VOLUME NO

AUGUST

2020

EASWARI ENGINEERING COLLEGE

(AUTONOMOUS INSTITUTION)

DEPARTMENT OF EEE

SPARKZ'20

MESSAGE FROM THE HOD'S DESK

Hearty welcome and best wishes to all the individuals who receive this newsletter. It gives me great pleasure to present the first issue of "SPARKZ" for the academic year 2020-2021. I cheer the students to work hard and put in their best efforts towards their technical endeavors so that it may yield prolific results. I would like to thank all my colleagues for their diligent efforts to help the department progress at a very steady rate of knots. We as a team strive hard to take the department to the height of success, glory and to achieve our vision.

VISION OF THE DEPARTMENT

To produce graduates with foundation in Electrical and Electronics Engineering who can cater to the dynamic needs of the industry and to provide a diverse and stimulating environment for quality research.

MISSION OF THE DEPARTMENT

- M1. To align the teaching learning process and to provide basic foundation for the students to adapt to the changing industrial needs
- M2. To enrich with the latest developments through seminars, guest lectures, workshop and paper presentations
- M3. To awake young minds to acquire knowledge continuously and learn to apply it
- M4. To attain multidisciplinary problem solving skills, social awareness and confidence required to excel in their chosen field
- **M5.** To develop professional competency and technical expertise individually and through team effort thereby exhibit leadership in industry
- **M6.** To create research oriented mindset and focus in fulfilling growing demands of society through mentoring and motivation

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- 1. Graduates will have fundamental and broad knowledge in Electrical Sciences relating to industrial applications and research to design, analyze and synthesize information from various sources and think differently to provide solutions to their discipline
- 2. Graduates will become entrepreneurs, employees of reputed organizations, pursue higher studies and research for developing advanced skills in Electrical and Electronics Engineering
- 3. Graduates will exhibit technical and intellectual competency and will be amenable for life-long learning
- 4. Graduates will demonstrate technical knowledge and ethical values for professional development to meet the societal needs
- 5. Graduates will be able to work in multi-disciplinary environment by providing solutions to real time problems.

THE EDITORIAL TEAM

CHIEF EDITOR:

Dr.E.KALIAPPAN,

PROFESSOR & HOD/EEE

EDITOR:

Ms.B.PONKARTHIKA,

ASSISTANT PROFESSOR/EEE

EDITORIAL MEMBERS:

A.KOUSHIKA PREETHI - IV A

U.INDUJA -IV A

S.S.SIVANEE-IV B

SAI MALAVIKA VENKATESH-IV B

G.GUNASEKARAN - IV A

S.MALINI PREETHI- III A

T.EVANSEA TRACY-III A

B.SRIKUMARESH-III B

S.P.YASHWANTH KUMAR – IV B

R.SRI RAJA SUMAN - III B

COURSES OFFERED:

- BE- ELECTRICAL & ELECTRONICS ENGINEERING
- ME- EMBEDDED
 SYSTEM
 TECHNOLOGIES
- PH.D/M.S(RESEARCH)

The Department is Accredited by NBA

ACTIVITIES CONDUCTED BY THE DEPARTMENT (May-July)

