

2024-25/ Volume 24/ Issue 1

June to December 2024



**KSR** College of  
Engineering

AN AUTONOMOUS INSTITUTION

NAAC  
ACCREDITED **A++**

NBA  
ACCREDITED  
PROGRAMMES



**25**  
YEARS  
2001 - 2026  
Celebrating  
Academic Excellence

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

## CIRCUIT CHRONICLES-2024

### NEWSLETTER

**ACADEMIC YEAR 2024-2025**



## K.S.R. COLLEGE OF ENGINEERING

### **Vision**

We envision to achieve status as an excellent educational institution in the global knowledge hub, making self-learners, experts, ethical and responsible engineers, technologists, scientists, managers, administrators and entrepreneurs who will significantly contribute to research and environment friendly sustainable growth of the nation and the world

### **Mission**

<b>IM1</b>	To inculcate in the students' self-learning abilities that enable them to become competitive and considerate engineers, technologists, scientists, managers, entrepreneurs, and administrators by diligently imparting the best of education, nurturing environmental and social needs.
<b>IM2</b>	To foster and maintain a mutually beneficial partnership with global industries and Institutions through knowledge sharing, collaborative research, and innovation.

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### **Vision**

We envision as a center of excellence in the field of Electronics and Communication Engineering to produce technically competent graduates with diverse teaching and research environments.

### **Mission**

<b>DM1</b>	To educate the students with the state of art technologies to meet the growing challenges of the industries.
<b>DM2</b>	To develop an innovate, competent and ethical Electronics and Communication Engineer with strong foundations to enable them for continuing education.



# NEWSLETTER

## CHAIRMAN MESSAGE



**Shri. R. Srinivasan, BBM., MISTE.,  
Chairman, KSR Educational Institutions**

Education is the foundation of a brighter tomorrow, and this Newsletter reflects the vibrant spirit of our learners. May it continue to inspire creativity, excellence, and lifelong curiosity in every reader. In the recent times, the role of KSRCE is to carry out proactive research and development activities to make the students as well as faculty member's intellectuals, which are very challenging and demanding. It is of great significance that this magazine is going to deliberate upon It will definitely explore new areas of practice and enhancing quality of professional services.

I am sure this magazine will be a milestone in ensuring the highest standards in this profession. I wish the organizers the very best in this and all their other endeavors.

I am eagerly looking forward to seeing you and enjoying this newsletter in KSRCE Campus.

**With best wishes  
Mr. R. SRINIVASAN  
Chairman  
KSR Educational Institutions**



# NEWSLETTER

## DEAN MESSAGE



**Dr. M. VENKATESAN, M.E., Ph.D.,  
Dean**

It is with immense pride and joy that I present to you the latest edition of our ECE Department Newsletter a vibrant reflection of the creativity, talent, and achievements of our students and staff.

Over the past two decades, KSRCE has served the young engineering aspirants of our nation by providing state-of-art facilities and well knowledgeable faculty members.

The Institute has held high the lighted torch of teaching and learning and has not failed in its duty in the hour of need. The students imbibe qualities of an excellent teacher and researcher to set academic standards. The last couple of years marked several milestones in the history of KSRCE.

Technology is constantly evolving, and staying up to date with the latest trends can help us stay competitive in the job market, give you access to new features and capabilities.

I congratulate the editorial team, contributors, and all those who have worked tirelessly to bring this edition to life. Let this newsletter serve not only as a record of our accomplishments but also as an inspiration for the journeys yet to come.

**With best wishes  
Dr. M. VENKATESAN  
Dean**

## PRINCIPAL MESSAGE



**Dr. P. MEENAKSHI DEVI, M.E., Ph.D.,  
Principal**

My heartiest welcome to all the young budding Engineers who have joined in "K.S.R. College of Engineering". With the help of highly qualified and dedicated staff members, we will be moulding the students to the required shape which will make them employable. The composite unit of Students, Parents, and Society is our customer. The K.S.R. College of Engineering will strive hard to provide customer satisfaction.

