

# THE EEE VIDYAMAN

**Department of Electrical & Electronics Engineering** 

# Global Academy of Technology, Bangalore-98

(Approved by AICTE, Delhi and Affiliated to VTU, Belgaum)

**ACADEMIC YEAR - 2023-24** 

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#### **About GAT**

Global Academy of Technology, established in the year 2001, is one of the most sought-after engineering and management colleges Bangalore, Karnataka. Located in a sprawling campus of 10-acre land GAT has contemporary multi-media classrooms. modern smart laboratories, seminar halls, auditorium, an up-todate library with volumes of recommended and reference books along with e-journals and wellequipped computer centre. Students at GAT experience 24 x 7 high speed Wi-Fi facilities and web-based CMS & LMS for video streaming which is an integral part of e-learning. GAT provides ample opportunities for various co-curricular and extra-curricular activities for the students. A large cafeteria and well-maintained hostels for both boys and girls are available. The campus brims with more than 2000 students and 300 experienced staff involved in effective Teaching and Learning Process. Fully established mentoring, peer learning and counselling by proctors ensure holistic development of all students. GAT has academic alliances with various industries and research organizations to provide current industry perspective to the students.

#### **Vision statement**

To be premier institution with excellent learning and teaching environment for imparting quality education to students in engineering and management with futuristic needs of society.

#### **Mission statements**

M1: To create conducive environment of continuous teaching learning and improvement for students and faculty through the state-of-theart infrastructure.

*M2*: To promote research & innovation by collaborating with industries.

*M3*: To inculcate ethical values and environmental consciousness amongst students through holistic development programmes to serve the society.

#### **About EEE Department**

Electrical Engineering is the mother of all electrical sciences. Its sound foundation is the plinth on which new branches have emerged rapidly. This is a compelling and broad field that plays an increasingly important role in making positive contribution to the betterment of society and human condition. The department of Electrical and Electronics Engineering has been effectively functioning since the commencement of the college in 2001. The department strives to be in the forefront in educating the students in the fundamentals as well as emerging technologies. The aim of the department is toper are students for the continually changing, high-technology world of electrical engineering by providing old theoretical foundation in science, mathematics, engineering with substantial hands-on laboratory experience, and a curriculum that challenges students to think and act logically.

### **Department Vision statement**

To be a foremost education programme in the field of Electrical & Electronics Engineering to train the students to face global challenges and succeed in their future endeavors.

#### **Department Mission statements**

- Strengthen learning environment that facilitates quality education in the field of Electrical & Electronics Engineering.
- Enhance the Industry Institute interaction continuously to enable faculty and students work on real time engineering problems.
- ➤ Improve the quality of value-added programmes to enhance the technical and intellectual capabilities of students ensuring their success in competitive examinations for higher studies, employment, and research.

### **Program Educational Objective**

**PEO1:** Engage in the design of systems and applications in the field of Electrical and Electronics Engineering and allied Engineering Industries.

**PEO2:** Applying the knowledge of Electrical and Electronics Engineering to solve problems of societal relevance.

**PEO3:** Engage in life-long learning through continued education, professional practices, and technical training and/or higher education and research.

**PEO4:** Exhibiting enhanced levels of leadership and commitment to professional ethics and social awareness in their professional careers.

#### **Program Specific outcomes**

**PSO1:** Design DC machines, transformers, and dynamic AC machines for given specifications. **PSO2:** Understand generation, transmission, distribution, and utilization of electric power. **PSO3:** Design analog and digital electronic circuits and controller for operation and maintenance of electrical systems.



**Dr. DEEPIKA MASAND**Professor & HOD

It gives me immense pleasure in bringing out newsletter "EEE VIDYAMAN".

The department was started with the primary objective to be a foremost programme in the field of electrical and electronics engineering to train the students to face the global challenges and to address the societal problems. Since its inception, the department has been offering infrastructural facilities which include a variety of state of art equipment with modern computing facilities to aspiring professional students to meet contemporary requirements of the industry. The department is dynamic and vibrant with a blend of young experienced and enthusiastic faculty. Department is actively involved in academic and research activities in electrical and electronics engineering and multidisciplinary fields.