S.No	Date	Webinar	Name of the Resource Person and Designation	No of Participants Benefited
1.	07/05/2020	Auxiliary Power Supply Design for Electric Vehicle on Board Charger	T.Thandapani, Director (Tech) RRT Electro Powwer (P) Ltd,Chennai.	136
2.	09/05/2020	Power System Distribution with Latest Technology	Mr. V. Sathish Kumar, Assistant Manager, L&T ECC,Chennai	155
3.	10/05/2020	Electrical Engineering Applications of Machine Learning	Mr. Nagur Ramesh, Mentor, Guvi Geek India Pvt. Ltd,Chennai	199
4.	11/05/2020	Testing , Commissioning and Retrofitting Numerical Relay	Mr.K.sunderrajan, Senior Engineer, GKPower Expertise Pvt.Ltd,Chennai	192
5.	11/05/2020	Scope of Electrical Components in Automobile Industry	Mr.Subramoniyan Senior Engineer- R & D WABCO India Limited,Chennai	186
6.	12/05/2020	Power Transformer Testing	Mahindar Reddy CH, Manager, L&T construction, Chennai	250
7.	13/05/2020	Autonomous Quadcopter Docking system in c#	Mr. Umapathi K, Senior software Analyst, UST Global systems,Chennai	128
8.	13/05/2020	Opportunities in Micro, Small and Medium Enterprises	Mr. J. Ranjeeth Kumar, IAS Commissioner-MSME Industries Department, Gujarat	170
9.	14/05/2020	Transform yourself to a successful Entrepreneur	Mr.R.Karthik CEO, Hovitrans Shippers Pvt. Ltd,Chennai	178
10.	15/05/2020	Industry 4.0	Mr.R.Vignesh, Chief Technology Officer, QuantanicsTechserv Pvt.Ltd, Madurai.	155
11.	17/05/2020	Effect of One Nation One Grid	Er.Sathya Narayana Kumar, Asst.Executive Engineer, TANGEDCO, Thermal Power station, Tuticorin	198
12.	19/05/2020	Cliff of Ice Berg - EV market	Mr.Vaithiyanathan Vice President (Marketing) Sosaley Technology Pvt Ltd,Chennai Mr.M.Srinivasan Head Embedded systems and BMS Sosaley Technology Pvt Ltd,Chennai	270
13.	20/05/2020	Up skilling for the future- What the industry expects from the NextGen Engineers?	Mr.JegapriyanGovindarajan, Managing Director, Tecumseh Products India	130
14.	22/05/2020	Grid connected Solar Photo Voltaic plants and Microgrids- Design, Challenges and Issues	Mr. A. SARAVANA KUMAR, Scientist 'E'/ Joint Director, Power Electronics Group, CDAC,Tiruvanandapuram.	120
15.	22/05/2020	Technology trends in Networking	Mr. R. VASUDEVAN, Technical Lead,CISCO Systems, Taramani, Chennai.	100

ACTIVITIES CONDUCTED BY THE DEPARTMENT

(May-July)

S.No	Date	Webinar	Name of the Resource Person and Designation	No of Participants Benefited
16.	26/05/2020	Solar Energy Conversion	Dr Sreejith S Assistant Professor National Institute of Technology, Silchar Assam,Cachar.	171
17.	26/05/2020	International Webinar on Commanding your Grip on Higher Education	Ms.Nandini Venkatraman, Wireless QA Manager,Octoscipe INC, Massachusetts,USA	170
18.	27/06/2020	Transforming Electrical Engineers to Industry ready C Programmers	Mr.K.S.Anirudhan, Senior Software Engineer, Technicolor Connected Homes, Chennai	150
19.	29/06/2020	National Level Webinar on IoT Applications for Next Gen Industries	Mrs.Sheeba Singh.M, Authorized Speaker, Finnlogic IT service Pvt ltd., Jammu and Kashmir	150
20.	29/06/2020	International Level Webinar on Effect of Partial Shading & its Mitigation Techniques	Dr.T.Sudhakar Babu, Institute of Power Engineering, Dept. of Electrical Power Engineering, University Tenaga Nasional (UNITEN), Malaysia	164
21.	30/06/2020	An Overview on Opportunities in Electrical Industry- Post COVID Scenario	Mr.V.Vijay Karthik Lead Technical Institute GE T & D India Ltd, Chennai	124
22.	30/06/2020	Aspects and Prospects of Energy Manager/ Auditor exams in India	Dr.P.Dharmalingam, Director, Ensave Consultancy and Training Pvt.Ltd., Chennai	163
23.	11.07.2020	Webinar on Design & Opportunities in Electric Vehicle Industries	Mr.R.LGeoffer Jaish, Engineer, AVL India Pvt.Ltd, Chennai	100
24.	18.07.2020	Webinar on Challenges, Opportunities and Research prospects on High penetration of renewables in Modern power grids	Dr. Md.Alamgir Hossain, Postdoc Research Associate, School of Engineering & Information Technology,The University of New SouthWales,Australia	155
S.No	Date	Faculty Development Programme	Name of the Resource Person and Designation	No of Participants Benefited
1.	18/05/2020 To 22/05/2020	International Faculty Development Programme on "Research Innovative and Recent Trends in Electrical Engineering"	Mr.Saravanan Bramandham, Lead - Traction Control , Alstom Transport India Limited, Bangalore	176
S.No	Date	Conference	Name of the Resource Person and Designation	No of Participants Benefited
1.	30/07/2020 & 31/07/2020	International E-Conference On "Challenges And Opportunities In Renewable Energy, Smart Systems And E-Mobility" (ICCORSE- 2020)	Dr.M.Vasudevan, Deputy General Manager,HCL Technology,Chennai	750