In our college, we give top priority to discipline. A series of tests and examinations will be conducted to achieve good performance in the university examinations. An effective Training and Placement (T&P) cell is formed to provide placement to all our students. Importance will be given to extra-curricular and co-curricular activities also.

Excellent infrastructure facilities and good learning atmosphere is an added advantage of this great Institute. I hope all the students admitted here will enjoy the four years of study. Let us all work hard to produce the most competent scientists, engineers, Entrepreneurs, Managers and researchers through Quality Education.

**With best wishes  
Dr. P. MEENAKSHI DEVI  
PRINCIPAL**

## **HOD MESSAGE**



**Dr.C.GOWRI SHANKAR M.E.,Ph.D**  
**HEAD OF THE DEPARTMENT**

The HOD of ECE takes great honour in publishing this newsletter, which highlights our recent activities including seminars, workshops, publications, student projects, and collaborations reflecting our continuous pursuit of excellence and impact. We also take this opportunity to express our gratitude to our alumni and industry partners, whose support and engagement continue to enrich our journey

**With best wishes**  
**Dr.C.GOWRI SHANKAR M.E.,Ph.D**  
**HEAD OF THE DEPARTMENT**

**EDITORIALS**

- K.S.R. College of Engineering is on its 25<sup>th</sup> year. Being the pioneers in Engineering Education, our chairman, Thiru. R. Srinivasan, always wanted the Institution to be a model institution and working towards it.
- In this year of release, the editorial board cordially records its gratitude and indebtedness to the management for these novel practices.
- With congratulation to the outgoing engineers, we wish the students for a successful ensuring academic year. I expect more cooperation and commitment from the students which will eventually lead them for a better future.

**EDITORIALBOARD****CHIEF PATRON**

Thiru. R. SRINIVASAN  
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**STUDENT EDITOR**

S UGESHRAJA (II YEAR)  
R K KRISHNA GOKILAA (II YEAR)

**CONTENT**

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## STUDENTS CORNER

A team of ECE students actively participated in the **Youth Leadership Summit 2024** organized by ICT Academy on 23.10.2024 at Coimbatore. The event inspired young minds through leadership sessions, expert talks, and collaborative youth interactions.



This is to certify that Ms. Barani C, a student of B.E (Electronics and Communication Engineering) of K.S.R College of Engineering, Tiruchengod, Tamilnadu has completed a thirteen weeks (July 22, 2024 to October 30, 2024) project on "Simulation of fine pointing system using FSM and Quad detector" under the supervision of Sri. Adarsh Jain, Head, Sci/Engr-SF, HSTA-QUTG-QSTD and Sri. Sambuddha Majumder, Sci/EngrSC, HSTA-QUTG-QSTD, Space Applications Centre, (IsRO), Ahmedabad. The research work was carried out through Scientific Research and Training Division (SRTD) of Space Applications Centre, Ahmedabad



Naveen Balaji and Deepak M of the ECE Department actively participated in Startup TN's "Puthumaith Thozhil Bootcamp 2.0" hosted at K.S.R. College of Engineering on September 2024. The bootcamp offered hands-on training in design thinking, business model canvas, and startup pitch preparation.



