

**DR. T. THIMMAIAH INSTITUTE OF  
TECHNOLOGY**

**DEPT. OF ELECTRONICS &  
COMMUNICATION ENGINEERING**

**ECE  
SPECTRUM**



**VOLUME-3, ISSUE-1  
ACADEMIC YEAR 2022-2023**





## Dr.T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Estd. 1986) Oorgaum, Kolar Gold Fields, Karnataka – 563120

(Affiliated to VTU, Belgaum, Approved by AICTE - New Delhi)

NAAC Accredited 'A' Grade

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

### ***SPECTRUM 2022-23***



#### ***Principal's Message***

Dear Readers,

I am delighted to welcome you to the third issue of “Spectrum” student’s Technical Magazine, a technical publication that showcases the latest developments in Electronics & Communication Engineering. I would like to congratulate and appreciate the efforts of Dr. Vijaya Bharathi M, Head of the Department and her editorial team for this magazine. They have done a commendable job in bringing out this issue, which features articles on topics for the overall development for the student’s fraternity. The magazine also highlights some of the achievements and activities of our students, faculty members, Alumni and industry partners in the field of Electronics & Communication Engineering. I hope you enjoy reading this magazine and find it informative and inspiring. I urge you to keep learning and exploring new horizons in the field. Electronics & Communication Engineers are well-positioned in using technology to solve crucial engineering issues and improve the living conditions of the modern world making things more easy making a positive impact on the society and environment.

Dr. Syed Ariff

Principal

Dr. T. Thimmaiah Institute of Technology, KGF



### *From the Editor's Desk*

Dear Readers,

I am delighted to welcome you to the Third Issue of "Spectrum" Technical Magazine, a student-led publication that showcases the latest developments in Electronics & Communication field. This magazine is a platform for our students, faculty members, alumni and industry partners to share their insights, experiences and achievements in Electronics & Communication Engineering. In this issue, you will find articles on topics such as Technical publications, students and faculty member's achievements, Industrial MoU, sports and cultural events conducted under student's forum-ECE-ANWESHA. The department is involved in some of the exciting projects and activities like competitions, outreach programs and alumni events. I would like to thank the editorial team for their hard work and dedication in preparing this magazine. I would also like to thank all the authors who contributed their valuable content to this issue. Without their efforts, this magazine would not have been possible. I hope you enjoy reading this magazine and find it informative and inspiring. I look forward to hearing your feedback and suggestions for future issues. Together, we can make this magazine a success and a source of pride for our department and our profession.

Sincerely,

Dr. Vijaya Bharathi M

HOD

Electronics & Communication Engineering

## EDITORIAL COMMITTEE

### Chief-Editors



**Dr. Vijaya Bharathi M**  
HOD, Associate Professor,



**Dr. Jenitha A**  
Associate Professor, IQAC Head

### Associate Editor:



**Prof. Mohana C**  
Asst. Professor

## STUDENTS EDITORIAL COMMITTEE



**Sanjay S**  
(1GV20EC030)



**Deepika J**  
(1GV20EC008)



**Nivas P G**  
(1GV21EC035)



**Sandeep S U**  
(1GV21EC052)

## **DR. T. THIMMAIAH INSTITUTE OF TECHNOLOGY**

### **VISION**

To produce technically competent engineers having innovative skills positive attitude, leadership and professional ethics, with a focus on developing sustainable and new technology.

### **MISSION**

- Create a conducive environment for teaching, learning and innovation by providing state of the art infrastructure.
- Learn sustainable and new technologies through industry institute collaborations.
- Produce technically competent engineers with ethics, discipline and social consciousness through holistic education.

## **DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

### **VISION**

“Graduates to be recognized in the field of Electronics & Communication Engineering ensuring academic excellence with innovative technical skills and professional ethics.”

### **MISSION**

M1: Imparting quality technical education through innovative teaching learning process.

M2: Active association with industry to meet the growing challenges in the society.

M3: Develop overall competency with professional ethics by providing training programs.

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## STUDENTS ACTIVITIES AND THEIR ACHIEVEMENTS

1. Students of 3<sup>rd</sup> Semester was taken for heritage walk along with faculty as a part of their social connect course on 12/1/2023.



Heritage walks to National Institute of Rock Mechanics (NIRM)

2. Students from the Department participated in Gold rush activities and won prizes in various activities. Sindhuja-1GV20EC033 of 3<sup>rd</sup> year got the overall championship in sports under girl's category.



Overall championship award

3. Fresher's day was celebrated on 10.12.2022 in Edusat. The 5th and 7th Semester students welcomed the 3rd semester students and organised various cultural events.



Students welcoming 3<sup>rd</sup> semester students

4. ECE Students Forum office bearer elections were held on 2.12.2022 and the following elected members were pinned with a badge.

