ACADEMIC YEAR 2022-2023

K.S.R. COLLEGE OF ENGINEERING (Autonomous)
TIRUCHENGODE – 637 215
ECE NEWS LETTER
CIRCUIT CHRONICLES

VOL 22 / ISSUE 1

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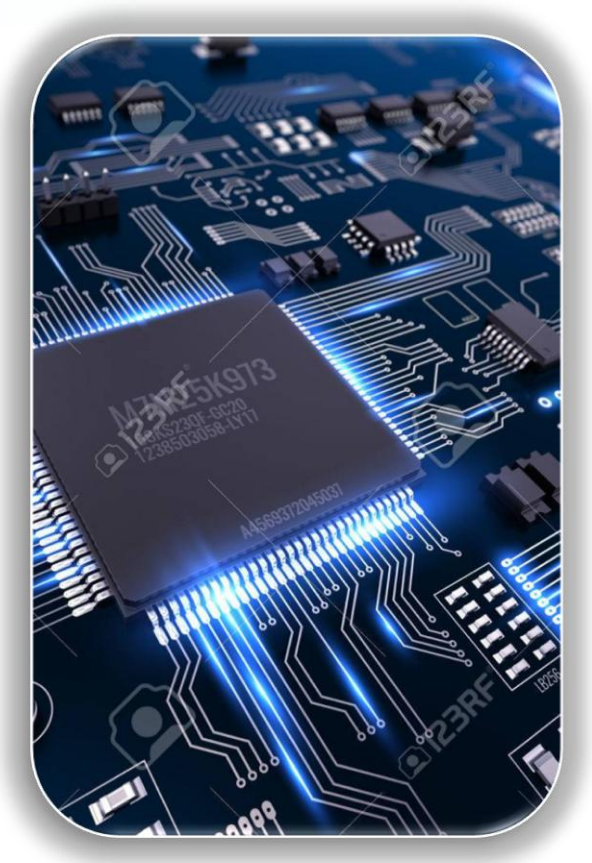

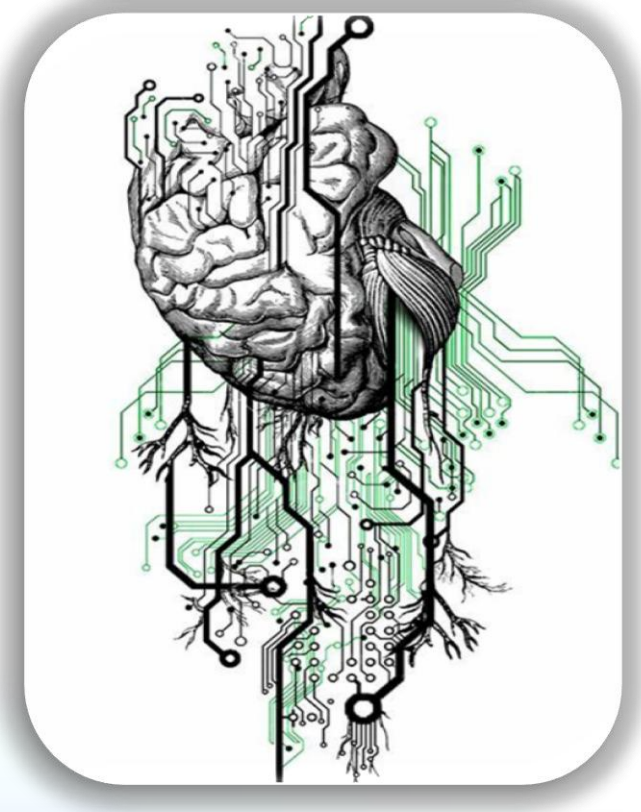

VISION OF THE INSTITUTION

IV 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 OF THE INSTITUTION

IM 1 To inculcate in the students self-learning abilities that enable them to become competitive and considerate engineers, technologists, scientists, managers, administrators and entrepreneurs by diligently imparting the best of education, nurturing environmental and social needs.

