

CET ELECTRON

Newsletter of Department of Electronics and Communication, CET



Bidding Adieu to the Class of 2024: Celebrating Achievements and Embracing the Future. We are immensely proud of their accomplishments and wish them all the best in their future endeavors.

POWER ELECTRONICS: TRENDS AND FUTURE INSIGHTS

25 March 2024: The AE Association conducted a workshop on Power Electronics Technology, featuring Ramesh P, a Scientist from CDAC Trivandrum, as the keynote speaker. This workshop aimed to equip students and faculty with insights into the latest advancements in power electronics, highlighting future trends and applications in the industry. Participants engaged in discussions and hands-on sessions, enhancing their understanding of this critical field.

OPPAM: ESSENTIAL STUDY RESOURCES FOR STUDENTS

Oppam is a valuable initiative launched by the EC Association to support students in their academic journey. It provides access to essential study materials, including notes and previous year question papers, ensuring that all students have the resources they need to excel in their studies. This initiative reflects the association's commitment to enhancing educational support and fostering a collaborative learning environment within the department.

CELEBRATING THE RETIREMENT OF OUR ESTEEMED FACULTY

18 May 2024 :The EC Department celebrated the retirement of esteemed faculty members Dr. Ajayan K.R, Dr. Susan R.J, and Mr. Joy P.



Dr. Ajayan K.R., who served as Professor and Dean of Student Affairs, has been a pivotal figure in the department. His dedication to student affairs and academic excellence has left a lasting impact on both students and colleagues. Dr. Susan R.J, a respected professor, has also made invaluable contributions to the department through her teaching and mentorship, inspiring countless students throughout her career. Mr. Joy P. has been a vital part of the team, supporting various initiatives and fostering a collaborative environment. The department wishes all three retirees a fulfilling and joyful retirement, celebrating their achievements and the legacy they leave behind.

EC DEPARTMENT WELCOMES THE NEW HoD

31 May 2024: EC Department is pleased to announce the appointment of Dr. Haris P.A. as the new Head of Department, succeeding Dr. Joseph Zacharias, who has served diligently as HoD. We extend our heartfelt gratitude to Dr. Joseph for his leadership and contributions during his tenure and look forward to the new initiatives and vision that Dr. Haris will bring to the department.





SPECTRA'24

15 March 2024: Spectra, the Electronics department fest organized by the EC Association, is a celebration of innovation and creativity within the department. One of the standout components was the Project Expo, where 25 teams, addressed statement problems using electronics concepts, with the best projects awarded cash prizes. The excitement was further amplified by the Robot Wars and Robot Soccer, where teams from various regions showcased their robotic designs in spirited competitions. Additionally, workshops led by industry leaders such as RigLabs provided participants with opportunities to enhance their technical skills. The festival also included entertaining activities like game rooms, a neon room, and a haunted house, culminating in a lively Cultural Night filled with music, dance, and performances that celebrated the talents of aspiring artists and strengthened the department's community spirit.





CANDELA'24

03 April 2024: Candela, the electronics department fest organized by the AE Association, is a vibrant celebration that brings together students and faculty to showcase innovation and creativity in the field of electronics. The fest co-ordinated by Dr. Helen Mary M.C, Assistant Professor, and Applied Association representative Pranav. P.R along with students of EC department. The fest was inaugurated by former HoD Dr. Joseph Zacharias. The event featured an exciting Roboshow that highlighted the innovative Bandicoot, a groundbreaking solution designed to tackle the issue of manual scavenging. Also a various number of events including workshops, games and other fun cultural activities to provide an energetical experience and fun.



NBA ACCREDITATION ACHIEVEMENT FOR MTECH IN SIGNAL PROCESSING

The M.Tech program in Signal Processing at CET has achieved NBA accreditation for the academic years 2024-25, 2025-26 and 2026-27 marking a significant milestone in recognizing the program's quality and standards. This accreditation underscores the program's commitment to delivering high-quality education and advancing expertise in the field of signal processing.

ECE EXPANDS: 120 B- TECH SEATS AVAILABLE!