<b>Sl. No.</b>	<b>Name of the Members</b>	<b>Post held</b>
1	DIVYA SWETHA J	PRESIDENT
2	MANASSAH RUFUS M.	VICE PRESIDENT
3	MELVIN JOEL T	SECRETARY
4	BHAVANA G	JOINT SECRETARY
5	JOSHUA S	TREASURER
6	DEEKSHA B	CULTURAL HEAD
7	VIPIN H	TECHNICAL HEAD
8	SANJAY S	SPORTS HEAD
9	MONISHKAR SHAKTHI A	COORDINATOR
10	DEEPIKA J	COORDINATOR
11	SAKTHI RAGAVAN C	COORDINATOR
12	SAHANA K	COORDINATOR
13	SANDHEEP S U	COORDINATOR
14	NIVAS P G	COORDINATOR



Student's coordinators with Principal, ECE HOD and ECE Forum Coordinator



5. Sports (Cricket and football) was conducted under ECE forum activities



Football Team

6. The ECE forum valedictory was conducted and prizes was distributed for various activities.



Winners of the events

**Other events Winner's details under ECE forum**

Sl No.	Event Name	1 <sup>st</sup> Prize	2 <sup>nd</sup> Prize	3 <sup>rd</sup> Prize
1	Vegetable carving	Sindhuja V C (1GV20EC033)	Gokul DP (1GV20EC010)	Deeksha B (1GV20EC007)
2	Dance	Tanushree (1GV21EC065)	Irene and group (1GV21EC019)	Lalith S (1GV21EC027)
3	Pencil Sketching	Tanushree (1GV21EC065)	Kauvya shree M (1GV21EC014)	Sunitha p (1GV20EC042)
4	Extempore	Nivas P G (1GV20EC035)	Arfiya (1GV20EC003)	Bhavana G (1GV20EC005)

5	Cook without fire	Subitha Infancia A (1GV20EC062) and Harshitha G (1GV20EC014)	Sindhuja V C (1GV20EC033)	Deepika J (1GV20EC008)
6	Treasure Hunt	Deeksha B (1GV20EC007) Deepika J(1GV20EC008)	Suresh P and team (1GV20EC037)	—
7	Cross word	Rithik B (1GV20EC026) Sanjay S (1GV20EC030)	Suhas L (1GV21EC402) Suresh P (1GV20EC037)	Deeksha B (1GV20EC007) Deepika J(1GV20EC008)
8	Volley ball	Winners : 3rd semester Vishal V (1GV22EC408) Gladwin G (1GV22EC401) Sandeep MS (1GV21EC050) Sanjay H (1GV21EC055) Prasanna Raj G (1GV21EC039) Hari varma G (1GV21EC011)	Runners: 5th semester Melvin Joel T (1GV20EC021) Suhas L (1GV21EC402) Suresh P (1GV20EC037) Naveen Kumar N (1GV20EC024) Suraj Singh H (1GV20EC036) Vishva D (1GV20EC040)	-----
9	Football	Winners: 3rd sem Vishal V (1GV22EC408) Gladwin G (1GV22EC401) Sandeep MS (1GV21EC050) Sanjay H (1GV21EC055) Prasana Raj G (1GV21EC039)	Runners :5th semester Monishkar Shakthi A (1GV20EC022) Melvin Joel T (1GV20EC021) Sanjay S (1GV20EC030) Suhas L (1GV21EC401) Vishva D (1GV20EC040)	
10	Cricket	Winners: 3rd semester Vishal V (1GV22EC408) Sanjay MD (1GV22EC405) Rohith R	Runners: 5th semester Monishkar Shakthi (1GV20EC022) Vipin H (1GV20EC039) Rithik B	

	(1GV22EC404) Raymond Frank S (1GV22EC403) Gladwin Guna Raj G (1GV22EC401) Sandeep Ms (1GV21EC050) Sanjay H (1GV21EC055) Lilith TV (1GV21EC064)	(1GV20EC026) Kanna S (1GV20EC012) Melvin Joel T (1GV20EC021) Suhas L (1GV21EC402) Suresh P (1GV20EC037) Naveen Kumar N (1GV20EC024)	
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7. A field visit to NMIT Bangalore was organised by Dr.TTIT. in association with IIC on 26-05-2023, students from 6<sup>th</sup> semester participated in the visit.



Field visit to NMIT Bangalore on 26-05-2023

8. Students of the Department attended a live telecast of Pariskha Pecharcha 2023 by Honourable Prime Minister Shree Narendra Modi on 27<sup>th</sup> January 2023.

9. K.V Sneha and Harsha S has participated in IP Awareness/Training program under National Intellectual Property awareness on April 26<sup>th</sup> 2023.

