





### DEPARTMENT OF EECE

# NEWSLETTER IETE & IEEE Professional Societies

DEC 2021 - APR 2022

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#### **About GITAM**

The Gandhi Institute of Technology and Management (GITAM) was established in 1980 by a group of eminent intellectuals and industrialists, led by Dr. M. V. V. S. Murthi, former Member of Parliament, and popular philanthropist. Their goal, to bring to life Mahatma Gandhi's vision of an institution for higher education that transcends all barriers. GITAM is ranked as a Category-'I' University the of Human by Ministry Resource Development, Govt. of India. It's also accredited by the NAAC with an 'A++' grade[24] and is ranked 95th in the University category in NIRF Ranking 202 of MHRD. Gandhi Institute of Technology and Management (GITAM) is located at Visakhapatnam, Hyderabad and Bengaluru.

#### Vision

To excel in Electrical, Electronics and Communication Technologies cultivating innovation with socio-ethical commitment Mission

- Empower the students with knowledge to face real-world challenges for holistic development.
- Conduct multidisciplinary research that makes an impact on society, addressing key challenges through innovative solutions.
- Foster a culture emphasizing empathy, respect, commitment upholding the ethical standards.

#### **About EECE Department**

#### **Overview**

A 4-year B.Tech. Electronics and Communication Engineering programme seeks to produce skilled electronics and communication professionals with a strong foundation in the fundamentals of Electronics and Communication Engineering who can engineer large, relevant, and robust electronics & communication systems.

Our B.Tech. Electronics and Communication Engineering programme prepares the students

for either a professional career or advanced disciplines. The curriculum is designed to deliver comprehensive knowledge and teachings on electronics and communication engineering to ensure students develop a complete understanding of the subject. A degree in this programme will cover the following topics:

- > Analog & Digital Communication
- Digital Logic & Circuits
- > Coding & Information Theory
- Wireless Networking
- Signal Processing
- > Electronics Architecture & Protocols

Additionally, the programme will also educate the students on the general principles of all the disciplines of engineering. The programme will also instill teamwork, leadership, and communication skills in the student with professional, ethical, and human values to be responsible citizens of society.

#### Career Options for B.Tech. Electronics and Communication Engineering

Students who enroll in the B.Tech. Electronics and Communication Engineering programme will develop the necessary skills to become successful professionals and experts in the field. The wide range of career opportunities include:

- Telecom EngineerTotal
- R&D Software Engineer
- Software Analyst
- Electronic Design Engineer
- Desktop Support Engineer
- Technical Director

Department of Electrical, Electronics and Communication Engineering, GITAM School of Technology, GITAM Deemed to be University, Visakhapatnam-530045, Andhra Pradesh, Ph: 0891-2840230, Website:<u>www.gitam.edu.in</u>

- Network Planning Engineer
- Service Engineer

To provide high-quality education in Electrical & The department of EECE is a constituent department in GITAM Institute of Technology, GITAM (Deemed to be University).

The department has two active professional societies dedicated to the holistic development of students namely IETE and IEEE.

#### **About IETE:**

IETE Student Chapter – GITAM School of Technology

The Institution Electronics of and Telecommunication Engineers (IETE) is India's leading professional society dedicated to advancing Science and Technology in Electronics, Telecommunication, and IT. Established in 1953, IETE serves over 1,25,000 members across 64 centers in India and abroad, providing leadership in scientific and technical fields.

Recognizing the need for innovation, the IETE Student Chapter at GITAM School of Technology was established in 2008-2009 under the EECE Department. It aims to promote knowledge exchange and professional growth in Electronics, Telecommunication, Computer Science, and Information Technology. The chapter fosters young minds by keeping pace with evolving global trends in technology.

#### **About IEEE:**

**IEEE GITAM:** Inspiring Innovation & Growth

The Institute of Electrical and Electronics Engineers (IEEE) is the world's largest technical professional organization, dedicated to advancing innovation and technological excellence for the benefit of humanity. With over 420,000 members in 160+ countries, IEEE fosters scientific and technological progress through highly cited publications, global conferences, industry standards, and educational initiatives. It serves professionals in electrical, electronics, computing, and related fields, shaping the future of technology and engineering. IEEE operates through 334 Sections, 2,100+ 3.000+Chapters. and Student Branches worldwide, with specialized societies.

