



KALLAM HARAMADHAREDDY INSTITUTE OF TECHNOLOGY

Affiliated to JNTU Kakinada, accredited by NBA, Accredited by NAAC
with A Grade

CHOWDAVARAM (POST), GUNTUR, ANDHRA PRADESH-522019

Website: www.khitguntur.ac.in e-Mail: kaelguntur@gmail.com Phone
No. 0863-2272245



EEE-IMPACT Y

QUATERLY- NEWSLETTER

OCTOBER 2K23-DECEMBER 2K23

**Department of Electrical and
Electronics Engineering**

INSIDE THIS ISSUE:

- **About College**
- **Department Vision**
- **Department Mission**
- **Editorial Board**
- **Student Achievements**
- **Faculty Achievements**
- **Student workshops and guest lecture**
- **Tech news**

About College:

Founder promoter members of the Society, who are Primarily Businessmen, Believe that the future of India can be built and moulded in class rooms; the total education can play a very important role for peaceful and co-operative existence of all human beings. The National and International understanding can be Built-up only through the Tool of Education, thereby after careful and meaningful discussions among ourselves, We desired to establish a society by the name " **KALLAM ACADEMY OF EDUCATIONAL SOCIETY** ". The Society is registered as vide **Reg. No. 24 of 2006 dated 17-01-2006** under the **Andhra Pradesh Societies Registration Act, 35 of 2001**.

Science and Technology have emerged major factors in the sustenance of the society. They are changing the world with a matchless speed and magnitude. In this scenario , to create competent technocrats, an ideal institution with good ambience, infrastructure and eminent faculty is required.



Department Vision:

To produce globally competent man power which can contribute to the development and welfare of the society by meeting the needs of both the nation and the international community to empower the students to become technologically vibrant , innovative and emotionally matured and to train them to face the challenges of the quality conscious globalized world economy

Department Mission:

- To create educational opportunities to the predominantly agrarian society in and around guntur
- To provide an environment most conducive to learning and to create a stimulating intellectual atmosphere on campus
- To achieve academic excellence
- To support economically weak students to pursue education
- To establish partnership between institution and industry

Editorial Board:

Chief Editor:

Dr. K. Hari Krishna, Professor, HOD, EEE

Editors:

Dr. G. Kishor Babu, Professor, EEE

Dr. P.P. Sharma,

Professor, EEE

Faculty Members:

Mr. M. V. N. Murthy,

Asst. Prof., EEE,

Mr. J. Sunil Babu,

Asst. Prof., EEE.

Student Members:

SK. Khadar Basha (IV-EEE),

Koppolu Mahesh (III-EEE).

Gaddam Shankari (II EEE)

Student Achievements:

S. No	Regd. No.	Name of The Student	Name of The Event	Event dates	Name of the Organizing Inst.	Merit/Participation	State – within/outside
1	208X1A0203	Bathula Tejasri	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	1 st Prize	State – within
2	208X1A0204	Bellamkonda Deepthi	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	2 nd Prize	State – within
3	208X1A0213	Guntu Kalyani	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	2 nd Prize	State – within
4	208X1A0218	Karna Venkatakrishna	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
5	208X1A0226	Naru Karthik Reddy	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	1 st Prize	State – within
6	208X1A0232	Rangannapalem Lavanya Vijaya Lakshmi	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
7	218X5A0202	Jinkala Pavan Kalyan	Paper Presentation	Explorers Meet-2k24, 6 & 7 March 2024	SRK Institute of Technology	2 nd Prize	State – within
8	218X5A0204	Kollipaka John Deva Prabhudas	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	3 rd Prize	State – within
9	218X5A0213	Sk Mobina Apsara	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	3 rd Prize	State – within
10	218X1A0201	Adapa Mani Krishna	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	2 nd Prize	State – within

11	218X1A0226	Pathlavath Madhavi Bai	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	2 nd Prize	State – within
12	228X5A0202	Chatarajupalli Vaishnavi	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
13	228X5A0204	Dundi Gangadhar Reddy	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
14	228X5A0215	Kondeti Praneeth	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
15	218X1A0211	Naru Ramanji Reddy	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
16	228X1A0202	Allacheruvu Prashanth	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
17	228X1A0208	Changalsetty Naga Sai Ganesh	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
18	228X1A0219	Siva Kumar Battula	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
19	238X5A0205	Dasi John Prasanth Babu	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
20	238X5A0211	Pralayakaveri Gopi	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
21	238X5A0213	Rajineedi Sai Kumar	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
22	238X5A0217	Yarlagadda Venkata Naga Lakshman	Technical Quiz	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within

23	238X5A0220	Nakka Dayana	Paper Presentation	Samkalp2k23 ,22 & 23 Oct 2023	Kallam Haranadhareddy Institute of Technology	Participation	State – within
24	218X1A0205	Gopu Trinadh	Blind Folded Circuits	Exousia 2k23, 05-10-2023	VVIT,Nambur	Participation	State – within