10. Harsha S attended the workshop on “ROBOPACK”, organized by TECHNOLOGY from 13-03-2023 to 14-03-2023.

11. Students of the Department have taken up NPTEL courses. The department congratulates the following students:

<b>NPTEL- courses completed by students during 2022-23</b>				
<b>Sl. No</b>	<b>Student Name</b>	<b>USN</b>	<b>Courses Attended</b>	<b>Number of weeks</b>
1	Arfiya	1GV20EC003	Cloud Computing	12 Weeks
2	Bhavana G	1GV20EC005	Human behaviour	8 Weeks
3	Deeksha B	1GV20EC007	• English language for competitive exams	12 Weeks
			• Soft Skill Development	8 Weeks
			• Emotional Intelligence	8 Weeks
			• Human behaviour	8 Weeks
4	Deepika J	1GV20EC008	• Human behaviour	8 Weeks
			• English language for competitive exams	12 Weeks
			• Soft Skill Development	8 Weeks
			• Emotional Intelligence	8 Weeks
			• Developing Soft skills and Personality	8 Weeks
			• Knowledge Management	8 Weeks
5	Fiza	1GV20EC009	• English language for competitive exams	12 Weeks
			• Soft Skill Development	8 Weeks
			• Human behaviour	8 Weeks
6	Kanna S	1GV20EC012	• Data Science for Engineers	8 Weeks
			• Python for data science	4 Weeks
7	Kavya B	1GV20EC015	Cloud Computing	12 Weeks
8	Manasa Aralumallige S	1GV20EC018	• Soft Skill Development	8 Weeks
			• Emotional intelligence	8 Weeks
9	Manassah Rufus	1GV20EC019	Cloud Computing	12 Weeks
10	Syed Afrid	1GV20EC038	• Programming, Data structures and Algorithms using Python	8 Weeks
			• The joy of computing using python	12 Weeks
			• Robotics	8 Weeks



Sample NPTEL Certificates

12. Students of 8<sup>th</sup>, 5<sup>th</sup> and 3<sup>rd</sup> semesters of the Department have registered as membership in IETE



Sample IETE Certificates

13. Students participated in the 24th VTU Inter Collegiate State Level Athletic Championship 2022-23 from 21st to 24th May 2023 at VTU, Belagavi.



Miss Sindhuja-1GV20EC033 leading the team at inauguration of VTU state level Athletic

14. Thanushree of 4<sup>th</sup> sem participated in sconti app contest held at and secured first prize



15. The students of 5<sup>th</sup> sem, Mr. Naveen Kumar, Mr Suresh P and Mr. Vishva D participated in NCC-Combbined Annual Training Camp 2022-2023 from 13-10-2022 to 20-10-2022.



Sample NCC Certificate

16. Students participated in International conference on “Recent Trends in Technology and Applied Science” organized by Dr. TTIT on 02-08-2022 and 03-08-2022.

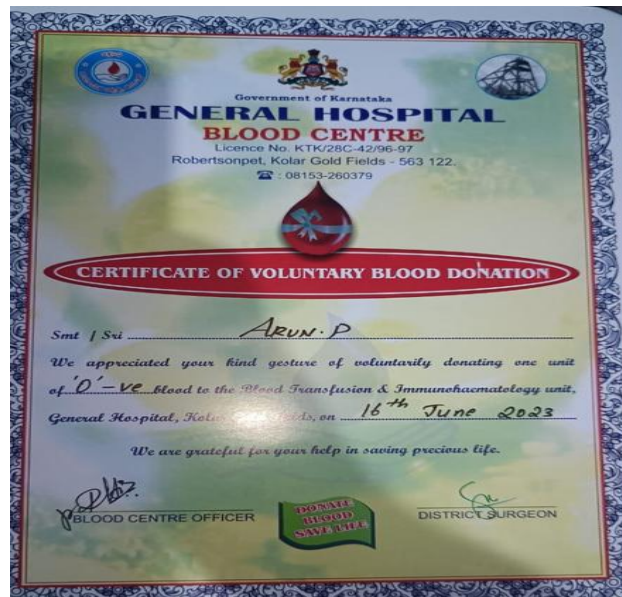
17. Students of the department participated in blood donation camp in Dr.TTIT on 16-06-2023.

Eight students donated blood from ECE department.



<b>Sl. NO.</b>	<b>USN</b>	<b>Name of the student</b>
1	1GV21EC045	RAKSHITH V
2	1GV21EC043	RAGHAVENDRA G R
3	1GV22EC402	KALYAN KUMAR
4	1GV21EC039	PRASANNA RAJ
5	1GV21EC027	LALITH S
6	1GV21EC049	SAI SANDEEP M
7	1GV21EC037	PAWAN JAI PURNESH V
8	1GV22EC400	ARUN P

Students receiving certificates under AICTE Activity (Blood Donation) and the list of students who donated the blood.