## FACULTY SPOTLIGHT

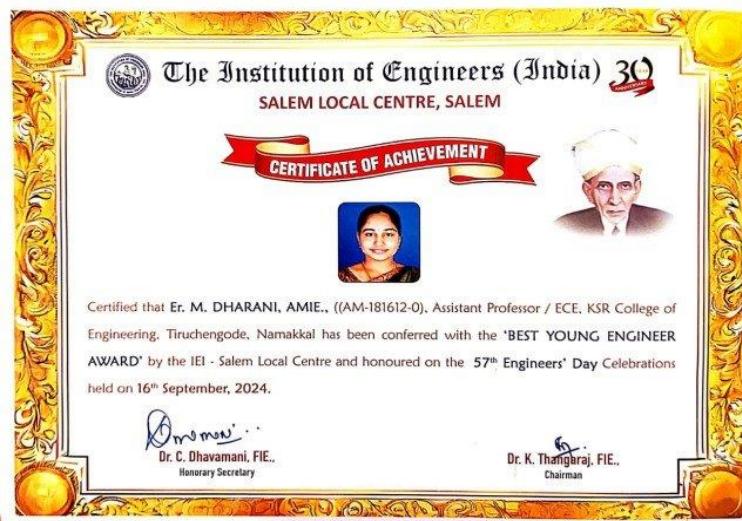
Our department faculty Dr.R.Eswaramoorthi, Professor had received Certificate of Appreciation as NPTEL Discipline Star Jul-Dec 2024



Our Department faculty Mr.M.M.Arun Prasath, Assistant Professor have received "Best Faculty Award 2024" from ARAM SEIYA VIRUMBU TRUST, Madurai.

Our Faculty Dr.P.Thilagavathi, Associate Professor had received Best Teacher Award 2024 on 16th October from Scientific International Publishing House (SIPH)





Mr. M. Dharani, Assistant Professor of our ECE Department, has been honored with the "Best Young Engineer Award 2024" by The Institution of Engineers (India), Salem Local Centre, on 16th September 2024.

We are proud to announce that our faculty members Dr. P. Govindaraju and Ms. M. Dharani, Assistant Professors, have been honored with the "Faculty Excellence Award 2024" by Vanakkam HRD, Chennai, in recognition of their outstanding contributions to teaching and academic excellence



Mr. M. Udhayakumar, Assistant Professor of the ECE Department, received the "Best Faculty Award 2024" from Knowledge Research Academy, Coimbatore, on 11th October 2024.

## NPTEL ACHIEVER

ECE Department faculty successfully completed various NPTEL courses with Elite, Silver, and Top 1% honors during the 2024–2025 odd semester. These achievements reflect their commitment to continuous learning and academic excellence.

**KSR College of Engineering** NAAC ACCREDITED A++ | NBA ACCREDITED PROGRAMMES  
AN AUTONOMOUS INSTITUTION

*Congratulations*  
**NPTEL ACHIEVERS**

**DEPARTMENT OF ECE**

 <b>Dr. C. GOWRI SHANKAR</b> Design Thinking-A Primer <b>88 Elite+Silver (Top 2%)</b>	 <b>Ms. B. LATHA</b> Introduction to Machine Learning <b>88 Elite+Silver (Top 2%)</b>	 <b>Dr. S. JAYACHITRA</b> Cloud Computing <b>78 Elite+Silver</b>	 <b>Mrs. S. JEYABHARATHI</b> Accreditation and Outcome Based Learning <b>78 Elite+Silver</b>	 <b>Dr. R. POORNIMA</b> Analog Communication <b>76 Elite+Silver</b>
 <b>Mr. P T KANDASAMY</b> Technical English for Engineers <b>76 Elite+Silver</b>	 <b>Dr. R. ESWARAMDORTHI</b> Computer Architecture <b>75 Elite+Silver (Top 5%)</b>	 <b>Mrs. D. GOWTHAMI</b> Electronic Systems for Cancer Diagnosis <b>75 Elite+Silver</b>	 <b>Dr. P. THILAGAVATHI</b> Digital Circuits <b>73 Elite</b>	 <b>Dr. S. AGILADAVI</b> Moral Thinking-An Introduction to Values and Ethics <b>72 Elite</b>
 <b>Dr. V. DEVARABHATHI</b> Sustainable Engineering Concepts and Life Cycle Analysis <b>70 Elite</b>	 <b>Mr. P. MOHAN</b> Technical English for Engineers <b>69 Elite</b>	 <b>Mrs. D. DHAVAMANI</b> Accreditation and Outcome Based Learning <b>69 Elite</b>	 <b>Ms. M. DHARANI</b> Design Thinking-A Primer <b>68 Elite</b>	 <b>Mr. JOTHIMANI</b> Analog Communication <b>67 Elite</b>
 <b>Mr. M. M. ARUNPRASATH</b> Cloud Computing <b>65 Elite</b>	 <b>Mrs. T. BRINDHA</b> Sustainable Engineering concepts and life cycle Analysis <b>64 Elite</b>	 <b>Ms. S. SURUTHI</b> Introduction to Industry 4.0 and Industrial Internet of Things <b>63 Elite</b>	 <b>Dr. P. GOVINDARAJU</b> Machine Learning and Deep Learning - Fundamentals and Applications <b>60 Elite</b>	 <b>Ms. V. SINDHUJA</b> TALG - Teaching And Learning in General Programs <b>60 Elite</b>
 <b>Mr. T. MARTHANDAN</b> Design Thinking - A Primer <b>58 Successfully Completed</b>	 <b>Mr. P. SIVASANKAR RAJAMANI</b> Introduction to Semiconductor Devices <b>53 Successfully Completed</b>			

