VISION

To achieve excellent standards in technical education and engage research in the field of Electronics and Communication Engineering creating employable and innovative professionals who can excel in global challenges.

MISSION

1) To practice innovative teaching and learning practices in Electronics and Communication domain with effective curriculum enhancement and Industry collaboration.

2) To inspire creative enquiry and innovation in students through excellent training programs and projects for professional skills.

3) To imbibe a sense of team work, ethics combined with social responsibility in students.

Dr. Biju Varghese
(Chairman, Mangalam Educational institutions)

Dr. Vinodh P Vijayan
(Principal, Mangalam College of Engineering)

Dr. Abraham C G
(HOD, ECE, Mangalam College of Engineering)

ACHIEVEMENTS

- Converted 8 students projects into SCOPUS indexed publication
- 9 student teams cleared the YIP-IDEA preliminary round.
- 5 patents have been published in this academic year
- A student from ECE has earned Honours distinction.
- Dr. Abrham C. G. published a groundbreaking book titled "Exploring Generative Artificial Intelligence for Transformative Healthcare Applications

HOD'S MESSAGE

The Department of Electronics and Communication Engineering, Mangalam college of Engineering founded on a commitment to educational excellence, aims to inspire the next generation of technological leaders and researchers. Since our establishment in 2002, the department has grown significantly, increasing student intake and introducing postgraduate programs in VLSI and Embedded Systems.

Our distinguished faculty are experts in their fields, dedicated to fostering interdisciplinary learning. Through various opportunities such as student organizations, internships, co-ops, and research projects, we ensure students gain real-world experience by collaborating with peers, researchers, and industry professionals both nationally and internationally.

In addition to regular coursework, we offer an inclusive learning environment enriched with seminars, workshops, and training programs led by students and staff. These sessions keep students updated on the latest trends in electronics by engaging them with industry experts.

The department also promotes a strong sense of community and personal growth through a variety of cultural and sports activities throughout the year. We are committed to producing socially responsible graduates who are prepared to make a positive impact on the world.

BOOK PUBLICATIONS

Dr. Abrham C. G. published a groundbreaking book titled "Exploring Generative Artificial Intelligence for Transformative Healthcare Applications" on June 13, 2025. The book delves into the potential of generative AI to revolutionize healthcare delivery, enhance clinical decision-making, and drive innovation across medical research and patient care

SCOPUS PUBLICATIONS

- Mariya Stephen, Abraham Chavacheril Geevarghese, Arsha Joy, Jibil Joji, Rahul Reghu Nath, Varghese Joseph, "Hands free shopping cart with self-checkout",AIP Conference Proceedings, AIP Conf. Proc. 3260, 020015 (2025),https://doi.org/10.1063/5.0260771, Published: July 2025
- Devika Sarath, Shiney M. Abraham, Stephane Abraham, Aswin P. Thankachan, Dhanush M. Raj, Devika Raj Karippal, " 2 x 2 DRAG", AIP Conference Proceedings, AIP Conf. Proc. 3260,020014(2025),https://doi.org/10.0259472, Published: July 2025
- Abraham Chavacheril Geevarghese, Lijosh Mathews, Akhil Anilkumar, Anandu Prasad, Aswin Siby, Joel Valluzhathil Saji, " Efficient eye gaze controlled wheelchair"AIP Conference Proceedings,AIPConf.Proc.3260,020013(2025), https://doi.org/10.1063/5.0260922,Published:July 2025
- Sumesh Chandran Ramachandran, Jithin Gregory Thomas, Lavanya Kanathedath, Subin Saji Peter, Vishnu Sabu, " The electrical skate board", AIP Conference Proceedings, AIP Conf.Proc.3260,020057(2025),https://doi.org/10.1063/5.0260059, Published: July 2025
- Ajeesh Sadasivan, Abraham Chavacheril Geevarghese, Arjun Krishna Kadampattil Manoj, Shan B. Mathew, Akhinesh Biju, Alfin E. Prasad, " Piezoelectric energy harvesting systems with EV charging hub integration", AIP Conference Proceedings, AIP Conf. Proc. 3260,020060(2025),https://doi.org/10.0259057, Published: July 2025
- Jyothisree Kaithamattathu Remanan, Reneesh C. Zacharia, Able Thomas, Anagha Rakesh, Sreejish K. Pillai, Sudev Aryattukunnel Sajeev, " Low cost CNC machine for PCB designing", AIP Conference Proceedings, AIP Conf. Proc. 3260,020016(2025),https://doi.org/10.0259755, Published: July 2025
- Deepthy Mary Alex, Meera Panicker Pulupra Ravikumar, Afssy Basheer, Anjitha Anil, Akash Puthenparambil Santhosh, Tenil Sojan, " Assistance system for the visually challenged, AIP Conference Proceedings, AIP Conf. Proc. 3260,020059(2025),https://doi.org/10.0261230, Published: July 2025