At GITAM (Deemed to be University), the IEEE Student Branch actively engages students in technical research, professional development, and cutting-edge conferences, offering platforms like APS, SPS, RAS, CS, PES, and WIE AG Group to enhance knowledge and skills. Committed to technological growth, leadership, and integrity, IEEE and IEEE GITAM work together to nurture talent and drive advancements for a better future.

# **IETE STUDENT CHAPTER**

#### IETE STUDENT CHAPTER DEPARTMENT OF ELECTRICAL ELECTRONICS AND COMMUNICATION ENGINEERING GITAM INSTITUTE OF TECHNOLOGY GITAM Deemed to be University, VISAKHAPATNAM-530045

IETE STUDENT CHAPTER Committee List						
Name of the Faculty		Position				
Dr. K.Karuna Kumari		Faculty Advisory				
Dr. S. Neeraja		Faculty Advisory				
Dr. P. Raju		Faculty Advisory				
REG NO.	NAME	POSITION				
IETE Excom Committee						
121910403018	Bhima Shankar	President				
122010406002	A.Mitra Teja	Vice President				
121910403001	Vishnu Priya D	Secretary				
121910401052	Muskan	Joint Secretary				
121910403043	Malla Chaitanya	Treasurer				
121910402042	Appala Naidu	Joint Treasurer				
121910401017	Ravi Vikas	Program CoOrdinator				
IETE Advisory Committee						
121810404001	K.Sidharth	President				
121810403042	M. Nikith	Vice President				
121810401012	Lavanya .K	Secretary				
121810404052	K. Monika Anjani	Joint Secretary				
121810404052	K. Raghuram	Treasurer				
121810401015	N. Harshavardhan	Joint Treasurer				
121810404018	T. Kethan Sai	Program CoOrdinator				

#### **IETE EVENTS:**

#### Zenith-A legacy of leading:

IETE Student Chapter, GITAM University, conducted its first event of this academic year, filled with great responses from participants. The first round of the event was conducted on the 16th of February 2022.



It started with Memo, a non-technical game where participants were asked to find the film name using emojis, whereas in technical, we had Quizzard, where each person was given a grid full of electric components symbols and told to identify them within the given stipulated time of 45 seconds. All 84 participated and gave a tremendous response. Students, who qualified for the first round, proceeded to the second round held on 17th February 2022, which had a Tic-Tac-Toe in Non-technical in which the person had to guess the song played at the background to place X's and O's. Whereas in technical, it was Pachisi, where 3 participants competed with each other and had to answer technical questions to move each step forward and reach the finish point of the game.

The third round was challenging in both the Technical (Tech Trove) and Non-Technical (Rummage) held on 18th February 2022, where the participant needs to cross different levels to reach the final stage in both fields. Zenith has created great fun and enthusiasm among the participants. Students gave their best efforts in every round.

The winners of technical and Non-Technical events are Krishna Karthik (2C) and Vamsi (2A), respectively. Runner ups of Technical and Non-Technical events are Neharika (3A) and Hari Priya (3A), respectively. Winners of technical and nontechnical are awarded a cash prize and a certificate of appreciation. All the participants in the event are awarded participation certificates as well. The event was a success on a huge scale, and participants gave great feedback too.

This event is coordinated by Prof. J.B. Seventline, HoD, EECE, and IETE faculty advisors Dr.K.Karuna Kumari, Dr. S.Neeraja, Dr. P. Raju, and Student coordinators Chaitanya.M,Bheema Shankar.

#### Workshop on R Programming:

IETE Student Chapter, GITAM University, conducted its first workshop of this academic year which was filled with great response from participants. IETE Student Chapter has conducted a workshop on 30th and 31st March 2022 on R Programming by the Chief Guest Shri.M. Santosh Kumar.



The workshop was initiated by the respected Head of the Department Dr. J.B. Seventline and the

faculty advisories of IETE student chapter, Dr. K. Karuna Kumari, Dr. S. Neeraja, and Dr. P. Raju.

We were so honorable to have M.Santosh Kumar of Grafx IT Solution Private Limited and Center Academic Head and individual contributor with solid experience in corporate and educational settings, providing management and information technology solutions for accepting our invitation and presiding over the workshop.





