

2024-25/ Volume 24/ Issue 2



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**Vission**

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

Mission

IM1	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.
IM2	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**

To be a globally recognized department in Electronics and Communication Engineering, fostering innovation, research and sustainable technological solutions through holistic education.

Mission

DM1	Impart value-based quality education through experiential learning and modern pedagogy.
DM2	Enrich professional skills and technical competence by equipping students with state-of-the-art laboratories to meet industry readiness.
DM3	Nurture Innovation and Research towards sustainable solutions and societal well-being.

NEWS LETTER



CHAIRMAN MESSAGE

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 magazine in KSRCE Campus.

VICE CHAIRMAN MESSAGE

In today's interconnected world, Electronics and Communication Engineering (ECE) is not just a discipline it is the foundation upon which connectivity, innovation, and technological advancement are built.

At Circuit Chronicles, we recognize that building a robust electronic and communication infrastructure is a shared responsibility that goes beyond laboratories and technical teams to include every student, researcher, and professional involved in shaping the digital area. The rapid evolution of technologies such as VLSI, embedded systems, wireless communication, signal processing, and IoT calls for a comprehensive approach that blends awareness, education, and hands-on innovation. Our mission is to nurture a culture where every ECE stakeholder is equipped with the knowledge and skills to drive progress, solve real-world problems, and contribute to sustainable technological growth.



As Vice Chairman, I take pride in our initiatives that empower the ECE community through advanced training, research-driven projects, and collaborative efforts that bridge academia and industry. This newsletter reflects our ongoing commitment to sharing knowledge, celebrating breakthroughs, and strengthening the role of ECE in transforming the future.



NEWSLETTER



DEAN MESSAGE



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 one decade, 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 magazine serve not only as a record of our accomplishments but also as an inspiration for the journeys yet to come.

PRINICIPAL MESSAGE



My heartiest welcome to all the young budding Engineer who have joined in "K.S.R. College of Engineering". With th help of highly qualified and dedicated staff members, we will b moulding the students to the required shape which will mak them employable. The composite unit of Students, Parents, an Society is our customer. The K.S.R. College of Engineering wi 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.

HOD MESSAGE

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.



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

EDITORIALS



- K.S.R. College of Engineering is on its 25th 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

CHIEFPATRON

Thiru. R. SRINIVASAN
(Chairman)

PATRONS

Shri K. S. SACHIN
(Vice Chairman)
Dr. M. VENKATESAN
(Principal)

CHIEFEDITOR

Prof. Dr.C.GOWRI SHANKAR , HOD/ ECE

ASSOCIATE EDITOR

Mrs, P.Usha, AP/ ECE
Mrs.S.Dhavamani, AP /Maths

STUDENT EDITOR

THARUN PRAJIN C R (III YEAR)
DEEPAN KUMAR V (II YEAR)
PAVITHRA T (III YEAR)



CONTENT

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STUDENTS CORNER



Ms. Barani C, final year ECE student, successfully completed a 13-week research project on “Simulation of Fine Pointing System using FSM and Quad Detector” at ISRO-SAC, Ahmedabad under the guidance of senior scientists from the Scientific Research and Training Division (SRTD).



We are delighted to share that **Srinivasan V**, a distinguished student of the ECE Department, has been successfully placed at **VTS Enterprises India Private Limited** with an impressive annual package of ₹12 Lakhs.

FACULTY SPOTLIGHT**STEP - Best Supporting Department Award**

The ECE Department has been honored with the "*Best Supporting Department*" award by the STEP Association. Dr. C. Gowrisankar, Professor and Head of the Department, proudly received the award on behalf of the department.

STEP - Innovative Educator Award

Dr. P. Thilagavathi, Associate Professor of the ECE Department, was honored with the "*Innovative Educator Award*" by the STEP Association in recognition of her exceptional contributions to teaching excellence.

FACULTY SPOTLIGHT**Society for Technocracy Engineering Professionals (STEP 2025)**

Mr. M. Jothimani
Faculty Leader Award



Mr. M. Udhayakumar
Faculty Leader Award



Mrs. V. Sindhuja
Faculty Leader Award



Ms. M. Jeyabharathi
Faculty Leader Award

Our faculty members Mr. M. Jothimani, Mr. M. Udhayakumar, Mrs. V. Sindhuja, and Ms. M. Jeyabharathi were honored with the "*Faculty Leader Award*" at an event organized by KSRCE, acknowledging their exemplary leadership and dedication.