YIP Preliminary Winners

The Electronics and Communication Engineering Department proudly congratulates 9 students who were selected as preliminary winners in the Young Innovators Programme (YIP). Wishing them success in the next rounds

- Aswin Santhosh Kumar, with Ashbin Thomas and Ashna Mary, presented an idea under Education and Skill Development (PRO-00001369 – Student-Centric Enhancements), guided by Ms. Mariya Stephen, Assistant Professor
- KR Devika, along with Karthika S and Karthik P, worked on a project under Data Sciences and AI focusing on Efficiency, mentored by Ms. Aparna Jose, Assistant Professor.

- Vaishnavi Sanjeev, with Treesa Biju and Vignesh R, developed an idea under Data Sciences and AI – Applications for Convenience, mentored by Mr. Ajeesh S, Assistant Professor.
- Eswar Aravind, Devi S Kuttan, and Elvin Jose focused on Education and Skill Development (PRO-00000057 – Child Psychology), guided by Ms. Reshma Chandran, Assistant Professor.
- 5. Alex Sibi and Adwaith M proposed a project on Data Sciences and AI – Efficiency, mentored by Ms. Deepthy M, Assistant HOD.
- Aparna K S, with Anjana K J and Ashbel Anu, worked on Data Sciences and AI – Sustainability, under the guidance of Ms. Jyothisree K R, Associate Professor.
- Vivek S, along with Vishnu M S and Vishnun S, presented an idea under Data Sciences and AI (PRO-00001459 – Delay Detection), mentored by Mr. Ajeesh S
- Arjun V P and Vishnu J N proposed a project in Education and Skill Development (PRO-00001488 – Career Mapping), guided by Ms. Aparna Jose.
- Deepak S, Binil Sunny, and Devi Nandana worked onTraditionalIndustries (PS_COIR_001 – Coir Product Standardization), mentored by Mr. Lijosh Mathews, Assistant Professor.

PATENT

- Fabrication of Carbon Nanotube-Based Nanoelectronic Circuits for Ultrafast Processing SystemsThis patent introduces high-speed nanoelectronic circuits using carbon nanotubes for advanced computing. The work was contributed by Dr. Abraham C. G, Dr. Devika Sarath, Mr. Ajeesh S, and Ms. Smitha Sunil.
- High-Speed Terahertz Antenna Array System for Data Transmission in Secure Satellite Communications.This invention enhances secure satellite data transmission using terahertz antenna arrays. Contributors include Dr. Abraham C. G, Dr. Deepthy Mary Alex, Mr. Jaleel P K, and Ms. Resma Chandran.

- Design of Energy-Efficient 6G Communication Architecture Using AI-Driven Frequency ModulationAimed at 6G networks, this patent uses AI for efficient frequency modulation to reduce energy use. Developed by Dr. Abraham C. G, Dr. Deepthy Mary Alex, Mr. Sumesh Chandran, and Mr. Lijosh Mathews.
- Machine Learning Enabled Dynamic Spectrum Allocation in Cognitive Radio Networks for UrbanAreasThis work applies machine learning for better spectrum use in urban cognitive radio networks. The patent was contributed by Dr. Devika Sarath, Ms. Jyothisree K R, Ms. Aparna Jose, and Ms. Neeba George.
- Monolithic Photonic-Electronic Integrated Circuit for Low-Latency Optical Computing SystemsThe patent integrates photonic and electronic components on a single chip for faster optical computing. Developed by Ms. Mariya Stephen, Mr. Jaleel P K, Ms. Shiney M Abraham, and Ms. Meera Boban.

