



# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(Unit of Alva's Education Foundation (R), Moodbidri)

Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka

Affiliated to VTU, Belagavi & Approved by AICTE New Delhi. Recognized by Govt. of Karnataka.

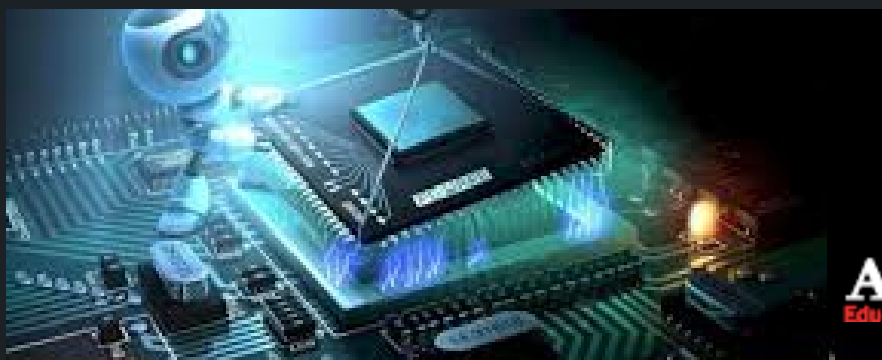
Accredited by NAAC with 'A+' & NBA (ECE & CSE)

## Department of Electronics & Communication Engineering



DWANI  
2023-24 (EVEN)





## Electronics & Communication Engineering



### >>> VISION OF THE DEPARTMENT

Centre of Excellence to Empower the young minds in the field of Electronics and Communication Engineering with research focus and skill development through Transformative Education catering to the needs of the Society.

### >>> MISSION OF THE DEPARTMENT

- To create Learning Environment to enable the Students for Excellence in the field of Electronics and Communication Engineering.
- To Empower the Students with necessary Skills for Solving the Complex Technological Problems.
- To Inculcate Research Culture among Teaching-Learning Group by guiding them towards Research Activities to bridge the gap between Industry and Academia.
- By Imbibing the Students with Human Values and Ethics through Transformative Education and make them Socially Responsible professionals.

### >>> ABOUT THE DEPARTMENT .....



Department of Electronics and Communication (E&C) Engineering is accredited by National Board of Accreditation (NBA), New Delhi. ECE is one of the renowned branches in the field of Engineering, have proved time and again, that they play a pivotal role in both the developing and well-being of our society in the fast paced human life. E&C branch is concerned with the design, development, manufacture and application of electronic devices, circuits and systems.

# A message from THE HEAD OF THE DEPARTMENT

I am happy to share that Department of Electronics and Communication Engineering is releasing the newsletter, enumerating the various activities and achievements of our faculty members and students during the period of January 2024 to July 2024. The department endeavors to produce confident professional tuned to the real time working environment. The Department offers an excellent academic environment ecosystem with a team of highly qualified faculty members to inspire the students to develop their technical skills and to inculcate the spirit of teamwork among them.

I would like to thank our Management, Principal, colleagues, students and other stakeholders for supporting and making it possible to contribute back to society. With your support, our Department will continue to excel and contribute to our society to make it a better place to live.



**Dr. Dattathreya G**  
Head of the Department &  
Dean (Planning)



# ACTIVITIES

**Inaugural function of Department Forum “EVIONICS” Activities 2023-24**

**Chief Guest : Mr. Shreyas P Bhat, Principal Engineer (Yield and Integration),  
GlobalFoundries, Bangalore.**

**Date & Time : 03/01/2024 & 2.15 PM**



The inaugural ceremony of “EVIONICS Activities 2023-2024” was held on 03/01/2024. Ms. Shreya, welcomed the Chief guest Mr. Shreyas P Bhat, Principal Engineer at GlobalFoundries, Bangalore, Mr. Vivek Alva, Managing Trustee, AEF, Dr. Peter Fernandes, Principal, Dr. Dattathreya, Dean planning, Dr. Siddesh G K, Head of the Department, Dr. Manjunath D V, Dr. Ganesh V N, Forum Coordinator, Heads of other Departments, and Faculty members of E&CE Department.