Best Faculty Award

Our ECE Department faculty members Mr. B. Vinothkumar, Dr. S. Jayachitra, Mrs. M. Dharani, and Mrs. D. Gowthami were honored with the "*Best Faculty Award*" by The Institution of Engineers (India) in collaboration with Adhiyamaan College of Engineering, Hosur, on April 4th, 2025, in recognition of their academic excellence and dedication.

FACULTY SPOTLIGHT**Thalaivi Awards 2025**

Dr. P. Thilagavathi, Dr. R. Poornima, and Ms. B. Latha from the ECE Department received the prestigious “*Shero of the Year*” award in the Working Women category, presented on March 15th, 2025, at Dindigul, Tamil Nadu, in recognition of their inspiring professional excellence.

NPTEL ACHIEVERS

NPTEL DISCIPLINE STAR

Ms.B.Latha, Assistant Professor, received a *Certificate of Appreciation* as an *NPTEL Discipline Star* for the Jan–Apr 2025 session, recognizing his commitment to continuous learning and academic excellence.



The ECE Department has showcased exceptional dedication and skill in NPTEL certification courses. Their outstanding performance during January to April 2025 reflects their commitment to academic excellence.

PATENT

IoT based Real-Time Air Quality Detector






Our ECE department faculty, Dr. R. Poornima, has been granted a Design Patent for the IoT based Real-Time Air Quality Detector on 09/01/2025. Hearty congratulations to her on this innovative achievement

IoT based Mathematical & Statistical Prediction of Neural Disorder and Memory Mapping Technique in Health Care Management

Application Details	
APPLICATION NUMBER	202441102003
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	23/12/2024
APPLICANT NAME	1. Dr.P.Meenakshi Devi 2. Kavitha R 3. Raja Sekar P 4. Sowmya R 5. Dr K P Uvarajan 6. Dr. Anguraj S 7. Sethupathi S 8. Dr. P. Shanmugasundaram
TITLE OF INVENTION	IoT based Mathematical & statistical prediction of neural disorder and memory mapping technique in health care management
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	senanipindia@gmail.com
ADDITIONAL-E-MAIL (As Per Record)	editorsipofficial@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	10/01/2025

Dr. K. P. Uvarajan, faculty of the ECE Department, has published a patent titled "IoT based Mathematical & Statistical Prediction of Neural Disorder and Memory Mapping Technique in Health Care Management" on January 10, 2025. The department proudly recognizes his innovative contribution to IoT-driven healthcare advancements.

PUBICATIONS

S.N O	TITLE OF THE JOURNAL	FACULTY PHOTO	SCI/SCOU PS
1.	R Eswaramoorthi, Matta Venkata Pullarao, Priyadarsini K, "Hierarchical Auto-Associative Polynomial Convolutional Neural Network With Gorilla Troops Optimization for an Effective Millimeter-Wave Path Loss Modeling in 5G-IoT Mobile Communication System, Volume:38/4, https://doi.org/10.1002/dac.6109 ,2025.		SCI
2.	A Velliangiri, Jayaraj Velusamy, R Leena Rose, Task replication based energy management using random-weighted privacy-preserving distributed algorithm for real-time embedded system, Volume:167, https://doi.org/10.1016/j.future.2025.107708 , 2025.		SCI
3.	Sankarakutti Palanichamy Manikandan, Sandeep Reddy Narani, Sakthivel Karthikeyan, Nagarajan Mohankumar, Deep learning for skin melanoma classification using dermoscopic images in different colorspace. http://doi.org/10.11591/ijece.v15i1.pp319-327 , 2025.		SCI Scopus
4.	A.Yoganathan,: P.S.Periasamy,: C. Devipriya,:P. Anitha, Accurate Identification of Leaf Disease using Yolov4 Algorithm, Volume:32/9, https://doi.org/10.52783/cana.v32.4558 , 2025.		SCI Scopus
5.	P Thilagavathi, S Senthil Kumar, D Gowthami, A Sridevi, All pass transformation based variable digital filter design using low power approximate floating point adder and low power compressor based approximate multiplier, Volume:102, https://doi.org/10.1016/j.vlsi.2025.102344 , 2025.		SCI Scopus
6.	Sowmiya R, M. Pravin Kumar, T. M. Sathish Kumar, Rasika P;M. Poornima Devi;S. Priya Dharshini, "Artificial Intelligence-Driven Protein Folding System Employing Alpha Fold". "2025 International Conference on Multi-Agent Systems for Collaborative Intelligence (ICMSCI)", Date Added to IEEE Xplore: 27 February 2025, DOI: 10.1109/ICMSCI62561.2025.10894449, ISBN:979-8-3315-0983-5		Scopus

