E-CONNECT:

Where Signals Meet Innovation 2025

Volume: 1, Jan-Dec 2025

AJAY KUMAR GARG ENGINEERING COLLEGE

AKGEC

Ajay Kumar Garg Engineering College, Ghaziabad
Department of Electronics and Communication Engineering

About the Department

Department of Electronics and Communication Engineering at AKGEC was established in 1998. The department provides an outstanding research environment complemented by excellence in teaching. Ever since its inception, the department has been a pioneering academic centre for technical education, research and innovation in all major areas of Electronics and Communication Engineering. The department is organized in tune with these latest developments in terms of curriculum, well-qualified faculty and the state-of-the-art labs for B.Tech. (UG course) in Electronics & Communication Engineering along with M. Tech. (PG course) in Electronics & Communication Engineering. Approved intake of B.Tech. (ECE) course is 180 students and for the M. Tech. (ECE) course it is 18 students.

The department has adequate number of laboratories as per requirement (strength of students in the department and number of practical courses mentioned in syllabus scheme). These laboratories are fully equipped with latest / modern hardware kits / equipment's, software tools and consumables. ECE labs have all the basic as well as advanced level facilities to fulfill the requirements of UG, PG and PhD level courses. These laboratories are fully utilized by the students and faculty members of ECE department for performing the practical experiments, doing the Project Work and Research Activities (R & D). One dedicated Lab Staff member is always present in each laboratory room. Responsibility of each lab room also has been assigned to a Faculty Lab Incharge to ensure regular maintenance and up-gradation of laboratories. ECE department also has established Texas Instruments-Centre of Excellence Lab, NI-LabVIEW Academy, Virtual Lab (with IIT Kanpur) and IoT Lab etc. in collaboration with reputed industries and academic institutes.

The department has its technical society-Phoenix. The society organizes many technical competitions, quizzes, technical seminars, mock interviews, aptitude tests, project exhibition and technical paper presentation etc. for the students. ECE department also has an active IEEE-Communication Society student branch chapter for organizing / participating various events at international level.

Message from the Advisor's Desk

It gives me immense pleasure to know that the Department of Electronics and Communication Engineering, Ajay Kumar Garg Engineering College, Ghaziabad, is bringing out its Department Magazine for the year 2025. Such publications serve as an important academic platform to document intellectual growth, innovation and collective achievements of the department.

The field of Electronics and Communication Engineering continues to be a driving force behind technological transformation, impacting areas such as communication systems, VLSI, embedded systems, IoT, artificial intelligence and sustainable technologies. In this rapidly evolving landscape, academic departments must not only impart technical knowledge but also nurture creativity, ethical responsibility, research aptitude and societal awareness among students.

I appreciate the sustained efforts of the ECE faculty in strengthening academic rigor, research culture, industry engagement and student-centric initiatives. This magazine reflects the department's commitment towards excellence, innovation and holistic development. I am confident that it will inspire students to pursue higher learning, research and responsible professional practice.

I congratulate the Head of the Department, faculty members, students and all contributors for their dedication in bringing out this publication and wish the department continued success in its academic and professional endeavours.

Best Wishes

Prof. Amita Dev
Advisor
AKGEC, Ghaziabad

Message from the Director's Desk

I am pleased to note that the Department of Electronics and Communication Engineering is publishing its Department Magazine for the year 2025. The magazine is a meaningful reflection of the academic environment, technical activities, achievements and creative expressions of both students and faculty.

The ECE Department at AKGEC has consistently demonstrated commendable progress in academics, laboratory development, research activities, industry collaboration and student achievements. The department's focus on outcome-based education, hands-on learning, and adoption of modern tools and technologies has significantly contributed to enhancing students' technical competence and professional readiness.

This magazine not only showcases departmental accomplishments but also encourages students to develop technical writing, innovation and teamwork skills that are essential for their future careers. I appreciate the sincere efforts of the Head of the Department, faculty coordinators, editorial team, and students involved in preparing this publication.

I extend my best wishes to the ECE Department for continued growth, excellence and hope that this magazine will motivate the academic community to achieve greater milestones in the years ahead.

Best Wishes

Prof. Hemant Ahuja
Director
AKGEC, Ghaziabad

Message from HOD's Desk

It gives me immense pleasure to present this issue of the Department of Electronics & Communication Engineering magazine. This publication reflects the collective academic spirit, creativity and technical competence of our students and faculty members.

The field of Electronics and Communication Engineering is evolving rapidly, driven by innovations in VLSI, Embedded Systems, Signal Processing, Communication Networks, IoT and AI-enabled technologies. Our department continuously strives to keep pace with these advancements by fostering a strong foundation in core concepts while encouraging research, innovation, and hands on learning.