**With great pleasure, we congratulate the following faculty members for their great achievements in NPTEL JULY-NOV 2024 examinations**

## PATENT

- Mr. R. Veeramani and Mr. M. Jothimani of the ECE Department have been granted a Design Patent (No. 423189-001) titled "Smart Device for Remote Patient Vital Signs Monitoring" on 11th September 2024. The design was filed on 12th July 2024.
- Dr. S. Karthikeyan has been granted a Design Patent (No. 425246-001) for "*Light Fidelity Based Data Transfer Device*" on 27th September 2024, filed on 30th July 2024.
- Dr. R. Eswaramoorthi received a Design Patent (No. 428276-001) for "*IoT Based Smart Mirror with an Information Display System*", granted on 9th December 2024, filed on 26th August 2024.
- Dr. S. Jayachitra published her innovation titled "*Machine Learning (ML) & Wireless Sensor Networks for Intelligent Irrigation Management in Rural Agriculture*" (Application No. 202411068435) on 27th September 2024, filed on 10th September 2024.
- Dr. R. Poornima was granted a Design Patent (No. 436198-001) for "*IoT Based Real Time Air Quality Detector*" on 9th January 2025, filed on 30th October 2024.
- Mr. M. M. Arun Prasath secured a Design Patent (No. 432200-001) for "*IoT Based Internet Speed Monitoring Device*", granted on 5th December 2024, filed on 29th September 2024.

## FUNDS & CONSULTANCY

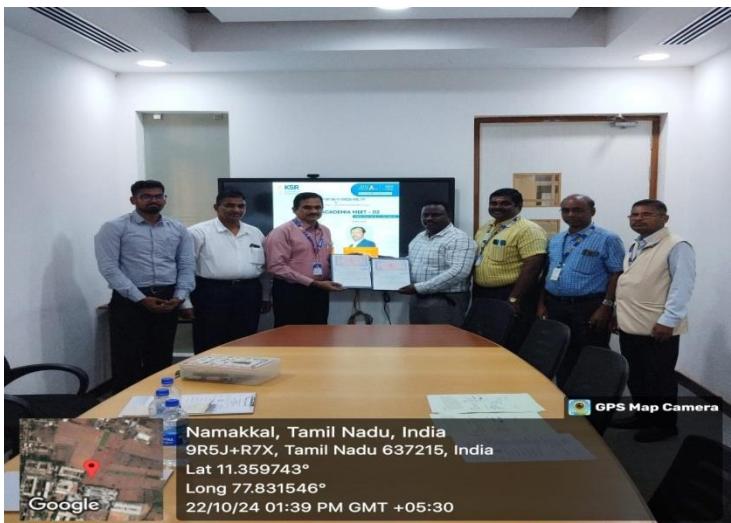
Mrs. S. Sridevi, Assistant Professor of the ECE Department, has successfully received a consultancy project titled "*Embedded System Design for Automation*" from **NEXGEN Technology, Pondicherry**, with a sanctioned amount of **₹15,000**. This collaboration reflects the department's growing engagement with industry-driven projects and practical innovation.

