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TECH-TIDE

NEWSLETTER

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



AHALIA SCHOOL OF ENGINEERING & TECHNOLOGY

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Ahalia Campus, Palakkad | Ph: 04923 226666



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MESSAGE FROM PRINCIPAL



Dear Students, Faculty, and Esteemed Readers,

It gives me immense pleasure to present the July–December 2025 issue of Tech-Tide, the bi-annual newsletter of the Department of Electronics and Communication Engineering. This magazine stands as a vibrant reflection of the department's academic rigor, innovative spirit, and collective commitment to excellence.

The field of Electronics and Communication Engineering continues to evolve at an unprecedented pace, shaping the backbone of modern technology—ranging from communication systems and embedded technologies to artificial intelligence and sustainable innovations. In this dynamic landscape, Tech-Tide serves as a valuable platform that captures the intellectual curiosity, creativity, and technical competence of our students and faculty.

I commend the ECE Department for fostering a culture that encourages research, innovation, and holistic development. The articles, technical insights, project highlights, and achievements showcased in this issue demonstrate not only academic strength but also the department's dedication to nurturing industry-ready engineers with strong ethical values and social responsibility.

I extend my heartfelt appreciation to the editorial team, faculty coordinators, and students whose tireless efforts have made this publication possible. Their enthusiasm and teamwork truly exemplify the spirit of collaborative learning.

I am confident that Tech-Tide will inspire its readers, ignite innovative thinking, and serve as a source of knowledge and motivation. I wish the Department of ECE continued success in its pursuit of academic excellence and technological advancement.

Warm regards,

Dr. P R Suresh

Principal

Ahalia School of Engineering and Technology

MESSAGE FROM VICE PRINCIPAL



Dear Students, Faculty Members, and Readers,

I am delighted to extend my greetings to the readers of Tech-Tide, the bi-annual newsletter of the Department of Electronics and Communication Engineering, for the period July–December 2025. This publication is a testament to the department's vibrant academic environment and its continuous efforts toward excellence in technical education.

In today's rapidly transforming technological era, the role of Electronics and Communication Engineering is pivotal in driving innovation, connectivity, and digital transformation. Tech-Tide effectively showcases the department's academic activities, technical accomplishments, research initiatives, and creative expressions, reflecting the enthusiasm and dedication of both students and faculty members.

I appreciate the department's commitment to fostering a culture of innovation, critical thinking, and lifelong learning. The contributions featured in this issue highlight not only technical competence but also teamwork, leadership, and a strong sense of responsibility—qualities essential for future engineers.

I congratulate the editorial team, faculty coordinators, and students for their sincere efforts in bringing out this edition of Tech-Tide. Such initiatives play a crucial role in strengthening communication, encouraging knowledge sharing, and inspiring young minds.

I wish the Department of ECE continued success in its academic pursuits and commendable contributions to the technological and societal development of our nation.

Best wishes for continued growth and excellence.

With best wishes,

Dr. Krisha Kumar Kishor

Vice-Principal-ASET.

MESSAGE FROM HOD



Dear Students, Faculty, Alumni, and Well-Wishers,

Tech-Tide is not just a newsletter—it is a mirror of the continuous learning, experimentation, and growth that define the Department of Electronics and Communication Engineering. I am pleased to present this July–December 2025 bi-annual issue, which captures the academic journey and technical spirit of our students and faculty during this period.

This semester has been marked by active learning through laboratories, mini-projects, technical workshops, industry interactions, paper presentations, and student-driven initiatives. The articles and reports featured in this issue highlight how our students are translating classroom concepts into practical solutions while developing problem-solving skills and professional confidence.

As a department, we emphasize strong fundamentals, hands-on exposure, teamwork, and adaptability to emerging technologies. Tech-Tide provides a platform for students to express ideas beyond examinations—encouraging technical writing, innovation, and creative thinking, which are essential traits of a competent engineer.

I sincerely appreciate the efforts of the student editorial team and faculty mentors whose commitment and coordination have brought this edition to life. Their initiative reflects the leadership and collaborative culture we strive to nurture within the department.