Mr. Shreyas shared his words of wisdom with students. He congratulated the new office bearers and explained the responsibilities to fulfill. He shared a brief thought on the corporate life and student life. He also presented how to bridge the gap between industry and academia. He suggested the students to cultivate the habits of working on new technology and to update them with the present industry era.



The IBM skill build program boot camp was conducted from 13th Feb 2024 to 17th Feb 2024. The IBM Skills Build Boot Camp on Cloud Computing at Alvas Institute of Engineering and Technology, Mijar, Moodbidri, demonstrated significant success in achieving various outcomes, fostering skill development, and enhancing the overall learning experience for the participants.

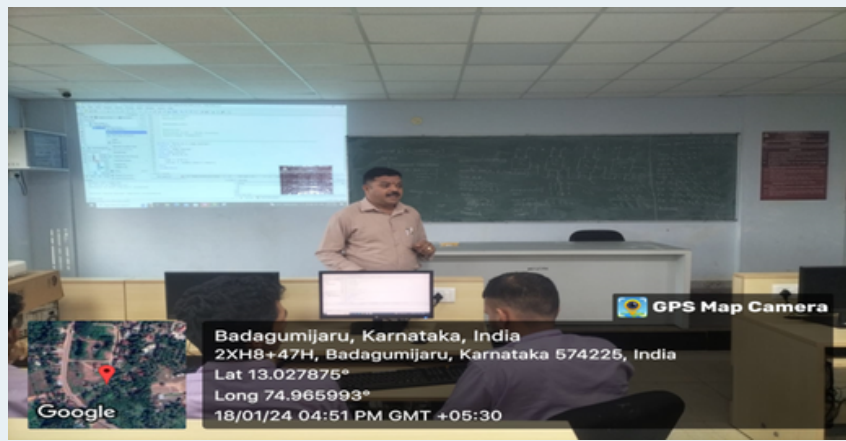


The outcomes of the IBM Skills Build Boot Camp underscore its success in imparting valuable skills, fostering collaboration, and preparing students for the challenges and opportunities in the field of cloud computing.



The technical talk on "Innovative Developments in MEMS Gas Sensors" commenced on 27th Feb. 2024 at 10:30 AM.r. Shwetha H R, a renowned expert in the field of MEMS (Micro-Electro-Mechanical Systems), graced the occasion as the resource person. Dr. Shwetha H R brought a wealth of knowledge and experience to the event, setting the stage for an insightful discourse on the latest innovations in MEMS gas sensors.

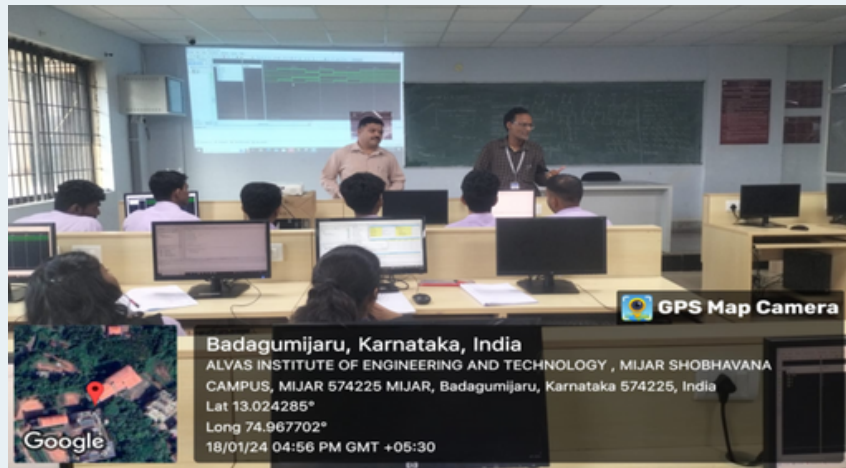
The technical talk delved into the cutting-edge advancements in MEMS gas sensors, a crucial component in various industries such as environmental monitoring, healthcare, and industrial safety. Dr. Shwetha H R provided a comprehensive overview of the current state of MEMS gas sensor technology and its implications for the future.



