

# VIDYA JYOTHI INSTITUTE OF TECHNOLOGY



# **VIDHYULLATHA**

# ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT NEWS LETTER

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#### **Director's Desk**



It gives me immense pleasure to pen a few words for the Vidyullatha, the VJIT EEE Newsletter. Since the inception of VJIT, we have consistently strived to provide quality education to students pursuing undergraduate and postgraduate courses. I am proud to say that our efforts have yielded commendable results, reflecting our commitment to excellence.

However, we recognize that there is always room for growth. As educators, we remain steadfast in our mission, continuously seeking ways to enhance our teaching methods and learning environment. Our resolve is stronger than ever to ensure that VJIT remains a beacon of quality education.

I take this opportunity to congratulate all the faculty members for their relentless efforts to improve their teaching techniques and skills in the pursuit of excellence. Their dedication and innovation are the cornerstones of our success. Together, let us continue to work towards shaping the future of our students and the field of electrical engineering.

#### Principal's Message



An institution plays a pivotal role in bridging the gap between an individual and a professional. Vidya Jyothi Institute of Technology (VJIT) is no exception to this. For the past twenty-two years, VJIT has stood tall as a platform where countless technical talents have nurtured their futures and achieved excellence.

Beyond academic achievements, we recognize that students excel further in life when equipped with essential life skills. These skills empower them to navigate challenges with confidence, both in their professional and personal endeavors.

As a testament to our growth, the *VJIT EEE Newsletter Vidyullatha* which began as a humble initiative and has reached yet another significant milestone. It continues to reflect the vibrancy and achievements of our department. I extend my heartfelt congratulations to the newsletter team and all the faculty members whose efforts make this endeavor a success. Together, let us strive for greater accomplishments and continue to illuminate the path for future generations.



#### Editor:

The Department of Electrical and Electronics Engineering (EEE) at VJIT was established in 1999 with an initial intake of 40 students in the undergraduate program. Over the years, the intake gradually increased to 120, reflecting the growing demand for quality education in this field. In 2011-12, the department introduced the postgraduate program in Power Electronics & Electrical Drives, followed by the Electrical Power Systems program in 2013. These additions have further strengthened our academic offerings, catering to the evolving needs of the industry. Our department is equipped with exceptional facilities, including a dedicated library, spacious and well-established laboratories, and a unique Model Room. The Model Room serves as the lifeline of the EEE Department, fostering research-oriented, project-based learning for all students. With state-of-the-art infrastructure and a team of well-qualified and experienced faculty, we are fully equipped to deliver high-quality education tailored to meet contemporary industry requirements.

It brings me immense happiness to witness the continuous growth and achievements of the department as we strive to provide an enriching academic environment for our students to share that about 100 students of EEE department have registered in IEI student chapter.

Seminars, Workshops and Technical Symposia are conducted in the department regularly to keep the faculty and students updated with latest developments in various technologies. The students in the department are moulded into competent electrical engineering professionals, to face the challenges of the POWER sector. Thus the EEE Dept is developing enviously by leaps and bounds.

#### Editorial Board

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6.Mr.M.Narender, Student, II-EEE 7.Mr.H.Bharath Chandra, Student, II-EEE

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2.Mr.Ch.Sanjay,Student,IV~EEE

3.Mr.K.Maheshwar,Student,III-EEE

4.Mr.G.Rahul, Student, III-EEE

5.Mr.G.Akhil,Student,II~EEE

6.Ms.B.Prathyusha,Student,II~EEE

#### VISION OF THE INSTITUTION

- ❖ To develop into a reputed Institution at National and International level in Engineering, Technology and Management by generation and dissemination of knowledge through intellectual, cultural and ethical efforts with human values
- ❖ To foster Scientific Temper in promoting the World class professional and technical expertise

#### MISSION OF THE INSTITUTION

- To create state-of-the-art infrastructural facilities for optimization of knowledge acquisition
- ❖ To nurture the students holistically and make them competent to excel in the global scenario
- To promote R&D and Consultancy through strong Industry Institute Interaction to address the societal problems

#### VISION OF THE DEPARTMENT

To become a reputed department in the impartation of professional and technical expertise in the field of Electrical and Electronics Engineering.