Sample certificate of the participant

## TOPPERS DETAILS

### Toppers of 2<sup>nd</sup> year (3<sup>rd</sup> semester)

Sl.No.	Name	USN	Percentage
1	Dameta Jeesha. R	1GV21EC007	90.57%
2	Keerthi M	1GV21EC025	86.71%
3	Jincy PSavyar	1GV21EC022	84.57%

### Toppers of 3<sup>rd</sup> year (5<sup>th</sup> semester)

Sl.No.	Name	USN	Percentage
1	Manasa Arulmallige	1GV20EC018	88.4 %
2	Deepika J	1GV20EC008	85.6%
3	Deeksha B	1GV20EC007	85.4%

### Toppers of 4<sup>th</sup> year (7<sup>th</sup> semester)

Sl.No.	Name	USN	Percentage
1	Mahalakshmi S	1GV19EC022	87.75%
2	Sowmiya J	1GV19EC044	86.3%
3	Grita A	1GV19EC057	86%

### Toppers of 4<sup>th</sup> year (8<sup>th</sup> semester)

Sl.No.	Name	USN	Percentage
1	Mahalakshmi S	1GV19EC022	77.33%
2	Shakthi Raghavan	1GV19EC044	76.5%
3	Chandralekha M	1GV20EC402	75.33%



## PLACEMENT DETAILS

### PLACEMENT RECORD OF 2019-2023 BATCH

Sl No	Name	USN	Dept	Company
1	SAKTHI RAGHAVAN	1GV19EC037	ECE	KLOK System
2	VEDASHREE GM	1GV20EC404	ECE	KLOK System
3	FARHEEN TAJ	1GV19EC012	ECE	KLOK System
4	SUMITH R	1GV19EC046	ECE	KLOK System
5	SAKTHI RAGHAVAN	1GV19EC037	ECE	TCS
6	NAGA SHILPA BR	1GV19CS045	ECE	TCS
7	MOUNISHA	1GV19EC028	ECE	WISTRON
8	FARHEEN TAJ	1GV19EC012	ECE	WISTRON
9	AKSHAYA KA	1GV19EC002	ECE	WISTRON
10	TRIBHUVAN	1GV19EC050	ECE	WISTRON
11	SOWMIYA J	1GV19EC044	ECE	WISTRON
12	SAKTHI RAGHAVAN	1GV19EC037	ECE	ELFONZE TECHNOLOGY
13	TABREZ	1GV19EC058	ECE	AWS
14	SUJITHA	1GV19EC045	ECE	WISTRON
15	TABREZ	1GV19EC058	ECE	WISTRON

**ACTIVITY UNDER ECE FORUM - PENCIL SKETCH, PAINTING**



**Pencil Sketch and painting by Keerthi M- 1GV20EC025 2<sup>nd</sup> year**



**Pencil Sketch by Thanushree-1GV21EC065 2<sup>nd</sup> year**

## FACULTY ACHIEVEMENTS

1. Faculties of the Department participated in Sports like Running, Discuss throw, Jawling throw, Throw ball and won 14 medals.
2. Dr. Jenitha A, Associate Professor of ECE Department took charge as IQAC head on 29-09-2022
3. Dr.K. M Palaniswamy has participated in 48<sup>th</sup> edition of Bridge 2022 on the title “ A high impact industry-institute interaction event of india” on 19/11/2022 organised by ICT academy.
4. Dr. Vijaya Bharathi M has successfully defended the PhD Thesis on “Synthesis and characterization of IV-VI and II-VI quantum dots for live cell imaging: under the guidance of Dr.KaustabGhoshon03-02-2023
5. Dr.K. M Palaniswamy has participated in 50<sup>th</sup> edition of Bridge 2023 on the title “ A high impact industry-institute interaction event of india” on 14/03/2023 organised by ICT academy.



6. Dr. Jenitha A acted as session chair for National Conference (NGIEC 2023) organised by ECE Dept ,East Point college of Engineering and Technology on 16th June 2023.



National Conference (NGIEC 2023)

7. Dr.Jenitha A and Prof. Tamil Vani R submitted project proposal for communication system in VGST on 25-05-2023.
8. Dr.Jenitha A has presented a session on the topic of student Project and Dr.Vijaya Geetha R has presented on topic of Student internship in the student induction programme phase-II held from 25.05.2023 to 05.06.2023.
9. Dr.Vijaya Geetha R has successfully defended the PhD Thesis on the topic “ Multiscale change Detection for temporal SAR images” under the guidance of Dr. Kalaivani S, VIT University on 03-03-2023.
10. Dr.Vijaya Geetha R presented and conducted a webinar on Intellectual Property Rights & Patent Filing for Sri Bhagawan Mahaveer Jain College, KGF on 21.07.2023.