The department strives to provide a conducive environment for the students to develop analytical and practical skills and utilize them to solve the real-life problems. To encourage the students, the department conducts training on regular basis on present trends in hardware and software, organize workshops, industrial visits, and internships periodically. The department's newsletter is a step forward to showcase academic achievements of our faculty and students.

This will create an impact on the minds of readers, by way of providing larger overview and dimensions of the department. Finally, I congratulate my students for participating in various extra-curricular activities and competitive examinations. My best wishes to all for their bright career and future endeavors.

From,

#### Faculty Development Programs (FDPs)

Continuous improvement, unlearning, learning, and relearning is most important attribute for teachers. **FDP** online, offline and hybrid mode programmes have been attended by the faculty to keep in track with latest technology and trends.

- AICTE Training And Learning (ATAL)
   Academy Faculty Development Program on
   Emerging Technologies in Sustainable Energy
   System at B.M.S.COLLEGE OF
   ENGINEERING From 29th Jan to 3rd Feb
   2024
- 6 Days FDP on "Deep Learning for Natural Language Processing" at Global Academy of Technology-AI&DS from 25th to 30th September 2023
- 5 Days FDP on " Data Analysis and Visualization using TABLEAU" at Global Academy of Technology, Bengaluru from 16th to 22nd August 2023
- 4. Atal FDP on "Recent Advances in Electric Vehicle Technologies: Challenges and Solutions" at Dayananda Sagar College of Engineering from 06th to 11th November 2023
- 6 Days FDP on "Deep Learning for Natural Language Processing" at Global Academy of Technology-AI&DS from 25th to 30th September 2023
- 5 Days FDP on " Data Analysis and Visualization using TABLEAU" at Global Academy of Technology, Bengaluru from 16th to 22nd August 2023
- 7. SUITEV: Smart Universal Infrastructure for Efficient Electric Vehicle Charging" from 24th to 30th June 2024
- 8. INUP I2I-Hands on Training on Nanofabrication & Characterization Techniques at CeNSE, IISc Bengaluru from 16th to 25th Jan 2024

# <u>Department Published in National /</u> International Conferences

Papers have been published by the department faculty in various conferences and journals for the academic year 2023-24

#### **Papers Published by Faculty**

- Paper titled "Fuzzy Based Perturb & Observe MPPT Algorithm for Grid Tied PV System" at IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER) . on 13-14<sup>th</sup> October by Dr.G. Jayachitra .
- 2. Paper titled" Photovoltaic Hotspot Detection and Monitoring System" at IEEE International Conference on Electronics, Computing, Communication and Control Technology

- (ICECCC) on 2-3 May 2024 by Nagarathna K
- 3. Paper titled" at Detection and Analysis of Power Quality Issues in Railway Traction System Using Fuzzy Based Wavelet Transform" On 14-16th December 2023 by Dr. Ruma Sinha.
- 4. Paper titled "Development of Fault Detection, Isolation Strategy, and Robost Fault Tolerent Controller to sustain fight control system accurate failures" at Power System Technology, 2024 powertechjournal.com. by Nagaratha K.

# Conference Presentation by Faculty Patents

"AI Based humanoid industrial robot" by Dr.Ruma Sinha and Dr. G. Jayachitra.

#### **MOU's**

| Sl.<br>No | Company   |  |  |  |
|-----------|---|--|--|--|
| 1         | Power Research & Development<br>Consultants Pvt. Ltd., Bengaluru  |  |  |  |
| 2         | TMI systems No.204,1st floor, 75th cross, 12th 'B' main 6th block (off Dr. Rajkumar road), Rajajinagar,Bengaluru-560010 |  |  |  |
| 3         | ONE ROOF AUTOMATIONS<br>No.99,2 <sup>nd</sup> main road,<br>Ranganathapura, Magadi main<br>road,Bangalore-560079        |  |  |  |
| 4         | EDUNET FOUNDATION # Sair Way, Business Park,Floor,EGL Dommaluru, Bengaluru-560071                                       |  |  |  |

