

2022

NEWSLETTER

EDITION-1

1)	About	1
	• College	1
	• Department	2
2)	Messages	4
	Editor in Cheif	4
	HOD's Message	5
	• Faculty's Message	6
	Alumni's Message	6
3)	Faculty's Corner	7
-)	Achievements	6
	Text Books	8
	• Patents	9
	 Publications 	10
	• Certifications	14
4)	Student's Corner	19
	• Events	19
	 Paper Publications 	22
	Certification Courses	22
	• Sports • Placements	23 24
	• Placements	24
5)	Activities Corner	25
	Industrial Visits	25
	Events Conducted	28
	Student Art	30
6)	Newsletter Editorial	
	Board	31

About college

St. Martin's Engineering College (SMEC) is established in the year 2002 by St. Martin's Children's Education Society. SMEC offers UG and PG courses such as B.Tech in CSE, Artificial Intelligence and Data Science, CSE- AI & ML, Computer Science and Design, Artificial Intelligence and Machine Learning, IT, ECE, EEE, MECHANICAL, CIVIL and M.Tech - Artificial Intelligence and Data Science with an intake of 1080 (UG) and 18 (PG) students per year.

SMEC is awarded with prestigious grade A+ from NAAC, UGC Paramarsh, NBA accredited, ISO certified, DSIR Recognition, Remote centre of IIT Bombay, Member of CII and MSME certification. It is Certified as AAA+ by Careers 360; Ranked 2nd by Wikipedia Telangana, ranked 3rd by Competition Success Review; ATAL ranked, Ranked as Best Engineering Colleges of India by Career Connect. The best part to announce that 93 books, 6228+ research papers and 187+ patents are published by staff and students. Institution has signed more than 88+ MoUs with worldwide major companies' and institutions. The college is the recipient of glorious Governor Award thrice; The Engineering Educators' Award 2019; NIRDPR Award from Govt. of India; IDF Best Partner Award; Dewang Mehta Award; TCS ION Award; CSI Award from Students Chapter; Best Innovation by Federation of Gujarat Industries and Street Cause-Most Dedicated Division. It is being declared as Best Sports College by Stumagz, Telangana, National Leadership Excellence Award 2019 by ICCI. The crowning glory in academic excellence was achieved by bagging gold medals from university every year. Adding, 138 innovative products are developed by students and faculty.

The remarkable achievement by the faculty members of the college is that they have published 148+ books, 8800+ research papers, 161+ patents, 28+ copyrights and 40,000+ international certification courses. SMEC has a strong vision of offering world class training to the promising Engineers and Management professionals. SMEC is situated in an eco-friendly environment, the college has the best infrastructure. This is the only college in Telangana which got approved for the NCC boys and girls wing.





About Department

The Department of Electrical and Electronics Engineering (EEE) started in the year 2002 with an intake of 60. The Department is endeavouring to produce highly trained and capable engineers, who can accept the challenges of the real world. The Department focuses on uncompromising academic standards in imparting both theoretical and practical instructions with a view to prepare professional engineers. The B. Tech (Electrical and Electronics Engineering) Program has been accredited by the National Board of Accreditation (NBA) since 2008.

The faculty strives to foster and encourage a teaching methodology that is both practical and theoretical in approach tuning to the requirements of the latest developments in research and industry in the field of Electrical and Electronics Engineering. The Department has its own Technical Association, BETA to enhance the professional competence of students. The association organizes activities like lectures by distinguished industrialists, academicians, and practitioners of the profession, competitions for the students throughout the year. The association also conducts Seminars, Guest Lectures, and Workshops. Through this, the students will learn how to participate in these activities and get awareness of technical presentation and participation in group discussions.

Industrial visits are regularly organized to enhance the practical knowledge of the students and keep them abreast with the latest technological applications in various industries so that their employability skills are enhanced. Over the last three years, the department organised 27 Industrial visits and 136+ Internships for the B. Tech students.







Department Vision & Mission:

Vision

Develop Electrical and Electronics Engineering department as a centre of excellence by imparting quality education to the students, to enable them globally competitive.



Mission



Create an environment where students excel in skill and knowledge development, them as successful convert entrepreneurs with managerial ability, to train them to have all round personality development to work efficiently in any team, and to provide a plat form for interaction between academic scholars and industry for best research achievements.



Dear all,

Greetings from St. Martin's Engineering College.

It gives me an immense pleasure to share with you the highlights of Electrical and Electronics Engineering (EEE) Department. Department of EEE has done a fabulous job of creating this informative and valuable newsletter EN'LIGHT'. This edition of the Newsletter reports the significant activities carried out by faculty, students and Alumni in the areas of teaching and Learning, Research and Development and Industry Interaction, Sports and Cultural activities. The department has organised around 14 technical events like conferences, Guest Lectures, Workshops, Seminars, and Industrial Visits etc. in past one year to enhance the knowledge of the students. The faculty and the students have contributed their research work in various areas of Electrical and Electronics resulting 56 publications, 4 books and 6 patents in the last one year. I hope this effort will definitely enrich our environment with academic diligence. I wish all the best for the academic, research and developmental activities in the department to achieve greater heights. I appreciate the efforts put in by editorial board of Electrical and Electronics Engineering to bring out the newsletter EN'LIGHT'. My best wishes to the department for the future endeavours.

HOD Message



Warm Greetings!!