## INDUSTRY COLLABORATION



The Department of ECE signed an MoU with New Technology, Coimbatore on 03rd October 2024 to enhance opportunities in internship, in-plant training, placement, and project support. This collaboration aims to strengthen industry-academia interaction for student development.

An MoU was signed between the Department of Electronics and Communication Engineering and Birds India Corporation, Salem on 4th July 2024. The partnership focuses on fostering industrial training, project development, and collaborative research.



The Department of ECE signed an MoU with Japers Engineering and Automotive Services, Coimbatore on 22nd October 2024. The collaboration aims to provide industry exposure, technical training, and internship opportunities for students.

The Department of Electronics and Communication Engineering signed an MoU with Wearable MEMS Private Limited, Rasipuram on 22nd August 2024. This collaboration aims to enhance student innovation through MEMS-based project development and industrial training.



## DEPARTMENT ACTIVITIES

### Seminar / Workshop



Seminar on Research to writing Structuring the final year projects on 27.07.2024 organized by Department of Electronics and Communication Engineering. The Resource person Dr.P.Senthamaraikannan, Associate Professor, Department of Mechanical Engineering, K.S.R. College of Engineering.

The Department of Electronics and Communication Engineering organized by Fostering innovation and entrepreneurship skills for students to proto type and develop new products using IOT on 24.08.2024. The Resource person Mr.Marthandan, Assistant Professor, Department of Electronics and Communication Engineering K.S.R. College of Engineering



Seminar on "IPR Essentials: Insights for Future Engineers" on 24.08.2024 organized by Department of Electronics and Communication Engineering. The Resource person Dr.S.Jegadeesan, Professor, Department of Electronics and Communication Engineering M.Kumarasamy College of Engineering, Karur.



Workshop on “Yoga and Mindfulness for Healthy Life Style” on 10.08.2024 organized by Department of Electronics and Communication Engineering. The Resource person Prof. Siddeshwaran M.A, Yoga Trainer, Erode.

Seminar on “Awareness Program GATE TANCET” on 24.08.24 organized by Department of Electronics and Communication Engineering. The Resource person Dr.T.M.Sathis Kumar, Associate Professor, Department of Electronics and Communication Engineering, K.S.R College Of Engineering.



Seminar on-Advanced Techniques for Mobile Servicing Applications on 03.10.2024 organized by Department of Electronics and Communication Engineering. The resource person Dr.B.Krishnakumar, Founder, CEO, New Technology Institutions, Coimbatore



Seminar on Overview of IoT Applications and Arduino Programming for Entrepreneurs on 15.10.2024. organized by Department of Electronics and Communication Engineering. The resource person Dr.Bhavesh H Pithadiya, Assistant Professor, CVM University, Vallabh Vidyanagar, Gujarat.

Seminar on “Future of Electronics projects in Industry” on 18.10.2024 organized by Department of Electronics and Communication Engineering. The Resource person Dr.Ravi Doraiswami, CEO, President, wearableMEMS Private Limited, Rasipuram.



Seminar on-“Exploring the Integration of IOT with Embedded Technology” on 21.10.2024 organized by Department of Electronics and Communication Engineering. The Resource person C.P.Shankar Prabhakaran, Founder, CEO, Coimbatore.

## Technical Event



Recent trends in Electronics on 10.08.2024 organized by Department of Electronics and Communication Engineering.

The Department of Electronics and Communication Engineering organized by “Tech Talk: Group Discussion Insights for Engineers” on 24.08.2024.



Paper Presentation on “Recent Trends in IOT and Embedded System, image Processing and Signal Processing” on 19.10.2024 organized by Department of Electronics and Communication Engineering.