INTERNATIONAL E-CONFERENCE ON CHALLENGES AND OPPORTUNITIES IN RENEWABLE ENERGY, SMART SYSTEMS AND E-MOBILITY (ICCORSE-2020)

	SWIART STSTEMS AND	DE-WIOBILITY (ICCORSE-2020)			
Inaugural Address:		Tutorial Session- Keynote Address: Dr.Ramani Kannan, Senior Lecturer, Universiti Teknologi Petronas,			
Chief Guest	Dr.M.Vasudevan Deputy General Manager, HCL Technologies, Chennai.	 Malayisa on "Renewable Energy Efficiency Systems of the Present and Future". Dr.C.Bharatiraja, Associate Professor, SRM University, Chennai on 			
Guests of Honour	Dr.G.Uma Professor,Department of EEE, Anna University, Chennai. Mr.Ramesh Marimuthu Chief Product Owner, Edge Apps Startup Siemens AG,Karlsruhe, Germany.	 "Challenges and Recent Development in EV charging". Dr.K.Vasanth, Professor, Vidya Jyothi Institute of Technology, Hyderabad on "IOT for Common People". Mr.Siva Vasanth, Scientist-SE, IPRC/ISRO, Mahendragiri on "Instrumentation Design for Automatic Ground Testing of Cryogenic Engines". 			
Special Invitees	Dr.M.P.Selvan Associate Professor, Department of EEE, National Institute of Technology, <u>Trichy, Tamil Nadu.</u> Dr.Md.Mahadi Bin Abdul Jamil, Associate Professor, Faculty of Electrical & Electronics Engineering, Universiti Tun Hussen Onn, Malaysia.	 Mr.P. Siva Guru, Energy storage Expert,Masdar, Abudhabi on"Challenges and opportunities in Renewable Energy Sources". Dr. R. Saradh Prasad, Lecturer,King Saud University, Saudi Arabia. on "Organic Electronic on OLED, Lasers, Solar Cells and CancerTreatment". Dr.C.Govindaraju, Associate Professor, Govt. College of Engineering,Salem. on "Power Converters for Fuel Cell Energy Conversion System". Dr.Umashankar Subramaniam, Professor, Prince Sultan University, Saudi Arabia. on "Solar and Energy Storage in Smart Grid Perspective". 			

STUDENTS ACADEMIC EXCELLENCE - Star of the Semester- Odd 2019-2020:



"Faith is like electricity. You can't see it, but you can see the light"- Gregory Dickow

STUDENT ACHIEVEMENTS (May-July)

Internship:

S.No	Batch	Name of the student	Name of the Industry / Organization	Stipend/ Month
1	2016-20	P.R. Madhevan	Embedur Systems	Rs.15,000
2	2016-20	M.Hemanth Kumar	Whirldata	Rs.15,000
3	2017-21	A Jane Jersha	Image Creative Education Private Ltd	Rs.2,000
4	2017-21	B Akash Hari	Internshala Student Partner	Rs.4,500
5	2017-21	P.Divya Sai Sudha	Devesh Thapar Internet Marketing	Rs.2,000
6	2018-22	P.V Sai deepak	Expertrons Technologies Pvt Ltd	Rs.3,000
7	2018-22	P.V Sai deepak	Pathfinder	Rs.10,000
8	2018-22	M.Amudha	World Youth Council	-
9	2018-22	T.Abhishek Dheeven	Comondov	-
10	2018-22	S. Darshni	Predicting Life Expectancy using Machine Learning & SmartBridge	-
11	2017-21	P.Kothandaraman	Internshala Student Partner 17 program	-
12	2017-21	S.V.Vishal	Insicle	-

FACULTY ACHIEVEMENTS

Conference Publications:

S.No.	Paper
1.	Dr.J.Gowrishankar, "Proteus Model of Cascaded Multi-Level Inverter for Single DC Source & Multi DC Source", Virtual Conference on Recent Trends on Renewable Energy ,Smart Grid & Electric Vehicle Technologies, Vellore Institute of Technology(09.07.2020).
2.	Mrs.J.Lydia "A High Efficiency Z Source Sparse matrix Converter For Vehicle To Home & Grid To Vehicle Application "7 th IEEE International Virtual Conference on Smart Structures & Systems (ICSSS 2020), Saveetha Engineering College, (23 rd & 24 th July 2020).