Over 72 students from the EECE and CSE Department participated in the webinar. All the way through the workshop we were able to learn a lot of new things and gain our knowledge on R Programming and gained a



hand on experience on the same. All the participants were also given Participation Certificates at the end of the workshop. The event was a success on a huge scale and participants gave great feedback too.

# **IEEE STUDENT BRANCH**

#### IEEE STUDENT BRANCH DEPARTMENT OF ELECTRICAL, ELECTRONICS AND COMMUNICATION ENGINEERING GITAM INSTITUTE OF TECHNOLOGY GITAM Deemed to be University, VISAKHAPATNAM-530045

#### **IEEE EXECUTIVE COMMITTEE (2024-25 AY)**

Name of the Faculty	Position
Dr. Md Khwaja Muinuddin Chisti	Student Branch Counselor
Prof. P V Y Jaya Sree	Women in Engineering Affinity Group Faculty Advisor
Dr. Thumbur Gowri	Signal Processing Society Faculty Advisor
Dr. Srinivasa Rao Vammi	Antenna & Propagation Society Faculty Advisor
Dr. B. Suri Babu Naick	Robotics And Automation Society Faculty Advisor
Dr. Bandaru Durga Prasad	Power And Energy Society Faculty Advisor

<b>Registration No.</b>	Name	Position
Student Branch		
121810403050	Charishma	Student Branch Chair
121810403026	Bharat	Student Branch Secretary
121810403034	Dinesh	Student Branch Treasurer
121810404006	Inan	Student Branch Membership Development Lead
<b>Signal Processing So</b>	ciety	
121810404005	Nikesh	Signal Processing Society Chair
121810404007	M. Sandeep	Signal Processing Society Vice Chair
121810404031	Bharadwaj	Signal Processing Society Secretary
121810402048	Ramana Babu	Signal Processing Society Treasurer
121810404023	Bhargav	Signal Processing Society Membership Development Lead
Antennas And Propa	igation Society	
121810401006	Anik	Antennas And Propagation Society Chair
121810402015	Balaji	Antennas And Propagation Society Vice Chair
121810403026	Adithya	Antennas And Propagation Society Secretary
121810404022	Nithin	Antennas And Propagation Society Treasurer
121810402038	Sai Kiran	Antennas And Propagation Society Membership Development Lead

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Robotics And Automation Society				
121810404056	Sasikanth	Robotics And Automation Society Chair		
121810402053	Sudhanshu	Robotics And Automation Society Vice Chair		
121810401004	Prithvi	Robotics And Automation Society Secretary		
121810402021	Rishwanth	Robotics And Automation SocietyTreasurer		
		Robotics And Automation Society		
121810404037	Kulasekhar	Membership Development Lead		
Women In Engineering Affinity				
121810404026	Amrutha	Women In Engineering Affinity Chair		
121810404040	Mallika	Women In Engineering Affinity Secretary		

#### **IEEE Events**

#### **RGB LED control using Arduino, Re-**Wire Series-08 :

IEEE Student Branch, GITAM (Deemed to be University) launched the 8th video of 'RE-WIRE SERIES' on RGB LED Control using Arduino by Pavan Vignesh, Proceedings Lead, GITAM IEEE SB.



Speaker: Shivani Narsina, Technical Project Lead, GITAM IEEE SB.

We see a lot of decorative lights hanging during the festival season. But did you ever think about how they glow in different colors? It's because of the RGB LEDs.

The RGB LED emits various shades of light by creating fusions with the three basic colors Red, Green and Blue. From decorative lights to LED Displays, RGB LEDs are used everywhere. In this video, we can learn how to make an RGB LED glow in multiple colors using an Arduino!

#### NeoPixel LED control using Arduino, Re-Wire Series-09 :

IEEE Student Branch, GITAM (Deemed to be University) launched the 9th video of 'RE-WIRE SERIES' on NeoPixel LED control using Arduino by Pavan Vignesh, Proceedings Lead, GITAM IEEE SB.

NeoPixels are Adafruit's brand for individuallyaddressable RGB color pixels and strips using a single-wire control protocol on a microcontroller. While controlling RGB LEDs requires multiple pins, NeoPixels save the effort. This

means one pin can control all the Led's colors and

which LEDs are on at any given time. This helps create some cool effects like lightsabers etc. This video teaches us how to control NeoPixel LED using Arduino!