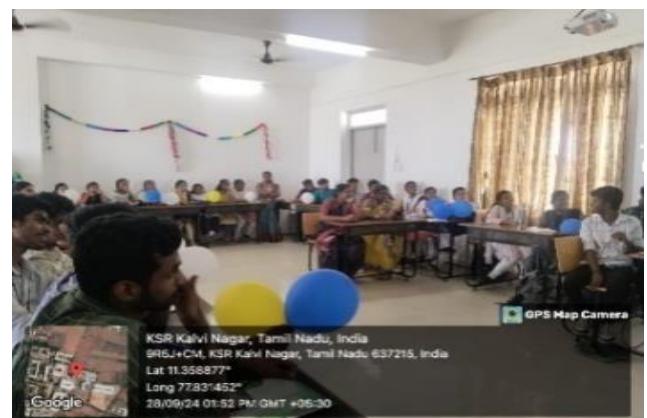
## Symposium



The Department of Electronics and Communication Engineering organized by “National level Technical Symposium -Paper Presentation” on 28.09.2024.

## Non-Technical Event-Treasure Hunt

The Department of ECE organized a thrilling non-technical event, *Treasure Hunt*, during the 2024–2025 odd semester. The event encouraged teamwork, problem-solving, and enthusiastic participation from students.



## Technical Event-Codeathon

The Department of ECE conducted an exciting technical event, Codeathon, as part of the 2024–2025 symposium, drawing enthusiastic participation from coding enthusiasts. The event challenged students with real-time problem-solving tasks, fostering innovation and technical skills.



## Ideathon

As part of the department symposium, the Department of Electronics and Communication Engineering organized an exciting *Ideathon* event that encouraged students to think innovatively and present creative solutions to real-world problems. The event provided a platform for participants to showcase their ideas, prototypes, and entrepreneurial thinking, fostering a spirit of innovation, teamwork, and technical excellence among budding engineers.



## Brain Teaser & Treasure Hunt

The Department of ECE conducted Brain Teaser and Treasure Hunt events as part of the symposium to challenge students' logic and problem-solving skills. These fun-filled activities boosted enthusiasm, teamwork, and quick thinking among participants.

### **INDUSTRIAL VISIT**



Final Year students have undergone Industrial Visit to Anithaa Weaving Mill, Tiruchengode on 19.09.2024.



Third Year students have undergone Industry Visit at "TNPL", Karur on 19.10.2024.



Final Year students have undergone Industrial Visit at "TNPL", Karur on 25.10.2024.

## FIELD VISIT

Final year ECE students visited "Real Tech Systems," Perundurai, on 05.10.2024 as part of their industrial exposure. The field visit offered valuable insights into real-time electronic systems and industry practices.