#### **Papers Presented by Students**

- Final year students Ms. Inchara.S and Ms.Priyanka Arora presented a Research paper titled "Design And Analysis Of An Automatic Load Sharing And Power Theft Management" at the 2024 IEEE International Conference On Recent Innovation In Smart And Sustainable Technology(ICRISST 2024), held at Presidency University, Bengaluru, Karnataka, India.on March 15<sup>th</sup> -16<sup>th</sup> 2024. Under the guidance of prof. Nagarathna K.
- 2. Final year student **Sushanth K M** has presented the Research paper entitled "**Photovoltaic Hotspot Detection And Monitoring System**" in International Conference On Electronics, Communication, Computing And Control Technology(**ICECCC 2024**) hosted by the department of Electronics

#### Class Toppers AY: 2023-24

| #  | USN        | NAME               | Photo |
|----|------------|--------------------|-------|
|    | 1GA20EE023 | LIKISHA D          |       |
| 01 | 1GA20EE046 | SUMAN S<br>AMBIGER |       |
| 02 | 1GA21EE032 | SAUJANYA B         | 6     |
| 03 | 1GA22EE003 | ADITI HASINI       | (6-1) |

 And Communications Engineering, at CMR Institute Of Technology, Bengaluru 2<sup>nd</sup> and 3<sup>rd</sup> May 2024. Under the guidance of prof. Nagarathna K

#### **Student Achievements**

#### **Sports**

- 1. Dheeraj Kumar R (1GA19EE017) participated at VTU State Level Wrestling (Men and Women) Championship 2022, which was held at Global Academy of Technology, Bengaluru, on 12<sup>th</sup> & 13<sup>th</sup> December 2022.
- Jeevan Gowda P (1GA18EE015) participated at VTU Single Weight-lifting Tournament 2021, which was held at Jyothy Institute of Technology, Bengaluru on 22nd February 2022.
- 3. Jeevan Gowda P (1GA18EE015) participated at All India Inter University Weight-lifting Championship 2021, which was held at Chandigarh University, Mohali, Punjab, from 8th to 12th March 2022

#### **Events Conducted**

15<sup>th</sup> September is celebrated as National Engineers' day. On this occasion, IEEE-PES student branch GAT conducted an event VID-YOUTH on 16<sup>th</sup> September 2023.















**IBM Skills Build Training** was conducted from 27-11-2023 To 30-11-2023







# 6 Days Skill Development Course: 04-12-2023 to 09-12-2023

Topic: "Assembly Language Programming using KEIL Software"

**Coordinator:** 

Mrs. Nagarathna K

Mr. Balagopal Reddy G







**Guest Lecture:** on 14-12-2023

By Mr. Prerith Subramanya, Alumni of EEE (Passed out year-2018)

Topic: Job opportunities for EEE and higher studies in abroad





## An Expert Session by, Prof. CHETAN SINGH SOLANKI

Professor, **IIT Bombay**| Founder of Energy Solar Foundation | Brand ambassador of Solar Energy

**Topic:** 6 Points Understanding of Climate Change and Corrective Actions









Fresher's Day Celebration & Sports Day on 01-02-2024 to 02-02-2024











# **Education awareness program-Higher Studies Abroad on 06-02-2024**





## Orientation for 3<sup>rd</sup> semester students on 14/12/23





Paper presentation competition TANTRA 2.0 on 16 March 2024



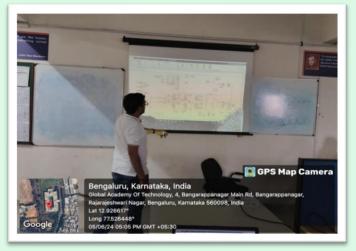
#### **EXPERT TALK**

A Technical Talk was organised on **14th May 2024** by the department of Electrical and Electronics Engineering at Global Academy of Technology, Bengaluru. We had our esteemed guest speaker **Dr. Jithendranath J (phD, IIT Kharagpur)** with us who is working as Senior system studies engineer at Hitachi Energy, Chennai where they concentrate on providing grid and power quality solutions.