I am very much pleased to initiate our Department's official newsletter EN'LIGHT'. The newsletter invites a wider readership in the institution. The name and fame of the department and the institution depends on the caliber and achievements of the students and faculty members. The essential purpose of a Department Newsletter EN'LIGHT' is to inform, engage, inspire and entertain a diverse readership-including Alumni, parents, students, faculty of the department and college. We continued to excel in teaching, research, cultural and service activities. In this year, the department has organized 3 workshops, 7 seminars, and 4 industrial visits. The department actively involves in publishing 56 research papers and 6 patents in one year. I wish to record my heartly congratulations to those who have brought laurels to the Department, appreciate all of you for working together as a team. Let this newsletter be a forum to exhibit the potential of students and faculty members with their literary skills and innovative ideas.

Faculty Message:

I am very happy to know that our EEE department is bringing out its first newsletter, EN'LIGHT' which highlights the academic activities, achievements and progress of faculties and students. I am fortunate to be a part of the various technical and research activities conducted by EEE department. I wish the department should progress more efficiently in future times.



Mr. CH. SRINIVAS Associate Professor Department of EEE

Alumni Message:



Hello Everyone,

I am G. Achyuth Reddy, Managing Director at SUREGROW FARMS (OPC Pvt Ltd.). I pursued my B.Tech. in the Department of Electrical and Electronics Engineering, St. Martin's Engineering College from 2013-2017. Currently, I am owning a company, SUREGROW Farms Pvt. Ltd. which produces agricultural and poultry products. I am very happy to be a part of this first edition newsletter EN'LIGHT'. As a student of Electrical and Electronics Engineering Department, I have participated in many technical events like TAM and I have gained a lot of technical and administrational skills. As an alumni, I am proud to see the department success in all the areas. I have signed a MOU with the department and I am working closely with the department in enhancing student skills and improving their knowledge in Electrical Technology. It's a great privilege to share my entrepreneurial experience with the students of the department in the form guest lecture. As an alumni, I am always ready to contribute to my department in all aspects. I wish more progress to the department in future times.





FACULTY CORNER

FACULTY ACHEIVEMENTS:

Our EEE department has been glorified with an award for organizing more number of technical events/symposiums/international conferences blishing a greater number of research articles and encouraging the faculty members to upgrade their knowledge in advance technology motivating the staff and students update their expertise as well as promoting the SMECs quality educational services.





ACHEIVEMENT OF FACULTY:



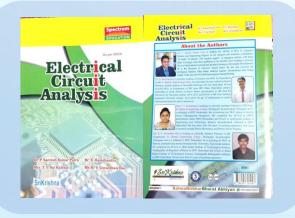
Mr. N Daniel Manoj, Assistant Professor from the department of Electrical & Electronics Engineering has been appreciated with award for delivering his duties at placement with utmost commitment and contributing the best efforts for **SMECs** glory.

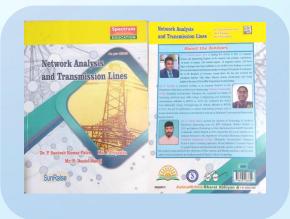


TEXTBOOKS:

The following are the list of Textbooks with ISBN numbers Published by the faculty:

S. No. Name of Authors		Title of Book and Book Chapters	Publication Detail (Publisher, Edition, ISBN)	Month & Year
1.	Dr. P. Santosh Kumar Patra, Dr. N. Ramchandra, Mrs. T.V. Sai Kalyani, Mr. K.V. Govardhan Rao	Electrical Circuit Analysis	Sri Krishna Techno Publishers, 978-81-953919- 4-3	Nov'2021
Dr. P. Santosh Kumar Patra, Ms. P. Priyanka, Mr.N. Daniel Manoj		Network Analysis and Transmission Lines	M/s SunRaise International Publishers, 978-81-952678- 5-9	Nov'2021
3.	Dr. P. Santosh Kumar Patra, Ch. Nirosha& Dr N. Ramchandra	Electromagnetic Fields	Spectrum, ISBN: 978-93- 92311-01	Jan'2022
4.	Dr. N. Ramchandra, Mr. CH. Srinivas, Mr. V. Bharath Kumar	Electrical Machines- I	M/s Seven Hills Interntaional Publishers, ISBN-978-81-953918-4-4	Jan'2022
5.	Dr N. Ramchandra, Mr. CH. Srinivas, Mrs. S. Trilochana	Basic Electrical Engineering	Spectrum, ISBN: 978-93- 83470-31-0	Jun'2022











PATENTS:

The faculty of the department has filed and published 6 patents in the last 1 year.

Mr. G. Sridhar Babu, Mr. N. Daniel Manoj, Mr. B. Ganesh Reddy, Mr. V. Bharath Kumar, and Mrs. G. Esha filed a patent titled "Electricity Backup with Super Capacitors for Television" with the detail of 202041027546, DoF 29-06-2020, DoP 14-08-2020.

Dr. N. Ramchandra, Mr. V. Sunil.Kumar, Mrs. Sangeetha C. N, Mr. T. Penchalaiah, Ms. Santosh Kumari, Ms. CH. Nirosha filed a patent titled "Mission Agriculture" with the patent detail of 202041028829, DoF 07-07-2020, DoP 31-07-2020.

Dr. N. Ramchandra, Mr. CH. Srinivas, Mrs. S. Trilochana, Mrs. T.V. Sai Kalyani, Mr. K. V. Govardhan Rao, Mr. V.Vishnu Vardhan invented "Hybrid Electric Vehicle" with the patent detail of 202041028152, DoF 02-07-2020, DoP 10-07-2020.

Dr. N. Ramchandra. invented "Design and Fabrication of IOT based Solar Agriculture Weeder" with the patent detail of 202141023740, DoF 28-05-2021, DoP 11-06-2021.