#### MISSION OF THE DEPARTMENT

M1: Imparting Quality Technical Education by provision of state-of-the-art learning facilities.

M2: Preparing the students to think innovatively and find effective solutions to address engineering and societal problems with a multi-disciplinary approach maintaining continuous industry interaction.

M3: Encouraging team work and preparing the students for lifelong learning with ethical responsibility for a successful professional career.

#### PROGRAM EDUCATIONAL OBJECTIVES

**PEO1:** Equip graduates with a sound foundation in mathematics, science and engineering fundamentals, necessary to build a protective career

**PEO2:** Graduates will excel in giving solutions to real time problems through technical expertise and operational skill set in the field of Electrical Engineering

**PEO3:** Graduates will act with integrity in catering the need based requirements blended with ethics and professionalism.

#### MESSAGE FROM HOD DESK

It is my pleasure to present this edition of *Vidyullatha*, highlighting the remarkable progress of the EEE Department.

This semester, we successfully organized industrial visits, workshops, and technical events, ensuring that our students and faculty stay at the forefront of technological advancements. These initiatives are thoughtfully designed to prepare our students as skilled professionals, ready to excel in the ever-evolving power sector.

The department continues to achieve new milestones, setting higher standards of excellence with each step. I commend the newsletter team for their dedication in capturing and showcasing our journey so effectively.

Wishing everyone continued success as we move forward with determination and vision.

# PHOTO GALLERY

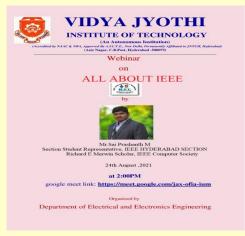
#### GUEST LECTURE

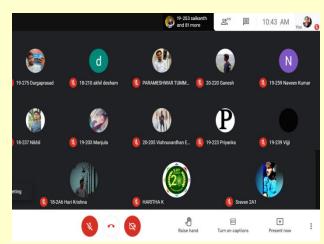




A Technical talk on Job Opportunities to Electrical Engineers is organized for EEE Students on 6th Dec ,2021

#### **WEBINAR**





A Webinar on ALL about IEEE is organized on 24th August,2021.

Mr.Sai Prashanth, Section Student Representative, IEEE HYDERABAD SECTION the guest speaker of the webinar started with his experiences as an IEEE member. Later he explained about the benefits of IEEE that includes What is IEEE from the student's point of view? Student life, along with its many positive features, also contains a certain amount of chaos. IEEE has created a set of benefits specifically targeted for students in order to fill the void and increase the positive experience for students on their way to becoming an expert in their field. The participants of this webinar were all EEE students.

#### **ENERGY CONSERVATION DAY**









Energy Conservation Day is organized on December 14<sup>th</sup> ,2021.Students across various departments participated in this event for poster presentation. This event is conducted to raise awareness about the importance of energy efficiency and the need to conserve energy for sustainable development. Hosting an event to mark this occasion can inspire participants and promote actionable measures for energy conservation. Students participated in the event with enthusiasm and few were awarded for the best poster presentation by the chief guest Ms.Sri Rekha Mavulati, Counselor from IGBC of CII.

#### **ACHIEVEMENTS**

#### **Student Achievements:**

- A team Anirudh Soni, K S Keshav Kumar of IV year got short listed for Smart India Hackathon 2022 grand finale at National level.
- ➤ Sai Vivekanand Joshi of II year got 2<sup>nd</sup> place in conducted on 31<sup>st</sup> august,2021 at ETS, TOEFL Essentials.
- Anirudh Soni, K Keshava Rao, Khwaja Sohail Ahmed of III year got 5<sup>th</sup> Place in Hackathon Santri 2021 for EDU-AR app at International level.
- ▶ P. Naveen Kumar of III year got 1<sup>st</sup> prize in 13<sup>th</sup> Indian open inter engineering collegiate sports fest conducted at VNRVJIET on June 2<sup>nd</sup> 2022 at National level.





