysts
30	1JT20EC049	Susheela B P	S2D Process Solutions Pvt Ltd
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39	1JT20EC059	Yuktha D R	S2D Process Solutions Pvt Ltd
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### *Faculty Achievements*

**Dr. Asha Bharathi**, an Associate Professor, in the Department of Electronics and Communication Engineering, spearheaded a **week-long meditation initiative** at Jyothy Institute of Technology. This program welcomed the participation of approximately **50 faculty members**.

The "Har Ghar Dhyam" session, orchestrated under her **guidance in collaboration with the Art of Living Organization**, achieved remarkable success. It introduced meditation to approximately **600 students**, a practice much needed in the current times. Dr. Asha Bharathi also **led meditation and stress management sessions** as part of the student Induction program.



### *Faculty paper publications*

Name of the Staff	Research Article Name	Indexing	Date of Publish
Dr. Geetha Priya M	Exploring the frozen frontier: unmanned aerial vehicles and multispectral sensors unveiling cryosphere dynamics in East Antarctica's Dronning Maud Land. GIScience & Remote Sensing.	Scopus	January 2024
Dr. Geetha Priya M	Estimation of Glacier Velocity of Ny-Ålesund, Arctic Using Sentinel-1 Remote Sensing Data.	Scopus	March 2024
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Dr. Asha Bharathi S & Dr. Hamsa S	"Monitoring of Smart Greenhouse using Internet of Things (IoT)", Lecture notes in Civil Engineering, vol 457, pp 213-225, 2024, Springer, doi: 10.1007/978-981-99-9610-0_19	Scopus	March 2024
Dr.Asha Bharathi S	Design and implementation of Automated and Radio Controlled Rover with Object Detection using Raspberry, IJAEM, vol 6, issue 04, pp 1022-1027	Google Scholar	April 2024
Dr. Hamsa S,	"IoT Driven Civil Engineering Solutions for Smart Integrated	Scopus	March

Dr.Asha Bharathi S	Agriculture in Controlled Environment”, Lecture notes in Civil Engineering, vol 459, pp 347-358, 2024, Springer, doi: 10.1007/978-981-97-0072-1_31		2024
Dr. Hamsa S,	“Development of Artificial Intelligence of Things and Cloud Computing Environments Through Semantic Web Control Models”, Emerging Technologies for Securing the Cloud and IoT, IGI Global, 2024, pp 112-143,	Scopus	April 2024

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Dr. Chethana K	MB Chaitanya Anusha M Kudur Susheela BP	Design Development and Calibration of Pulse Rhythmic Dilation using fiber bragg grating for patient care	5000
Mrs. Smitha Agrawal	Sreesha S Rakshitha V Hemanth S Punyashree BM	Smart Jacket for back posture detection and alert with image analysis	5000
Dr. Chethana K	Tanishaa Sastry Sonika M Yashwanth BR	IoT based intravenous fluid monitoring and alerting	4500
Mrs. Sumangala Gejje	Darshan P Manoj KB Tejas B Shreyas SN	Lung capacity and health analyzer using IoT	4500

### ***Toppers of the semester***

Semester	Name and USN	% and CGPA
8 <sup>th</sup>	1. Hitha Dathananda [1JT20EC018]	90.4 %
	2. Ameetha Mumtaj SH [1JT20EC002] & Sandhya P [1JT20EC039]	90.0 %
	3. Chandana K S [1JT20EC009]	89.8 %
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	2. Anushree S K [1JT22EC012]	84.2 %
	3. N. Rishitha Choudhary [1JT22EC065] & Vinod Kashyap [1JT22EC118]	82.9 %

# Department of Electronics and Communication Engineering

## Editorial Board



**Dr. K Chandrasekhar**  
Professor and Head



**Dr. Hamsa S**  
Associate Professor

## Student Editors



**Udhayashree K, 3<sup>rd</sup> year**  
[1JT21EC081]



**Shreya L, 2<sup>nd</sup> year**  
[1JT22EC092]



**Banashree K S, 3<sup>rd</sup> year**  
[1JT21EC009]



**Rohith P, 3<sup>rd</sup> year**  
[1JT21EC059]