The Electronics & Communication Department is pleased to announce the addition of extra seats which makes a total of 120 seats for its B-Tech Electronics and Communication programme.

INNOVATIVE MILESTONES: SECURING NEW PATENTS

Dr. Sivakumar R., Associate Professor, Department of Electronics and Communication, and team received a patent for their invention : AN AUTOMATIC SAFETY SYSTEM THAT ENHANCES SAFETY OF A USER WHILE RIDING A VEHICLE.

CET has been granted a patent for a method and system providing variable speed control to electric motors. This innovative work, led by Dr. Biji Jacob and Ms. Jeeshma Mary Paul from the Electronics and Communication Department, showcases the department's commitment to cutting-edge research.

CET WELCOMES NEW PRINCIPAL

Dr. Suresh K from Electronics and Communication Engineering Department took charge as the new principal of CET succeeding Savier J S.



NEW HORIZONS: CET EXPANDS OPPORTUNITIES WITH MULTIPLE MoU'S FOR STUDENT INTERNSHIP

1.Airport Authority of India(AAI)

The College of Engineering Trivandrum (CET) has recently signed a Memorandum of Understanding (MoU) with the Airport Authority of India (AAI), creating valuable internship opportunities for students. This collaboration allows CET students from the Civil Engineering, Computer Science, Electronics and Communication Engineering, and Electrical Engineering branches to undertake internships at Trivandrum Airport

for a period of 4 to 6 weeks, with some flexibility in the minimum duration. AAI will accommodate four students per branch at a time, providing them with practical exposure and experience in their respective fields.

2.Exodyne Private Limited

14-June-2024: CET and Exodyne Private Limited, Trivandrum, have signed an MoU on 14th June 2024 to promote R&D cooperation in Electronics and IT. Signed by Shri Savier J., Principal of CET, and Shri Prasant K. Prasad, Director of Operations at Exodyne, this partnership aims to drive electronic innovation and foster academic and professional growth. It will enable joint R&D projects and offer valuable internships for both undergraduate and postgraduate students, enhancing their practical skills and industry readiness.

CELEBRATING PhD ACHIEVEMENTS

Prof.Sindhu N

25 July 2024: Prof:Sindhu N was awarded a PhD in Electronics and Communication Engineering by VISTAS, Chennai, for groundbreaking research in the area of "Emotion Recognition using Electrocardiogram (ECG) Signals for Patients with Autism Spectrum Disorder." This work focuses on developing innovative methods to enhance emotional recognition in individuals with autism, leveraging ECG signals for improved diagnostic and therapeutic approaches.

Prof. Reshmi E

Prof. Reshmi E was awarded PhD by IIT Bombay for a the thesis titled "Study of Recombination Characteristics in Silicon Solar Cells." This research, focusing on Microelectronic Devices, delves into the recombination processes in silicon solar cells, contributing to advancements in solar energy efficiency and technology.



IGNITING INNOVATION: THE BUILDCLUB WORKSHOP EXPERIENCE

17-18 November 2023 :The BuildClub Workshop, hosted by Build Club CET in collaboration with IITM Research Park and CETAA Chennai Chapter, was a resounding success on November 17th and 18th. This two-day event captivated 50 eager students with immersive hands-on projects, from dancing LEDs to autonomous robots and IoT devices, under the expert guidance of Maxelerator Foundation mentors. Coordinated by a dedicated team led by Dr. Haris P A and Prof. Shalu R F, the workshop not only advanced technical skills but also fostered a collaborative learning environment. With a focus on cutting-edge domains and practical experience, Build Club CET continues to drive innovation and technical excellence within the community.

PTA MEETING 2024-25



The PTA meeting for the academic year 2024-2025 was successfully conducted, bringing together parents and faculty to discuss important matters concerning student welfare and academic progress. During the meeting, Dr. Suresh Kumar E. extended his service as the PTA Secretary for the upcoming term, reaffirming his commitment to fostering a collaborative environment between parents and the school. The discussions emphasized the importance of parental involvement in enhancing the educational experience, setting a positive tone for the year ahead.

