IEEE Advancing Technology for Humanity

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IEEE KSIT SB PRESENTS

2024

MOMENTUM

VOLUME-9

IEEE BANGALORE SECTION

IEEE KSIT BANGALORE

IEEE Women in Engineering
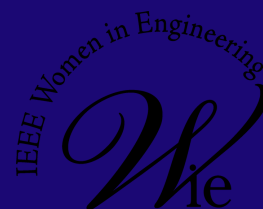
K. S. INSTITUTE OF TECHNOLOGY

VISION

"To impart quality technical education with ethical values, employable skills and research to achieve excellence".

MISSION

- To attract and retain highly qualified, experienced & committed faculty.

- To create relevant infrastructure.

- Network with industry & premier institutions to encourage emergence of new ideas by providing research & development facilities to strive for academic excellence.

- To inculcate the professional & ethical values among young students with employable skills & knowledge acquired to transform the society

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

VISION

"To achieve excellence in academics and research in Electronics & Communication Engineering to meet societal need".

MISSION

- To impart quality technical education with the relevant technologies to produce industry ready engineers with ethical values.

- To enrich experiential learning through active involvement in professional clubs & societies.

- To promote industry-institute collaborations for research & development.

CONTENTS

MESSAGE FROM THE CEO

Professional personality and character develops through active participation in professional bodies. This brings together the knowledge imparted in the classroom and the experiential learning that takes place through field surveys and visits. Listening to practitioners of technology expose the students to new frontiers through seminars, conferences, workshops etc., and help the academia to keep abreast of all the developments in the field of research being carried out in Universities, R&D of industry and other organizations. This job of connecting the students the world over is being done by IEEE, that is an international professional body that effectively connects all the stakeholders.

The Student Chapter of IEEE at KSIT is a very proactive one that is catering to the learning needs of its' members. It is creating a wonderful platform that provides many opportunities for the students to have a real exposure and holistic learning that makes them more confident to take on the professional challenges. Their dedication and commitment to the cause of learning and knowledge proliferation is commendable.

I would like to congratulate both WIE & IEEE at KSIT for their active involvement and enthusiasm in bringing out this 9th Volume of IEEE magazine "MOMENTUM".

My best wishes to the wonderful editorial team.

– DR K. V. A. BALAJI,
C E O,
K S GROUP OF INSTITUTION.

MESSAGE FROM THE PRINCIPAL

I Congratulate the IEEE student branch & WIE affinity group of KSIT for all the technical and non-technical events organized in the college. The IEEE student branch at KSIT is very active and has created platform for all the IEEE members & participants to showcase their talents.

I am very Proud of WIE & IEEE KSIT student branch for their active involvement in releasing 9th Volume of IEEE magazine "MOMENTUM". I would like to encourage the entire team to maintain their standards high through their good work.

My Best wishes to the entire team.

– DR. DILIP KUMAR K
PRINCIPAL & DIRECTOR
K. S. INSTITUTE OF TECHNOLOGY

MESSAGE FROM THE HOD

I would like to appreciate the efforts of IEEE editorial team & congratulate for their excellent team work in showcasing & summarizing the talent, achievements and mile stones achieved by our students through the IEEE newsletter. KSIT IEEE student branch provides platform for all our students to exhibit their talent both in curricular and extracurricular activities. We believe in the overall personality development of students. We in IEEE student branch kindle innovative & design thinking & mould them to be good leaders.

Our IEEE student branch believes in the quotes ""Intelligence plus character-that is the goal of true education & Key for success."

–DR. P.N.SUDHA
HOD, DEPT OF ECE
K.S.INTITUTE OF TECHNOLOGY

MESSAGE FROM BRANCH COUNSELOR

It is a tremendous responsibility and also a great honor and privilege to serve the IEEE KSIT student branch as Branch counselor. Every year, with much joy and anticipation we celebrate the launch of IEEE newsletter. IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. At KSIT, IEEE student branch along with WIE (Women in Engineering) affinity group and signal Processing society is formed with the quest of achieving our technical and professional goals with IEEE's mission and vision. And most importantly encourage our students to contribute to real world problems. It was an honor to receive Best small student branch award from Bangalore section in the past.