I hope this issue of Tech-Tide motivates our students to explore, innovate, and take pride in their learning journey. Let us continue to work together to strengthen our department and shape engineers who contribute meaningfully to society and the profession.

Wishing all readers an engaging and insightful experience.

Warm regards,

Dr.V.Balamurugan

Head of the Department

Electronics and Communication Engineering

INSTITUTION VISION & MISSION

VISION

Grow as a center of learning and research, transforming students to professionals with knowledge, skill, competence, commitment, confidence through decisive learning and contribute to the sustainable development of the society.

MISSION

★ MISSION 1

To instill technical expertise in order to address current and emerging challenges in the quest for creating sustainable and high-quality livelihoods.

★ MISSION 2

To foster a culture of research, innovation, and entrepreneurship through determined learning.

★ MISSION 3

To promote an environment that supports the welfare of society through ethical and professional conduct

ABOUT ECE DEPARTMENT

The Department of Electronics and Communication Engineering (ECE) is a dynamic and innovative hub committed to excellence in teaching, research, and industry collaboration. Established with the vision to produce competent professionals, the department focuses on developing strong foundational knowledge and advanced technical skills in electronics, communication systems, embedded systems, VLSI design, IoT, and signal processing.

Our faculty comprises highly qualified educators and researchers who bring a wealth of academic and industry experience. The department offers undergraduate programs that blend rigorous theoretical instruction with hands-on practical training. State-of-the-art laboratories, modern research facilities, and industry-standard software tools support experiential learning and innovation.

We actively promote research, internships, and student participation in technical events and competitions. With regular guest lectures, industrial visits, and collaboration with leading companies, the department ensures students are industry-ready and equipped to face emerging global challenges in technology. Graduates from the ECE department are well-placed in top-tier companies, pursue higher studies at renowned institutions, and contribute significantly in areas such as telecommunications, robotics, AI, space technology, and consumer electronics.

DEPARTMENT VISION & MISSION

VISION

To provide quality education in Electronics and Communication Engineering through determined learning, promoting innovation and research, upholding professional ethics and contribute to sustainable societal progress

MISSION

★ MISSION 1

To provide a holistic technical education that empowers students with a robust foundation of theoretical expertise and practical skills in Electronics and Communication Engineering

★ MISSION 2

To foster lifelong learning, research and inspire entrepreneurship, empowering students to excel in their field of expertise.

★ MISSION 3

To nurture professional ethics, team work and leadership skills in students for their overall development and contribution to the society.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- ✦ Apply the concepts of Electronics and Communication Engineering to provide solutions to the emerging problems in the society.
- ✦ To solve problems of social relevance applying the knowledge of ECE and pursue higher education.
- ✦ Work effectively as individuals and as team members in multidisciplinary projects
- ✦ Engage in lifelong learning, career enhancement and adapt to changing professional and societal needs.

PROGRAM SPECIFIC OUTCOMES (PSO)

- ✦ PSO 1: Develop electronics-based solutions for real-life challenges integrating entrepreneurship and sustainability
- ✦ PSO2: Uphold ethics and values in designing sustainable technologies while embracing lifelong learning for professional growth

LATEST TRENDS AND DEVELOPMENTS IN ROBOTICS

Technical Talk

July 11, 2025

The Department of Electronics and Communication Engineering organized the inauguration of its departmental association “ERFINDERS” on 11th July 2025 at visvesvaraya hall , followed by a highly engaging technical talk titled “Latest Trends and Developments in Robotics”. The event was conducted to mark the beginning of the new academic year with a strong emphasis on innovation, learning, and collaboration among students and faculty.

The program commenced with a prayer song by Anisree, a student of S3 ECE, setting a graceful tone for the event. This was followed by a warm welcome address delivered by Pooja P Menon of S7 ECE.

The inauguration was formally carried out by the Chief Guest, Prof. Santhakumar Mohan, from the Department of Mechanical Engineering, IIT Palakkad, who officially declared the association open. His presence and insights brought immense value to the occasion.

During the ceremony, the association office bearers for the academic year 2025–26 were introduced, highlighting the student leadership for the upcoming year.