FACULTIES EMBARK ON PhD JOURNEY

Prof. Sudhi S and Prof. Jithina T S have been chosen for a PhD program under QIP. Prof. Jithina will pursue her PhD at IIT Palakkad, while Prof. Sudhi will undertake his PhD at NIT Surathkal. Their selection highlights their commitment to academic advancement and field contributions.



EMPOWERING THE NEXT WAVE: SEMESTER FIVE ORIENTATION FOR ECE & AEI

2 August 2024: An orientation session for the fifth semester B.Tech. ECE and AEI students was organized on August 2, 2024. Dr. Bindu G.R. Former Principal Government Engineering College Thrissur was the resource person for the session. The focus of the session was to prepare students for academic and career growth opportunities in the coming semesters.

APPROVAL SECURED FOR INNOVATIVE ACCESSIBILITY PROJECTS IN KERALA

The Centre of Excellence for Disability Studies (CeDS) has approved two faculty research projects aimed at improving accessibility for differently-abled individuals in Kerala. The first project, led by Dr. Jerrin Thomas Panachakel, titled "Empowering Visually Impaired Commuters in Kerala Transit System," has been allocated ₹1,00,000 and will utilize resources from an existing project. The second project, headed by Dr. Anusha S.P., titled "Adaptive Signal Control with Pedestrian Phases for Differently Abled and Elderly Persons," has received ₹2,50,000 and will be demonstrated on the CET campus. Both projects are set for a one-year duration and will share resources to ensure successful completion.

EXPLORING INDIA'S DIVERSITY: STUDENTS EMBARK ON UNFORGETTABLE INDUSTRIAL VISIT

Students from the S5 and S8 batches went on an enriching industrial visit covering several iconic destinations, including Bombay, Jaisalmer, Manali, Rishikesh, Amritsar, and Delhi. This tour aimed to provide practical exposure and enhance their understanding of various cultural and technological aspects across these diverse locations. Highlights of the trip included exploring the vibrant city of Bombay, known for its bustling economy and rich heritage, and experiencing the historical significance of Jaisalmer with its stunning forts and desert landscapes. The students enjoyed the serene beauty of Manali, engaging in outdoor activities and appreciating the natural surroundings. Rishikesh offered insights into yoga and spirituality, while Amritsar's Golden Temple provided a profound cultural experience. In Delhi, the students had the opportunity to explore a prominent electronic industry, where they gained insights into the latest technological advancements and manufacturing processes. Additionally, the visit included interactive sessions with industry professionals, who shared valuable knowledge about career opportunities and the future of electronics in a rapidly evolving market. This industrial visit not only broadened their horizons but also fostered teamwork and camaraderie among peers, making it a memorable educational experience.



RESEARCH PUBLICATIONS

Mitigation of FWM effect in DWDM-RoF system using OQPSK modulation

Research Scholar:Supriya S S

Guide:Dr Joseph Zacharias

Journal/Conference:Optical and Quantum Electronics

Month&Year:January 2024

An Improved DTC based Five phase Induction motor Drive with Minimum Torque Ripple and Constant Switching Frequency

Research Scholar:A Gauri

Guide:Dr. Shiny G(Supervisor),
Dr. Sreeni K G (Co-supervisor)

Journal/Conference:Advances in Electrical and Computer Engineering, vol. 24, no. 1, pp 51-60, 2024.

doi.org/10.4316/AECE.2024.01006

Month&Year:February 2024

Reducing FWM Efficiency in DWDM Networks by Employing OFDM and Alternate Channel Delay

Research Scholar:Supriya S S

Guide:Dr Joseph Zacharias

Journal/Conference:2024 7th International Conference on Devices, Circuits and Systems

Month&Year:April 2024

Augmenting Smart City Connectivity: A Robust Radio over Fiber System Resilient to Chromatic Dispersion

Research Scholar:R D Soumitra

Guide:Dr Joseph Zacharias

Journal/Conference:2024 7th International Conference on Devices, Circuits and Systems