7.	S. Senthil Kumar, P. Usha, P. Balakrishnan, V. Kamatchi Kannan, M. Manjula, M. Vijayakumar "Deep Learning Driven Engineering Innovations: Advancing Sustainable Green Building and Smart Infrastructure for a Resilient Future" 2024 First International Conference for Women in Computing (InCoWoCo) Date Added to IEEE Xplore: 27 February 2025, DOI: 10.1109/InCoWoCo64194.2024.		Scopus
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Student Project Grant at TNSTC



KSR College of Engineering
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25 YEARS
2001 - 2026
Celebrating Academic Excellence

Hearty Congratulations

Dr. R. NANDAKUMAR Vice Principal Professor/ECE STUDENTS GOPI J NAVEENA E PRADEEPIKA M VARSHA T ECE-2025Batch	Dr. P. DHIRAVIDAMANI Professor/MECH STUDENTS BHARANIDHARAN P SURYA S MANIKANDAN, D GIRIPONNER, M MECH-2025Batch	Ms. JEYABHARATHI S ASP/ MATHS STUDENTS DHINAKARAN G CHANDRU V MEE-2025Batch	Mr. C. KARTHIKEYAN ASP/ CSE STUDENTS KANISHKA D DEVIKALA S SABURA YASMIN A K CSE-2025Batch	Mr. P. MANIKANDAN ASP/ MECH STUDENTS DHANUSH. B DHARANIKRISHNAN, M GOKUL. S CSE-2025Batch
Mr. V.S. TAMIL SELVAN AP/SFE STUDENTS VIVEK D LOGESHWARI N PRAVEEN KUMAR M TAMILVANAN V SFE-2025Batch	Mrs. T. YAMUNARANI AP/ BME STUDENTS RAJESH KUMAR K POORANI S KIRUTHIKA E BME-2025Batch	Mr. P. J. RAGU AP/ BME STUDENTS DHAYANITHI P RANJINI M YASMIN S BME-2025Batch	Mrs. INDUMATHI K AP/ BME STUDENTS PAVITHRAN G PRIYADHARSHINI N JEGAN S BME-2025Batch	

For Receiving Student Project Grant
₹ 67,500
STUDENT PROJECT SCHEME 2024-2025

TAMIL NADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

KSR Educational Institutions
ENGINEERING | ARTS AND SCIENCE | DENTISTRY | DIPLOMA | ITI | ALLIED HEALTH SCIENCE | NURSING | PHARMACY | TEACHER EDUCATION | SCHOOLS
KSR KALVI NAGAR, TIRUCHENGODE, NAMAKKAL - 637215, TAMILNADU, INDIA.

TNOST
www.ksrce.ac.in

We are proud to share that two teams from our department have been selected for the Tamil Nadu State Technical Textbook Competition (TNSTTC). The first team is led by Dr. R. Nandakumar, Vice Principal, along with project students Gopi J, Naveena E, Pradeepika M, and Varsha T. The second team is guided by Mrs. Jeyabharathi, Associate Professor of Mathematics, with students Dhinakaran G and Chandru V. Hearty congratulations to both teams on this commendable achievement

DEPARTMENT ACTIVITIES

EVENTS ORGANIZED BY THE FACULTY

INNOVATIVE STARTUP IDEAS

The Department of ECE, in association with the Institution's Innovation Council and Centre for Sustainable Development Goals, conducted a session on "Innovative Startup Ideas" on January 25, 2025, at Pearl Hall.

The event empowered students with entrepreneurial insights and encouraged them to transform creative ideas into viable startups.



Design and Debug of Embedded Systems-Innovation Perspective

The Department of Electronics and Communication Engineering, in association with the Institution's Innovation Council, successfully organized a session on "Design and Debug of Embedded Systems – An Innovation Perspective" on January 27, 2025, at Pearl Hall.