Workshop Conducted for 3rd year A & B Section Students scheduled on 17th to 18th of January, 2024 and 22nd to 23rd January, 2024.

Dr. Srinivasa Rao Udara, Associate Professor, STJIT & M.D, BJV Tech, Ranebennur, was the resource person .

The program was aimed to provide participants with comprehensive knowledge and hands-on experience in Verilog coding in VLSI Design, covering both theoretical concepts and practical applications.



A Four-day workshop on Verilog HDL coding was organized by Dr. D V Manjunatha, Professor , Department of Electronics and Communication Engineering (ECE) , AIET Mijar.



The invited talk on "VLSI - The Present and Future" commenced as scheduled at 11.00 AM at VLSI Lab on 02-03-2024






## Technical Talk on “IEEE: Enhancing Your Career”

Resource Person : Dr. Dhanukumar Pattanashetti

IEEE INDIA office

Date & Time : 28-05-2024 at 11:00 AM




Alvas Institute of Engineering and Technology   
Moodbidri, Dakshina Kannada Dist, Karnataka 574225

Alvas Research Center, IEEE Student Branch  
in association with  
Dept of Electronics & Communication Engineering

Organizing an insightful talk on

### IEEE: Enhancing Your Career



**Speaker: Dr. Dhanukumar Pattanashetti**  
IEEE India Office

Venue: MBA Seminar Hall  
Time: 3PM  
28 May 2024

Dr. Dhanukumar Pattanashetti, Librarian working for a Technical Society at Bengaluru. An expert in the field with extensive experience in IEEE and professional development, delivered the keynote address on enhancing career prospects through IEEE involvement.

The programme is organized by the Department of Electronics & Communication in association with IEEE Chapter, AIET, Mijar on 28th May 2024 in MBA seminar hall. The talk was attended by students from the E&CE department, faculty members, and IEEE representatives, including the Head of the Department Dr. Siddesh G. K., Dean of Planning Dr. Dattathreya, IEEE Branch Counsellor Dr. Manjunath Kothari, and Dr. Guruprasad. The event was well-received, with active participation and engagement from the audience.

## Technical Talk on “Exploring Antenna Innovations”

Resource Person : Dr. Karthik Rudramuni,

Antenna Designer, WIPRO Research Lab, Bengaluru.

Date & Time : 15-06-2024 at 11:00AM



Department of ECE organized a technical talk on “Exploring Antenna Innovations” by Dr. Karthik Rudramuni, Antenna Design Engineer, Wipro Research lab, Bangalore on 15/06/2024 to 6th and 8th Semester students of ECE.

## Technical Talk on “FPGA and ASIC”

Resource Person : Dr. Srinivasa Rao Udara, Associate Professor, STJIT &

Managing Director BJV Tech, Ranebennur.

Date & Time : 01-07-2024 at 11:00AM



Department of ECE conducted the technical talk on “FPGA and ASIC” by Dr. Srinivasa Rao Udara, Associate Professor, STJIT & Managing Director BJV Tech. Ranebennur on 01/07/2024 for 4th Semester students of ECE.



## Technical Talk on “Biomedical Signals and Its Applications in Machine Intelligent Automation and Robotic Control”



Department of ECE organized an Technical talk on “Biomedical Signals and Its Applications in Machine Intelligent Automation and Robotic Control” in association with “E-Yantra” to Fourth Semester students of ECE by Dr. Roshan Joy Martis on 23rd July 2024 in Civil Engineering seminar Hall.

Dr. Roshan Joy Martis, Associate Professor in the Department of Computer Science and Engineering at Global Academy of Technology, Bengaluru. He did his Ph.D in Medical Science and Technology from IIT Kharagpur. He has appeared consecutively for four years (since 2020 till 2023.) as one among the top 2 percent meritorious researchers of the world as per the survey conducted by the Stanford University, CA, USA .