Month&Year:April 2024

ACHIEVEMENTS

**Jnanesh Naick G(S3 AE),
Nanditha D(S3 AE)**



Secured third position in 'The Social Code' hackathon held on January 27th and 28th, conducted by IEEE CS SBC CET and IEEE SIGHT SB CET

Anagha Umesh(S5 EC)

She was the Overall coordinator of GDSC for Drishti'24. 4 workshops and 1 competition were conducted. One of the workshops, "Web Dev with Next.js" included students from NISH. The "Exploring GenAI " workshop had 120+ participants from different colleges.

**Vasanthi B N S(S5 EC)
Greeshma Jayakumar(S5 EC)**

Toppers (Top 1%) of Analog Circuits NPTEL Course

Parvathy Narayan H(S5 EC)



Event Coordinator, Reverse Coding competition, organized by IET-On Campus CET as part of Drishti'24. Was also a General Volunteer for CodeRecet, a 36 hour hackathon conducted by TinkerHub and IET-On Campus CET on March 22,23,24

Sreelakshmi Ajit(S5 EC)

Organized a hardware hackathon titled ECHO and a workshop titled Flutter for App Development for ISTE SC CET as part of Drishti'24.

Varun S(S7 AE)

Organised a Hackathon on behalf of ISTE for Drishti'24 where almost 40 students from various colleges participated.

ACHIEVEMENTS

**Akshara A ,Ananthan M,
Anurag T,Fathima Liya K
K,Riya K,Sarath S
(M-Tech AEI)
Rinsa mol T
(M-Tech Signal Processing)
Adwaith S, Harinandh M
M, Aswin S, V Janaki,
Priyanka Thomas, Irene
Saira Mathew, Paul
Thomas, Govind V,
Theertha Devan,
Safvan C K(S7 EC)**

These students underwent an internship with the C2S program.

Jibin(M-Tech MNE)

Got selected to visit the fabrication facility in Taiwan through C2S internship program.

Kalidasan K(ECE 23)



Secured GATE rank ECE 142, IN 144

**Aswathy N , Bhadra Ashok, Dave
Paul Joseph, Haridathan S, Alvin
Joseph, Fahmi Khan , Prannav
Kamath,
Akshay K Subash(S7 EC)
Ananya Satheesh,
Akash Krishna E V(S7 AE)**



Attended internship at RISE Lab IIT Madras.

Akshay K Subash(S7 EC)



Was a part of the team 'Herakles Racing' whose vehicle secured AIR 1 in Maneuverability and AIR 9 in overall performance at E-BAJA 2024, Hyderabad and played a significant part in the design and manufacturing process of the EV.

CULTURALS AND SPORTS



The Electronics Department won the Disha Trophy

Akash B(S3 AE)



CET Annual athletic meet:
1500m gold, 800m gold, 400m bronze,
KTU athletic meet :
4*100m relay- bronze,
Hestia Basketball Cup champions
Dhwani basketball Runners up
Vidyut'24 Basketball Cup
Runners up

Sona Steephen(S3 AE)

National Ball Badminton Junior Championship conducted from 10-3-2024 to 14-03-2024 and was also awarded Star of India award

**Induja V,
Irene Saira Mathew,
Parvathy Benoi, Aranya Krishna
Bhadra Ashok, Sradha S Kumar
V Janaki (S7 EC)**



Secured First prize in Group Dance in Sargam'24

**Kripa Sophia David(S3 AE)
Akhila R Nair(S5 EC)**



KTU athletic meet 4*400m relay second prize
Dhwani'24 basketball winners

CULTURALS AND SPORTS

Nayan Krishna P R(S3 AE), Samuel Binu Varghese(S3 AE), Diya Eldo(S5 AE), Ardra Prakash(S5 AE), Hima Cicily(S5 AE), Amrutha S(S5 AE), Althaf Mansoor(S7 EC), Bewin George(S7 AE), Amritha S S(AE 24), Dilip K(EC 24) (Watch The Freakz)



Was the finalists for the national level event 'DESTINY SEASON 4'. Event conducted at Chennai.