Dr. N. Ramchandra, Mrs. T.V.Sai Kalyani, Mrs. S.Trilochana, Mrs. G.Esha, Ms. CH.Nirosha invented "Alcohol Detection with messaging System and Vehicle Control" with the patent detail of 202141031252 DoF 12-07-2021. DoP 16-07-2021.

Dr. N. Ramchandra invented "Design and Fabrication of Electric Smart bike with Voice Recognition" with the patent detail of 202041018099, DoF 28-04-2020, DoP 29-05-2020.













PUBLICATIONS:

The faculty is actively involved in the research. Over 56 Journals have been published for the past 1 year:

S. No.	Name of Authors	Title of the Research Article
21101	Dr.Ramchandra Nittala	A New PV-FC-Based Autonomous DC Microgrid Power Management Method.
		Stability analysis and efficiency improvement of IPFC using latest PR controller.
		DC Power Systems with Constant Power loads.
		Crop Shield System with IoT Technology Surveillance Auto.
1		Electronics and Power Electronics Devices in Dissipated Power Systems with Fuel cells.
		A Novel Control Strategy for Doubly Fed Induction Generator in Micro-Grid.
		On-Line and Off-Line Monitoring-Diagnosis System (MDS) for Power Transformers.
		New trends in active filters for power conditioning
2	Sridhar Babu Gurijala	Stability analysis and efficiency improvement of IPFC using latest PR controller.
		A Novel Design of Hybrid Energy Storage System for Electric Vehicles.
	Ch.Srinivas	Implementation of a Lithium-Ion Battery Charging Scheme with Multiple Levels.
3		Dynamic power and management control of pv pem fuel cell based stand alone ac microgrid using HES.
		A Novel Electric Vehicles Charging/Discharging Management Protocol Based on Queuing Model.
		Analysis, Design, and Implementation of A single-Stage Multi pulse Flexible-Topology Thyristor Rectifier for Battery Charging in Electric Vehicles.

		A Novel Efficient Vehicle Fast Charging System Structure With Lower Order Current Suppression Capability. Footstep Power Generation for Rural Energy Application to run A.C and
	C T 'L	D.C loads.
4	S.Trilochana	Single loop Control of a Common dc-Bus Configured Traction Motor Emulator using State Feedback Linearization Method.
		Comparison of Peak Power Tracking Based Electric Power System Architectures for CubeSats.
5	Daniel Manoj Nethala	Pwam Based Boost Converter/Inverter With Fuzzy Logic Controller For Hev/Ev Motor Drive Applications.
		Black Box in Automobiles to Prevent Accidents.
	T. V. Sai Kalyani K. V. Govardhan Rao	Health Analysis of Transformer Winding Insulation Through Thermal Monitoring and Fast Fourier Transform (FFT) Power Spectrum.
		An Improved Bidirectional dc/dc Converter with Split Battery Configuration for Electric Vehicle Battery Charging/Discharging.
6		On-Line and Off-Line Monitoring-Diagnosis System (MDS) for Power Transformers.
Control of a three-phase Hybrid Converter for a I		Control of a three-phase Hybrid Converter for a PV Charging Station.
		Preventing Transformer Saturation in Bidirectional Dual Active Bridge Buck-Boost DC/DC Converters.
		New Trends in Active Filters for Power Conditioning.
7		An Improved Bidirectional dc/dc Converter with Split Battery Configuration for Electric Vehicle Battery Charging/Discharging.
		Health Analysis of Transformer Winding Insulation Through Thermal Monitoring and Fast Fourier Transform (FFT) Power Spectrum.

		Health Analysis of Transformer Winding Insulation Through Thermal Monitoring and Fast Fourier Transform (FFT) Power Spectrum.
		New Trends in Active Filters for Power Conditioning.
		On-Line and Off-Line Monitoring-Diagnosis System (MDS) for Power Transformers.
		Comparative Study of Smooth Start of three phase Induction Motor using MATLAB Simulink.
		Management of Energy in Hybrid Electric Vehicle with Distinct Power Sources
8	Voruganti Bharath Kumar	Lithium-Ion Battery State-of-Charge Balancing with State-of-Health Awareness Capability.
		Modelling of Parallel Hybrid Transmission.
		Home Automation using Arduino.
	Vishnuvardhan Vadla	Setup of an Electric Car Charging Device with a PV Grid.
		Implementation of Smart Prepaid Energy Meter using IOT.
9		Hybrid Energy for Remote Islands from Peoples Independent Power Producers.
		Research on Communication Technology of Power Monitoring System Based on Medium Voltage Power Line Carrier and low Power wide Area Network.
		Lithium-Ion Battery State-of-Charge Balancing with State-of-Health Awareness Capability.
10	G.Esha	Analysis of Electric Vehicle of Wireless Charging System.
		Optimization and Management of Energy Power Flow in Hybrid Electrical Vehicles.
11	Ch.Nirosha	Modular Isolated Boost Converter With A New Harmonic Reduction Technique.
		IOT Smart Energy Grid.

			Analysis and Modelling of Wind Turbine Generators Considering Frequency Controls.
			Coordinated Robust Control of DFIG wind Turbine and PSS for Stablilization of power Oscillations Considering System Uncertainies.
	12 B		Residential Grid Integration of Solar Photovoltaics and Electric Vehicles.
		B.Sampath Kumar	Autonomous Power Management for Interlinked AC-DC Microgrids.
		13 P.Priyanka	A Novel WFS Based Multi Port DC- DC Converter With Minimal Switching Devices.
13	13		An Integrated Multiport DC-DC Converter with Electric Vehicle.
	Single-Stage Zeta-Sepicbased Multifunct	Single-Stage Zeta-Sepicbased Multifunctional Integrated Converter for Plugin Electric Vehicles.	
			Analysis of Electric Power Quality.
		4 T.Naveen Kumar	Evolutionary Optimization Technique for Optimal Placement of a Shunt FACTS Controller in a Java-Bali 24-bus Indonesian System.
	14		Autonomous Power Control and Management between Standalone DC Microgrids.
			A Compact Experimental Device for the Study of Transient mode in Electrical Circuits.
			Research on Interturn Short Circuit Fault Location of Rotor Winding in Synchronous Electric Machines.