IM 2 To foster and maintain mutually beneficial partnership with global industries and Institutions through knowledge sharing, collaborative research and innovation.

VISION OF THE DEPARTMENT

DV 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 OF THE DEPARTMENT

DM 1 To educate the students with the state of art technologies to meet the growing challenges of the industries.

DM 2 To develop an innovate, competent and ethical Electronics and Communication Engineer with strong foundations to enable them for continuing education.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

The graduates of the programme will be able to:

PEO 1 Employability and Higher Education: Excel in Professional career and higher education by acquiring knowledge in mathematical, social, scientific & engineering principles.

PEO 2 Core Competence: Analyze, design and develop/implement core engineering problems in communication systems that are technically sound, economically feasible and socially acceptable.

PEO 3 Interpersonal Skills and Team Work: Exhibit professionalism, ethical communicating skills and team work by engaging in lifelong learning for sustainable development of the society.

PROGRAMME OUTCOMES (POS)

Program Outcomes (POs)

PO1 Engineering Graduates will be able to:

Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2 Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 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.

PO4 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.

PO 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.

• **PO6 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.
• **PO7 Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
• **PO8 Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
• **PO9 Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
• **PO10 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.
• **PO11 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.
• **PO12 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.
• **Program Specific Outcomes (PSOs)**
• **PSO1 Professional Skill:** Specify, design and test modern electronic systems that perform analog and digital processing functions.
• **PSO2 Problem – Solving Skills:** Design essential elements (circuits and antennas) of modern RF/Wireless communication systems.

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FACULTY ACHIEVEMENTS

Publications:-

S.NO.	NAME OF THE AUTHOR(S)	TITLE OF THE PAPER	NAME OF THE JOURNAL	VOLUME/ ISSUE NO.	DOI/ ISSN NO.	YEAR
1.	Dr.P. S.Periasamy	Computer Aided Coronary Atherosclerosis Plaque Detection and Classification	Intelligent Automation & Soft Computing	34/1	DOI:10.32604/iasc.2022.025632	2022
		Environmental Impact of High Voltage Insulator quality Analysis Using Improved Deep Learningapproach.	Journal of Environmental Protection and Ecology.	23(2)	-	2022

S.NO.	NAM8.E OF THE AUTHOR(S)	TITLE OF THE PAPER	NAME THE JOURNAL	VOLUME/ ISSUE NO.	DOI/ ISSN NO.	YEAR
	Dr.P. S.Periasamy	A Trusted Distributed Routing Scheme for Wireless Sensor Networks Using Block Chain and Jelly Fish Search Optimizer Based Deep Generative Adversarial Neural Network (Deep-GANN) Technique	Wireless Personal Communications		Doi.org/10.1007/s11277-022-09784-x	2022
		Micro Calcification Detection in Mammogram Images Using Contiguous Convolutional Neural Network Algorithm.	Computer Systems Science & Engineering.	45/2	10.32604/csse.2023.028808	2022
		Environmental Impact of High Voltage Insulator quality Analysis Using Improved Deep Learningapproach.	Journal of Environmental Protection and Ecology.	23(2)		2022
		Joint power allocation and channel assignment for deviceto-device communication using the Hungarian model and enhanced hybrid Red Fox-Harris Hawks Optimization.	Wileyonlinelibrary.com/journal/dac.	36/7	10.1002/dac.5425	2022
2.	Dr. S. Karthikeyan	An Advancement of Humans Activities Detection Based on Wireless Sensors and Machine Learning.	Advanced Engineering Science.	54/2		2022
		Adaptive Multicale Transformation Run-Length Code-Based Test Data Compression in Benchmark Circuits.	Intelligent Automation & Soft Computing.		DOI:10.32604/iasc.2022.026651	2022
3.	Dr. R Eswaramoorthi	Deep graph neural network optimized with fertile field algorithm based detection model for uplink multiuser massive multiple input and multiple output system.	Transactions on Emerging Telecommunications Technologies.	33/12	Doi.Org/10.1002/Ett.4614	2022
4.	Mrs.P. Thilagavathi	Adaptive Multicale Transformation Run-Length Code-Based Test Data Compression in Benchmark Circuits.	Intelligent Automation & Soft Computing.	22/1	DOI:10.32604/iasc.2022.026651	2022
5.	Dr.R.Satheeskumar	Evolutionary gravitational neocognitron neural network based block chain technology for a secured dynamic optimal routing in wireless sensor networks	Journal of Experimental & Theoretical Artificial Intelligence.	35/ 6	doi.org/10.1080/0952813X.2022.2153274	2022
6.	Dr.R.Poornima	Evolutionary gravitional neocognitron neural network based differential spatial modulation scheme for uplink multiple user huge MIMO systems	Knowledge based systems			2022