Won the following prizes from events conducted at:
 UKF kollam - 2nd prize,
 Mar Ivanios College - 1st prize,
 IIST Trivandrum - 1st Prize,
 IISER Trivandrum - 1st Prize,
 Providence Chenganur - 2nd,
 MIT Kayamkulam - 1st prize
 LBS Trivandrum - 1st prize
 Harfest - 1st prize
 MA college - 2nd prize
 MBITS - 1st prize
 Toch - 1st prize
 Bishop jerome kollam - 1st prize
 VKCET - 2nd Prize
 ACE Trivandrum - 1st prize
 St. Thomas Trivandrum - 2nd,
 TKM - 3rd prize
 College of Engineering attingal-2nd
 Marian Enggineering college - 1st
 CET -showcase

Ananya Satheesh(S7 AE)



KTU atheltics meet-400m Relay 2nd Prize

Ann Gipson(S5 AE)

Maria Gipson(S5 AE)

KTU athletic meet 4*400m-relay second prize,
 Dhvani'24 basketball winners

Nasheeth K(S3 AE),

Muhammad Rajab C(S3 EC),

Mrithul Martin(S3 AE),

Blesson Mathew(S3 EC),

Jeevan Poullose(S3 AE),

Anand C P(S3 AE), Sreerag

N(S3 AE), Mayoogh

Manohar(S3 AE), Joyel

Jose(S3 EC), Suryadarshan

P S(S3 EC), Gokuldas T C(S3 AE),

Disha football second prize

Nanditha Vinod(S5 AE)

Secured third price in Classical dance conducted on Sargam'24

CULTURALS AND SPORTS

Jeevan Krishna S ,Mahesh Jagadesh ,Sidharth Shibu Nanddhu Sivan, Mohammed Irfan, Amaldev N D, Suha Dinesh S (S7 EC)



Secured First Prize in mime conducted on Sargam'24

Megha Elizabeth(S5 AE)

Was part of the fashion team Fashbea which secured third price in the Glamour Galleria event conducted on Dhanak'24, annual cultural fest of IIST

Mohammed Nimshad,Ashiq M, Abu Binoy Mathew, Shijin (S7 AE), Mrithul Martin, Gokul Das (S3 AE), Hanan Jasim (S5 AE)



Secured 3rd Runners Up in KTU Interzone

Irene Saira Mathew(S7 EC)

Runner up Women's doubles in the Inter department badminton tournament

Varun S(S5 AE)

Secured First price in Mridhangam conducted on Sargam'24

Hima P Anil, Karthik Ramesh, Varun S, Abhishek P Nair, Archa C S, Isha Lekshmi I S (S7 AEI)

Roshan Muzaf T(S3 AEI)



Secured Third Prize in Eastern Group Song conducted on Sargam'24

M V Mahadevan(S7 EC)

Runner up Mens singles in the Inter department badminton tournament

TOPPERS

ECE 2024

S8 TOPPERS

PN PARAMESHWARAN	9.81
DONA KURIAN	9.73
AKSHAY K B	9.63
S JANARDAN	9.53
GODSON ANTONY	9.51
MEENAKSHI V	9.51
MARIYA CHERIAN	9.47
K SATHVIK KAMATH	9.42
ELSA ELDHOSE	9.39
M LEKSHMI NAIR	9.37

AEI 2024

S8 TOPPERS

MALAVIKA V	9.63
MANSI MANOJ	9.44
CHANDANA MOHAN	9.43
DEVADUTT J	9.28
R MUKUND	9.24
JUDY THERESA ZACHARIA	9.23
AKASH MATHEW P	9.21
ABHIJITH S	9.19
CAREN LAURETTE R	9.17
VANDANA A S	9.09
ARJUN RAJESH	9.03
NITHIN CHANDRAN	9.03