CERTIFICATION COURSES

NPTEL Courses:

National Programme on Technology Enhanced Learning (NPTEL) is a project of MHRD initiated by seven Indian Institutes of Technology (Bombay, Delhi, Kanpur, Kharagpur, Madras, Guwahati and Roorkee) along with the Indian Institute of Science, Bangalore, to provide quality education to anyone interested in learning from the IITs.

A following faculty have successfully completed few courses such as

- Mr. G. SRIDHAR BABU (Introduction to ML, Introduction to IoT),
- Mr. CH. SRINIVAS (Introduction to IoT),
- Mr. V. BHARATH KUMAR (Cloud computing, Introduction to IoT, The joy of computing using python.),
- Ms. CH. NIROSHA (Introduction to IoT),
- Mr. B. SAMPATH KUMAR (Cloud computing, Introduction to IoT, The joy of computing using python.),
- Ms. P. PRIYANKA. (Introduction to IoT).





CERTIFICATION COURSES FROM VARIOUS AGENCIES:

To enhance the technical knowledge, the faculty has completed 89 certification courses from different agencies.

S.NO	NAME OF THE FACULTY	CERTIFICATE TYPE	CERTIFICATE AGENCY
	Dr. N. Ramchandra	Introduction to Programming with MATLAB	Coursera
		MATLAB Onramp	MathWorks
1		Deep Learning Onramp	MathWorks
		Artificial Neural Networks	European Open University
		Crisis Management	European Open University
		Introduction to Mechanical Engineering Design and manufacturing with fusion 360	Coursera
	Mr.G.Sridhar Babu	ESP8266&Micro python for IoT	Udemy
2		Learning To Teach Online	LinkedIn Learning
		MATLAB Onramp	MathWorks
		Learning MATLAB	LinkedIn Learning
	Mr. Ch Srinivas	Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360	Coursera
		ESP8266& Micro python for internet of things	Udemy
		Artificial neural Network	European Open University
		Embedded Systems	European Open University
3		GSM Technology	European Open University
3		JAVA Digital Image Processing	European Open University
		Analog Communication	European Open University
		Amplifiers in Electronics	European Open University
		5G Telecome Technology	European Open University
		Crisis Management	European Open University

	Mrs.S.Trilochana	Word Press Complete Website- Master class word press madeeasy	Udemy
		A case study on Covid-19 on India using Data Science and machine learning	IT ronix solutions
4		Ethical Hacking	IT ronix solutions
		google my business- complete listening optimisation technics	IT ronix solutions
		Data cleaning for machine learning with python and pandas	IT ronix solutions
		Sensors and Sensors Fundamentals	Udemy
		Planning Your Carrier	LinkedIn Learning
5	Sangeetha.C.N	Learning MATLAB	LinkedIn Learning
		R MArkdown&Rstudio(Latex)	LinkedIn Learning
		Introduction to 5G	LinkedIn Learning
	Mrs. T. V. Sai Kalyani	Introduction to Programming with MATLAB	Coursera
		MATLAB Onramp	MathWorks
6		Deep Learning Onramp	MathWorks
		Artificial Neural Networks	European Open University
		Crisis Management	European Open University
	Mr. K. V. Govardhan Rao	Introduction to Programming with MATLAB	Coursera
		MATLAB Onramp	MathWorks
7		Deep Learning Onramp	MathWorks
7		Artificial Neural Networks	European Open University
		Crisis Management	European Open University
		Virtual Storage Access Method	European Open University
		Learning MATLAB	LinkedIn Learning
8	Mr. Daniel Manoj	Learning To Teach Online	LinkedIn Learning
		MATLAB 2018 Essential Training	LinkedIn Learning

		Excel Quick Tips	LinkedIn Learning
		Electrical Systems: Panel Boards, Frequency Drives, and Transformers	LinkedIn Learning
		ESP8266& Micro python for internet of things	Udemy
		Word Press Complete Website Master Class Word Press Made Easy	Udemy
		Introduction to Mechanical Engineering Design and manufacturing with fusion 360	COURSERA
		ESP8266&Micro python for IoT	Udemy
9	Mr. T. Penchalaiah	MATLAB Onramp	MathWorks
		Machine learnig- unsupervisinglearnig	IT ronix solutions
		Getting started python	IT ronix solutions
	Mr.V.Bharath Kumar	Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360	Coursera
		ESP8266& Micro python for internet of things	Udemy
		Micro Processor	European Open University
		Artificial Neural Networks	European Open University
10		Basic Electronics	European Open University
		Digital Circuits	European Open University
		Engineering Mathematics	European Open University
		Engineering Matlab Applications	European Open University
		Embedded systems	European Open University
		GSM Technology	European Open University.
	Mr. V. Vishnuvardhan	Introduction to mechanical engineering design and manufacturing with fusion 360	Coursera
11		ESP8266& Micro python for internet of things	Udemy
		google my business- complete listening optimisation technics	IT ronix solutions