### Sri Bhagawan Mahaveer Jain College

11. Dr.VijayaGeetha R attended a workshop on “How to Draft and File Patent” conducted by NIPAM-Chennai on 26.04.2023.
12. Dr.VijayaGeetha R has taken a active participation as “Jurie” for 5th International Conference on Recent Trends in Technology, Engineering and Applied Science held on 19th and 20th May 2023.
13. Prof. Tamilvani R successfully completed the NPTEL course on “Introduction to Information Theory.
14. Prof. Tamilvani R attended a one week internship program on“ Internet Of Things With Python conducted by it expert training Chennai from 6/2/23 to10.2.23
15. Prof. Tamilvani R attended a one month internship program on Machine Learning conducted by Pantech APSSDC from 11/1/23 to 10/2/23.
16. Prof. Deepa B M and Prof. Shankavi attended 5 day online FDP on “Inculcating universal human values in technical education” organized by AICTE from 22 may to 26 may 2023.

17. Dr.Bhuvanendhiran T and Ms Mohana C attended 5 day online FDP on “Inculcating universal human values in technical education” organized by AICTE from 29 may to 2<sup>nd</sup> June 2023.

#### **NPTEL COURSES COMPLETED BY THE FACULTY**

Sl. No	Faculty Name	Courses Attended	Number of weeks
1	Dr. Jenitha A	<ul style="list-style-type: none"> <li>• Python for data science</li> <li>• Data Science for Engineers</li> <li>• NBA Accreditation and teaching and learning in Engineering(NATE)</li> </ul>	4 Weeks 8 Weeks 12 Weeks
2	Dr. Vijaya Geetha R	Python for data science	4 Weeks
3	Dr. Bhuvanendhiran T	Introduction to Machine Learning	8 Weeks
4	Prof. Inbalatha K	<ul style="list-style-type: none"> <li>• Python for data science</li> <li>• Data Science for Engineers</li> </ul>	4 Weeks 8 Weeks
5	Prof. Tamil Vani.R	<ul style="list-style-type: none"> <li>• Data Science for Engineers</li> <li>• Design Thinking- A Primer</li> <li>• An Introduction to information Theory</li> </ul>	8 Weeks 4 Weeks 8 Weeks

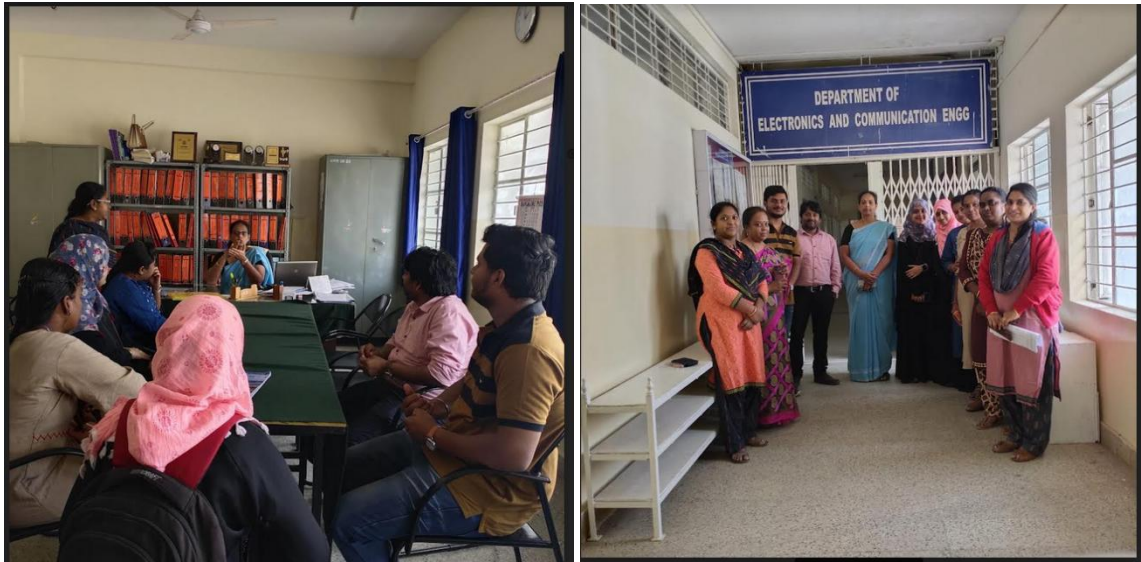
#### **GRANTS RECEIVED**

Prof. Tamil vani R guided project named Tomato plant leaf disease identification and prevention using image processing and IoT selected for SPP KSCST 46 th series and granted a fund of Rs.5000.

## DEPARTMENT ACTIVITIES

1. Klok system placement drive was conducted by Mr. Vinay kumar an Alumnus (2007-11 batch of ECE) and team on 15-10-2022 and four students were placed.
2. The Alumni of 2017 Batch and 2015 Batch visited the department on 30-12-2022.