Following the inauguration, a technical session was conducted by Prof. Santhakumar Mohan, an expert in the field of Robotics and Automation. His talk shed light on several emerging areas in robotics and its multidisciplinary applications.

HIGHLIGHTS OF THE TECHNICAL TALK:

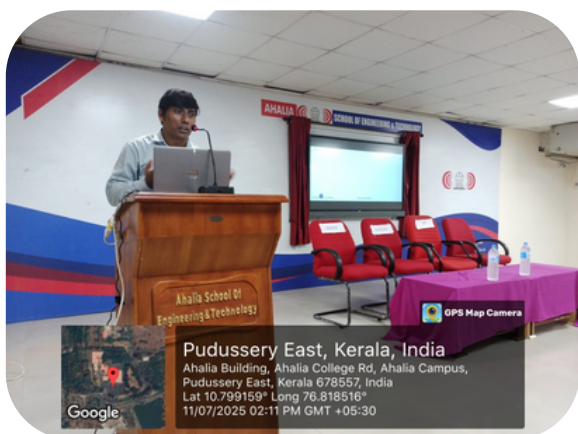
- ✦ Evolution of robotics from traditional automation to intelligent and autonomous systems
- ✦ Integration of Artificial Intelligence and Machine Learning in robotic platforms
- ✦ Applications of robotics in sectors such as healthcare, manufacturing, space exploration, and service industries

LATEST TRENDS AND DEVELOPMENTS IN ROBOTICS

The session was not only informative but also highly interactive, sparking curiosity and enthusiasm among the students.

Dr. V Balamurugan, Head of the Department, addressed the gathering and felicitated the guest speaker, appreciating his valuable contribution and the enriching session.

The event concluded with a vote of thanks delivered by Namitha S Kumar of S5 ECE, who acknowledged the collective efforts of the organizing team, the guest speaker, faculty members, and student volunteers for ensuring the event's success. The inauguration of ERFINDERS and the technical talk marked a vibrant beginning for the academic year 2025–26. It set a strong foundation for future activities aimed at fostering technical excellence, innovation, and active participation among students of the Department of Electronics and Communication Engineering.



CAREER BLUEPRINT : ENGINEER EXPERIENCE UNVEILED

Talk

August 7, 2025

On 7th August 2025, from 3:20 PM to 4:20 PM, the Design and Analysis Lab hosted a highly insightful career-oriented event, titled “Blueprint of a Career: Engineer Experience Unveiled.” This event was designed to provide students and aspiring engineers a glimpse into the world of engineering and the real-life experiences of professionals from leading tech companies.

The session began with a warm welcome speech by Dr. V. Balamurugan, the Head of Department (HOD), who greeted the gathering of students and professionals. Dr. V Balamurugan highlighted the importance of such events in shaping students’ understanding of career opportunities and the different paths within the engineering field.

Dr. Balamurugan introduced the distinguished resource persons for the session:

Ms. Maria Xavy – IP Logic Designer Engineer at Intel

Ms. Showfeena Shajahan – Test Engineer at Renaissance Electronics

Both professionals were invited to share their experiences, challenges, and insights into their specific engineering roles, offering valuable knowledge to the attendees.

PRESENTATION BY RESOURCE PERSONS

Ms. Maria Xavy – IP Logic Designer Engineer at Intel

Introduction to Role: Maria began by explaining the role of an IP (Intellectual Property) Logic Designer, a specialized engineer responsible for designing, developing, and optimizing digital logic used in semiconductor devices. She elaborated on how her work at Intel involves the development of next-generation technologies that power everything from smartphones to computers and servers.

Challenges & Skills Required: Maria emphasized the critical importance of a strong foundation in Digital Logic Design, Computer Architecture, and Programming Languages such as Verilog and VHDL. She also mentioned the constant innovation and team collaboration required in the industry, which makes the field both challenging and rewarding.

Career Path Insights: Maria shared the importance of internships, the value of constant upskilling, and how networking and mentorship can accelerate career growth. She encouraged students to be proactive in learning and exploring new technologies to remain competitive in the ever-evolving tech industry.