Faculty Achievements:

- List of Publications:**

S. No	Name of the author	Title of the Paper	Name of the Journal	Month & Year of Publications	ISSN /DOI Number	Remarks
1	Dr. K. Hari Krishna	Transformer-less ANN-Controlled STATCOM-based Power quality improvement for three phase DC-AC Boost inverter in grid-connected solar photovoltaic Systems	International Journal of Electrical and Electronics Engineering	NOV 2023	ISSN: 2348-8379	SCOUPS
2	Dr. K. Hari Krishna	An intelligent based DC series electric springs in DC micro grids	International Journal of Intelligent Systems and Applications in Engineering	JAN 2024	ISSN: 2147-6799	SCOUPS
3	Dr. L. Shanmukha Rao	Analysis of a novel soft switching bidirectional DC-DC Converter for electric vehicle	International Journal of Applied Power Engineering	OCT 2023	ISSN: 2302-9285	SCOUPS
4	Dr. L. Shanmukha Rao	Performance evaluation of solar-PV integrated hybrid fuzzy Logic controlled multi-functional UPQC for enhancing PQ features	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS
5	Dr. L. Shanmukha Rao	A novel hybrid-fuzzy logic based UVC technique for Solar-PV/Grid integrated water-pumping system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS

6	Dr. L. Shanmukha Rao	Performance evaluation of novel 9-level RSMLI topology for Grid-tied solar-PV system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS
7	Dr. L. Shanmukha Rao	A novel solar PV integrated fuzzy-logic controlled UAPQC Device for power quality enhancement	International Journal of Advances in Applied Sciences	MARCH 2024	ISSN: 2252-8814	SCOUPS
8	Dr. L. Shanmukha Rao	A novel fuzzy-logic controller - MDSUPQC topology for power quality improvement in multi-feeder distribution system	International Journal of Advances in Applied Sciences	MARCH 2024	ISSN: 2252-8814	SCOUPS
9	Dr. L. Shanmukha Rao	A novel 7-level reduced-switch MLI topology fed PMSM drive for electric vehicle system	Indonesian Journal of Electrical Engineering and Computer Science	FEB 2024	ISSN: 2502-4752	SCOUPS
10	Dr. L. Shanmukha Rao	A novel SIMIDCBC topology driven PMSM for PEV application	International Journal of Applied Power Engineering	MARCH 2024	ISSN: 2252-8792	SCOUPS
11	Dr. L. Shanmukha Rao	Mitigation of PQ issues in EV charging station connected distribution system using novel RSMLI -based shunt APF	International Journal of Advances in Applied Sciences	DEC 2023	ISSN: 2252-8814	SCOUPS
12	Dr. G. Kishor Babu	Analysis of a bi-directional power Converter of electric vehicle	Journal of systems engineering and electronics	DEC 2023	ISSN: 1671-1793	SCI
13	Dr. P. P. Sharma	A novel fuzzy-logic controller- MDSUPQC topology for power quality improvement in multi-feeder distribution system	International Journal of Advances in Applied Sciences	MARCH 2024	ISSN: 2252-8814	SCOUPS
14	Dr. P. P. Sharma	A novel solar PV integrated fuzzy-logic controlled UAPQC	International Journal of Advances in	MARCH 2024	ISSN: 2252-8814	SCOUPS

		device for power quality enhancement	Applied Sciences			
15	Dr. P. P. Sharma	Performance evaluation of novel 9-level RSMLI topology for Grid-tied solar-PV system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS
16	Dr. P. P. Sharma	A novel hybrid-fuzzy logic based UVC technique for Solar-PV/grid integrated water-pumping system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS
17	Dr. P. P. Sharma	Performance evaluation of solar-PV, integrated hybrid fuzzy Logic controlled multi-functional UPQC for enhancing PQ features	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS
18	Mr. M. V. N. Murthy	Performance evaluation of solar-PV integrated hybrid fuzzy Logic controlled multi-functional UPQC for enhancing PQ features	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS
19	Mr. M. V. N. Murthy	Mitigation of PQ issues in EV charging station connected Distribution system using novel RSMLI-based shunt APF	International Journal of Advances in Applied Sciences	DEC 2023	ISSN: 2252-8814	SCOUPS
20	Mr.M. Ranjith Kumar	Mitigation of PQ issues in EV charging station connected Distribution system using novel RSMLI-based shunt APF	International Journal of Advances in Applied Sciences	DEC 2023	ISSN: 2252-8814	SCOUPS
21	Mr. M. Ranjith Kumar	A novel hybrid-fuzzy logic based UVC technique for Solar-PV/grid integrated water-pumping system	International Journal of Applied Power Engineering	JUNE 2024	ISSN: 2252-8792	SCOUPS