The event provided valuable insights into innovative approaches for designing and debugging embedded systems, enriching students' understanding of real-world applications.



DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING,
INSTITUTION'S INNOVATION COUNCIL

In association with
Centre for Sustainable Development Goals

Organizes
Seminar on

**DESIGN AND
DEBUG OF EMBEDDED
SYSTEMS - INNOVATION
PERSPECTIVE**

Mr. HAREESH "ice" JANAKIRAMAN
Director,
Embedded Guru LLC,
Texas, USA.

ON MONDAY
JANUARY 27, 2025
STARTS AT
10.00 AM



The iPhone's Influence on Modern Innovation.

. The Department of Electronics and Communication Engineering at K.S.R. College of Engineering is organizing an expert talk titled "Inside Apple's Ecosystem: The iPhone's Influence on Modern Innovation."

Ms. S. Tamilshri, Team Lead at Foxconn Hon Hai Technology, Chennai, will deliver the keynote address on March 8, 2025, at 10:30 AM in Pearl Hall.

The session aims to provide valuable insights into Apple's technological ecosystem and its impact on contemporary innovations



Pathway to success in VLSI: Essential skills and industry insights

The Department of ECE in collaboration with the Career Development Centre (CDC) organized a seminar for the II and III year ECE students on March 22, 2025, at Pearl Hall, Dr. C.V.Raman Block. The session featured Mr. Shaik Aleem Ur Rehman, ASIC Design and Verification Engineer at Microsoft, Bengaluru, who delivered an inspiring talk on "Pathway to Success in VLSI – Essential Skills and Industry Insights."

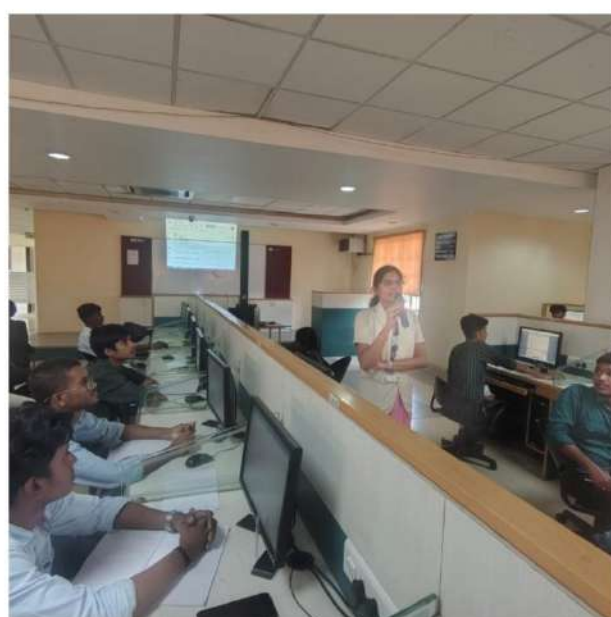
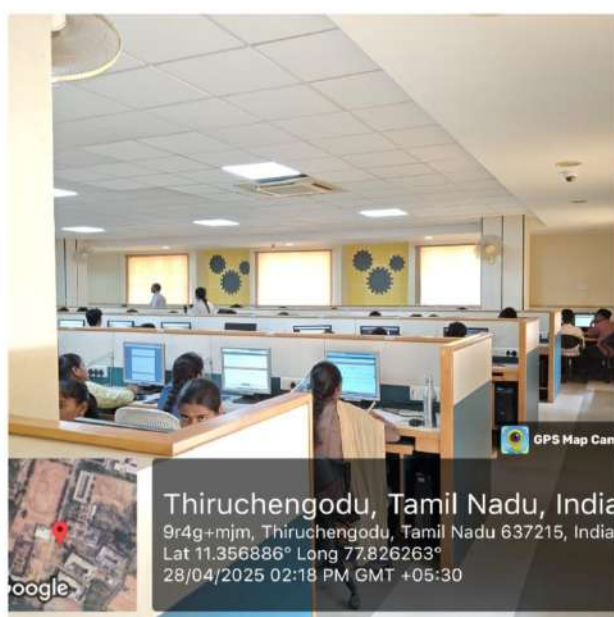
"The seminar provided valuable guidance on career opportunities and skill development in the VLSI domain, enriching students with real-world industry perspectives"



Generative AI for System-Level Design and Simulation

The Department of Electronics and Communication Engineering, in collaboration with the Institution's Innovation Council and the Centre for Sustainable Development Goals, organized a two-day workshop on "Generative AI for System-Level Design and Simulation" on April 28 and 29, 2025 at CADD LAB

The workshop aimed to equip participants with advanced knowledge and practical skills in applying Generative AI techniques to system-level design and simulation, fostering innovation and technical expertise.