Ms. Showfeena Shajahan – Test Engineer at Renaissance Electronics

Introduction to Role: Showfeena gave an insightful overview of her role as a Test Engineer at Renaissance Electronics, explaining that test engineers are responsible for ensuring the quality and reliability of electronic products through rigorous testing protocols.

Key Skills and Tools: She described the technical skills required, such as proficiency in automation tools, test frameworks, and scripting languages. She also highlighted the importance of attention to detail and problem-solving skills to identify issues in hardware and software integration.

Job Prospects & Advice: Showfeena encouraged students to explore cross-disciplinary knowledge—understanding both hardware and software aspects of electronics is crucial in today's testing world. She also spoke about the importance of hands-on experience, either through internships or personal projects, to gain practical exposure to real-world problems.



USAGE OF OPEN-SOURCE TOOLS IN CLINICAL IMAGE PROCESSING

Expert Talk

August 19, 2025

The expert talk on “Open Source Tools in Clinical Image Processing” was organized by the Department of Electronics and Communication Engineering on 19th August 2025. The session began with a welcome address by Ms. Nandana, student of S5 EC-E, who warmly welcomed the dignitaries, faculty members, and participants. Dr. V Bala murugan HoD ECE, then addressed the gathering, highlighting the importance of clinical image processing in modern healthcare and the role of open-source tools in promoting cost-effective research and innovation. The expert talk was delivered by Dr. K S Tamil selvan HoD BME, KPR Institute of engineering and technology, Coimbatore. an eminent resource person with expertise in medical image analysis and open-source software.

SESSION HIGHLIGHTS

Introduction to popular open-source platform ITK-SNAP.

- Demonstrations of medical image visualization, segmentation, and registration.
- Applications of open-source tools in tumor detection, surgical planning, and clinical research.
- Discussion on the importance of open tools for collaborative, reproducible research.

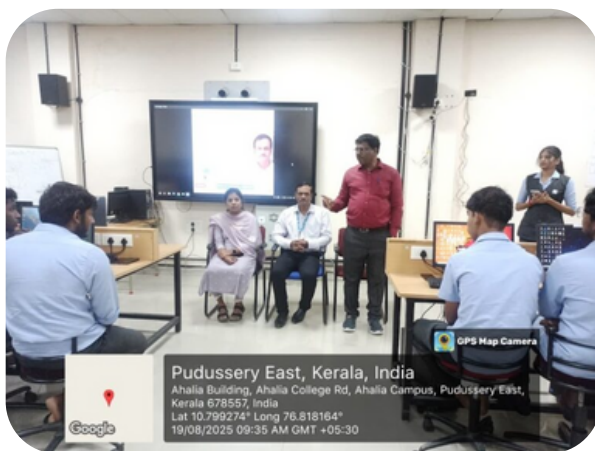
OUTCOMES

Students and faculty gained practical knowledge about tools widely used in clinical imaging.

- The session bridged the gap between engineering techniques and medical applications.
- The talk motivated participants to undertake research projects using open-source platforms.

USAGE OF OPEN-SOURCE TOOLS IN CLINICAL IMAGE PROCESSING

The session concluded with a vote of thanks proposed by Ms. Athulya Shivadasan student of S5 ECE, who expressed gratitude to the resource person, organizers, and participants for making the event successful. The program was attended by 50 (S5 ECE) students from the department. The expert talk was highly informative and beneficial to all participants, enhancing their knowledge in the field of clinical image processing and motivating them to further explore open-source research tools.



3D MODELLING USING FUSION 360

Workshop

August 25, 2025

The hands-on workshop on “3D Modelling Using Fusion 360” was successfully conducted on Monday, 25th August 2025, at the CAD Lab, ASET. The program was organized by the IEEE Student Branch of ASET, adding great value to the learning experience.

The session was led by Mr. Abhinav Rajeev, CEO & Director of Bumblebee Instruments Pvt. Ltd., who guided the participants through the exciting journey of turning creative ideas into innovative 3D designs.

The workshop provided participants with:

- Practical exposure to Fusion 360 and its applications in modern design.
- Industry-level insights to improve design speed, efficiency, and innovation.
- Skills to strengthen their portfolios and build a strong foundation in CAD-based product design.





