

<u>Student Editors Board:</u> *Chief Editor:* Mr Dinesh R IV-EEE Mr Guna III-EEE

Designer: E Ms Vaishnavi II-EEE <u>Staff Editors Board:</u> <u>Board member 1:</u> Dr J Maalmarugan-HoD

<u>Board member 2:</u> Mr K Muthuraj-AP



SRIET Profile:

Sri Ranganathar Institute of Engineering and Technology (SRIET) came into existence in 2011, out of an ardent desire of **Dr. V. Narayanasamy** to contribute manifold to the society that nurtured him. SRIET is an Innovative Educational Institution where the curiosity, creativity and intellectual joy of students all drive to academic excellence. Our Institution provides complex problem-solving skill and imbibes service to the public good. SRIET is defined by strong association and working in ways that excel in traditional boundaries.

SRIET's academic excellence is rooted in a student-centred model of learning. The Curriculum is an accurate approach to education that pushes the students to be creative thinkers, intellectual risk-takers and entrepreneurial problem-solvers. SRIET leaves students prepared to thrive as independent and innovative leaders and equipped with the tools they need to become the next generation of leaders in their respective fields.

VISION OF THE INSTITUTE:

To be a Unique Institution that Enables Students to Become Contributing Humans towards Technology, Business and Sustainability of Natural World.

MISSION OF THE INSTITUTE:

Our Mission is to Facilitate Students with Harmonious Teaching and Experiential Learning by Integrating Industrial and Societal Needs with Curriculum, Providing Requisite Infrastructure Facilities and Imbibing Ethical Values.

PRINCIPAL'S DESK:

"Welcome to our SRIET, on behalf of all of our faculty, staff and students... In today's competitive global world, a skilled technical education is becoming increasingly important for future success.As Principal, I am extremely proud of our college's rich tradition of providing valuable, experience-based engineering education since its inception. Our programs prepare students to become leaders with the moral depth and intellectual rigor required to meet the challenges of a critical societal transition. We offer individualized, high-quality education delivered by an experienced and well-qualified faculty who bring objectivity and a practical focus to their classrooms. We attract students from a wide range of ethnic and cultural backgrounds, resulting in a vibrant and stimulating



classroom environment. With this message, I'd like to wish all of our students, alumni, and future students a very positive and effective experience together."

> Warm regards, Dr K P Arulshri, M.E., Ph. D.,Principal





ABOUT THE DEPARTMENT:

Electrical engineers synthesize science, mathematics, technology, and application-oriented designs into world-class consumer products, timely microprocessors, state-of-the-art computers, advanced electronic components, and much more. From cutting-edge technology revolutions to real life applications, the innovations of electrical engineers continue to lead the future and elevate the standards in the marketplace. With a shortage of electrical engineering talent in the job market, the demand for graduates with an electrical engineering degree remains at an all-time high.

VISION OF THE DEPARTMENT:

To enable our students to have a higher degree of competence in enhancing efficiency in energizing the world and maximizing green energy.

MISSION OF THE DEPARTMENT:

- To facilitate students to adept latest technology in addressing the challenges in transmission and distribution of electricity.
- > To engage and collaborate with education and experience towards building unified technology.
- To kindle the students to innovate in designing and developing new products and process that add value to customers.
- > To inculcate the need of green energy in the minds of students to sustain Mother nature.

HOD'S DESK:

I believe my role as an educator is to guide and nurture the next generation to establish skills to achieve health, respect, prosperity and fulfilment.

The ability to be innovative and creative is important to me. I enjoy being challenged and inspired by the people around me. I am an avoid supporter of effective and innovative professional development that encourages teachers to be reflective and to

Dr. J MAALMARUGAN M.E., Ph.D., Professor, HOD Email: maalmarugan@sriet.ac.in Mobile: 84899 29865

continuously examine our practice to provide quality teaching and learning for each student. My role as head of the department is to keep up with latest trends and research and be an active partner in the college's professional development.







PROGRAM OUTCOMES (PO)

PO1: Engineering knowledge

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

PO2: 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.

PO3: 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.