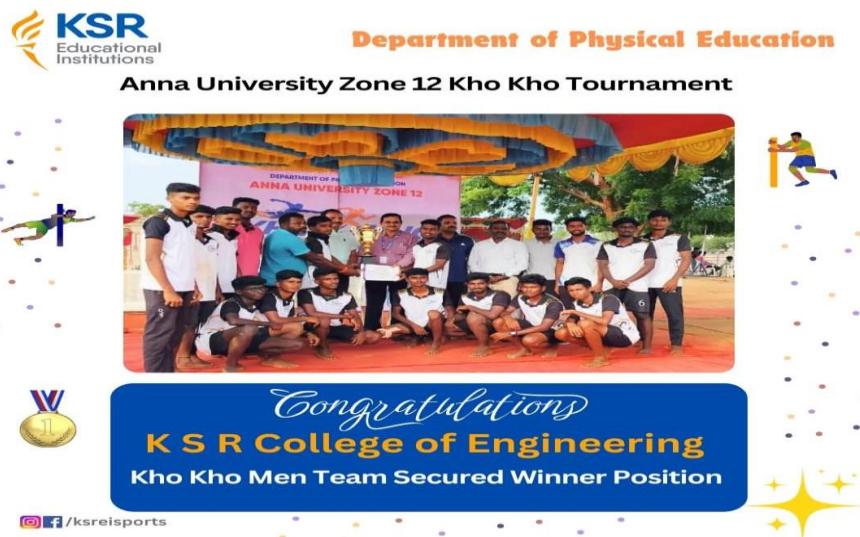


Second-year ECE students visited "Milky Mist," Perundurai, on 07.11.2024 as part of their field exposure program. The visit provided practical understanding of automation and processing in the dairy industry.

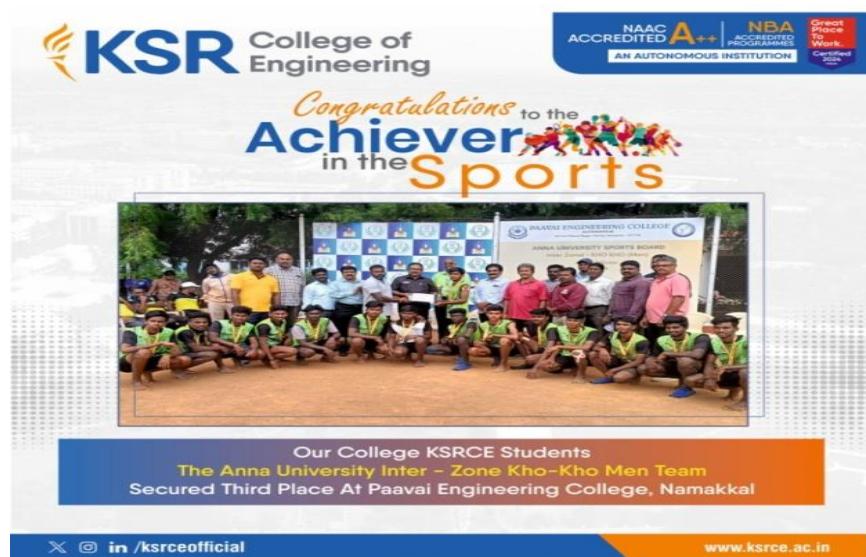


## SPORTS CORNER

Sriram P and Dhamotharan C, Department of ECE Students, received First place in KhoKho in the Anna University Zonal Tournament 2024 – 2025 held at K.S.R College of Engineering



Sriram P and Dhamotharan C, Department of ECE Students, received Third place in KhoKho in the Anna University Inter Zonal Tournaments 2024 – 2025 held at Paavai Engineering College.



## CELEBRATION GLIMPSES

The ECE Department warmly celebrated Teachers' Day on September 5, 2024, honoring the dedication and guidance of our esteemed faculty members with heartfelt events and activities.



The ECE Department joyfully celebrated the traditional Navaratri Golu in 6 October 2024 with devotion and enthusiasm. Faculty and staff came together to admire the vibrant doll display and participate in the festive rituals.



## The Galaxy of K.S.R. Educational Institutions

**K.S.Rangasamy college of Technology**  
**K.S.R. Institute of Dental Science and Research**  
**K.S.R.College of Engineering**  
**K.S.R.Institute For Engineering and Technology**  
**K.S.Rangasamy College of Arts & Science**  
**K.S.Rangasamy College of Arts & Science for Women**  
**K.S.Rangasamy Institute of Technology**  
**K.S.R. Polytechnic College**

**K.S.R. College of Education**  
**K.S.R. Matriculation Higher Secondary School**  
**K.S.R. Industrial Training School**  
**K.S.R. Akhsara Academy**  
**Rajammal Rangasamy I.T.I.**  
**Rajammal Rangasamy Teacher Training Institute**  
**Rajammal Rangasamy Higher Secondary School**  
**Avvai K.S.R. Matriculation School**

**SINCE 1984**



**K.S.R. COLLEGE OF ENGINEERING**