The goal of the talk is to provide a comprehensive overview of how biomedical signals are utilized in modern technology, highlight current innovations, and foster discussion on future developments in the field.

# Industrial Visit

**Name of Industry : Master Control Facility (MCF), ISRO, Hassan**

**Date of Visit : 4.1.2024**

Master Control Facility (MCF) at Hassan in Karnataka controls all the geo-stationary satellites of ISRO. MCF controls all the Geostationary / Geosynchronous satellites of ISRO, namely, INSAT, GSAT, EOS, CMS and IRNSS series of satellites. MCF provides overall radio visibility coverage extending from Persian Gulf in the West to Australia in the East, a geo-arc of 150 degrees which makes it ideal control center in South Asian Region. MCF has the expertise in operations of Indian Geosynchronous Space assets for Communication, Navigation and Metrological Payloads.

A team of 54 students of final year ECE visited Master Control Facility (MCF), ISRO, Hassan along with 2 faculty members. Students gained practical knowledge on various theoretical concepts known to them, with the co-ordination of consultant guide at MCF (ISRO).





Name of Industry : HAM Radio Station Setup at Dept. of ECE, NITK, Surathkal

Date of Visit : 22.01.2024



The industrial visit to NITK Surathkal was organized for the Electronics and Communication Engineering students of Alva's Institute of Engineering & Technology. The visit aimed to provide insights into the Centre for System Design and the HAM Radio Station setup at NITK Surathkal.

Towards the end of the visit, the students were given an opportunity to clarify their queries. Around 34 students of 2nd year and 3rd year, Electronics & Communication Engineering attended. The industrial visit to NITK Surathkal was an enriching experience for the students of Alva's Institute of Engineering & Technology. It provided a valuable opportunity to explore cutting-edge research at the Centre for System Design and understand the practical applications of HAM radio communication. The interactions with faculty members and researchers opened avenues for future collaborations and knowledge exchange.



# Faculty Achievements

- Dr. Guruprasad had a Patent grant for the Development of interlocking pavers using waste plastic and APTES as binding material in collaboration with jagruth tech pvt ltd, Mysuru in 2023.
- Dr. Siddesh G K registered a patent design on titled “The smart seed sowing machine” in patent office , Government of India on 12th April 2024. (design no. 413388-001).
- Dr. Siddesh G K registered a patent design on titled “ IOT Operated Robot for Agriculture Farm Management” in patent office, Government of India on 12th April 2024. (design no. 413389-001).
- Dr. Ganesh V N, has published a patent and waiting for grant titled on “An adaptive noise reduction system for enhanced audio signal clarity” with application 202421024990 in 2024.
- Dr. Ganesh V N, successfully completed a NPTEL course on “Communication Networks” and FDP certificate from IIT, Kharagpur with Elite score in Jan-Apr 2024.
- Dr. Ganesh V N, participated in foundation training program on “Semiconductor Fabrication and Characterization” conducted from 18th -20th June 2024, by Centre of Nano Science & Engineering, IISc, Bengaluru supported by MoTA, GOI.
- Dr. Ganesh k, Mr. Harish Bhat has undergone innovation ambassador (IA) training “Advance Level’ conducted in online mode by MoEs Innovation Cell & AICTE during the IIC calendar year.
- Dr. Guruprasad applied for a Patent grant on smart electric vehicle powered by solar energy in 2024.

## KSCST Projects Selected in 2023-24

- 1.Pavan K H , Akshay, Chaithra Shree M G , Pratham, received a grant of Rs.5,500.00 in student project programme -47th series from KSCST in 2024 guided by Mrs. Vijetha T S.
- 2.Rohan H, Rakshitha S, Ramya K, Vishwanath M , received a grant of Rs.5,500.00 in Student Project Programme -47th series from KSCST in 2024 guided by Dr. Manjunatha DV and Dr. Napoleon.
- 3.Shridevi, Disha H, Shruthi, Shwetha, received a grant of Rs.6,500.00 in student project programme -47th series from KSCST in 2024 guided by Mrs. Bhagyashree.