Students, beginners, and makers enthusiastically engaged in interactive learning, gaining the confidence to design without limits. The session not only expanded technical knowledge but also inspired participants to imagine, innovate, and shape the future through 3D modelling.

INDUSTRIAL VISIT TO BSNL PALAKKAD

Industrial Visit

September 19, 2025

The Department of Electronics and Communication Engineering organized an industrial visit for the S3 ECE students to BSNL Palakkad on 18th September 2025. A total of 54 students participated in this visit, accompanied by Mr. Vinod Kumar P (Assistant Professor, ECE) and Mr. Sathyan P (Senior Instructor, ECE Department).

The visit aimed to bridge the gap between academic learning and industrial practices, offering students valuable exposure to real-world applications in the field of telecommunications and networking. The objective of the visit are to understand the practical aspects of telecommunication systems and networks, to gain insights into the functioning of switching systems, optical fiber communication, and broadband technologies to familiarize students with the latest advancements in telecom infrastructure, to enhance industry–institute interaction and broaden the students' practical knowledge. The session began with an introductory briefing by BSNL officials about the organization's role in India's telecom sector. Students were given a guided tour of various divisions such as:

Switching and Transmission Unit, Optical Fiber Communication Systems, Broadband and Mobile Communication Wing, Network Operations Centre (NOC). The officials explained concepts like call routing, signal processing, IP-based telephony, and 4G/5G readiness. An interactive session was held where students clarified their doubts on modern telecom challenges and career opportunities in the sector.

Students acquired practical exposure to telecommunication technologies complementing their academic curriculum. The visit enhanced their understanding of switching, transmission, and broadband systems.

INDUSTRIAL VISIT TO BSNL PALAKKAD

It motivated students to explore future career opportunities in the telecom and networking domain.

The industrial visit to BSNL on 18th September 2025 was highly beneficial for the S3 ECE students. It provided them with valuable industrial insights and strengthened their theoretical knowledge with hands-on exposure to telecom infrastructure.



ARDUINO WORKSHOP

Workshop

September 24, 2025

From coding basics to real-time projects, the Arduino workshop empowered students to experiment, create, and innovate. A session full of curiosity, learning, and endless possibilities! An Arduino training program was conducted at LM HSS Mangalam Dam

The program conducted by Department of ECE for the students of LM HSS Mangalam Dam. The session were handled by Ms.Gayathri P S and Mr.Sathyan P from Department of ECE,Ahalia School of Engineering and Technology.

The Arduino Workshop was a highly engaging and hands-on learning experience aimed at bridging the gap between theoretical knowledge and real-time hardware implementation. The workshop introduced participants to the fundamentals of Arduino hardware, programming concepts, and interfacing techniques using sensors, actuators, and communication modules. Through step-by-step demonstrations and practical sessions, students gained confidence in writing, modifying, and debugging Arduino programs while understanding real-world applications of microcontrollers. One of the major advantages of the workshop was its emphasis on experiential learning, which enhanced students' problem-solving ability, logical thinking, and design skills. The open-source nature of Arduino, its ease of programming, and vast community support were highlighted, motivating students to explore innovation beyond the syllabus. Key highlights of the workshop included hands-on mini projects, live circuit debugging, sensor interfacing experiments, PWM-based control applications, and interactive discussions on project development and industry relevance. Overall, the workshop empowered students with practical skills, boosted their interest in embedded systems and IoT, and laid a strong foundation for academic projects, internships, and future technological innovation.

ARDUINO WORKSHOP



STATISTICAL QUALITY CONTROL & RELIABILITY ENGINEERING

Expert Talk

October 14, 2025

An expert talk on “Statistical Quality Control & Reliability Engineering” was organized on 14th October 2025 at Visvesvaraya Hall, Ahalia School of Engineering & Technology (ASET), Palakkad. The event was conducted as part of the International Day of Standards celebration.

The session was jointly organized by the Institution’s Innovation Council (IIC), ISTE, IETE Student Chapters, and the NSS Unit, in association with the Departments of Electronics and Communication Engineering (ECE), Mechanical Engineering (ME), and Civil Engineering (CE).