	spoken english quiz		IT ronix solutions		
		machine learnig- unsupervisinglearnig	IT ronix solutions		
		Data cleaning for machine learning with python and pandas	IT ronix solutions		
		Matlab onramp	math works		
12	Mrs.G.Esha	Getting started with python	IT ronix solutions		
		wordpress complete website master class-wordpressmadeasy	Udemy		
		ESP8266& Micro python for internet of things	Udemy		
		Introduction to mechanical engineering design and manufacturing with fusion 360	Coursera		
		Deep Learning Onramp	MathWorks		
13	Ms. CH. Nirosha	Image processing onramp	MathWorks		
		matlab-onramp	MathWorks		
		signal processing onramp	MathWorks		
	Mr.B.Sampath Kumar	wordpress complete website master class-wordpressmadeasy	Udemy		
		ESP8266& Micro python for internet of things	Udemy		
14		google my business- complete listening optimisation technics	IT ronix solutions		
		Data Cleaning for Macine Learning with Python and Pandas	IT ronix solutions		
		R Programming Language	IT ronix solutions		
	Ms. P.Priyanka	wordpress complete website master class-wordpressmadeasy	Udemy		
15		Automata theory	European Open University		
		I- mode mobile internet service	European Open University		
		Total quality management	European Open University		
		5G Telecom Technology	European Open University		
		Total productive maintenance	European Open University		

STUDENTS CORNER

Sympo Aagnyna:

A Two-Day National Level Technical Symposium "SYMPO **AAGNYA** 2021" was conducted to provide a common platform to all the students to exchange and share their experience and innovative ideas on the most widely used technical aspects. The main motive of this symposium is to provide an inter disciplinary platform for students from various fields to present their novel ideas. Following students Mr. M. Mahesh, Mr. T. Yashasri, Mr. SK. Salman from EEE department participated in circuit debugging, treasure hunt events.











TAM:

TAM stands for Technology Awareness Month, the events are conducted on generating awareness amongst students about the latest practical technologies in the Industry of Engineering. TAM focus on bringing light to the topics that are usually hind sighted by the students of Engineering. Students from 2nd year and 3rd year participated in Group Discussion and Quiz. The following students have won the participation certificates from the TAM, Mr. N. Sahil, Mr. T. Yashasri, Mr. Charan Tej, Mr. Venkata Rakesh, Mr. Ravuri Hemanth, Mr. G. Yogander Reddy, Mr. D. Vamshi Krishna, Mr. Shiva Shaunshnav, Mr. N. Satish Reddy, Mr. V. Sai Pranav Reddy, Mr. M. Vignesh, Ms. K. Ruchitha, Mr. K.Akshay

Smart India Hackathon:

Smart India Hackathon is a nationwide initiative to provide students with a platform to solve some of the pressing problems we face in our daily lives, and thus inculcate a culture of product innovation and a mind-set of problemsolving. A total of 18 students from 3rd year participated in this internal hackathon. The 1st team Energy Saviours have done their project on energy conservation using modern technologies. The members are Ms. K. Ruchitha, Mr. M. Vignesh, Mr. G. Surya Kiran, Ms. D. Sneha Sri, Ms. G. Greeshma, Ms. V. Saraswathi. The 2nd team Rising sparks have done their project on Automatic detection of face mask and social distancing. The team members are Mr. M. Mahesh, Mr. M. Nikhil, Mr. SK. Salman, Mr. V. Karthik Reddy, Mr. N. Sahil, Mr. K. Shravya. The 3rd team **Power hub** have done their project on chat bot using intelligence. artificial The team members are Mr. M. Sai Pradeep, Mr. K. Lokesh, Mr. B. Sriram, Mr. V. Koushik, Mr. V. Kalyan Kumar, Mr. V. Guru Venkat. It was indeed a proud moment for all of us and we were filled with happiness beyond words.

Part Design of the Years and Particles Statement P

JNTU Pragnya Workshop:

It is a National Level Technical event conducted at JNTU-Hyderabad. This event is conducted by the Electrical and Electronics Engineering students where over 30,000 electrical students from five hundred different colleges all over the India are invited. From our college 11 students took part in this event, workshop on "Haptic control on robotic devices" and Quiz. The students are Mr. Mahesh, Mr. Sai Kiran, Raj Kumar, Mr. V. Sai Kowshik, Mr. M. Vignesh, Ms. D. Snehasri, Ms. V. Saraswathi, Mr. G. Greeshma, Mr. G. Surya Kiran, Mr. M. Mahesh, M. Sai Kumar.



Osmania University Workshop:

Students from 2nd year attended a 2-day workshop on "IoT for Emerging Applications". The students involved in this are V. Sai Kowshik, Raj Kumar Sapa.







NCC:

SMEC has NATIONAL CADET CORPS (NCC) girls and boys wing to foster the spirit of team work and management, which leads to the development of student personality. Our department students Ms. K. Archana, Ms. P. Manogna and Ms. Vaeshnavi are in the team of NCC girl wing. The students have participated in different parades and trained in foot drill command, weapon training, field craft, civil defense, map reading etc.







Helping Hands:

SMEC has a strong association called Helping Hands. Today, Helping Hands Foundation is a 100+ strong volunteer driven community working in different social domains ranging from education, health, women empowerment to environmental conservation through three mediums: financial donations. on-field activities and social media. Mr. A. Tejith Reddy, Mr. N. Sandeep, Mr. A. Manideep, and Mr. Mubin are the students of EEE department, who are in the team of Helping Hands, they have been a part of various social activities conducted by Helping Hands association.







Paper publications:

The students are actively involved in the research apart from their regular studies. The students of EEE has participated in online International Conference of ICAEEE – 2022 and presented their research in front of the panel team.