# Value Added Program On Electric Vehicle Design and Control Using MATLAB





3<sup>rd</sup>-7<sup>th</sup> June 2024 Conducted By Dr. B. Dastagiri Reddy NITK, Surathkal



Farewell Function for VIII Semester 2024 Batch held on 25-06-2024





#### **Industrial Visit**

# INDUSTRIAL VISIT: Industry Visit to Venkat Switch Gears for 4<sup>th</sup> Semester Students on 4-07-2024





#### Industry Visit: Industry Visit to BIDADI Substation for 6th Semester Students on 3-07-2024





# Best Outgoing Project for the Academic 2023-2024 EEE Department.

Part of a student's journey in educational life is to work on projects, either final year or otherwise. They even get an opportunity to showcase their hard work and talent at various Institutional, National, or International levels. The projects that have performed well at various levels have been highlighted in this section.

Final year student Suman S Ambiger and Shashank Kumar M.K has won 2<sup>nd</sup> place for the project SMART SHOPPING TROLLY under the guidence of Dr.Ruma Sinha in the open day project at INTERACT-2024 held from 29<sup>th</sup> May-1<sup>st</sup> June.





The final year students Manoj A, Kushi K and Anagha K has got KSCST sponsorship of 5000/- for the project titled "SELF CHARGING SOLAR SURVEILLANCE DRONE (AGRICULTURAL IMPLEMENTATION)" under the guidance of Dr. G. Jayachitra







Final year students **Mr. Sushanth**, **Mr.Ajay** and **Mr.Swaroop** got fourth cash prize of **5000**/- in srishti-innovation exchange 2024, state level project exhibition held at Atria Institute of Technology, Bangalore from May 24<sup>th</sup> -26<sup>th</sup> under the guidance of **prof. Nagarathna k.** 



# **Students Placed in Companies 23-24**

| S.NO | USN NO     | NAME                | COMPANY NAME                |
|------|------------|---------------------|-----------------------------|
| 1    | 1GA20EE004 | ANURAG JAIN S       | SOLAR EDGE TECHNOLOGIES     |
| 2    | 1GA20EE009 | CHADANA G           | SOLAR EDGE TECHNOLOGIES     |
| 3    | 1GA20EE034 | PRIYANKA ARORA      | MU-SIGMA                    |
| 4    | 1GA20EE051 | VISHAL G            | SOLAR EDGE TECHNOLOGIES     |
| 5    | 1GA20EE052 | VISHAL UMESH        | SOLAR EDGE TECHNOLOGIES     |
| 6    | 1GA20EE054 | YUVRAJ GOWDA S      | SOLAR EDGE TECHNOLOGIES     |
| 7    | 1GA21EE401 | ARJUN K             | SOLAR EDGE TECHNOLOGIES     |
| 8    | 1GA21EE410 | SHILJA D            | SOLAR EDGE TECHNOLOGIES     |
| 9    | 1GA21EE418 | SWAROOP B N         | SOLAR EDGE TECHNOLOGIES     |
| 10   | 1GA20EE038 | SAGAR S             | QSPIDER                     |
| 11   | 1GA20EE020 | KEERTHI N           | QSPIDER                     |
| 12   | 1GA21EE417 | SUSHANTH K M        | QSPIDER                     |
| 13   | 1GA20EE005 | ANUSHA H S          | TAP ACADEMY                 |
| 14   | 1GA20EE047 | VAIBHAV P S         | NADIYA TECHNOLOGY SOLUTIONS |
| 15   | 1GA21EE402 | DANUUSH CHANDRA I S | ENEL GREEN POWER Pvt.Ltd.   |
| 16   | 1GA20EE053 | VITTAL HANCHINAL    | QSPIDER                     |
| 17   | 1GA20EE015 | GAGAN M C           | QSPIDER                     |
| 18   | 1GA20EE026 | MEGHARAJ G T        | QSPIDER                     |
| 19   | 1GA21EE414 | AJAY R              | QSPIDER                     |
| 20   | 1GA21EE411 | SHREYAS S           | JYOTHI ELECTRICAL LIMITED   |
| 21   | 1GA20EE041 | SEVANTH KUMAR       | QSPIDER                     |

# **EDITORIAL BOARD:**

## Dr. DEEPIKA MASAND

Professor & HOD Dept. of EEE, GAT

## Mrs. HARSHINI VERONICA

Assistant Professor Dept. of EEE, GAT

## Ms. ADITI HAASINI

Student EEE Dept. GAT