As a branch counselor, I have witnessed the student's interest and enthusiasm to explore the engineering world and to my opinion IEEE is the best platform to guide and satisfy them. Workshops in popular areas, IEEE Day celebrations, Valedictory, Technical talk, Women's Day celebration and a wide spectrum of events reached IEEE members and non members. The student members of our branch have done excellent job with highest order of energy and interest. Hope to move on with the same pace with more sharp edge towards excellence and wider reach. I heartily invite you all to extend your support and join us in all the activities related to IEEE at our KSIT student branch and contribute to better humanity.
Wish you continued health and safety

–MRS. BHARGAVI ANANTH
BRANCH COUNCELLOR

MESSAGE FROM STUDENT CHAIR

Before becoming the IEEE Chair for the year 2022-23, I was the WIE treasurer during my third year of engineering. Being in IEEE made me realize the importance to team work, time management and taking up responsibilities. Apart from soft skills, I was able to learn more about new technologies and researches around the globe through IEEE Xplore.

From helping organize events to planning and executing events, IEEE has taught me team management and organizational skills.

I would like to thank my staff Execom for guiding me throughout the year. I would like to thank my fellow Execom members for co operating with me in making every event a grand success.

I would extend my thanks to the management of K.S.Institute of Technology for giving us an oppurtunity and supporting us to conduct various events.

-KIRAN.V.NARAYAN

IEEE CHAIR

ABOUT THE STUDENT BRANCH

- The IEEE Student Branch was inaugurated in KSIT in the year 2002. The branch aspires to enrich the students of KSIT with the latest developments in various fields of technology and research developments. IEEE KSIT SB along with its WIE Entity and IEEE KSIT SPS conduct various technical and semi-technical events to ensure that the students' competency levels are enhanced to meet the required standards in today's industry. IEEE KSIT strives to invigorate the experience of organization and participation in the students through events that are conducted through the year. INNOVACEEEA is the Mega event conducted by the student branch having participants from various colleges. IEEE KSIT along with its WIE Entity conducted a 5K MARATHON with the theme "We Run, You Learn" in the year 2019 which had 200 plus participants. The SB also conducted an online programming challenge in the year 2020 "CODE\n WIN 1.0" which had about 500 participants

EVENTS

WOMENS DAY

On 8th March,2023 IEEE KSIT SB along with the department of Electronics and Communication conducted Guest talk on the occasion of Womens Day. The guest for the day was Dr.Dilip Kumar K,Dr.P.N.Sudha. The talk was hosted by Amulya and the guest was introduced by Gagana Sindhu. The principal Dr K Dilip Kumar handed over a sampling to the guest

The theme for 2024 women's day was "Embrace Equity". The guest spoke about her journey in the VLSI field and the hardships that she had to face as a women .She encouraged women to ask more questions and not let the male patriarchy stop them from achieving their dreams. She spoke about progress that has been made towards gender equality and to acknowledge the work that still needs to be done. She reminded us of the vital role the women play in our society.

Personality Development PROGRAMME

This programme was held on 14th February 2024,which was organized by IEEE-WIE,ASH for 5th sem girls.The participants were around 150 members.Our Resource person was Ms. Shrilakshmi Hegde who is a Image Consultant And Soft Skills Trainer .

This was a social event which was very useful for the Students.This whole talk was about Personality Development, Menstrual Hygiene, Mental Health.Students gained knowledge on how to overcome interview stress. Women and girls obtained training to look after their mental health and hygiene..

INNORAPS

IEEE SB KSIT,ISTE KSIT in association with Department of Electronics and Communication organized Technical event INNORAPS on 2 February 2024.

Principal Dr.Dilip Kumar K, Hod of electronics and communication, Dr. PN Sudha and IEEE chair Santosh Kumar B inaugurated the event and welcomed all the participants and wished them best for participating.
About 110 members from 3rd Sem and 5th Sem participated in the event.

The Objective of this Technical seminar was to advance the Students in challenging and navigating technical skills.

CCN Model Exhibition

On 29th February &1st March 2024 KSIT-IEEE SB,IETE,ISTE,IEI along with the department of Electronics and Communication conducted Project exhibition. The guest for the day was Head of Department of ECE Dr.P.N.Sudha,Dr.Dinesh Kumar,Mr.Praveen .

 The main objective of the exhibition was to Gain knowledge on Technical Proficiency,CCN concepts Understanding,Teambuilding.
This event was conducted for 5th sem students where around 120 students participated in the event

ORPHANAGE VISIT

A visit was organized for IEEE members to a boys orphanage SAMPATTU was organized by KSIT IEEE Student Branch on July 1st 2023.
This orphanage shelters kids in the age group of 3 years to 16 years.
The main objective of the visit was to encourage students to think about the needs of the society and motivate them to work for the same

IEEE students visited the orphanage at around 12.30 pm, which was the lunch time. Lunch was arranged for all the kids. IEEE students served lunch for everyone. The kids recited shlokas before lunch. After lunch, students interacted with kids, showed their projects, explained about robotics. Sports items like volleyball, football, basketball, hoolahoops, skipping ropes, tennis balls and football pump was donated to the orphanage. Our students even played cricket with the kids. Everyone were very happy to spend quality time with kids.