• **List of FDP's:**

S.No	Name of the Faculty	FDP / Workshop /Seminar /STTP	Title of the Program	Date(s)		Organization
				From	To	
1	Dr. K. Hari Krishna	FDP	AI Techniques in electrical system	15/04/2024	20/04/2024	Bapatla Engineering College
2	Dr. K. Hari Krishna	STTP	Electrical CAD Design	26/06/2023	01/07/2023	Bapatla Engineering College
3	Dr. L. Shanmukharao	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
4	Dr. G. Kishor babu	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
5	Dr. G. Kishor babu	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
6	Dr.P.P. Sharma	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
7	Mr. R. Subbareddy	STTP	Electrical CAD Design	26/06/2023	01/07/2023	Bapatla Engineering College
8	Mr. M.V.N.Murthy	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
9	Mr.V. Rajesh	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology

10	Mr.P. Venubabu	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
11	Mr.M. Ranjith Kumar	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
12	Mrs. P. Kavitha	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
13	Mr.J. Sunil babu	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
14	Mrs. P. Naga divya	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
15	Mr. D. Sambhasiva Rao	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
16	Mrs. P. Nagajyothi	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College
17	Dr. M. S. Naik	FDP	Advancements in aerospace materials: manufacturing, testing and characterization 2.0	11/03/2024	15/03/2024	Hindustan College of Engineering and Technology
18	Mr. K. Gopi Krishna	FDP	NSQF Aligned Skill Development	19/02/2024	23/02/2024	Narasaraopet Engineering College

➤ **Student workshops and guest lecturers**

S. No	Name of the Event Organized	Event Type	Date	Resource Person with Affiliation
1	Adjudicator for SAMKALP-2K23	Technical Symposium	22.09.2023 to 23.09.2023	Dr.Ch.Punya Sekhar, ANU,Guntur

2	Guest Lecture on "Opportunities for Electrical & Electronics Engineers in IT Sector"	Guest Lecture	9.09.2023	Dr.Ch.Punya Sekhar, ANU,Guntur
3	"Career Pathways in RPA Technologies and Future Prospects"	Career Talk	30-06-2023	Vishnu Vardhan, RPA Solution Architect, Qualesce
4	"Harnessing Hackathons: Your Pathway to Top Placements"	Awareness Session	13-07-2023	Nallamilli Venkata Reddy. M.S(Robotics), M.B.A Founder - CEO, Techybot and Vihanga Electrix Visakhapatnam
5	"Career Opportunities in Govt. Sector"	Career Talk	27-07-2023	Salil Agarwal, Project Manager, BHEL
6	"Awareness Program on Zscaler Zero Trust Cloud Security Virtual Internship Future Career Opportunities and Scope"	Career Talk	09-08-2023	Abhir Naik, Senior Academic Content Developer and Trainer, ZAAP, Zscaler
7	"Careers in Cyber Security"	Career Talk	30-09-2023	Vikas Goyal, Sr. Director-IT Security, FIS Global
8	"Careers in Data Analytics Process Automation"	Career Talk	05-10-2023	Dhaval Doshi, Assistant Vice President, JP Morgan Chase & Co
9	"Cracking the Code Alteryx Expert Insights and Certification Tips"	Career Talk	19-10-2023	Subrath Das, Associate Vice President Analytics, IMO
10	"Careers in Hyper Automation RPA"	Career Talk	28-10-2023	Sarthak Das, Intelligent Automation Manager, Pepsico
11	"Structural Design Technical Session"	Career Talk	02-11-2023	Suvam Chatterjee, Education Consultant, Bently Education
12	"Cloud Computing and Introduction to AWS"	Career Talk	04-11-2023	Raj Chilakapati, Chief Evangelist, Minfy

13	"5G and AI in Cyber Security will Revolutionize the next Decade Job Landscape"	Career Talk	11-11-2023	Dr. Debabrata Naik, Head of Cyber Security, Ericsson
14	"Campus to Corporate: What the Industry Demands"	Awareness Session	14-12-2023	Dasari. Sai Prem Charan Data Engineer, Hexaware Private Ltd
15	"Role of Product Technical Knowledge in Shaping Allegiance and Brand Success"	Career Talk	16-12-2023	Siddharth Agarwal, Head of Information Development, Newgen Software
16	"Cyber Security and the Future"	Career Talk	18-12-2023	Usman Ahmed, technical Head, Cyber Security, Thales
17	"Corporate Readiness: Bridging Academics and Professional Success"	Awareness Session	21-12-2023	Namala Harshavardhan, HTC Global Services pvt ltd
18	Guest lecture on "Electrical Vehicles"	Guest Lecture	10-07-2023	Dr. Y.S. Kishore Babu Professor of EEE & HOD, UCEN, JNTUK, Narasaraopet.