Events Attended by Faculty:

Online Course PlatformName of the CourseName of the faculty			May-Ju	<u>ly:</u>		
NPTEL	Ethics in Engineering Practice	Dr.E.Kaliappan Dr.D.Fathema Farzana Ms.B.Ponkarthika		S.No.	FDP/Webinar/ Workshop	No. of Faculty members attended
NPTEL	Fuzzy Logic & Neural Networks	Dr.K.Mala		1	FDP	152
NPTEL	Surface Engineering of Nanomaterials	Dr.R.Karpagam		2	Workshop	22
Coursera	Introduction to Programming with MATLAB	Mrs. C. Priya		3	Webinar	361
Coursera	Electrodynamics Analysis of Electric Fields	Mrs.J.Lydia		4	Online Course	07

PLACEMENT RECORD

Placement Summary as on 31/07/2020:

C.N.	Norma of the Com		No of students	S.No	Norma efficiencia	No of students	
S.No	Name of the Con	прапу	placed	5.INO	Name of the Company	placed	
1.	ACCENTUR	E	20	12.	RINI JOHN	ACCENTURE	
2.	AMAZON		1	13.	RITHU PRIYANGA M	ACCENTURE	
3.	BOSCH		2	14.	SATHIYENDRAN M	ACCENTURE	
4.	BYJUS		2	15.	SHANMUGA PRIYA V	ACCENTURE	
5.	CSS CORPART	ION	2	16.	SHRUTHI T	ACCENTURE	
6.	ECON SYSTE		1	17.	SUBHASHINI S	ACCENTURE	
7.	EMBERUR SYST	ΓEMS	1	18.	SUSHMITA M S	ACCENTURE	
8.	ETHNUS		1	19.	SWETHA LAKSHMI A B	ACCENTURE	
9.	FLDEC SYSTE	EMS	1	20.	TINO ISAAC I	ACCENTURE	
10.	FULL CREAT	VF	1	21.	M.R.ABINESH	AMAZON	
	HCL TSS		2	22.	ANAND VIGNESH R	BYJUS	
11.	HEXAWARE TECHN		4	23.	ARVIND VISHWANATH S	BYJUS	
12.		OLOGIES					
13.	IBM		1	24.	VAISHNAVI S	CSS CORPARTION	
14.	INFOSYS		1		ROSHINI.B.V	CORPARTION	
15.	L&T INFOTE	СН	2	25.	KOSIIIVI.B.V	CORPARTION	
16.	MPHASIS		2		ADHITHIYA VENKATESH		
17.	SUTHERLAND GI		11	26.	Κ	ECON SYSTEMS	
	SERVICES			27.	MADHEVAN P R	EMBEDUR	
18.	TATA ELXS		1			SYSTEMS	
19.	TCS NINJA		12	28.	VENKATESH R	ETHNUS	
20.	THINKSYNQ SOLU	UTIONS	1	29.	NIVEDHITHA M	FULL CREATIVE	
	PVT. LTD.	2000 JED 2		30.	SHIVANI P	FLDEC SYSTEMS	
21.	TVS SUNDARAM FA		1	31.	HAMSA PRIYA S	HCL TSS	
22.	VALUED EPISTEM LTD	ICS PVT	1	32.	VAISHNAVI S	HCL TSS	
22			1	33.	APARNA R	HEXAWARE	
23.	WHIRLDATA SC	IENCE	_			TECHNOLOGIES	
24.	WIPRO		1	34.	RAMAKRISHNAN G	HEXAWARE	
25.	ZOHO CORPORA	ATION	2			TECHNOLOGIES	
Г	otal No of Students Plac	ed	76*	35.	SUKUMARAN M	HEXAWARE TECHNOLOGIES	
UG Stude					MONISH V	HEXAWARE	
S.No	Name of the students	Name of	the company	36.		TECHNOLOGIES	
1.	BARATH SRINIVAS B		CENTURE	37.	SWATIKA R	IBM	
2.				38.	KAVIN R M	INFOSYS	
	DINAKARAN A	ACC	CENTURE	39.	SUDARSHAN M	L&T INFOTECH	
3.	EUNICE A	ACC	CENTURE	40.	THANIGAIVELAN R	L&T INFOTECH	
4.	GANAPATHI S	ACC	CENTURE	41.	AKSHAYA S B	MPHASIS	
5.	GOWTHAM E	ACC	CENTURE		GOVARTHANAN M		
6.	KOUSALYA M		CENTURE	42.		MPHASIS	
7.	MANIBHARATHI R		CENTURE	43.	MADHUVANTHI	SUTHERLAND	
8.	MUTHU MEERA S			44.	DEEPAK VENKATESH	GLOBAL SERVICES SUTHERLAND	
<u> </u>	NANDHINI G		ACCENTURE ACCENTURE			GLOBAL SERVICES	
10.	NISHANTH R			45.	MOHAN. M	SUTHERLAND	
	PAVITHRA R K		CENTURE			GLOBAL SERVICES	
11.	PAVITHKA K K ACCENTURE		CENTURE				