HARDWARE HACKATHON

This workshop was organized by the KSIT IEEE in collaboration with Garut Club of KSIT.It was organized on 21st and 22nd July 2023.To gain knowledge on interfacing input and output components.

Two days workshop was organized for First year students of KSIT on Hackathon Hardware: Arduino IDE. In this workshop students were made to learn the usage of Arduino and the internal structure of the same. Using Arduino students were made to implement small mini projects to test their knowledge. All the participants enjoyed the same thoroughly. This workshop was like a brain storming session for first year students on Hardware hackathon.

SPS DAY 2023

Signal Processing Society Day was celebrated on June 2nd 2023 to mark 75 years of Signal Processing Society.
A technical talk on Video Streaming and Career Opportunities in the field of Signal Processing was organized in the afternoon session. The talk was given by Mr. Harish Venugopal, Senior Project Manager, Harman International.

The event was split up into two sessions. Morning session included three technical events - Ideathon, Poster Presentation, and a Quiz. Students were asked group themselves in groups of 2 each and participate in all these events.
Under Ideathon, students had to come up with innovative ideas and the impact of those ideas to the society. Under Poster Presentation students were given a topic "Signal Processing for Society". They were asked to make posters either using software or paint. Finally a technical quiz on various topics was held. Winners and Runner up certificates with prize money was given for each of these events.

IEEE DAY 2023

IEEE KSIT, WIE KSIT and SPS KSIT in association with the Department of Electronics and Communication organized an IEEE Day on 7th of october.
The event was conducted in the afternoon for the first year students of ECE which included two events which were poster making followed by quiz. Students have showcased their talents in both poster making and quiz events with spirit. Event was winded up at 4pm with lots of energy.

INDUCTION PROGRAMME

IEEE KSIT, WIE KSIT and SPS KSIT in association with Department of Electronics and Communication organizedIEEE Mega event "INDUCTION PROGRAMME" on 1st ,2nd and 6th December 2022.

The panel consisted of execom members and the office bearers who addressed all the students and enlightened them about the importance and benefits of joining the IEEE. The panel also conducted an IEEE membership drive and hence was successfully able to motivate the students to become a member of the IEEE family. Post the panel discussion was followed by an eyes breaking session along with a non technical event such as the crosswords and the connections. Crosswords are where the students were instructed to form a meaningful word with the clues given. Connections are where the students are instructed to create a name of movie by connecting the pictures displayed on the screen. The winners and the runner ups were awarded with goodies as a token of appreciation and motivation.

NISVAARTH MARATHON

Nisvaarth is 5k marathon organized by the institution as a humanitarian service to help the underpriviliged children and support in their life activities.This was organised on 17th June 2023.Around 450 Students along with the lecturers participated in this event.

It was a 5 kilometer marathon which was conducted by IEEE KSIT in collaboration with KSEEM .
Marathon started from KSIT campus till Turahalli forest.Students gave their best and made the event successfull.Refreshments were given to the students.

INDUSTRIAL VISIT I

Department Electronics and communication under IETE student's forum, IEEE and ISTE organized one day industrial visit for 3rdSemester students along with faculty members on "U R RAO Satellite Centre, Bangalore. This visit was mainly focused to understand about the industries which were existing in the city according to the branch.

The students were able to get an idea how exactly the organization works on the given project. By this industrial visit we could even get information about the Government Undertaking companies. There were many interesting topics such as the upcoming government projects to develop the cities. The tech summit was divided into 2 sections 1. Familiar organization 2. startup companies

In the familiar organization they explained how exactly a team would be working for a project and what are all the outcomes of the project. They were only concerned about developing the cities and doing welfare In the startup companies their ideas were totally different they were working for well-being of the society and to get the solution for the problems in a society in a cheaper cost .This was organized on 22/02/2024.

INDUSTRIAL VISIT II

Department Electronics and communication under IKSIT-IEEE SB,IETE,ISTE,IEI one day industrial visit for 7th Semester ECE students along with faculty members to "Mahatma Gandhi Institute of Rural Energy & Development (MGIRED) on 27/02/2024 permitted by Karnataka Power Corporation Ltd. There are total 62 students and five staff members were present during industrial visit.