➤ **Tech news:**

Major Global & US Highlights

Date	What Happened	Why It Matters
Oct 30, 2023	President Joe Biden signed Executive Order 14110 ("Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence") aiming to establish a US-wide framework for AI safety, civil rights, equity, competition, and innovation. Federal Register+2The White House+2	This was the first major binding government action in the US focused on AI governance, reflecting how governments are accelerating regulation in response to AI's rapid growth.
Nov 1–2, 2023	The UK hosted the AI Safety Summit at Bletchley Park with global participation, focusing on risks, regulation, and shared safety standards. Wikipedia+1	Marked a turning point toward international cooperation in AI safety and governance.

Date	What Happened	Why It Matters
Dec 6–7, 2023	Google launched <i>Gemini</i> , a multimodal AI model family (Ultra, Pro, Nano), and began integrating Gemini into products like Bard and Pixel phones— Gemini Nano enabling on-device features. The Financial Express+6CNBC+6TIME+6	Gemini represented Google’s bid to compete with OpenAI’s GPT models; its Nano variant underlines push toward efficient, on-device AI.
Feature Drops & New Product Features	Google's Pixel 8 Pro got Gemini Nano in the “Pixel Feature Drop” (Dec 2023) adding features like <i>Summarize in Recorder</i> , <i>Smart Reply</i> , etc. blog.google+1	Signals increasing embedding of advanced AI features in consumer hardware, often with privacy / offline-use emphasis.
Semiconductors & Hardware	In Q4, AMD launched its MI300 AI/data center GPU family; Nexperia released SiC (silicon carbide) MOSFETs; Microsoft developed custom AI inference and server chips (Maia, Cobalt). Allied Market Research	These hardware moves reflect rising demand for AI compute infrastructure, especially for inference and data center workloads.
Policy & Regulation Trends	• AI Safety Summit (UK) → international discussions on safety standards. Wikipedia+1 • The US EO pushed for standards like labeling, safety pre-deployment evaluations, more transparency. The White House+1 • Pressure for data protection and privacy globally.	Demonstrates that regulators are shifting from passive observation to active policy-making in AI; more emphasis on pre-deployment risk management, compliance, fairness.

IN India-Specific Highlights

Month / Time	What Happened	Significance
Oct 2023	Government announced plans for <i>Global IndiaAI 2023</i> (first edition of a major AI conference, scheduled October) to bring together AI stakeholders globally. The Economic Times	Indicates increasing ambition from India to position itself as a global AI leader and promote ecosystem development.

Month / Time	What Happened	Significance
Late 2023	New <i>Digital Personal Data Protection Act, 2023</i> (DPDP Act) passed, setting framework for digital personal data protection in India. Wikipedia	These legal/regulatory frameworks are foundational: shaping how data is handled, who does research, what oversight exists—a critical part of tech governance.
	Also the <i>Anusandhan National Research Foundation Act, 2023</i> commenced December 1, 2023, to regulate & promote research & R&D in science/technology sectors. Wikipedia	
Regulation and Platforms	The Asia Internet Coalition (representing large tech firms) requested the Indian government / IT Ministry for a 12-18 month extension in compliance deadlines for sections of the new data protection law (specifically those around deletion/contract renegotiation obligations). TechCrunch	Reveals the tension between regulatory goals and business readiness; implementation periods are likely to be contested and negotiated.
Science & Tech Funding / Restructuring	India's science & technology ecosystem saw large scale moves: a new body with ~₹ 50,000 crore outlay was set up to oversee R&D. Also there were administrative changes (e.g. dismissals in the science ministry) and rationalization (abolition of certain awards without Cabinet approval). www.ndtv.com	Suggests restructuring to streamline funding, oversight, and policy certainty in science & tech; possibly in response to concerns about efficiency / governance.

Trends & Implications

1. Multimodal & On-Device AI are accelerating. Google Gemini's trio (Ultra / Pro / Nano) reflects the push for models that work across text, images, audio, video, and operate even when offline. On-device AI is particularly important for privacy and performance.
2. Regulation is catching up. From the U.S. Executive Order to India's DPDP and New Research Act, there's increasing momentum toward rules for safety, ethics, data protection, and governance. Implementation, however, often lags draft law in clarity.
3. Hardware & Compute Infrastructure remain critical bottlenecks and differentiators. Both AI capability and cost depend heavily on chips (GPUs, custom ASICs), data centers, silicon developments (SiC, etc.). Countries and firms are investing accordingly.

- | |
|--|
| 4. Policy Harmonization & International Cooperation are becoming more visible in AI: safety summits, global norms, and shared concerns (bias, misuse, transparency). But differences in regulatory speed and weight persist. |
| 5. Science / Gov Restructuring in countries like India reflects a recognition that supportive ecosystems (research funding, institutions, administrative clarity) are essential for competitive AI and tech innovation. |