INDUSTRY CONNECT

The Industrial visit allowed students to see how theoretical concepts are applied in practice, enhancing their understanding of hardware engineering principles. It highlighted sustainable practices in the hardware industry, such as optimized resource usage. Additionally, the visit emphasized the importance of staying updated with industry trends, emerging technologies, and best practices, fostering a mindset of lifelong learning and continuous professional development.



INDUSTRIAL VISIT
Kerala Electrical and Allied
Engineering Company

SKILL SPRINT

Ms. Pradeepika M of the ECE Department has been honoured with the "Best Outgoing Student" and "Best Academic Performer" awards for the academic year 2024–2025. The department proudly applauds her outstanding achievements and wishes her continued success ahead



Ms. K. Vijayasree of III Year ECE has been awarded the "Best Academic Performer" for her exceptional academic achievements in the year 2024–2025. The Department of Electronics and Communication Engineering proudly congratulates her and wishes continued success.



Mr. Senthil Nathan S of the ECE Department received the Founder's Day Reward for his remarkable performance in dance. The department proudly appreciates his talent and contribution to cultural excellence.



**MEITHIRU PRAKASH B
IV/ECE, BEST POSTER
PRESENTATION
WINNER**



**DHANUJA R IV/ECE
BEST PROJECT
WINNER**

**THIYAGARAJAR
COLLEGE MADURAI
OPEN LEVEL STATE
TOURNAMENT WINNER**



**RANJITH KUMAR B
III/ECE
BEST PAPER AWARD**

COMMUNITY CONNECT

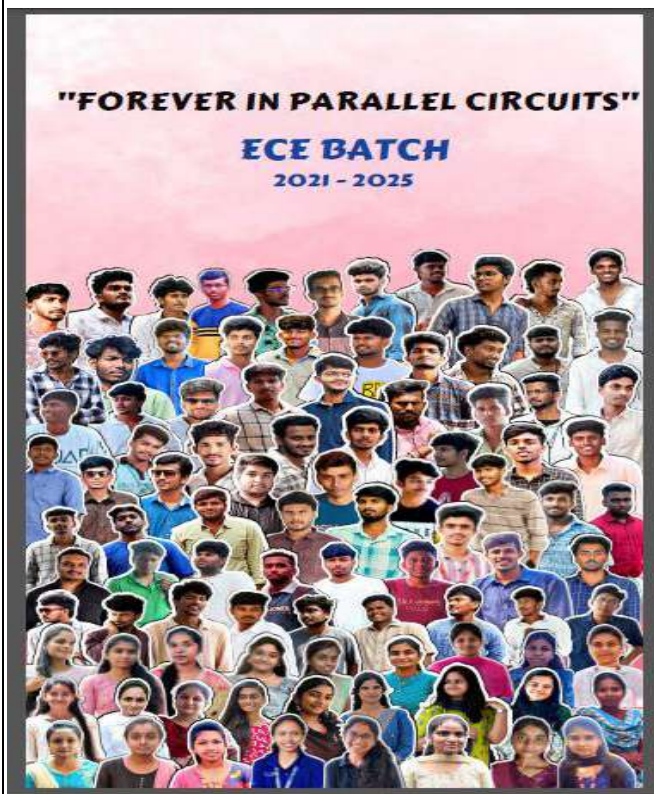
The event was organized as part of the College Social Responsibility (CSR) initiative to introduce school students to the fundamentals of electronics and engineering. The event engaged students from Grades 11 and 12 in interactive sessions and hands-on workshops. The initiative aimed to enhance awareness of STEM careers, providing insights into basic electronics and its applications. The event successfully inspired young minds, promoted community engagement, and received positive feedback from students and teachers

Celebration Glimpses

Pongal Festival



Farewell Day function



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
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