- Mr. K. Abinav, Ms. K. Ruchitha, Mr. P. Vinod, Mr. Ch. Kumar Teja, and Mr. A. Tejith Reddy presented paper on "Opportunities and Challenges of vehicle to home, vehicle to vehicle and vehicle -to-grid Technologies."
- Mr. M. Sai Pradeep, Mr. K. Lokesh, Mr. V. Koushik, Mr. V. Kalyan Kumar, and Mr. V Guru Venkat presented paper on "On board Bidirectional Battery Chargers Topologies for Plug -in Hybrid Electric Vehicles".
- Ms. K. Shravya, Mr. A Durga Prasad, Mr. N. Nagaraj, and Mr. Srinivas Reddy presented a paper on "Analysis, design and implementation of a single-stage multipluse flexible topology thyristor rectifier for battery charging in EV."
- Ms. D. Vani, Mr. Srinivas Reddy, Mr. Akshay Reddy, Ms.
 A. Manideep, Ms. Aparana Kasturi, mr. Pavan Kalyan presented a paper on "A Drive train integrated Dc fast charger with Buck boost functionality and simultaneous drives/charge capabilities."







IEI STUDENT CHAPTER:

The Institution of Engineers (India) [IEI] is the largest multi-disciplinary professional body of engineers, established in 1920 with its Headquarters located in Kolkata and incorporated under Royal Charter on 9th September 1935 by the then His Majesty of King George V. The Institution has been serving the engineering fraternity for over a Century with its national and international presence through 125 Centres spread all over India, 6 Overseas Chapters, 6 Fora and an Organ namely Engineering Staff College of India (ESCI), Hyderabad. The department has registered with IEI student chapter on 17-Dec-2021 with 59 students from 2nd and 3rd years enrolled as a student members and all the faculty as the members. Under IEI student chapter the department has organized events like Guest Lectures, Workshops and many more. The department events are also published in the IEI student chapter magazine.







Sports:

Sports are the integral part of student life in SMEC. Our department have participated in many sports events like Football, Cricket and Athletics all over nation.

Our student Ms. K. Manideepa has participated in the international volleyball competition. The following are some achievements of the students from various sport events.







Mr. V Karthik Reddy secured 3rd place in the 100 & 200 mts race, 1st place in relay, Cricket tournament Runner up in inter college tournament in the Annual Day Sports event Dt - 4th & 6th April 2022.





Mr. Anand & Mr. Sai Kiran secured 1st place in the Caroms (Doubles) in the Annual Day Sports event. Dt-29th March 2022



Mr. J. Vamshi secured 2nd place in Discus Throw. in the Annual Day Sports event. Dt-6th April 2022



Mr. M. Sai Pradeep secured 3rd place in high jump and 1st place in 400m race in the Annual Day Sports event. Dt-6th April 2022



Mr. Suresh secured 1st place & Mr. V. Karthik Reddy secured 3rd place in the 100 & 200 mts race in the Annual Day Sports event. Dt-6th April 2022



Ms. K. Yashaswini secured 2nd place in the 200 mt race in the Annual Day Sports event Dt-5th April 2022



Mr. Pavan secured the 1st place in 400mt race in the Annual Day Sports event.
Dt-6th April 2022

Placement

SMEC is known for its 100% placement record in all over Telangana State. SMEC has an independent Training & Placement Wing, committed to provide all assistance to its students. It is headed by an experienced and qualified Training & Placement Officer and ably assisted by Training & Placement Coordinators. The Wing ensures that maximum number of students secured placements in reputed National & Multinational Companies. For the academic year 2021-22, there have been 1158+ offers made and the student achievers are placed in 60+ MNCS. The department is happy to share that all the students from 2021-22 batch were placed in various MNCs with high packages. The following are the students with top packages.

2021-2022 Batch



Ms. SYED MAHEK 10.00 LPA BYJU's



Ms. B. SOWKYA 6.50 LPA Accenture



Ms. P. MANOGNA 6.50 LPA Accenture



Mr. MANIKANTA SAI 6.50 LPA WIPRO



6.50 LPA **WIPRO**



Mr. S.AHLAD CHARI Ms. V. VAESHNAVI REDDY 6.50 LPA WIPRO

2022-2023 Batch



Mr. K. LOKESH 6.00 LPA **AXIOM**

Student from 3rd year placed in AXIOM with a package of 6 LPA. Congratulations Mr. K. Lokesh for your achievement. We wish you best of luck for your future endeavours.

Activities Corner

Industrial visit to Arhyama Solar Power Plant (6 MW) – Aler:

We organized an industrial visit on 07.06.2022, Arhyama Solar Power Plant (6 MW) - Aler for the II-year B. Tech students. The visit was organized with prior permission and guidance of our beloved Principal, Dr. P. Santosh Kumar Patra Sir and Dr. N. Ramchandra Sir, HOD of EEE.

Mr. Bharath Kumar is the coordinator and Mr. B. Sampath Kumar, and Mr. T. Naveen Kumar were the Co-organizers of this industrial visit.

After reaching the **Solar Power Plant**, the students were welcomed by Plant Engineer and the students were instructed about the safety rules to be followed during the session. A brief introduction about Solar Power Plant and its working as well as Single Line Diagram (SLD) was explained.