Visit of Alumni of 2017 Batch and 2015 Batch

3. Mr. Thakur Anjuman Singh of 1998 batch visited the department along with his family and friends And visited labs and classrooms and shared their experience and gave valuable suggestions regarding Curriculum



Alumni visit to the department

4. The department signed MOU with Ruralcare Innovators LLP under the presence of Dr. M Kala Muthumari, Dr. Syed Ariff (Principal), Dr. H. G Shenoy (Vice-Principal), Prof. Ruckmani Divakaran (Dean Academics), Prof. Vijaya Bharathi (HOD of ECE) and Dr. Palani Swamy K.M (Professor., Dept of ECE) on 12-10-2022.



MOU with Ruralcare Innovators LLP

## PAPER PRESENTATION BY THE STUDENTS AND FACULTIES

1. Safna Firdous E K, Sneha N, Sujitha. S under the guidance of Prof. Ruckmani Divakaran and Prof Mohana C, presented the title Design of Vedic Multiplier using GDI logic with 32 nm Technology in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May2023.
2. Bhargavi S, Kanisha R, Chandralekha M under the guidance of Dr. Vijaya Bharathi M, presented the title Efficient IoT Based Weather Station in ICRTTEAS 2023 5th Virtual International Conference on Recent Trends in Technology, Engineering and Applied Scienceon19th and 20<sup>th</sup> May 2023.
3. Arfiya, Fiza, Kavya B, Rishika R under the guidance of Dr Vijaya Bharathi M presented A Robot Model To Detect Landmine Metals/Gases Using IOT Based Sensors in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
4. Kenneth Benny J, Sakthi Ragavan C, Grita A under the guidance of Dr. Vijaya Bharathi M, presented the title Road Environment Segmentation using Mobile netV in ICRTTEAS 2023 5<sup>th</sup> VirtualInternationalconferenceonRecentTrendsinTechnology,EngineeringandAppliedScienceon 19<sup>th</sup> and 20<sup>th</sup> May2023.



5. Baavanesh S, Rithik B, Suresh P under the guidance of Dr. Palaniswamy S presented the title “Lora Based Smart Weather Monitoring System” in ICRTTEAS2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
6. Deepak R, Hari shakthi N, Shyam Kumar P under the guidance of Dr Palaniswamy, presented the title Eye Movement Controlled Keyboard using AI in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
7. Evangelin P, Jaishnavi U, Mounisha N N under the guidance of Dr K M Palaniswamy presented IoT Based Atm intruder Detection System in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
8. Bharath Kumar R, Sumith R, Varadaraju D under the guidance of Dr. Jenitha A, presented the title Design of Low Power and High Speed Static CMOS Comparator in ICRTTEAS2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
9. Deeksha B Deepika J Manasa Aralumallige S Sonia M under the guidance of Dr Jenitha A presented the title Smart Emotion Recognition Framework: A Secured Iovt Perspective in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
10. Bhavana G, Nagamani M, Sangharshini M k under the Guidance of Prof Inbalatha K presented A Smart Parking System Using Iot in ICRTTEAS2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
11. Chaithanya KKV, Vidhya G N, Vidya M under the guidance of Prof. Inbalatha K, presented the title Controlling an IoT Based Wheelchair in ICRTTEAS2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
12. Akshaya KA, Mounika V, Pavithra P under the guidance of Prof. Inbalatha K, presented the title Classification of lung diseases using Medical Image Processing Techniques in ICRTTEAS2023 5<sup>th</sup> Virtual International Conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
13. Krithika A, Pooja GV, Sneha S under the guidance of Prof. Inbalatha K, presented the title Kitchen Gas Leakage Monitoring System IoT in ICRTTEAS 2023 5<sup>th</sup> Virtual International Conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
14. Krithika A, Pooja G V, Sneha S under the guidance of Dr. Vijaya Geetha R presented the title Virtual Doctor Assist Robot for Online Consultation using IoT in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.