PARTICIPATED / ATTENDED IN FDP/ SDP/ WORKSHOP/ GUEST LECTURE

S.NO.	NAME OF THE FACULTY(S)	TITLE OF THE PROGRAMME	CONDUCTED BY	DATE(S) AND YEAR
1.	Ms.S.Suruthi	Microsoft azure AI Engineer Associate.	ICT Academy, Excel Engineering College	15.11.2022-19.11.2022
2.	Mr.S.Krishna Kumar	Microsoft azure AI Engineer Associate.	ICT Academy, Excel Engineering College	15.11.2022-19.11.2022
3.	Dr.R.Sateeskumar	Emotional Intelligence.	ICT Academy, Paavai Engineering College	12.12.2022-14.12.2022
		Python made simple (Basic & Advanced).	Inspire Soft Solutions	13.07.2022-13.08.2022
4.	Mr.R.Veeramani	Python made simple (Basic & Advanced).	Inspire Soft Solutions	13.07.2022-13.08.2022
		Seminar on Recent Trends in Optical Communication.	K S R Institute for Engineering and Technology	12.11.2022
5.	Mr.M.Jothimani	Faculty Development Programe on Design and Development of Industry led Curriculum in Technology	AMET University	14.12.2022-22.12.2022
		Python made simple (Basic & Advanced)	Inspire Soft Solutions	13.07.2022-13.08.2022
6.	Dr.T.M.Satheeskumar	Course on Artificial Intelligence using python	Marcello Tech	21.11.2022 – 25.11.2022

PATENT PUBLICATION/GRANTED

S.NO.	TOPIC	INVENTORS	APPLICATION NO.	DATE	STATUS
1.	Solar Panel	Dr.P.S.Periasamy (Design with Grant Patent)	363767-001	363767-001 Cbr.No: 201301 Cbr. Date:05/05/2022	Filed
2.	Face Mask Detector	Dr.R.Eswaramoorthi Dr.A.Velliangiri (Design with Grant Patent)	364442-001 Cbr.No: 201301	363759-001 Cbr.No: 201293 Cbr. Date:05/05/2022	Filed
3.	Solar Mobile Charger	Dr.R.Poornima Dr.R.Satheeskumar (Design with Grant Patent)	368198-001 Cbr Number: 204092	364442-001 Cbr.No: 201752 Cbr. Date:19.05.2022	Filed
4.	Solar Charging Station	Dr.K.P.Uvarajan Dr.T.M.Sathishkumar (Design with Grant Patent)	202241043811	364440-001 Cbr.No: 201750 Cbr. Date:19.05.2022	Filed