A team Anirudh Soni,K S Keshav Kumar of IV year got short listed for Smart India Hackathon, 2022

English Olympiad (TOFEL)





1<sup>st</sup> prize in 13<sup>th</sup> Indian open inter engineering collegiate sports fest conducted at VNRVJIET Hackathon Santri 2021 for EDU-AR app at International level.

#### **Faculty Achievements:**

- ➤ Dr.A. Srujana, Professor & HoD, Mr.B.Sudhakar Reddy, Mr.B.Rajesh, Mr. M.Vijaykumar, Department of EEE granted the International patent on IFAC- Driver Less Vehicle Autonomous Control.
- > Dr. C. N. Ravi is awarded as the Best Researcher by ESN Publications
- Mr. K. Satish Kumar is awarded as Best Teacher by ESN Publications.

## **RESEARCH & DEVELOPMENT**

#### **RESEARCH PUBLICATIONS:**

S. N o	Names of the Author	Title of the Paper (Domain)	Journ al	Year & Mont h of Publication	Vol. No., Issue No. and pg. nos.	ISSN No /ISBN No/Digital Object Identifier (DOI)
1.	Dr. A. Srujana	Integrated Renewable Energy Sources for the minimization of Emission and Economic Operation of Power System (RES)	Internat ional Journal of Aquatic Science	2021& June	Vol 12, Issue 03, 2021	http://www.journal- aquaticscience.com/artic le_134358.html
2.	Dr. A. Srujana	Maximum power point tracking optimization and harmonics distributions control on PV systems (RES)	IT in Industry	Aug-21	Vol 9, No 3, 876-884	maximum power point tracking optimization and harmonics distortions control on pv systems   information technology in industry (it-in- industry.org)
3.	Mrs.V. Vijaya Lakshmi	Hybrid distributed power distribution system with an integrated three port converter for photovoltaic cell/Battery (RES)	IT in Industry	Aug-21	Vol 9, No 3, 891-900	hybrid distributed power distribution system with an integrated three port converter for photovoltaic cell /battery   information technology in industry (it-in-industry.org)

		Power Quality				
4.	Mr.M.Vijay Kumar	Improvement For Wind Large Scale Integration With Multi Frequency Oscillations With Measured (PE in PS)	IT in Industry	Aug-21	Vol 9, No 3, 901-909	tps://www.it-in- industry.org/index.php/ itii/article/view/752
5.	Mr. T. Parameshwa r	Implementation of the electrical spring for enhancing the power quality in PV based DC grid (RES)	IT in Industry	Aug-21	Vol 9, No 3, 885-890	implementation of the electrical spring for enhancing the power quality in pv based dc grid   information technology in industry (it-in-industry.org)
6.	Dr.A.Srujan a,	Solving constrained economic electrical energy generation and CO2 emission dispatch using hybrid algorithm (PE in PS)	Environ mental Technol ogy & Innovati on	29- Sep-21		doi: https://doi.org/10.1016/j .eti.2021.101999
7.	K. Swapna	Survival Study on Bidding Strategy for Microgrid Interfaced Distributed Renewable Energy Sources (RES)	Institute of Electric al and Electro nics Enginee rs (IEEE) - ASIAN CON, PUNE	Aug-21	978-1-7281-8403-6	https://doi.org/10.1109/ asiancon51346.2021.95 44891
8.	Dr.A.Srujan a, A. Srilatha, Mr. S. Suresh	Electric Vehicle Battery Modelling and Simulation Using MATLAB- Simulink (EV)	Turkish Journal of Comput er and Mathem atics Educati on	April 2021 SCOP US	4604-4609	https://doi.org/10.17762 /turcomat.v12i3.1853
9.	Abirami, P., Ravi, C.N	Load flow analysis of 10 bus loop distribution	Internat ional Journal of	2021 SCOP US	12(2), pp. 1006–1014	http://doi.org/10.11591/ijpeds.v12.i2.pp1006- 1014