The resource person for the session was Dr. Rajeev N, Dean Academics, ASET. Dr. Rajeev delivered an insightful lecture on the concepts of Statistical Quality Control (SQC) and Reliability Engineering, highlighting their importance in maintaining product quality and process efficiency in modern engineering industries. He also discussed various statistical tools, control charts, and reliability analysis methods used in quality improvement and system performance evaluation.





The talk helped students gain a deeper understanding of how SQC and reliability concepts can be applied in real-world engineering scenarios. It also emphasized the role of standardization in ensuring product consistency and dependability.

ARDUINO TRAINING

Workshop

October 14, 2025

With the aim of creating awareness among school students about the emerging fields of electronics and manufacturing, an Arduino training workshop was successfully conducted at M.N.K.M. Higher Secondary School, Chittilamchery. The programme was jointly organized by Ahalia Engineering College, Ezhuthachan I.T.I., and Gift College, reflecting a strong spirit of academic collaboration and community outreach. The workshop was formally inaugurated by the School Headmistress, Ms. Bindu, who emphasized the importance of early exposure to technology and practical learning for students. The training sessions were handled by Prof. P. S. Gayathri along with Senior Lab Instructors Mr. P. Sathyan and Ms. V. R. Sindhu, who introduced the students to the basics of Arduino, microcontroller concepts, and simple electronic circuits in an engaging and student-friendly manner. Through interactive demonstrations and hands-on activities, the participants were encouraged to explore electronics beyond textbooks and gain a foundational understanding of how technology works in real-life applications.

The workshop highlighted the advantages and applications of Arduino in a way that was easily understandable for school-level learners. Students learned that Arduino is an open-source, low-cost, and beginner-friendly platform that enables them to design and control electronic projects with minimal complexity. The training demonstrated how Arduino can be used in practical applications such as automatic street lights, smart irrigation systems, temperature monitoring, obstacle-detection systems, LED control, and basic robotics. These examples helped students visualize how electronics can solve everyday problems and contribute to smart and sustainable solutions. By engaging in simple programming and hardware interfacing, students developed logical thinking, creativity, and problem-solving skills.

ARDUINO TRAINING

The workshop also motivated them to pursue future studies and careers in engineering, electronics, and manufacturing technologies, thereby laying a strong foundation for innovation, skill development, and technological curiosity at an early stage.



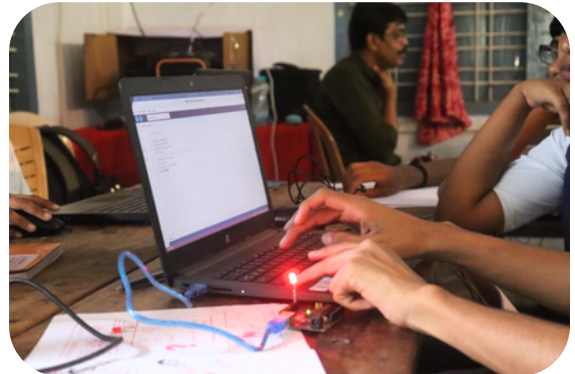
എം.എൻ.കെ.എം.എച്ച്.എസ്.എസ് ചിറ്റിലഞ്ചേരിയിൽ സംഘടിപ്പിച്ച ആർഡിനോ പരിശീലനം.

ആർഡിനോ പരിശീലനം നടത്തി

പാലക്കാട്: ഇലക്ട്രോണിക്സ് രംഗത്തും ഉത്പാദന രംഗത്തും വിദ്യാർത്ഥികൾക്ക് അവബോധം സൃഷ്ടിക്കുന്ന ലക്ഷ്യത്തോടെ എം.എൻ.കെ.എം.എച്ച്.എസ്.എസ് ചിറ്റിലഞ്ചേരിയിൽ ആർഡിനോ പരിശീലനം സംഘടിപ്പിച്ചു. അംഗവ്യക്തികൾക്ക്

ജേജും എഴുത്തച്ഛൻ ട്രെയിനിംഗ് കോളേജും ചേർന്നാണ് പരിശീലനം സംഘടിപ്പിച്ചത്. സ്കൂൾ ഹെഡ്മിസ്ട്രസ് ബിനു ഉദ്ഘാടനം നിർവ്വഹിച്ചു. പ്രൊഫ. പി. എസ്. ഗായത്രി സീനിയർ ലാബ് ഇൻസ്ട്രക്ടർ പി. സത്യൻ, വി. ആർ. സിന്ധു എന്നിവർ പരിശീലനത്തിന് നേതൃത്വം നൽകി.