# Students' achievements

- Meghana L, Vaishnavi S, Thanika M, Winners at VTU inter collegiate Ball Badminton state level Tournament held at CMRIT, Bangalore from 13th to 14th March 2024.
- Amaresha M, Winner in weight lifting inter collegiate state level held at Veman Institute of Technology, Bangalore from 1st to 2nd September 2023 at. Category: 55 kg.
- Prasanna Kumar B I, has secured 3rd place jackoondo (U-80kg) intercollegiate state level tournament held at SIT Tumkur on 21st & 22nd August 2023.
- Darshana B Bandi, Winner in solo dance under senior age category in folk dance form under an international dance contest & festival “Bharath Nruthya Mahotsav” from 3rd June to 6th June 2024 atr kala academy auditorium, Panaji, Goa.
- Prasanna Kumar B I, has secured 3rd place at TAEKWONDO C (U-80kg) intercollegiate state level tournament held at Global Academy of Technology, Bengaluru from 21st & 22nd june 2024.
- Shravya Shetty , has presented a paper titled “Review of Impact of Generative AI in Finance” in the “12th international conference on Contemporary Engineering & Technology 2024” held on 23rd & 24th March 2024.
- Prakruti KP, won FIRST place in the HeroX NASA Tournament Lab Challenge 'Brilliant Minds for Pure Blue Skies!' in 2024.
- Pooja V Naik, Chiranjeevi U B, Varun D, Prajwal Das, Varshini K L & Team, Winners at Tandav dance competition held at NITK, Surathkal on 2nd march 2024.
- Prajyoth , Vaishnavi V Naik participated in ESUMMIT-24 at IIT Bombay on 3rd to 4th January 2024.
- Sanjana S H, Chethana AB , Pallavi A B , Ramya R, participated in one week SERB sponsored workshop on “Applications of Artificial Intelligence in Smart Energy Generation and Storage Devices” during 19th to 25th June 2024 organized by NITK Surathkal.
- Kiran Kashyap, Prajwal M, Goutham, Mailara Gouda, Won 1st prize at FUSIONTECHATHON 2.0 an intercollegiate project exhibition hosted by department of AI-ML at AIET on 16th feb. 2024 Guided by Dr. Ganesh V N.
- Saikumar participated in FUSIONTECHATHON 2023 a 12 hour national level intercollegiate hackathon hosted by department of AI-ML at AIET on 2nd Sept. 2023
- Kishore U, Yashwanth and team won Handball runners held at NITTE.
- Varun D , Pooja V Naik, Chiranjeevi U B , has won 2nd place in Moves and Groves (Eastern) competition organised as a part of AJIET Aakar 2024 a state level techno cultural fest on 5th and 6th May 2024.
- Varun D, Pooja V Naik, Chiranjeevi U B , has secured 2nd place in Folk Orchestra at VTU cultural Youth Festival “Blis Beat 2024” organised by SJCIT, Chickballapur during 27th to 30th march 2024.