PLACEMENT RECORD

S.No	Name of the students	Name of the company
46.	ROSHAN	SUTHERLAND
40.		GLOBAL SERVICES
47.	BALAJI N	SUTHERLAND
4/.		GLOBAL SERVICES
48.	GOWTHAM R	SUTHERLAND
-10.		GLOBAL SERVICES
49.	ISVARIYA G	SUTHERLAND
47.		GLOBAL SERVICES
50.	KAVIN R M	SUTHERLAND
50.		GLOBAL SERVICES
51.	KISHORE KUMAR	SUTHERLAND
51.	R	GLOBAL SERVICES
52.	MONISH V	SUTHERLAND
52.		GLOBAL SERVICES
53.	VIJAYAVIGNESH	SUTHERLAND
	А	GLOBAL SERVICES
54.	ANIRUDH S	TATA ELXSI
55.	ASWATH RAM A S	TCS NINJA
56.	EUNICE A	TCS NINJA
	MOHAMED	TCS NINJA
57.	SAFAAITH	
	HUSSAIN A	
58.	PAVITHRA R K	TCS NINJA
59.	PRASHANTH M	TCS NINJA
60.	RINI JOHN	TCS NINJA
61.	SATHIYENDRAN M	TCS NINJA

	S.No Name of the students		Name of the company		
	62. SEETHARAMAN J R		TCS NINJA		
	63.	SUSHMITA M S	TCS NINJA		
	64.	SWETHA VILASHINI B	TCS NINJA		
	65.	VARUN SEKAR V G	TCS NINJA		
	66.	HARINI.B.R	TCS NINJA		
		BOSE KANNAN M	THINKSYNQ		
	67.		SOLUTIONS PVT. LTD.		
	68.	BOSE KANNAN M	TVS SUNDARAM FASTENERS		
	69.	VINOTH S	VALUED EPISTEMICS PVT LTD		
	70	HEMANTH	WHIRLDATA		
	70.	KUMAR M	SCIENCE		
	71.	NIVEDHITHA M	WIPRO		
	72.	KAVIN R M	WIPRO		
	73.	BENEDICT ELIGIUS J	ZOHO CORPORATION		
	74.	THABASSUM ASHIFFA I	ZOHO CORPORATION		
PG S	Student				
	S.No	Name of the students	Name of the company		
	1.	V R HEMASRI RAMYA	ROBERT BOSCH		
	2. SUDHARNA VINAYAGAM		ROBERT BOSCH		
Congratulations to all the placed students.					

CLUB ACTIVITIES

Energy Club:



EVENT 1: Doodle The DoodleTHEME: Life In QuarantineNo.of.Participants: 25EVENT 2: Spill The InkTHEME: An Untold Journeyof Your Life

No.of.Participants: 40

The ultimate aim of the event is to support innovation and fresh ideas from young engineering minds. Cash prizes were awarded to the winners.