KERALA KAUMUDI EPAPER
Kerala Kaumudi - Palakkad



INTRODUCTION TO ARDUINO & EMBEDDED SYSTEMS

Workshop

November 28, 2025

Ahalia School of Engineering & Technology proudly hosted the students of Kendriya Vidyalaya, Olavakkode for an engaging and insightful Arduino Workshop aimed at introducing young minds to the fundamentals of electronics and embedded systems. The workshop was designed to spark curiosity and creativity by providing students with hands-on exposure to Arduino hardware and basic programming concepts. Through interactive sessions, live demonstrations, and simple circuit-building activities, the participants gained a clear understanding of how software and hardware work together to create intelligent electronic systems. The learning environment encouraged questioning, experimentation, and teamwork, making the session both educational and enjoyable for the students.

The workshop also highlighted the wide-ranging applications and advantages of Arduino, helping students relate technology to real-world problem-solving. Practical examples such as LED control, sensor-based automation, and basic robotic concepts were demonstrated to showcase how Arduino is used in smart devices, automation, and IoT applications. Being an open-source and beginner-friendly platform, Arduino enabled students to quickly grasp concepts and experience the satisfaction of building working models on their own. The programme played a vital role in nurturing analytical thinking, creativity, and confidence among the participants, motivating them to explore future careers in engineering and technology. Overall, the workshop served as an inspiring platform that laid a strong foundation for innovation and empowered students to become the next generation of tech creators.

INTRODUCTION TO ARDUINO AND EMBEDDED SYSTEMS



DIGITAL SYSTEM DESIGN USING VERILOG AND FPGA

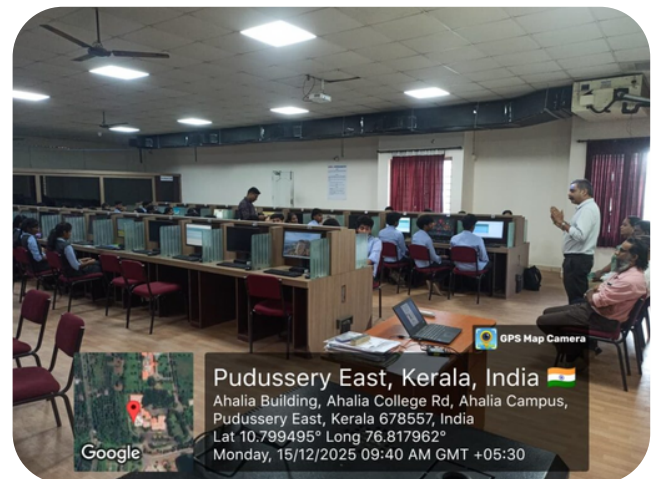
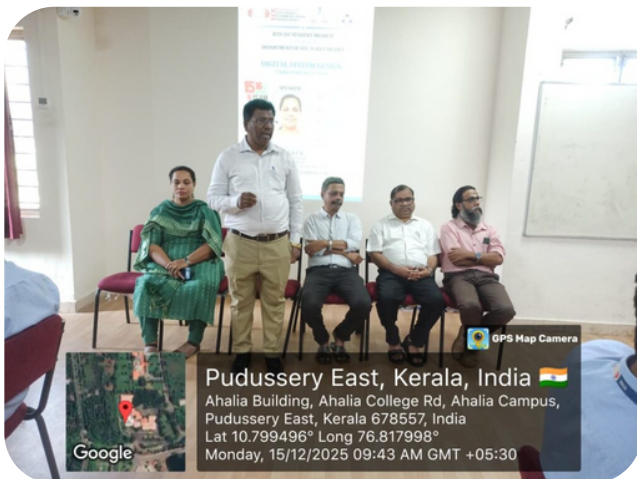
Workshop