PARTICIPANTS IN VARIOUS PROGRAMMES

S. No.	Name of the Faculty as Resource Person	Name of the STTP/FDP	Date	Location	Organized by
1.	Dr. P.S.Periasamy	STTP on 3D Image Processing and Reconstruction	19.08.2022	Coimbatore	RVS College of Engineering and Technology.
2.	Dr.C.Gowri Shankar	FDP on Emerging Trends in Electrical Engineering	01-07-2022	Sangli, Maharashtra	Annasaheb Dange College of Engineering and Technology.
3.	Dr.S.Karthikeyan	FDP on Applications of Image Processing using MATLAB	23.11.2022	Erode	Nandha Engineering College.
4.	Dr.R.Eswaramoorthi	Faculty Development Program on Internet of Things	08.09.2022	Puliangudi, Tirunelveli Dist.	S.Veerasamy Chettiyar College of Engineering and Technology.
5.	Dr.T.M.SathishKumar	FDP on Trends in Digital Technology	26.08.2022	Erode	Surya Engineering College
6.	Mr. R.Veeramani	Faculty Development Program on Recent Trends in Optical Communication	12.11.2022	Tiruchengode	K.S.R. Institute for Engineering and Technology.

DEPARTMENT ACTIVITIES

EVENTS ORGANIZED:

S. No.	Name of the Professional Societies/ Bodies/ Chapters/ Clubs	Name of the Event	National/ International Level	Date of Event
1.	ISTE	Workshop on Collaborative coding Using Github	National level	12.11.2022
2.	IETE	Seminar on Development of Wireless Sensor networks-WINS AMPS Underwater Acoustic and Deep Space network	National level	09.11.2022
3.	IEI	Seminar on Career Path Identification and Experience sharing	National level	27.10.2022
4.	IETE & ECE Association	Seminar on Sensor Networking and Cloud Networking	National level	12.10.2022
5.	ISTE	Seminar on CISCO Learning	National level	27.09.2022
6.	IETE	Webinar on ASIC Physical design flow	National level	12.09.2022
7.	IEI	Seminar on Design and Testing of RF and Microwave components using Network Analyzer and ADS software	National level	18.08.2022

STUDENT ACHIEVEMENTS

Awards Received by Students

S.NO.	NAME OF THE STUDENTS	NAME OF THE ACTIVITY	DATE	ORGANIZED BY	PRIZE/ AWARD WON
1.	Mahaashuruthy G	Webinar	30.07.22	National Level	Other State
		Webinar	17.09.22	National Level	Other State
		Webinar	31.07.22	National Level	Other State
		Workshop	05.09.22 & 06.09.22	International	Other State
		Workshop	17.09.22	International	Other State
		Guest Lecture	19.11.22	National Level	Other State
		Webinar	13.11.22	International	Other State
2.	Pavithra T	Oratorical	17.11.22	State Level	First Prize
3.	Shalini A	Workshop	27.05.22	National Level	Other State
4.	Indumathi J	Workshop	27.05.22	National Level	Other State
5.	Anandha Prakash R	Webinar	27.06.22	National Level	Other State
6.	Anandha Prakash R	Quiz	26.06.22	National Level	Other State
7.	Harish V	Quiz	26.06.22	National Level	Other State

STUDENT ACHIEVEMENTS

Awards Received by Students

S.NO.	NAME OF THE STUDENTS	NAME OF THE ACTIVITY	DATE	ORGANIZED BY	PRIZE/ AWARD WON
1.	Vinothini G	Paper Presentation	28.04.22	National Level	First Prize
2.	Indumathi J	Workshop	27.05.22	National Level	Other State
3.	Anandha Prakash R	Webinar	27.06.22	National Level	Other State

INFO CORNER

Our Students actively participated in the Sports Day with great enthusiasm and determination. They demonstrated excellent teamwork, discipline, and true sportsmanship in various events. Their outstanding performances earned several prizes and brought pride and recognition to the department.

Our department students enthusiastically participated in a variety of fun events, showcasing their talent, teamwork, and vibrant spirit. Their active involvement reflected both their creativity and strong sense of community beyond the classroom.

Our students proudly participated in a tree plantation drive, contributing to a greener and more sustainable environment. Their enthusiastic involvement reflected a strong commitment to environmental responsibility and community service.

Editorial Committee

Dr.T.M.Sathish Kumar ASP/ECE
Mrs.P.Usha AP/ECE
Mr.V.Srinivasan & III

G. Santhiya & VII
S. Jagadeep & VII
R. Anandha Prakash & V
N. Girivelavan& III