PO5: Modern tool usage

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling 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 (PSO)

PSO1

Capable to provide socially acceptable technical solutions to complex electrical engineering problems with the application of modern and appropriate techniques for sustainable development.

PSO₂

Comprehend, analyses and design products in core domains namely power, control and energy to meet the ever-changing demands of industry and society.

Bloom's taxonomy

Bloom's taxonomy was developed to provide a common language for teachers to discuss and exchange learning and assessment methods. Specific learning outcomes can be derived from the taxonomy, though it is most commonly used to assess learning on a variety of cognitive levels.





LABORATORY SPECIFIC:

Power Electronics and Drives Laboratory

It consists of different kinds of demo kits such as SCR characteristics, study kit for D.C motor control using chopper and necessary simulation software.

The lab is equipped with all the power electronic converters, DSP and FPGA based DC and AC Drives, Digital Integrated kits, Power supplies.



Electrical Machines Laboratory

Imparts the knowledge about characteristics and behaviour of the DC and AC Machines.

Well established with all kinds of motors, generators and latest Drives.





Control System Laboratory

Lab is equipped with control system kits like DC servomotor and synchros.

- Well established with instrumentation kits like LVDT, strain guage, thermistor and thermocouple
- kit

Provides an opportunity for the students to implement the control system concepts



Power System Simulation Laboratory

Furnished with high speed internet facilities in all the systems.

Software like ETABS in this lab interface the mathematical computing visualization and a powerful language to provide a flexible environment for technical computing in the areas of power electronics, control system, power system and electronic circuits.





Engineering Practices Laboratory

To impart the practical knowledge to the students about the Domestic Appliances, wiring, transformers DC machines, AC machines and basic electronic circuits.

Established with the basic tools, machines and accessories to provide service to all first year students



Renewable Energy Laboratory

The Renewable energy laboratory is equipped with solar photovoltaic training and research system, solar thermal training system, solar concentrator training system and wind energy training system.





Students Activity:

Students Participation Details					
Academic Year	Conference	Seminar/ Paper presentation	Workshop	Internship/ Training	Other Events
CAY (2020-2021)	10	6	4	3	7

- > Rohini. R form IV EEE attended Webinar on "Careers in Banking and Financial Services"
- Rohini. R attended Webinar on "Barriers and Opportunities in Renewable Cooling and Heating Systems"
- Rohini. R attended E-Quiz organized by Rathinam Technical Campus and got 84% on 27.08.2020.
- Sivasona C attended webinar on "Real time Implementation of Voltage Regulation of Power System using dSPACE simulator"
- Agunan A attended Guest Lecture on "Advancement in Control Engineering with MATLAB Application"
- Aswinprabhu K attended Guest Lecture on "Advancement in Control Engineering with MATLAB Application"
- Shanmugapriya S attended Guest Lecture on "Advancement in Control Engineering with MATLAB Application"
- Mathankumar M attended Guest Lecture on "Advancement in Control Engineering with MATLAB Application"
- A. Dharmalingam III year participated in Workshop "How to become a student Entrepreneur"
- S.Balamurugan and J.Pandiaraj III year Completed their INTERNSHIP at ABEE INDUSTRIALS, COIMBATORE
- R.Rahul II year participated in one-week AICTE sponsored online SSTP on "Machine Learning and its Applications".
- R.Rahul II year Participated in Webinar on "My Story from Being an Enthusiastic Engineer to a Passionate Entrepreneur"
- Mohanapriya M, Vertivel S from IV EEE Got placement offer from "KMIL Motherson Group of Companies"

- Gunalan, Jegan, Nithishkumar and Mithunchakkaravarthy form IV EEE got Placement offer from ROOTS CAST PRIVATE LTD, Coimbatore.
- > Pandiaraj N got placement offer from "Robert Bosch", Coimbatore on 27.02.2021.
- Nandhini D from III EEE participated in Webinar on "Dell-ICC Factory Innovation Tour" during 08.05.2021 by Mohamed Sathak Engineering College.
- Pandiaraj N from Final EEE attended Quiz Series on Electric Vechiles-XVII conducted by KPR Institute of Engineering & Technology during 19.06.2021.