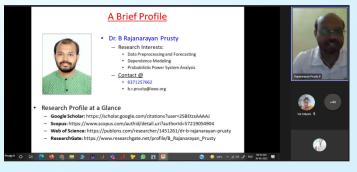


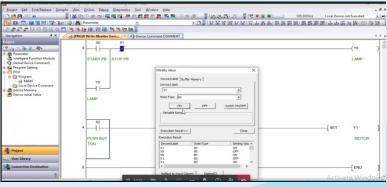
A Two-Day Virtual Workshop on "Program Logic Controller (PLC) and its applications:

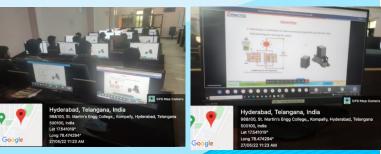
The Department of Electrical and Electronics Engineering has organized A Two-Day Virtual Workshop on "Program Logic Controller (PLC) and its applications" from 27.05.2022 to 28.05.2022. The Workshop was organized with an aim to give the knowledge to the Engineering Students on Program Logic Controller and its applications. Glimpse of the event the two-day workshop i.e., from 27.05.2022 to 28.05.2022. A session on PLC Theory was conveyed by chief Guest and Resource Person Mr. Muralidhar Reddy Akkimi. The overall response and feedback from the students were excellent and are interested to take part in further events.

Modelling and Simulation of Dynamical Systems in Electrical Engineering:

The Department of Electrical and Electronics Engineering has organized an online Guest Lecture on "Modelling and Simulation of Dynamical Systems in Electrical Engineering" on 30.05.2022. Dr. B. Rajanarayan Prusty has started the session with Prerequisites. Firstly, he has discussed about the state space description of Linear Systems. Later he has discussed about the numerical integration techniques such as Forward Euler's Method and Backward Euler's Method as well as observations with Euler's methods. Then he has discussed about the state space modelling of separately excited DC motor. Further he has discussed about the Estimation of System Damping along with analysis. The session went useful, informative, and Valuable.







Industrial visit to 400/220/132/33 KV Sub-Station, Malkaram:

The Department of Electrical and Electronics Engineering has organized an industrial visit on 28th April 2022 to 400/220/132/33 KV Sub- Station, Malkaram for III-year B. Tech students. After reaching the Sub- Station, the students were taken to main office and explained single line diagram (SLD) of sub- station. This lecture on SLD helped the students to gain knowledge on working of Sub-Station. The Sub- Station is completely automated. The relays, circuit breakers, etc., are controlled in a control room. This sub-station can also be controlled from city hotspots like Khairatabad to sense the faults. This sub- station is well protected from lightning or switching surges. The industrial visit to the substation helped the students to acquire the good knowledge in practical basis.





Online International Conference on "Advances in Electrical and Electronics Engineering (ICAEEE-2022)":

The Department of Electrical and Electronics Engineering has organized an Online International Conference on "Advances in Electrical and Electronics Engineering (ICAEEE-2022)" from 30.03.2022 to 31.03.2022. The main aim is to furnish a forum for faculty, research scholars and young academic scientists to share their innovative ideas in the advanced areas of Electrical and Electronics Engineering.



Industrial visit to Devi Electronics:

The Department of Electrical and Electronics Engineering has organized an industrial visit on 7th January 2022 to the Devi Electronics at Mallapur, Secunderabad for the II-year B. Tech students. Devi Electronics was Established in the year 1992, operates as a Sole Proprietorship firm. It was counted amongst the reputed firms engaged in manufacturing and supplying industrial lab equipment. comprehensive product line is huge in demand by the clients for electrical, engineering, and mechanical testing applications. These products are specifically designed to improve the output and show more accuracy in the testing results.



"Start-up opportunities for electrical engineers in the Agriculture Sector":

The Department of Electrical and Electronics Engineering has organized a guest lecture on "Start-up Opportunities for Electrical Engineers in the Agriculture Sector" on 04/12/2021. This program was organized with an objective to upgrade the knowledge of students about innovation, incubation, Entrepreneurship and Start-up in Electrical and Electronics Engineering. Engineering which can make a huge impact on agriculture and farming sector. The introductory session went useful, and Speaker has taken all queries of participants very efficiently.



Industrial visit to Electric Loco shed, Lalaguda

The Department of Electrical and Electronics Engineering has organized an industrial visit on 26th November, 2021 to the Electric Loco shed at Lalaguda for II nd III rd year B.Tech students.



An "Electric Locomotive" is a railway vehicle that can move along rails and push or pull a train attached to it using electric power drawn from an external source, usually from overhead cables or a third rail. Electric Locomotives do not have a conventional "engine" in them as we have seen in a diesel locomotive, but use the electricity collected from the outside source to power traction motors which turn the wheels.DE allotted a senior section Engineer for explaining about the loco shed. Sir has explained about Roof Equipment, Inside Equipment, Under equipment, Induction motor maintenance, Brake system, Gear system.



Industrial visit to Hindustan Aeronautics Limited (HAL), Balanagar:

The Department of Electrical and Electronics Engineering has organized an industrial visit on 15th December 2021 to the Hindustan Aeronautics Limited (HAL) at Balanagar for the II & Defence B. Tech students. Defence minister Rajnath Singh on Monday inaugurated week-long exhibitions by two defence public sector undertakings — Bharat Electronics Ltd (BEL) and Hindustan Aeronautics Ltd (HAL) — as part of the Centre's 'India@75' initiative. HAL has highlighted its 80 years of heritage, current and futuristic products.



HAL-products such as aircraft, helicopters, aeroengines, avionics systems, components and LRUs are displayed at exhibition.



Online International Conference on "Recent Developments in Power Engineering (ICRDPE-21):

An Online International Conference on "Recent Developments in Power Engineering (ICRDPE-21)" on 09/07/2021 to 10/07/2021. The conference was organized with an aim to furnish a forum for faculties, researchers, research scholars and young academic scientists, to share their innovative ideas and findings in Power Engineering. The aim of our conference was to create a platform for academicians, research scholars to present their novel ideas and share their views in recent development in Power Engineering, the time came, and all the participants presented their innovative ideas and findings in the specified areas. He discussed about recent trends in IT, evolution of various applications over these years, Structure of work in Bayer's, Robotic process automation, uses of robots and requirement of automation. He also discussed about AI & ML and its applications. He motivated the students and gave best wishes to students and faculty and other participants.