		network excited	Power			
		by a generator simulated using open modelica editor (PE in PS)	Electro nics and Drive Systems			
10.	K.Haritha, L.Raju	Converging Offshore wind energy difficulties (RES)	Internat ional Journal of Aquatic Science	July & 2021	ISSN 2008-8019, Vol 12.Issue 3	http://www.journal- aquaticscience.com/artic le_134068_8c81e3024a eef9cbadf7492eccc1299 d.pdf
11.	Mrs. S. Chaitanya	Renewable energy optimization with implementation of multiple objective optimization algorithm based on load scheduling (RES)	IT in Industry	Aug-21	Vol 9, No 3, 863-875	renewable energy optimization with implementation of multiple objective optimization algorithm based on load scheduling   information technology in industry (it-in- industry.org)
12.	Dr. A. Srujana	DFIG fault detection and control strategies for optimal generation of large renewable power plants (RES)	IT in Industry	Aug-21	Vol 9, No 3, 848-862	dfig fault detection and control strategies for optimal operation of large renewable power plants   information technology in industry (it-in-industry.org)
13.	S.Chaitanya , S.Suresh	Power Factor Correction Method Using PFC BOOST Converter For Non-Linear Loads (PE in PS)	Internat ional Journal Of Creativ e Researc h Though ts – IJCRT	June 2021 UGC	Volume 9, Issue 6 J	https://ijcrt.org/papers/ ijcrt2106459.pdf
14.	A. Mohandas	A Diode Clamped Potential Balancing Method For Z- Source (PE in PS)	Internat ional Journal of Researc h Publicat	Jul-21	Vol (2) Issue (7)	https://www.ijrpr.com/uploads/v2issue7/ijrpr667.pdf

				ion and Review s			
1	5.	Dr.K.Ragh avaiah	Design and Comparative Analysis of Controllers Implemented to Hybrid Energy Storage System Based Solar- powered Electric Vehicle (RES)	IETE Journal of Researc h	June 2021.	Page no: 1-23	DOI: 10.1080/03772063.202 1.1941328

## SEED MONEY PROJECTS APPLIED / GRANTED

Title of the Project	Funding Agency	Reference No.	Details of PI	Amount in Rs.
Multilevel Inverter for Induction Motor Drive	Vidya Jyothi Institute of Technology		Mr. A.Mohan Das, Assistant Professor, Dept. of EEE, VJIT	1,82,000

# **MOUs with Department of Electrical and Electronics Engineering**

MOUs exist with the following core companies and training institutions. The facilities available with the industry are utilized by students

S. No	Name of the MoU	Outcome
1	KGMECH Electro-Mechanical Pvt. Ltd	Internship, Training & Students Project
2	Hyderabad Instrument Transformers Pvt. Ltd.	Internship, Training & Students Project
3	PROFUSE Energy & Infrastructure (p) LTD.	Internship, Training & Students Project
4	SAPIENT systems.	Internship, Training & Students Project
5	Hyderabad Institute of Electrical Engineers (HIEE)	Internship, Training & Students Project
6	METRONIX.	Internship, Training & Students Project
7	ECI Engineering and Construction.	Internship, Training & Students Project
8	Balaji Electrical and Engineering works.	Internship, Training & Students Project
9	VEGA Solar Energy Private Ltd	Internship, Training & Students Project
10	AVGHNI Renewable Energy Indian Pvt. Ltd.	Internship, Training & Students Project
11	Vasavi Electricals.	Internship, Training & Students Project
12	CYME Automation Systems Pvt.Ltd	Internship, Training & Students Project
13	Link Buffer Studios	Internship, Training & Students Project

### **Academic Toppers**

S.No	Year/Sem	Roll.No	Name of the Student	CGPA
1	II/I	20911A0250	SIDDAMSETTY NIKHITHA	9.45
	,	21915A0203	BATHULA THARUN KUMAR	9.20
2	III/I	20915A0204	D HEMANTH SAGAR	9.23
	,	19911A0228	GOVINDREDDY ASRITHA	9.05
3	IV/I	19915A0201	A SAIKISHORE REDDY	9.24
,		19915A0212	M ASHRITA	94

#### **Placements**