STUDENT ACHIEVEMENTS

The ECE Departmen Congrats to Nourin Nila Nazar (Honors) and Rajasree P K (Minor in Robotics)! A crisp and well-designed poster celebrating their achievements and the ECE department's academic values.

STUDENT ACHIEVEMENTS

- Rajasree P.K, a student from the 2021–2025 batch, has secured a prestigious placement at Allianz, a leading global provider of IT services and solutions. The Department of Electronics and Communication Engineering proudly congratulates her on this remarkable achievement.

- Achu Jayamon, a student from the 2021–2025 batch, has secured a prestigious placement at RailTel's HomeInternet, a leading global provider of IT services and solutions. The Department of Electronics and Communication Engineering proudly congratulates his on this remarkable achievement

- Jisha Gigi, a student from the 2021–2025 batch, has secured a prestigious placement at Kosamattam Finance, an RBI-registered non-banking financial company. The Department of Electronics and Communication Engineering proudly congratulates her on this remarkable achievement.

- Melvin Varghese Manoj student from the 2021–2025 batch, has secured a prestigious placement at APTIV Connection Systems India Pvt. Ltd., a global leader in advanced automotive technology solutions. The Department of ECE at Mangalam College of Engineering proudly celebrates this remarkable achievement

- Melvin Varghese Manoj, student of the 2021–2025 batch, has secured a placement at Kaynes Technology, a leader in Electronics System Design and Manufacturing. The Department of Electronics and Communication Engineering at Mangalam College of Engineering proudly extends its warmest congratulations to him on this remarkable achievement
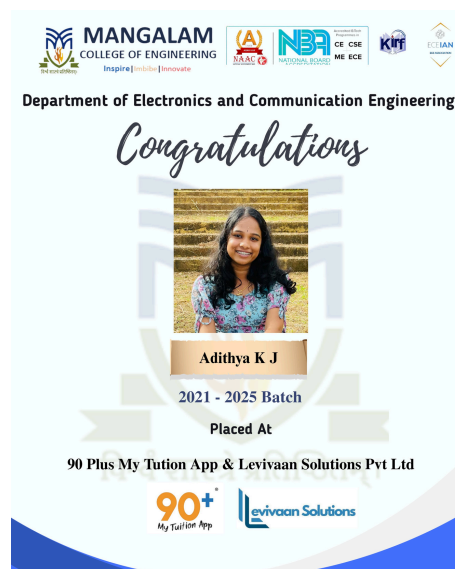
- Adithya K J, a student of the 2021–2025 batch, is proudly congratulated by the Department of Electronics and Communication Engineering at Mangalam College of Engineering for securing placements at 90+ Tuition App, a leading EdTech platform, and Levivann Solutions, a fast-growing digital solutions company.

- The Department of ECE at Mangalam College of Engineering congratulates Nibhamol S and K R Jayasooriya (2021–2025 Batch) on their successful placement at INFOWISE, a reputed organization driving innovation and excellence.

- The Department of ECE at Mangalam College of Engineering proudly congratulates Jisha Gigi and Ashna Saji (2021–2025 Batch) on their prestigious placements at the Goan Institute International Consociation of Education (GIICE). We wish them continued success ahead.

- The Department of Electronics and Communication Engineering at Mangalam College of Engineering is proud to celebrate the remarkable achievement of six talented students from the 2021–2025 Batch who have secured placements at NEXT GEN PRO (Next Generation Professionals), a reputed organization known for nurturing future talent. Heartfelt congratulations to Abhishek Thulasidharan, Ashna Saji, Nourin Nila Nazar, Abiya Dal, Adithyan Anoop, and Aswin Santhosh Kumar. The department applauds their hard work and dedication and wishes them continued success in their professional journey.

- The Department of Electronics and Communication Engineering, Mangalam College of Engineering, proudly congratulates the top performers of the KTU S8 Examination from the 2021–2025 batch. This achievement reflects their dedication, consistent efforts, and academic excellence. The department is truly proud of these students whose hard work has set a remarkable benchmark for their peers. May this success be a stepping stone toward even greater accomplishments in the future.

DEPARTMENT EVENTS

The Department of Electronics and Computing at Mangalam College of Engineering organized an Article Writing Competition on the topic "Why Reading Books Still Matters in the Era of Screens" as part of National Reading Day celebrations. The event aimed to promote a strong reading culture while enhancing students' writing and critical thinking skills. Articles were submitted by 7:00 PM on 19th June 2025 via a QR code link. The competition received enthusiastic participation and served as a reminder of the timeless value of books in today's screen-dominated world. Event Coordinators: Ms. Jyothisree K R and Mr. Lijosh Mathews.