Learn Beyond (Autonomous, NAAC "A")	RESTRICTORS CORRES C
Avinashi Road, Arasur, Coimbatore. Excellence	
Department of Electrical and E	lectronics Engineering
This is to certify t	hat
PANDIARA	
from	ineering and Technology
has participated in "Quiz Series on E	Electric Vehicles -XVII"
has participated in "Quiz Series on E on 19.06.2021 and scored	Electric Vehicles -XVII" 100%
has participated in "Quiz Series on E on 19.06.2021 and scored	Electric Vehicles -XVII" 100% J
has participated in "Quiz Series on E on 19.06.2021 and scored کت. V. Kumar Chinnaiyan HoD, EEE	tlectric Vehicles -XVII" 100% d پراج ^ل Dr.M.Akila Principal

Program Organized:

- EEE Organized one day National Level webinar on "Careers in Banking & Financial Services"
- EEE organized 1 day FDP on "Ample Platform e-learning"
- Organized Guest Lecture on "Smart Grid Automation"
- Guest Lecture on "Advancement in Control Engineering with MATLAB Application"
- > Organized one day National Level Webinar on "How to Build a Successful Startup"
- Organized One Day Webinar on "New Dimension of Higher Education-Opportunities for Innovation and Entrepreneurship"
- Organized Seminar cum Hands on Training on "Smart Manufacturing"
- **EEE** Initiated GATE coaching through whatsapp for II and III year students
- > Started Skill Development Training Program (SDTP) for III-year EEE students
- Organized One day Guest Lecture on "Unleash your Potential to Become a Successful Entrepreneur"
- **EEE** organized a Seminar on "Introduction to E-Vehicle System" on 19.4.2021.









FDP/STTP/Seminar/Workshops:

SRIET

- Mr. P. Meenakshi Sundaram participated 3days Online FDP on "Intellectual Property Rights-Emphasis on patent Drafting and research Innovation"
- Mr.D.Palanivel participated 3days Online FDP on "Intellectual Property Rights-Emphasis on patent Drafting and research Innovation"
- Mrs.D.Nivea participated 3days Online FDP on "Intellectual Property Rights-Emphasis on patent Drafting and research Innovation"
- Mr. K. Muthuraj participated 3days Online FDP on "Intellectual Property Rights-Emphasis on patent Drafting and research Innovation"
- Dr.J.Maalmarugan participated in Web conference on "Diverse Computing: Agro- Socio-Health-Bossiness Revolution"
- Mr.D.Palanivel attended webinar on "Women Empowerment"
- Mrs. K. Bagyalakshmi organized a online Webinar on "National Education policy 2020 through UBA cell"
- Mrs. M Shanthi motivated 12 students to participate Webinar on "National Education policy 2020 through UBA cell"
- Mrs D. Nivea attended TUTEA One day National Workshop on "Creation of Educational Video with Video Editor"
- Mr D. Palanivel participated and successfully completed the six days AICTE Sponsored Online STTP on "Challenges and Opportunities in Implementing IoT and Machine Learning for Smart Grid Distribution System (Phase 1)"
- Dr.J.Maalmarugan published a paper titled on Massive Waste Management for Smart Cities under the Journal of Huazhong University of Science and Technology Volume: 50 Issue 06-2021 Paper ID: HST-0621-522 indexed by Scopus.
- Mr. Alex George attended Webinar on "Recent trends in SMART GRID"
- Mr. Alex George participated in AICTE-sponsored FDP on "Computer vision and Image processing"