Online National level 2-Day Workshop on "Micro Grid Integration and Transmission towards Smart Grid Infrastructure:

The Department of Electrical and Electronics Engineering has organized an Online National level 2-Day Workshop on "Micro Grid Integration and Transmission towards Smart Grid Infrastructure" on 16/06/2021 to 17/06/2021. This program was organized with an objective to enhance the knowledge of faculty and students about Grid, Microgrid and Smart grid in Power System. Dr. J. Ramprabhakar covered the basic architecture of Microgrid. Then he covered the topic various components in Microgrid. In his lecture he pointed the necessity of implementing Microgrid across the different states in India. Further he discussed the components used for practical implementation of Microgrid. He explained about the transition of Microgrid into Smart grid. He also specified recent trends like integration of EVs and HEVs with Smart grid. The response and experiences feedback were excellent from the participants and are interested to be the part of the event in the future.





Online National level 3-Day Faculty Development Program on "Start-up Opportunities

An Online National level 3-Day Faculty Development Program on "Start-up Opportunities in Electrical and Electronics Engineering" on 20/05/2021 to 22/05/2021. Start-ups and Start-up Opportunities in Electrical and Electronics Engineering. Resource Person: Mr. G. Achyuth Reddy, Managing Director, SUREGROW FARMS, Hyderabad. He introduced us on the various research areas in Electrical Engineering which can make a huge impact on agriculture and farming sector. He also specified the financial assistance providing by India Government to initiate start-ups as part of Make in India.



An International Online 2-Day Workshop on Substation Automation system

An International Online 2-Day Workshop Substation Automation System on 09/01/2021 to 10/01/2021. This workshop was organized with an aim to introduce the faculty and students about stateof-the-art substation automation technologies and their applications in new and retrofitting substations. Mr. MA shaheed Started the session with the Introduction to substation. He discussed the various connections such as relay circuit, monitoring circuit and its importance in substation. Then he proceeded to importance of automation in substation and design process of automation system. Later he covered the introductory part of substation automation and how automation control the relay and monitoring system. Sir has also discussed the Networks type such as Bus, Star, Ring, Point to Point and its advantages.



The overall session was highly informative, and speaker has responded to all queries very precisely.

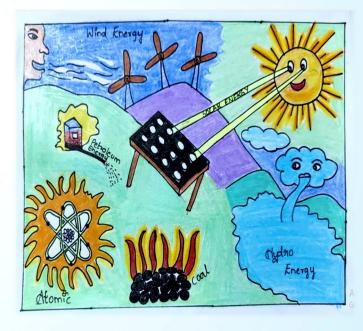
Online International Conference on "Intelligent Systems, Electrical and Communication Technology-2021(ICISECT-21)

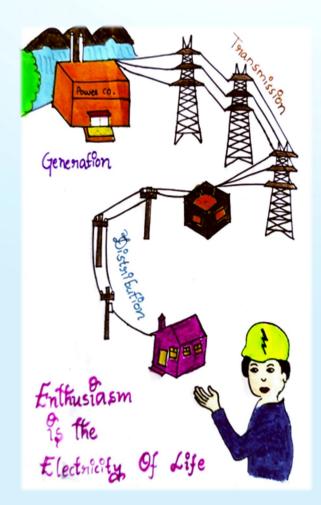
The Online International Conference on "Intelligent Systems, Electrical and Communication Technology-2021 (ICISECT-21)" was hosted by the Departments of Computer Science and Engineering, Information Technology, Electronics and Communication Engineering and Electrical Electronics and Engineering. ICISECT-21 aims to provide a common platform to all the leading academic scientist, researchers, research scholars to exchange and share their experience and innovative ideas in the latest technologies in different areas like Intelligence Systems, Power Electronics, Communication Technology etc. This conference provided an inter disciplinary platform for academicians, researchers, and other experts from various fields to present their novel ideas, discuss their thoughts as well as the challenges encountered and solutions to be adopted in the emerging areas of engineering and technology.



Student's Art









~ Art by



Ms.V.SARASWATI (19K81A0235)



Ms.K.SHRAVYA (20K85A02<mark>04)</mark>

EN'LIGHT' EDITORIAL BOARD

Newsletter Advisory board



Dr. N. Ramchandra HOD, EEE



Dr. S.V.S. Ramakrishnam Raju Dean Academics



Dr. Sanjay Kumar Suman Dean R&D



Dr. A. Anand Dean Events & Activities

Newsletter Editorial board





Mr. CH. Srinivas Mr. N. Daniel Manoj Assoc. Prof., EEE Asst. Prof., EEE



Ms. P. Priyanka Asst. Prof., EEE



Mr. M. Vignesh III - A, EEE



Mr. G. Yogender II - A, EEE



Mr. K. Santosh II - A, EEE

Newsletter Designer board



Mr. K. V. Govardhan Rao Asst. Prof., EEE



Mrs.T.V.Sai Kalyani Ms. K. Ruchitha Asst. Prof., EEE



III - A, EEE



Mr. K. Kowshik II - A, EEE



III - A, EEE



Mr. K. Divyesh II - A, EEE

Contact:

HOD EEE.

Professor & Head,

Department of Electrical and Electronics Engineering,

St. Martins's Engineering College, Dulapally, Medchal District,

Hyderabad, India

E-mail:hodeee@smec.ac.in