15. Mary Vinisha B, Sharmila A, Swetha T under the guidance of Dr. Vijaya Geetha R presented Brain Tumor Detection on MRI using Deep Learning in ICRTTEAS2023 5th Virtual International Conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
16. Harsha S, Naveen Kumar N, Shashank C under the guidance of Dr Vijayageetha R presented the title Implementation of A Smart Hydroponic Green house System Using IOT in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
17. Dr. Vijaya Geetha R presented a National level Project Exhibition on the title “Implementation of Smart Hydroponic Green house System using IoT” in Techonovation-2023 organized by CMR Institute of Technology held on 28 th June 2023 on 19th and 20th May 2023.
18. Manassah Rufus M, Sanjay S, Vishva D under the guidance of Dr Bhuvanendhiran T presented the title Design Of Robotic Vehicle With Real- Time Video Streaming in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
19. Kavya Raj, Mahalaxmi S, Surya H G under the guidance of Dr. Bhuvanendhiran T, presented the title Real Time Implementation of Smart Child Rescue Robot from Borewell using Zigbee in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
20. Divya Priya GR, Farheen Taj, Leekath Unnissa a under the guidance of Dr Bhuvanendhiran T and Prof. Rajesh Kumar Kaushal, presented the title Design of Low Power High Speed 16TCMOS Full Adder using CPTL Logic in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19th and 20th May 2023.
21. Rufina ,Sunitha, Sindhuja Under The Guidance of Prof Rajesh Kumar Kaushal presented the title Electronic jacket for women safety in ICRTTEAS2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19th and 20th May 2023.
22. Avinash Babu B, Mohan C R, Tribhuvan S R under the guidance Prof. Rajesh Kumar Kaushal of presented the title OTP Based Ration Distribution System using RFID & GSM in ICRTTEAS2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
23. Divya Swetha J, Sahana K, Sowmiya J under the Guidance of Prof. Tamil Vani R, presented the title OTP Tomato Plant Leaf Disease Identification and Prevention using Image Processing and IoT in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19th and 20th May 2023.
24. Kanna S, Melvin Joel T, Vipin H under the guidance of Prof Tamil Vani R presented the title Home Automation Using Hand Gestures in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.

25. Niveditha P Sirisha V under the guidance of Prof Mohana C presented the title “Password Based Circuit Breaker” in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19th and 20th May 2023.
26. Keerthana B S, Saimanimala S, Vandana K under the guidance of Prof. Mohana C, presented the title Content Based Video Retrieval System for Distorted Video Query in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
27. Kezia R, Shreeja R, Siddhitha S under the guidance of Prof Nandini G N, presented the title Smart Healthcare Robot using IoT in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
28. Gokul D P, Monishkar Shakthi A Suhas L under the guidance of Mrs Nandini G.N presented the title “IoT Based Wireless Notice Board Using Wi-Fi and Node MCU” in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
29. Md Shoaib Shah, Syed Afrid under the guidance of Prof Jesudas J presented the title Delivery of medical products using Unmanned aerial vehicle in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19th and 20<sup>th</sup> May 2023.
30. Soujanya D, Vedashree GM, Rachana K R under the guidance of Prof. Jesudas J, presented the title Design and Development of Biometric Enabled Advanced Voting System in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19th and 20<sup>th</sup> May 2023.
27. Keshav Raju K.M, Lohith K.R, Nayan Kumar K under the guidance of Prof Jeevika Mary presented the title Line follower, voice command obstacle detection, surveillance camera robot: design and hardware application in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023..
28. Chindhu Vaishnavi V, Kauvya Shree M under the guidance of Prof Deepa B M presented the title A Smart Anti theft System For Vehicle Security in ICRTTEAS 2023 5<sup>th</sup> Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19<sup>th</sup> and 20<sup>th</sup> May 2023.
29. Tabrez Ahmed N, Bhuvanesh Kumar under the guidance of Prof. Deepa B M, presented the title Autonomous Self-Driving Car using Raspberry Pi Model in ICRTTEAS 2023 5th Virtual International conference on Recent Trends in Technology, Engineering and Applied Science on 19th and 20<sup>th</sup> May 2023.

## OUTREACH PROGRAMS BY THE STUDENTS



Swachh Bharath Activity by the students of 3<sup>rd</sup> year.



Waste Management Awareness by the Students of 3<sup>rd</sup> year

# ECE NEWS

**The world is going big on semiconductor consumption and manufacturing but there is going to be a shortage of semiconductor talent, globally as well as domestically. To circumvent this, the Micron, Lam Research and Applied Materials agreed to invest in India, during visit to US by our Honourable Prime Minister Shri. Narendra Modi, it will create over 80,000 jobs in the semiconductor ecosystem, says Shri. Rajeev Chandrasekhar, Minister of State, Ministry of**

**The Rs 76,000-crore India Semiconductor Mission (ISM), recently announced by the government, is a resounding statement of intent to gain a foothold in the \$553 billion global semiconductor market.**

**Intel opened a new state-of-the-art design and engineering centre in Bengaluru, adding substantial capacity to its already existing operations in the city. “Intel India’s cutting-edge design will advance in client, data centre, IoT, graphics, artificial intelligence and automotive segments.”**

## PROGRAM EDUCATIONAL OBJECTIVES(PEOs)

**PEO1:** Develop the engineering design, problem solving skills and aptitude for innovations in multi-disciplinary areas.

**PEO2:** Manage resources skillfully as members and leaders to solve complicated real world problems.

**PEO3:** Be receptive to new technologies and attain professional competence through lifelong learning with Advanced degrees and other Professional Activities.