PARTECHSOLUTIONS

CERTIFICATE OF PARTICIPATION

NAME : Prof.MEENAKSHI SUNDARAM P COLLEGE : SRI RANGANTHAR INSTITUTE OF ENGINEERING & TECHNOLOGY has Successfully Completed MASTER CLASS ON POWER ELECTRONICS USING MATLAB(S DAYS)

at Pantech Prolabs India Pvt Ltd

From : APRIL 12,2021 to : APRIL 16,2021

M.MALAIYAPPAN DIRECTOR PANTECHSOLUTIONS



Resource Person/Organizing committee Member/Participant for "ENERGY MANAGEMENT AND CONTROL SYSTEM FOR SMART RENEWABLE ENERGY REMOTE POWER GENERATION" Phase III Sponsored by AICTE and held at Annamacharya Institute of Technology and Sciences, Rajampet. Ref. No. 34-66/399/FDC/STTP/Policy-1/2019-20 Participant ID: PH3AITS1046 Wallthes Grow Marger

Dr. M. Padma Lalitha Convenor & HoD E Department, AITS, Rajampet

Gnw. Narayana Dr. S. M. V. Narayana Principal AITS, Rajampet

12 | Page





Industrial Visit:



Students undergone industrial visit to "Sri Ranganathar Industries" at Kariyampalayam to learn about "solar power generation and utilization".



Placement Achievements:

S.no	Reg No	Name	Company	Salary
1	712017105001	AJITH KUMAR D	SM Infotechs	1,44,000
1.	/1391/103001	ajith647421kumar@gmail.com	sminfotechsservices@gmail.com	P/A
2	712017105006	ARUNKUMAR V	Viya InfoTech	1,44,000
2. /1391/105006	arunraina1499@gmail.com	business@viyahhitech.com	P/A	
		DHEENA THAVALAN I	Team Pink Technologies &	1 68 000
3.	713917105009	dheenamccullam003@gmail.com	Services	1,00,000 D/A
		difeenanceunanio05@gmail.com	salesteampink@gmail.com	I/A
1	712017105012	GUHAN V	Viya InfoTech	1,44,000
4.	/1391/103012	guhanvinayagam2000@gmail.com	business@viyahhitech.com	P/A
5	713017105014	HARISH R	Viya InfoTech	1,44,000
5.	713917103014	harishlatha5014@gmail.com	business@viyahhitech.com	P/A
6	712017105020	KEERTHANA A	Raja Tex Pumps	1,29,000
0.	/1391/103020	thanakeer45151@gmail.com	rajatexpumpsindia@gmail.com	P/A
7	713017105023	MARUTHAMUTHU S	Raja Tex Pumps	1,29,000
/.	713917103023	maruthamuthu.s28@gmail.com	rajatexpumpsindia@gmail.com	P/A
8	713917105024	MITHUNCHAKKARAVARTHI S	Raja Tex Pumps	1,29,000
0.	/15/1/105024	mithunchakkaravarthi007@gmail.com	rajatexpumpsindia@gmail.com	P/A
9	713917105025	MOHANA PRIYA M	Indigo Airlines Pvt Ltd	1,44,000
).	/15/1/105025	mohana1972000@gmail.com	nodalofficer@goindia.in	P/A
10	0 712017105027	NAVEENKUMAR N	Raja Tex Pumps	1,29,000
10.	/15/1/105027	kumarnaveen2771@gmail.com	rajatexpumpsindia@gmail.com	P/A
11	713917105029	PANDIARAJ N	SM Infotechs	1,44,000
11.	713717103027	pandiarajn265@gmail.com	sminfotechsservices@gmail.com	P/A
		RAGHULA	Team Pink Technologies &	1 68 000
12.	713917105033	anbu subha rk@gmail.com	Services	P/A
			salesteampink@gmail.com	1/11
13	713917105040	STELLA N	Viya InfoTech	1,44,000
10.	/13/1/102010	stellaeee2000@gmail.com	business@viyahhitech.com	P/A
		SWETHA N	Team Pink Technologies &	1.68.000
14.	713917105043)43 swethadoll27@gmail.com	Services	P/A
	C P P P P P P P P P P P P P P P P P P P		salesteampink@gmail.com	
15.	713917105045	THINAKARAN S	Raja Tex Pumps	1,29,000
		ssthina2000@gmail.com	rajatexpumpsindia@gmail.com	P/A
1.5	713917105047	VETRIVEL S	Team Pink Technologies &	1.68.000
16.		vetri150400@gmail.com	Services	P/A
			salesteampink@gmail.com	1 20 000
17.	713917105048	VIGNESH M	Raja Tex Pumps	1,29,000
		vickystarmd@gmail.com	rajatexpumpsindia@gmail.com	P/A
18.	713917105301	ANUSHIYA C	viya Infolech	1,44,000
		anusniyachandran94423@gmail.com	business@viyahhitech.com	P/A
19.	713917105306	LOGESHKUMAR C	SM Infotechs	1,44,000
		logesnkumarchinnaraj@gmail.com	sminfotechsservices@gmail.com	P/A