Speaker : Pavan Vignesh, Proceedings Lead, GITAM IEEE SB.

#### **Students of Department 6.0 :**

IEEE Student Branch, GITAM (Deemed to be University) had conducted a Five-round event, S.O.D 6.0. The theme is to get the best out of them by testing their wits and senses. The participants were given challenges constantly, and they



countered them with the required knowledge and charisma actively.

The first round is The Mind Fizz. This round tested the students' personalities, and It was like an eye feast to see how participants responded when given the responsibility. The second round is The Transition. This round tested their senses and knowledge.

Using Kahoot, the team displayed several old and new versions of the particular technology.

Ultimately, all participants are at the same altitude to understand that all the experiments are learning experiences, even when they don't go as planned.Inspired by their inventions, the theme is to give our level best.

The third round is the circuit hourglass. This round tested the memory of the students. The circuits were shown for a while and the questions were displayed accordingly. In the fourth round, the prophecy, the students were asked to select a topic among the given, and the debate started based on the topic chosen.

The event concluded by interviewing the finalists being interviewed by the honorary core team, and the best was recruited into the team.

## WOMEN'S DAY AND CHARITY DONATION DRIVE :

IEEE Women in Engineering (WIE) student chapter, GITAM (Deemed to be University) celebrated 25th International Women's Day and launched the poster for Charity Drive Donation to assist the school-going girls on 8th March, 2022.

The student branch reflected on the significant progress and achievements made by great women in Science, Technology, Engineering and Math within the IEEE.

The dais was graced by Dean, professor of engineering, Vijaysekhar Chellaboina, GITAM (Deemed to be University) who provided insights on how to break the gender bias and achieve greater heights in life.



He provided us with the comprehension of how women can raise the pillars for heights in society. Head of the Department, EECE, GITAM (Deemed to be University) Dr.J. Beatrice Seventline showed the mirror of life by reflecting on how she emerged from a student to an independent and self-sustained woman.



Branch Counsellor, Md. Chisti provided insights on making the best benefits of IEEE membership and evolving with IEEE. Chief Guest Ms. Gali Aruna, who is the Managing Partner of Digital School, who received

"Best Performing Project Officer Award" from the former Chief Minister Chandrababu Naidu, on the International Ozone Day -2001 from the Ministry of Environment and Forests Government of India provided intuition and awareness of breaking stereotypes and gender biases and stand as an

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Visakhapatnam-530045, Andhra Pradesh, Ph: 0891-2840230, Website:<u>www.gitam.edu.in</u> inspiring women who can lead a team on the belief that women can work equal to men without being under any influential banner.

The event ended with a happy note by cutting the ribbon and releasing the poster for the Charity event which will be held on 12th March, 2022, at Government Visual Blind School, Sagar Nagar, Rushikonda, VISAKHAPATNAM, Andhra Pradesh.

#### **CHARITY DONATION DRIVE :**

IEEE Women in Engineering (WIE) student chapter, GITAM (Deemed to be University) extends their helping hands to Government Residential School for Visually Challenged Girls, Visakhapatnam, Andhra Pradesh on 12th March, 2022. They believe that giving is not just about donating, it's about making a difference. The student branch collected money from students and purchased necessary things for the school. As part of their personal hygiene, things related to hygiene are given to the children to keep themselves and their surroundings clean and provide insights.

A variety of activities like singing songs are being held, and all the children have actively participated and prizes were awarded to the winners under the supervision of D.Vijaya, Assistant Principal of the school.

Branch Counsellor, Md. Chisti provided insights on making the children motivated irrespective of their



physical challenges. He encouraged students to choose the right path as they are just starting their studies. In addition, the children were assisted with an obstacle detector, which allows them to identify any objects ahead of them, so that they can be alerted to their surroundings. The event ended with all smiling faces along with gifts and other essentials in the hands of the children. The event was coordinated by Md. K.M. Chisti, Student Branch Counsellor, Y. Charishma, IEEE Student Branch Chairperson and P. Amruta IEEE WIE Society Chairperson.







### **IETE & IEEE**

**Department of EECE**