December 16, 2025

The Two-Day Hands-on Workshop on Digital System Design using Verilog and FPGA, conducted on 15th and 16th December 2025 at Programming Lab 3, was a focused technical programme aimed at strengthening the practical competencies of Electronics and Communication Engineering students. The workshop was organized by the IETE–ISF Student Chapter, in association with the Department of Electronics and Communication Engineering and IEEE Student Branch, Ahalia, and was coordinated by Dr. Aneesh K, Department of ECE. The sessions were expertly handled by Ms. Shaila C K, Assistant Professor, Department of ECE, SCMS School of Engineering and Technology, Cochin, who served as the resource person. Designed specifically for 4th Semester ECE students, the programme catered to 53 participants and provided a structured introduction to HDL-based digital system design. The workshop covered the complete design flow, including Verilog HDL fundamentals, RTL coding, combinational and sequential circuit design, FPGA architecture, synthesis, implementation, bitstream generation, clocking, timing constraints, and real-time debugging on FPGA platforms.

The workshop offered significant advantages by bridging the gap between theoretical digital electronics concepts and real-world hardware implementation. Through extensive hands-on sessions using Verilog HDL and FPGA design tools, students gained the ability to design, synthesize, implement, and debug digital systems efficiently. The practical exposure enhanced their understanding of timing analysis, architectural constraints, and hardware-level problem-solving—skills that are critical for industry-ready engineers. From a future perspective, the knowledge gained through this workshop opens pathways in VLSI design, embedded systems, hardware acceleration, signal processing, and semiconductor industries, as well as advanced academic and research pursuits. Overall, the programme had a strong academic and professional impact, equipping students with industry-relevant skills and preparing them for complex design challenges and technology-driven careers in the evolving electronics domain.

The feedback received for the two-day workshop on Digital System Design Using Verilog and FPGA was highly positive. Most participants rated the workshop as very good to excellent, appreciating the clear explanation of objectives, relevance of the topics, and the strong subject knowledge of the resource person. Students reported noticeable improvement in their understanding of Verilog HDL and FPGA-based digital system design. The workshop was well organized and highly recommended by the participants, with a few suggestions for incorporating more hands-on practice and problem-solving sessions in future programs.



ACHIEVEMENTS

ACADEMIC TOPPERS

AHALIA SCHOOL OF ENGINEERING AND TECHNOLOGY NAAC

Department of Electronics and Communication
Toppers of S6 Results (2022-26 Batch).

Congratulations


Arya Sasikumar
1st Rank


Ashrin A
2nd Rank


Arya PR
3rd Rank

*Congratulations on your outstanding achievement.
Wishing you continued success in all your endeavors.*

S4 UNIVERSITY EXAM
TOPPERS

DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING


NAMITHA S KUMAR


NANDHANA R


HARISHMA
CHANDRAN

Congratulations


AHALIA SCHOOL OF ENGINEERING & TECHNOLOGY NAAC


Accredited by NAAC
NATIONAL ASSESSMENT AND
ACCREDITATION COUNCIL


AHALIA SCHOOL OF ENGINEERING AND TECHNOLOGY NAAC

Department of Electronics and Communication Engineering

Congratulations
S2 Toppers


Zoya
Prakashan
(SGPA 9.45)


Nethra S
(SGPA 9.23)


Karthika
Krishna
(SGPA 8.55)

JOURNAL PUBLICATION

Aditya Kiran SR, Anirudh Sreejithesh, Ashik M, Jishnu R, Ms. Gayathri PS, Dr. V Balamurugan: 'A STUDY ON HIGH-PERFORMANCE VLSI ARCHITECTURE FOR REAL-TIME VIDEO EDGE DETECTION', International Research Journal of Modernization in Engineering Technology and Science, Volume:07/Issue:10/October-2025, e-ISSN: 2582-5208, <https://www.doi.org/10.56726/IRJMETs83693>

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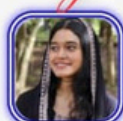


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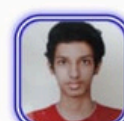
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