ARTICLES

INVENTIONS IN THE FIELD OF ELECTRICAL AND ELECTRONICS:

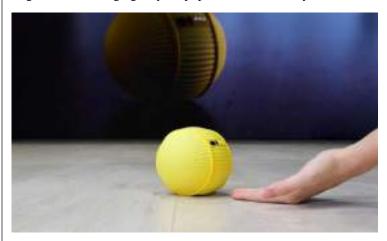


FIXD is a relatively new innovative gadget that will save you a ton of cash on unnecessary car repairs. It can also help you clear up any doubt what that mysterious "check engine" warning light has appeared again.

Simply plug it into your car's diagnostics port and the little device will tell exactly what the problem is in no time. It only works on cars built since 1996 and has already sold over 50 million dollars in sales in 2018.

Samsung Ballie:

Samsung's Ballie is an interesting combination between smart home device and robotic companion. The ball-shaped gadget, equipped with cameras and sensors used to follow you around, can control various smart home features, take photos, send you updates about your home when you're away, and even function as a fitness assistant. Designed to be an "all-around life companion," Ballie might be cute enough give your pup a run for its money.



Dell Alienware Concept UFO:

Dell showed off an interesting concept when it comes to PC gaming on the go with the Intel-powered Alienware Concept UFO. The portable Windows PC, which mirrors the form factor of the Nintendo Switch, features an 8-inch display, kickstand, detachable controllers, and support for external devices like displays or a keyboard and mouse. Sure, it's still a concept device, and Dell is mum on specifics, but a more portable PC gaming experience that doesn't require a laptop might be just what many gamers need to enjoy their favorite titles on the go.



Segway S-Pod:

Professor Xavier cosplayers, rejoice! Segway's S-Pod is, essentially, a two-wheeled self-balancing stroller that can hit speeds of up to 24 miles per hour. Unlike other Segway products, you control the S-Pod with a joystick instead of your body, making for a more relaxing jaunt around town. The S-Pod is outfitted with smart safety features, too, like automatic braking on turns and exterior lights that double as turn signals.



Fisker Ocean:

Electric vehicle maker Fisker is using its luxury SUV, the Ocean, to show the competition how to make eco-friendly vehicles. Fisker claims the Ocean is the world's "most sustainable vehicle," supposedly due to its all-electric drivetrain, vegan leather interior, and use of recycled materials like nylon and polyester. The Ocean also features a slick solar panel roof for passive battery charging, as well as a cool "California Mode" that rolls down every window for an openair feeling without compromising safety.



GALLERY





MALINI PREETHA.S- III A



KAVITHA.R-III A





KEERTHIKA.S-III A DIVYADHARSHINI.V-II A



SHREENITHI.V-III B



JEYANTHI YEGAMMAI S-II A



KOWSALYA.G-II B

ARTICLE:

An untold journey of my life

The journey that lies ahead She does not fear She is ready for the next chapter Ready to discover more of herself. With an open mind, and a courageous heart she travels the road confidently.. unwavering and determined, she grows infinitely stronger with each step.... My world......my mom ♥

--KEERTHIKA.S-III A

GALLERY

PAPER CRAFT & ART:

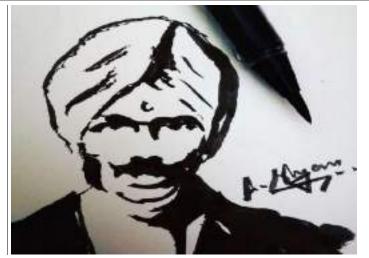




AFRIN.S- IV A



JAISHREE.S-IV A



SHYAM SUNDAR.A-IV B



PRAVEEN KUMAR.R- IV B



AMUDHA.M-III A

"Energy is liberated matter, matter is You can't see it, but you can see the light"- Gregory Dickow









International e-Conference on CHALLENGES AND OPPORTUNITIES IN RENEWABLE ENERGY, SMART SYSTEMS AND E-MOBILITY (ICCORSE- 2020)



Organized by
Department of Electrical & Electronics Engineering

30th - 31st July, 2020

https:eee.srmeaswari.ac.in