# Students' achievements.....

- Yashwanth G T has secured 3rd Place in VTU state level cross country intercollegiate championship 2024 held at Bhahubali College of Engineering , Shravanabelagola, from 14th to 16th June 2024.
- Varun Kumar R , participated in VTU state level Best Physique Championship and selection trials held at Vemana Institute of Technology , Bengaluru on 1st & 2nd September 2023. Competition.
- Diya successfully passed certificate of C examination in A Grade held in 2024 under the authority of Ministry of Defence, Government of India.
- Ravi Kovi, C Vennela, successfully passed certificate of B examination held in 2024 under the authority of Ministry of Defence, Government of India.
- Vaishnavi S, has participated in dance competition and secured 1st place during the annual training camp held at Alva's Pre-University college Moodbidri, from 2nd to 4th June 2024.
- Sinchana C K, Lakshmi Keerthana, successfully completed a NPTEL course on VLSI Design Flow: RTL to GDS on July-Oct. 2023.
- Lakshan, successfully completed a NPTEL course on "Hardware Modelling using Verilog" on July-Sep. 2023.
- Sonali, successfully completed a NPTEL course on "Computer networks and internet protocol" on July-Apr. 2024.
- Prathik M Saliya, Shravan, successfully completed a NPTEL course on "Fundamentals of Semiconductor Devices" on July-Apr. 2024.
- Gagan H S, Kiran Kashyap, Goutham, participated in SRISTI 2024, State Level Project Exhibition and Competition held at Atria Institute of Technology, Bengaluru from 24th to 26th May 2024 .
- Jeevan K G, Bhaskar T, Kaluva Chandrashekar, Kalmesh G G , Amaresha M , Varun D, Lekhan T, Shashank C S, SaiKumar, participated in the national workshop on "Unleashing Innovations for and from Grassroots conducted by HBN, GIAN, and NITK Surathkal on 24th February 2024.
- Sanjana S H, Shreya K R, Sinchana R, Pallavi A B, Chethana A B , Niveditha Patil, Lekhan T, Sindhu K S, Veena B , participated in the awareness session on plastic waste management as a part of the corporate social responsibility project plastic waste management Mangalore organized by United Way, Mumbai on 13th July 2023.
- Prajwal Malabagi, Kaluva Chandrashekar, participated in IoT Hackathon conducted on the 11th and 12th August 2023 organised by GINSERV at JSSATE Bengaluru.
- Suma K G participated in essay event organised in commemoration world wetland Day on 2nd Feb. 2024 at AIET Moodabidri in Association with EWRG, CES, IISc Bengaluru.
- Deeksha S , participated in INFOTHON 2.0 , a 24 hours National Level Hackathon organised by the department of information science & engineering, Vidyavardhaka College of Engineering on 20th - 21st Jan 2024.



# Students' achievements.....

- Manjunath H J, secured 3rd place - Cross country race in Inter Collegiate Division level tournament held at Bahubali College of Engineering, Shravanabelagola from 14-06-2024 to 15-04-2024.
- Anand Muddannavar, secured runners up in Foot Ball at Inter Collegiate Division level tournament held at PA College of Engineering, Mangalore from 22-05-2024 to 23-05-2024.
- Anand Muddannava secured State champion 1500mt, 2nd place in medley relay and 3rd place -800mt in 54th Shree Padma Bhooshan Manohar Parrikar state level Athletics championship 2023 held at Goa on 27th and 28th February 2023.
- Shashwath BJ secured 2nd place- Ball Badminton in Inter Collegiate state level tournament held at RYMEC, Ballary from 10-12-2023 to 11-12-2023
- Manjunath H J, has won second place in 4x100 mt relay in AIET Annual sports meet 2023-24 held at Moodbidri on 20th April 2024.
- Maduling, has won 3rd place in 400 mt relay in AIET Annual sports meet 2023-24 held at Moodbidri on 20th April 2024.
- Thanika M , has won 2nd place in 400 mt relay in AIET Annual sports meet 2023-24 held at Moodbidri on 20th April 2024.
- Thanika M, Winner in VTU Intercollegiate Ball Badminton State Level Tournament held at CMRIT, Bangalore from 13th to 14th march 2024.
- Chaitra vittal mane 3rd sem A- participated and presented a poster in 11th national conference on 'Condensed matter Physics and Applications'-CMPA organized by MIT Manipal on 14-12-2023 to 15-12-2023.
- Michelle Dcosta, participated and presented a poster in 11th national conference on 'Condensed matter Physics and Applications'-CMPA organized by MIT Manipal on 14-12-2023 to 15-12-2023.
- Sudarshana Govindaraddi Hanchinal, Participated and presented a poster in 11th national conference on 'Condensed matter Physics and Applications'-CMPA organized by MIT Manipal on 14-12-2023 to 15-12-2023.
- Manish Shetty Participated in Literatti - Unveiling Voices, Ideas & Perspectives organized by Chinthana manthana, Reader's Club of AIET on 17-11-2023.





## Photo Gallery

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# Department Forum: " EVIONICS "