Placement Achievements:





MoU Signed:





Student Project Details:

S.No.	Reg. No.	Name of the Student Title of the Project		Area/Domain/ Tool
1.	713917105010	DINESH R		F 1 11 1
2.	713917105020	KEERTHANA A	Accident Detection and Ambulance	System & IoT
3.	713917105014	HARISH R	rescue system using for	
4.	713917105023	MARUTHAMUTHU S		ІоТ
5.	7139171050 <mark>28</mark>	NITHISHKUMAR M	IoT based Smart Health Monitoring	
6.	713917105025	MOHANA PRIYA M	Smart Cities	
7.	713917105034	RAGUVARAN S		
8.	713917105038	SANKAR E		IoT
9.	713917105043	SWETHA N	In The and Solar Street Light Control	
10.	71391710 <mark>5048</mark>	VIGNESH.M	Tor based Solar Street Light Control	
11.	713917105306	LOGESH KUMAR C		
12.	713917105005	ARUNKUMAR N		ІоТ
13.	713917105011	GOWRISANKAR R	Multi-Span Greenhouse Monitoring	
14.	713917105035	RAMYA KRISHNA N	and Controlling System using IoT	
15.	713917105017	JEGAN N		
16.	713917105029	PANDIARAJ N	Highway Cruise Control System for	Embedded System
17.	713917105039	SONIYAGANDHI T	Vehicles using low power RF	
18.	713917105050	VINITH KUMAR S	Technology and CAN Protocol	



19.	713917105006	ARUNKUMAR V		
20.	713917105012	GUHAN V		IoT
21.	713917105019	KARMEGAN S	Design and Implementation of Smart	
22.	713917105044	T <mark>HANGAMANI P</mark>	Navigation System for Visually	
23.	713917105024	MITHUN CHAKKARAVARTHI	Impaired people using for	
24.	713917105032	PUSHPARAJ K		Embedded System
25.	713917105036	ROHINI R	Embedded based Smart Helmet	
26.	713917105045	THINAKARAN S	Arduino	
27.	713917105053	VISWANATH S		
28.	713917105009	DHEENA THAYALAN J		Power System
29.	713917105013	GUNALAN B	Voltage Sag and Swell mitigation by	
30.	713917105037	SANGEETHA S	Power system	
31.	713917105041	SUBBULAKSHMI L		
32.	713917105001	AJITH KUMAR D		Power System
33.	713917105027	NAVEEN KUMAR N	Protection of Over Voltage and	
34.	713917105301	ANNUSUYA C	Home Appliances	
35.	713917105307	PHILAMINA JABARANI		
36.	713917105033	RAGHUL A		ІоТ
37.	713917105040	STELLA N	Technology	
38.	713917105047	VETRIVEL S	reemiology	

Student's Model:





Technical Message:

John Hopkinson, FRS, (27 July 1849 – 27 August 1898) was a British physicist, electrical engineer, Fellow of the Royal Society and President of the IEE (now the IET) twice in 1890 and 1896. He invented the three-wire (three-phase) system for the distribution of electrical power, for which he was granted a patent in 1882. He also worked in many areas of electromagnetism and electrostatics, and in 1890 was appointed professor of electrical engineering at King's College London, where he was also director of the Siemens Laboratory. In 1883 Hopkinson showed mathematically that it was possible to connect two alternating current dynamos in parallel, a problem that had long bedevilled electrical engineers. He also studied magnetic permeability at high temperature, and discovered what was later called the Hopkinson peak effect











DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING