ISSUE 18

ENERGETICS EEE NEWS LETTERS K.S.R. COLLEGE OF ENGINEERING (Autonomous)

TIRUCHENGODE - 637 215

28.12.2022

Vision of the Institution

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 / Programme: (Electrical and Electronics Engineering)

DV We envision a Department that leads in the field of Electrical and Electronics Engineering through education, training and research committed to influence the direction of the field and make a constructive contribution to society wherein the Department can thrive and grow.

Mission of the Department / Programme: (Electrical and Electronics Engineering)

- **DM 1** To create professionally competent and resourceful Electrical and Electronics Engineers.
- **DM 2** To promote excellence in teaching, pioneering research and innovation for a sustainable growth of the nation and enrichment of humanity.

Programme Educational Objectives (PEOs): (Electrical and Electronics Engineering)

The graduates of the programme will be able to

- PEO 1 Employability and Higher studies: Excel in professional career and/or higher education by acquiring knowledge in basic engineering, science and mathematics in Electrical and Electronics Engineering.
- PEO 2 Sustainable Engineering Solutions: Develop and apply engineering solutions for solving contemporary social and human issues with realistic constraints through modern tools.

PEO 3 Interpersonal and Ethical Proficiency: Exhibit professional and ethical standards, effective communication skills, teamwork spirit and multidisciplinary approach for successful careers in Indian and Multinational companies and to engage in lifelong learning.

Programme Outcomes (POs) of B.E. - Electrical and Electronics Engineering

Prograi	m Outcomes (POs)
	Engineering Graduates will be able to:
P01	Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
P02	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.
P03	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.
P04	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.
P05	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.
P06	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.
P07	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.
P08	Ethics : Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
P09	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.
P011	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.
P012	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.
Prograi	m Specific Outcomes (PSOs)
PS01	Proficiency in Core: Realize the generation, transmission, distribution and utilization of

	electrical power.
PSO2	Professional Skill: Formulate the testing procedures needed to make the measurements of electrical and electromagnetic quantities and to provide solutions to the real time problems.

CONTENTS

- Faculty AchievementsDepartment ActivitiesStudents Activities

- ➤ Info Corner

FACULTY ACHIEVEMENTS

Faculty Publications:

Name of the Authors	Title of the paper	Title of the journal	Volume	Page No.	Year
S. Dinakaran, V. Ravi, P. Anitha	Radial Subset Clustering Feature- Based Deep Spectral Neural Classification for relational drug recommendation	Neuro Quantology	Vol. 20, No.9	pp. 873-883 DOI: 10.14704/nq. 2022.20.9.N Q440097	2022
R. Hemalatha and M. Ramasamy	Harmonics Extraction Scheme for Power Quality Improvement Using Chbmli-Dstatcom Module	Intelligent Automation & Soft Computing	Vol.35, No.2	pp. 1505- 1525 DOI: 10.32604/ias c.2023.0263 01	2022
Vijayakumar Arun, R. Kannan, S. Ramesh, M. Vijayakumar, P. S. Raghavendran, M. Siva Ramkumar, P. Anbarasu, and Venkatesa Prabhu Sundramurthy	Review on Li-lon Battery vs Nickel Metal Hydride Battery in EV	Advances in Materials Science and Engineering	Vol. 2022	pp.1- 7 DOI:10.1155/ 2022/79100 72	2022
K. Rajesh Kumar, and M. Vijayakumar	Optimization of Cognitive Femtocell Network via Oppositional Beetle Swarm Optimization Algorithm	Intelligent Automation & Soft Computing	Vol.36, No.1	pp. 819-831 DOI: 10.32604/ias c.2023.0309 61	2022

Dhanalakshmi Shanmugasundara m, and Dr.Gowri Shankar Chinnusamy	Fuzzy neural network Optimization approximate Multiplierusing nonlinear Anisotropic image denoising	NeuroQuantology	Vol.20, No.8	pp. 2477 - 2491 doi:10.14704 /nq.2022.20. 8.NQ22270	2022
Bharani Prakash, T; Sankar Ganesh, R.	Harmonic Minimization in Grid Coupled Photovoltaic Structures Using Selective Harmonic Elimination Pulse- Width Modulation in Multiple Level Series Linked Nano-Scale Double Gate Hetero- Structure MOSFET Based H Type Bridge Inverters	Journal of Nanoelectronics and Optoelectronics	Vol.17, No. 1	pp. 128- 135(8) DOI: https://doi.or g/10.1166/jn o.2022.3178	2022

Faculty patent publication

Topic	Inventors	Application No.	Date	Status
Solar Panel	Dr.S.Ramesh Dr.C.Gowrishankar Mr. S.Dhivagar	363767-001	18/10/2022	Patent Granted

Faculties as participants in various programmes

Name of the Faculty	Name of the Event/Title	Seminars / Workshops / Conferences/ FDP	Date of the Event	Organized by	Place	No. of days Attended
E.Kannan	Virtual Laboratory platform forDigital Electronics Circuits Laboratory	FDP	09.07.2022	Vellore Institute of Technology	-	01day
E.Kannan	Computer Vision and Natural Language Processing	FDP	08.08.2022- 18.08.2022	Easwari Engineering College	-	11days
K.Yamuna	Insights into Artifical Intelligence and Machine Learning for Bio-informatics Applications	FDP	27.06.2022- 07.07.2022	National Institute of Technology Warangal	-	11days
A.Vasanthi	Insights into Artifical Intelligence and	FDP	27.06.2022- 07.07.2022	National Institute of	-	11days

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	Machine Learning for Bio-informatics Applications			Technology Warangal		
B.Yuvarani	Insights into Artifical Intelligence and Machine Learning for Bio-informatics Applications	FDP	27.06.2022- 07.07.2022	National Institute of Technology Warangal	-	11days
S.Dhivagar	Application of Machine Learning and Deep Learning Using MATLAB	FDP	01.08.2022 -07.08.2022	Vel Tech Multi Tech Dr.Rangarajan Dr.Sakunthala Engineering College	-	08days
M.Subramani	Application of Machine Learning and Deep Learning Using MATLAB	FDP	01.08.2022 -07.08.2022	Vel Tech Multi Tech Dr.Rangarajan Dr.Sakunthala Engineering College	-	08days
Dr. SENTHIL KUMAR S,	DATA SCIENCE FOR ENGINEERING APPLICATION	FDP	11.07.2022 to 20.07.22	NIT,WARANGAL	-	10days
Dr. SENTHIL KUMAR S,	Environment Management System, Green Campus Audit, Energy Audit and Hygiene Audit to Educational Institutions and Industrial Sectors	FDP	26.09.22 to 30.09.2022	Nature Science Foundation, Coimbatore – 641 046, Tamil Nadu, India	-	05days
Dr. VIJAYAKUMAR M,	Environment Management System, Green Campus Audit, Energy Audit and Hygiene Audit to Educational Institutions and Industrial Sectors	FDP	26.09.22 to 30.09.2022	Nature Science Foundation, Coimbatore – 641 046, Tamil Nadu, India	-	05days
Dr. VIJAYAKUMAR M,	Environment Management System, Green Campus Audit, Energy Audit and Hygiene Audit to Educational Institutions and Industrial Sectors	FDP	26.09.22 to 30.09.2022	Nature Science Foundation, Coimbatore – 641 046, Tamil Nadu, India	-	05days

B.Yuvarani	Environment Management System, Green Campus Audit, Energy Audit and Hygiene Audit to Educational Institutions and Industrial Sectors	FDP	26.09.22 to 30.09.2025	Nature Science Foundation, Coimbatore – 641 046, Tamil Nadu, India	-	05days
K.Yamuna	Trends &challenges in the development of electric vehicles &hybrid electric vehicles	FDP	26.09.22 to 30.09.2022	lendi insititute of engineering &Technology,Viz ianagaram	-	05days
A.Vasanthi	Trends &challenges in the development of electric vehicles &hybrid electric vehicles	FDP	26.09.22 to 30.09.2022	lendi insititute of engineering &Technology,Viz ianagaram	-	05days
Dr.E.Vani	Trends &challenges in the development of electric vehicles &hybrid electric vehicles	FDP	26.09.22 to 30.09.2022	lendi insititute of engineering &Technology,Viz ianagaram	-	05days
S.Gowtham	Trends &challenges in the development of electric vehicles &hybrid electric vehicles	FDP	26.09.22 to 30.09.2022	lendi insititute of engineering &Technology,Viz ianagaram	-	05days
Dr.R.Senthil Kumar	Powering IOT using ARDUINO / RASPBERRYPI	FDP	29.09.22 to 30.09.22	Nan Mudhalvan - Sona College of Technology Salem	Salem	02days
Dr.R.Senthil Kumar	Applications of Machine Learing and Deep Learing using Matlab	FDP	01.08.22 to 07.08.22	Vel Tech Multi Tech Dr.RangarajanDr .Sakunthala Engineering College	-	07days
Dr.S.Ramesh	DESIGN AND DEVELOPMENT OF ELECTRIC VEHICLES: RESEARCH CHALLENGES AND OPPORTUNITIES	FDP	17th to 21st October 2022	Murugappa Polytechnic college,Chennai	-	05days
Dr.R.Senthil Kumar	Smart Grid and Distributed Energy Systems	Internation al Virtual seminar	12.9.2022	Dept of EEE/ Parthyusha Engineering College	-	01day