Mahatma Gandhi Institute of Rural Energy and Development (MGIRED) located in Bengaluru was established in the year 2000 with assistance of Ministry of New and Renewable Energy (MNRE), Government of India and the Rural Development & Panchayat Raj Dept., Government of Karnataka. The main objective was to have a unique Institution to carry out Capacity Building and Awareness Programmes in the areas of Rural Energy and Sustainable Rural Development which will cater to the needs of Karnataka and neighboring southern states namely Andhra Pradesh, Telangana, Tamil Nadu, Kerala and Union Territory Pondicherry.

INDUSTRIAL VISIT III

IEEE KSIT SB in association with IETE,ISTE,IEI got an opportunity to visit ELSIA, Electronic City, Bangalore campus on 16th Jan 2023 for 3rd sem students.

From this vist sutdents gained knowledge about:
• Learning about new inventions in the field of design, development, assembly & integration of communication, navigation, remote sensing, scientific and small satellite missions.
• Gaining the knowledge about various satellites developed and launched by ISRO
• From this visit the students were able to find their field of interest

STAFF EXECOM

Mrs. BHARGAVI ANANTH
BRANCH COUNCELLOR

MR. SANTHOSH KUMAR
IEEE CHAIR

Dr. P.N.SUDHA
WIE CHAIR

Mrs. SANGEETHA V
WIE MENTOR

Dr. SUDARSHAN B
IEEE MENTOR

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IEEE VICE CHAIR

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GANDHAMANI.C.M
IEEE/WIE/SPS
TREASURER

KUSHAL GOWDA
DEPUTY SECRETARY

GAGANA SINDHU
DEPUTY TREASURER
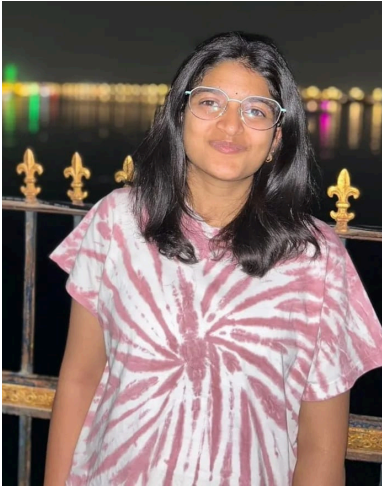
BHAVANA G
WEBMASTER

LOHITH
DEPUTY WEBMASTER
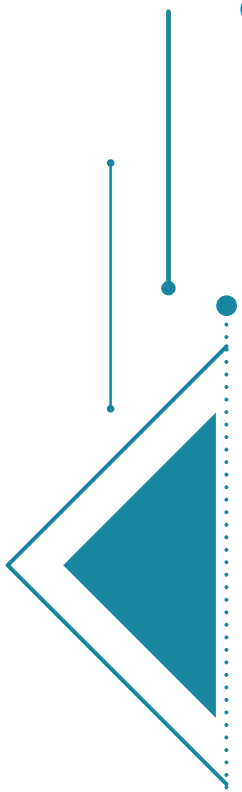
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WIE CHAIR

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WIE VICE CHAIR
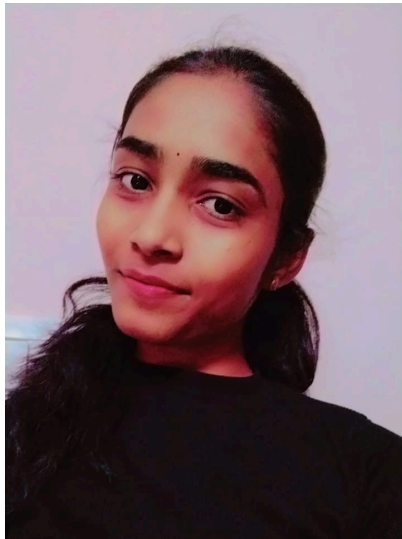
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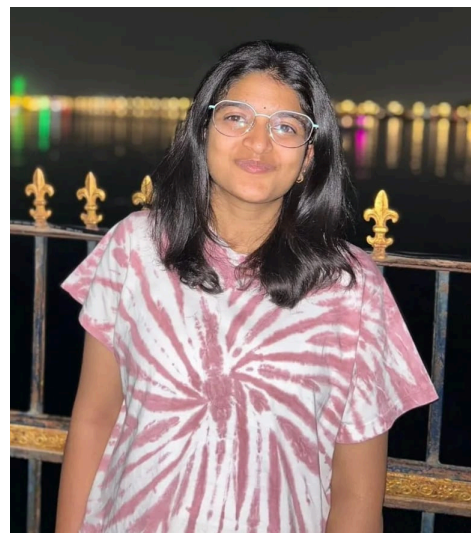
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SIGNATURES

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