Faculty Development Program (FDP)
on
"Smart Futures: AI-Integrated Electronics for Sustainable Development"
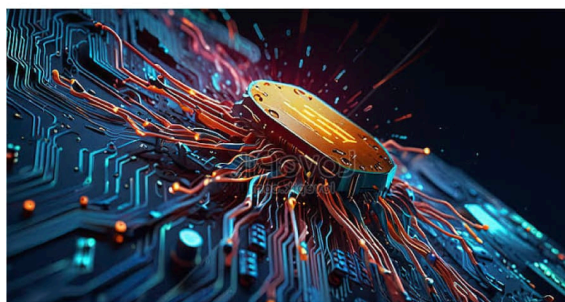
23 - 27 June 2025

Organized by

Department of Electronics and Communication Engineering

The **Faculty Development Program** on **"Smart Futures: AI-Integrated Electronics for Sustainable Development"**, held from 23–27 June 2025 at Mangalam College of Engineering, offered valuable insights into the integration of AI with electronics for sustainability, targeting faculty and researchers in AI, VLSI, and MEMS/NEMS.

- Day 1: Dr. Bindu Krishnan (IBM) introduced AI and ML for system optimization.

- Day 2: Dr. B. Srinath (HCL) discussed AI in embedded and smart hardware systems.

- Day 3: Dr. Arjun Hari M.S. (IISc) covered nano/microfabrication and MEMS/NEMS devices.

- Day 4: Dr. B. Umamaheswara Sharma (NIT Calicut) spoke on AI-driven image processing.

- Day 5: Dr. Meenu Suresh (Jain University) highlighted low-power VLSI optimization using AI.

The program combined theory with practical insights and concluded with certificate distribution to participants.

The Department of Electronics and Communication Engineering at Mangalam College of Engineering conducted an expert talk on "Idea to Impact: Innovation, Design and Market Fit" on 25th July 2025, by Mr. Amal Suresh P, Founder and CEO of ALGON. Held from 7:00 PM to 8:00 PM, the session provided valuable insights into transforming ideas into impactful, market-ready solutions. The event was coordinated by Ms. Resma Chandran V. P, Assistant Professor, Dept. of ECE

Electronics and Communication Engineering

Expert Talk

IDEA TO IMPACT: INNOVATION, DESIGN AND MARKET FIT

AMAL SURESH P
(Founder and CEO at ALGON)

📅 25-07-2025

🕐 7:00pm - 8:00pm

tinyurl.com/ece-iic

Faculty Co-ordinator
Resma Chandran V. P , Assistant Professor, Dept. ECE

Farewell

The Department of Electronics and Communiction Engineering warmly invites you to a special farewell celebration for the 2021–2025 batch, to be held on April 8, 2025, at 10:00 AM. This memorable event, thoughtfully organized by the S6 students, is dedicated to honoring the accomplishments and lasting impact of our graduating students.

The program will feature inspiring speeches, the presentation of mementos, and a variety of fun-filled activities including games, dance performances, and entertainment. It's a moment to cherish memories, share laughter, and bid a heartfelt goodbye as the graduates step into their next chapter.

COLLEGE EVENTS

Mangalam College of Engineering is organizing its annual arts fest, SAPTHARANG 2K25, on March 19th and 20th, 2025. This vibrant event will showcase a diverse range of artistic talents, including music, dance, drama, and visual arts. Students will have the opportunity to participate in various competitions and performances, fostering creativity and camaraderie. SAPTHARANG 2K25 promises to be a celebration of culture and artistry, bringing together the entire college community in a spirit of joy and festivity

The ARCADIANS team (EC S8), under the leadership of Mr. Anandhu Krishan, House Captain of S8., and the guidance of Mr. Sumesh Chandran, Faculty-in-Charge, emerged as the overall winners at SAPTHARANG 2K25. Their exceptional performance, teamwork, and dedication across a wide range of competitions earned them the top honors in this vibrant cultural fest.

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COLLEGE OF
ENGINEERING

ESTD 2002

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