Dr.R.Senthil Kumar	National Intellectual Property Awareness Mission	IP Awareness Program	11.11.2022	IQAC/KSRCE- Intellectual property Office		01day
Dr.R.Senthil Kumar	ICT Academy	Bridge 2022	13.07.2022	Chennai Trade Centre, chennai	-	01day
Dr.R.Senthil Kumar	Optimization of Machine Learning Algorithms for better healthcare services	One Day Seminar	17.08.2022	Department of Information Tech, Kongundu College of Engineering and Technology	-	01day
Dr.E.Vani	National Intellectual Property Awareness Mission	IP Awareness Program	11.11.2022	IQAC/KSRCE- Intellectual property Office	-	01day

DEPARTMENT ACTIVITIES

Events organized by the faculty

Name of the	Title of the Da		ate	Name of Funding	December Develop	
Coordinators	Programme	From	То	Agency/Chapter	Resource Person	
Dr.M.Ramasamy Mr.M.Subramani	Value Added Course on MATLAB for Electrical Engineers	19.11.2022, 20.11.2022 22.11.2022	23.11.2022	Aarthi Trust	Dr.M.Ramasamy Associate Professor K.S.R. College of Engineering, Tiruchengode	
Dr.V.Ravi Dr.R.Sankar Ganesh Mrs.B.Yuvarani	Technical Symposium- GRID 2022	30.09.2022	-	Aarthi Trust	Mr.Sownder kumar Periasamy The HK Online –Co founder & CHRO Coimbatore.	
Dr.V.Ravi Dr.R.Sankar Ganesh	Value Added Course on Training on Arduino Programming and Sensors Interfacing	26.09.2022	30.09.2022	Aarthi Trust	Mr.M.Parthiban Managing Director Caliber Embedded Technologies India Pvt. Limited, Salem	
Dr.R.Sankarganesh Dr.V.Ravi	Investor Awareness programme on Financial Literacy	23.09.2022	-	Aarthi Trust	Dr.K.Prakasam Director, Keyway Academy Erode.	
Dr.M.Ramasamy Dr.R.Senthilkumar	Seminar on Recent Trends In Real Time Embedded System	22.09.2022	-	IEEE	Karthick M.P, Technical Head,	

					C Cube Technologies,
					Salem
Dr.M.Ramasamy Dr.R.Senthilkumar	Seminar on Embedded System Based Applications	13.09.2022	-	IEEE	Mr.Mohammed Fareed Project Engineer IPCS Global Solution Private Limited Salem – 636 004 Tamil Nadu
Dr.M.Ramasamy Dr.R.Senthilkumar	Seminar on Life Skill Education and Its Implication	08.08.2022	-	IEEE	T.P. Karthik Project Manager Kyndryl Inc.Private Ltd Subsidiary of IBM Bangalore
Mrs.A.Vasanthi Mrs.K.Yamuna Mrs.B.Yuvarani Dr.E.Vani	Guest lecture on Optimal Design methodology for E- Vechicle.	04.08.2022	-	Aarthi Trust	Mr. M. Parthiban Managing Director, Caliber Embedded Technologies India Pvt. Ltd., Salem, Tamil Nadu.
Dr.M.Ramasamy Mr.M.Subramani	Value Added Course on Design of Printed Circuit Board using Photo Resistive Method	19.07.2022	22.07.2022	Aarthi Trust	Mr.T.Anand Febino Automation Solutions, Erode
Dr.M.Vijayakumar (1) Dr.M.Ramasamy Dr.R.Senthilkumar	Value Added Course on Programmable Logic Controller (PLC)	12.07.2022	15.07.2022	Aarthi Trust	Mr.S.Aravind Senior Project Engineer, IPCS Automation Salem

STUDENT ACTIVITIES

Awards Received by Students in the Events Organized by Other Institutes

S.No.	Name of students	Name of the Activity	Date	Organized by	Prize/ Award Won
1	K.S.Ramanitharan	Paper Presentation	12.10.2022	Gnanamani College of Technology	11
2	S.Periyanarayanan	Paper Presentation	12.10.2022	Gnanamani College of Technology	II
3	B.Lavanya	VOLLEY ball	3.12.2022 & 4.12.2022	Anna University Zonal (Builders Engineering College)	II
4		Athletic- High Jump	27.12.2022	Anna University Zonal (Bannari amman Institute of Technology)	I

5		4X100m relay	28.12.2022	Anna University	II
				Zonal Bannari amman	
				Institute of	
				Technology)	

INFO CORNER





18th National Level Technical Symposium on 30th, September 2022.

Editors

Dr. D.Gowrisankar

Assistant Professor,

Student Members

Devasana G

Sridhar A

(III Year)

Department of EEE,