## PROGRAM SPECIFIC OUTCOMES (PSOs)

**PSO1:** Apply the principles of Electronics in the field of VLSI and Embedded systems.

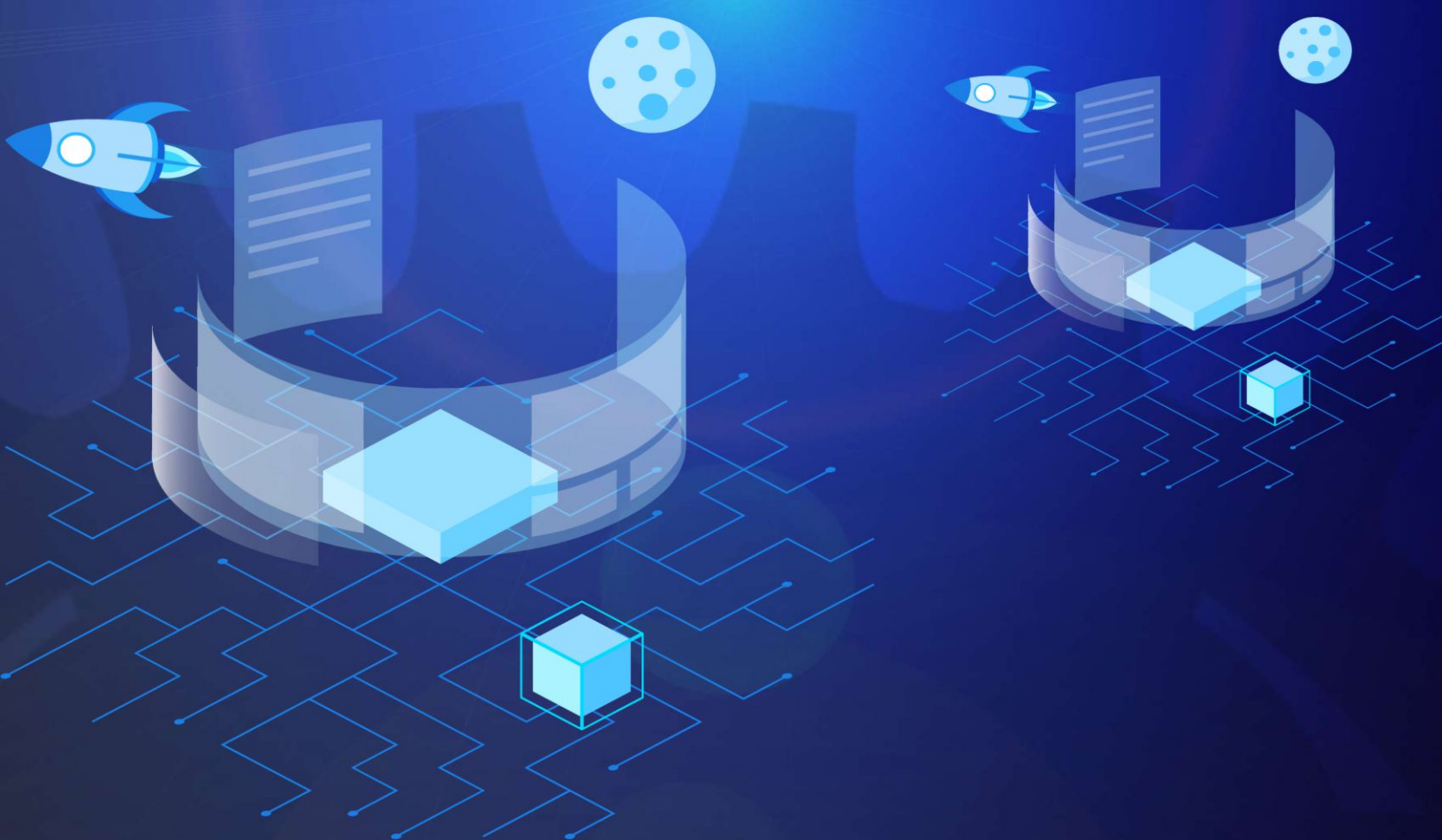
**PSO2:** Apply the domain knowledge to design, analyze and develop optimal solutions in the field of Signal Processing and Communication with social concern.

**PSO3:** Utilize acquired technical knowledge in Applied Electronics and multidisciplinary domains

## PROGRAM OUTCOMES (POs)

At the end of the B.E program, students are expected to have developed the following outcomes:  
Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialisation to the solution of complex engineering problems.

1. Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialisation to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
6. The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



**IF ANY SUGGESTIONS CONTACT US**

**[HOD.ECE@DRTTIT.EDU.IN](mailto:HOD.ECE@DRTTIT.EDU.IN)**