S7 ECE

S6 TOPPERS

ASWATHY N	9.87
DEENA MARIYA DAVID	9.83
THEERTHA DEVAN	9.63
KEERTANA PILLAI	9.57
GOUTHAM S KUMAR	9.39
BHADRA ASHOK	9.28
ATHUL KRISHNA AB	9.11
ARJUN ANIL	9.04
V JANAKI	9.04
AKHIL. A.S	9.00

S7 AEI

S6 TOPPERS

VAISHNAVI G J	9.50
KRISHNA S NAIR	9.59

TOPPERS

S5 ECE

S3 TOPPERS

ANAGHA UMESH	10	LINTO JOMON	9.09
GOWRI NANDANA	9.90	NEHA RAJ	9.09
NIRUPAMA SANKAR B	9.64	VINAYAK PRAKASH	9.05
DURGA MADHUSUDANAN	9.55	PARVATHY NARAYAN	9.05
GREESHMA JAYAKUMAR	9.45	RITA MARIA THOMAS	9.00
GOVINDS	9.45	SRUTHI CHANDRAN	9.00
ABRAHAM GEORGE	9.36	DEVIKA A M	9.00
KESHAV BALAKRISHNAN	9.36	MOHAMED RAZEEN	9.00
SUSAN MATHEW	9.32		
DIYA ROSE THOMAS	9.27		
VASANTHI	9.27		
SUPARNA R	9.23		
GOVIND S	9.23		
JEBISHA DAPHNE G	9.14		
JENNIFER GEORGE	9.09		

S5 AEI

S3 TOPPERS

M K S RASHMIKA	9.82
ASHLY BINU	9.36
NAVMI SREERAJ	9.27
SAPNA HARILAL	9.23
NEERAJA A	9.09

S3 ECE

S2 TOPPERS

GAUTHAM SHYAM	10	DIYA ADLE	9.43
MISH AL ABDUL JABBAR	10	ANJANA P SAJIV	9.42
ANURAGH HARIDAS	10	JULIN MARY DEEPAK	9.38
ANGEL MARIA	9.86	INDU C R	9.33
SHRADHA P	9.86	ACUTHA ASWIN NAICK	9.33
MERIYA ELEYAS	9.81	IJAS HASSAN	9.33
NANDAKISHORE J	9.81	SANDHRA	9.31
ARYASHREE	9.81	B PRITHVIKA	9.29
HIBA	9.79	AYISHA HELAN	9.19
PARVATHY B	9.67	AMARNATH	9.05
MARIA JOSEPH	9.62	ANUPAMA C P	9.00
ANNA M JOSHY	9.60		
ADITHYA PRAKASH	9.57		
AHALYA KRISHNAN	9.52		
GOVINDH J	9.52		
S DIYA WASIM	9.48		
KARTHIK A K	9.48		
SRIKRISHNA	9.48		

S3 AEI

S2 TOPPERS

KRIPA SOPHIA DAVID	9.33
MUHAMMED KAIF	9.24
BHARATH J	9.24
I P RHITHIKA	9.12

PLACEMENTS

As of August 2024



Suryagayathri Thangalazhi

Dave Paul Joseph

M V Mahadevan

S Fasna



Adarsh Varghese

Bristo C J



Krishna S Nair

Gowri S

PLACEMENTS

2024 BATCHES



Amal K Ayyan



Sooraj Menon



Sidharth R



Hani Roshan C K
Rahul P



Finoj Shafi



Suranya K

NEWSLETTER PANEL

CO-ORDINATOR

Prof. Rencymol M V

TEAM

Jeevan Krishna S(S7 EC)

Sidharth Shibu(S7 EC)

Parvathi M(S7 AE)

Sana Sithara (S7 AE)

Anagha Umesh(S5 EC)

Vaishnav Krishna (S5 EC)

Pranathi Ajayan(S5 AE)

Ardra Sharma(S3 AE)

Sreehari R(S3 AE)

Sebastian Varghese(S3 EC)

SPECIAL THANKS TO:

Dr. Haris P A, HoD

Dr.Sreelatha G

All faculties and students of
Department of Electronics and
Communication,CET.