This *E-CONNECTS: Where Signals Meet Innovation* magazine serves as a platform to showcase departmental highlights, events organized by the department, faculty and student's achievements, research insights, project work and creative expressions, highlighting the intellectual curiosity and problem-solving skills of our students. I appreciate the efforts of the editorial team who have worked diligently to bring out this edition.

I hope this magazine inspires readers to explore new ideas, strengthen their technical skills and contribute meaningfully to society through engineering solutions. I wish the department continued success in its academic and research endeavors.

Best Wishes

Dr. Neelesh Kumar Gupta
Prof. & Head of Department
Electronics & Communication Engineering
AKGEC, Ghaziabad

From the Editorial Team

It is with great pride and enthusiasm that we present this edition of ***E-CONNECT: Where Signals Meet Innovation***, the departmental magazine of the Electronics & Communication Engineering Department. This publication reflects the vibrant academic ecosystem, technological progress and innovative spirit that define our department.

E-CONNECT serves as a platform to document and celebrate the department's achievements, academic initiatives, research activities, industry collaborations and student accomplishments. From infrastructure advancements and state-of-the-art laboratories to expert talks, industrial visits, technical events and faculty–student interactions. This issue captures the collective efforts that drive excellence in teaching, learning and research.

The magazine also highlights faculty achievements, research contributions, publications, patents and recognitions, showcasing the department's commitment to continuous professional development and knowledge creation. Student participation in technical competitions, placements, internships, sports and co-curricular activities further reflects the holistic development nurtured within the department.

We express our sincere gratitude to the Head of the Department, ECE, for constant guidance and encouragement. We also thank all faculty members, students, contributors, and coordinators whose dedication and teamwork made this publication possible.

We hope that ***E-CONNECT*** inspires readers to explore emerging technologies, strengthen innovation-driven thinking and uphold the values of collaboration and excellence. We look forward to your valuable feedback and continued support in making future editions even more impactful.

Warm Regards

Editorial Team
E-CONNECT
Department of Electronics & Communication Engineering
AKGEC, Ghaziabad

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Achievements of the department

Two Days Bi-Lingual AICTE Sponsored Workshop

The Department of Electronics and Communication Engineering (ECE) at Ajay Kumar Garg Engineering College (AKGEC), Ghaziabad, received a financial grant of ₹2,00,000/- under the AICTE-VAANI Scheme and successfully organized a two-day bilingual workshop titled "Front-End to Back-End: Innovation and Practice in VLSI Design" on 26–27 September 2025. Conducted primarily in Hindi, the workshop aligned with the objectives of the VAANI initiative by making advanced technical knowledge more accessible and highlighting the importance of VLSI design and semiconductor technologies in India's technological growth and self-reliance.

The workshop benefited faculty members, undergraduate and postgraduate students and research scholars of ECE and allied branches by providing insights into the complete VLSI design flow from front-end design to back-end implementation. The sessions helped participants connect theoretical concepts with practical industry practices, while the use of Hindi encouraged better understanding and active participation.

At a time when semiconductor and VLSI technologies are central to modern electronics, AI hardware and communication systems, the workshop proved highly relevant. It enabled AKGEC faculty to update their technical expertise for teaching and research and helped students enhance their industry readiness, career prospects and interest in advanced electronics. Overall, the program strengthened the department's academic environment and reaffirmed AKGEC's commitment to quality technical education and innovation.

IEEE Day-2025 Celebrations

A grant of ₹10,000/- was sanctioned by the IEEE Uttar Pradesh Section to the IEEE Communication Society Student Branch Chapter of the Department of Electronics and Communication Engineering at Ajay Kumar Garg Engineering College (AKGEC) for organizing a series of activities as part of the IEEE Day-2025 celebrations. The IEEE student chapter at AKGEC has remained an active and vibrant technical community, regularly conducting professional and student-centric events that promote technical awareness, leadership and global exposure beyond the classroom.

As part of these celebrations, an IEEE Membership Promotion Activity was organized from 10th October 2025 onwards under the campaign title "Connect Today: Lead Tomorrow – Be Part of the IEEE Community." The initiative aimed to raise awareness among students and faculty members about the academic, professional and research benefits of IEEE membership, including access to technical resources, international conferences, professional networking opportunities and leadership opportunities. The activity reflected the chapter's continuous efforts to strengthen student engagement with global engineering platforms.

Such initiatives play a crucial role in shaping students into confident and industry-ready professionals by encouraging lifelong learning, collaboration and participation in a global technical community. Through regular events, such as membership drives, expert talks and technical activities, the IEEE local chapter at AKGEC continues to nurture professional ethics, technical competence and leadership skills among students, thereby significantly contributing to their overall academic and professional development.

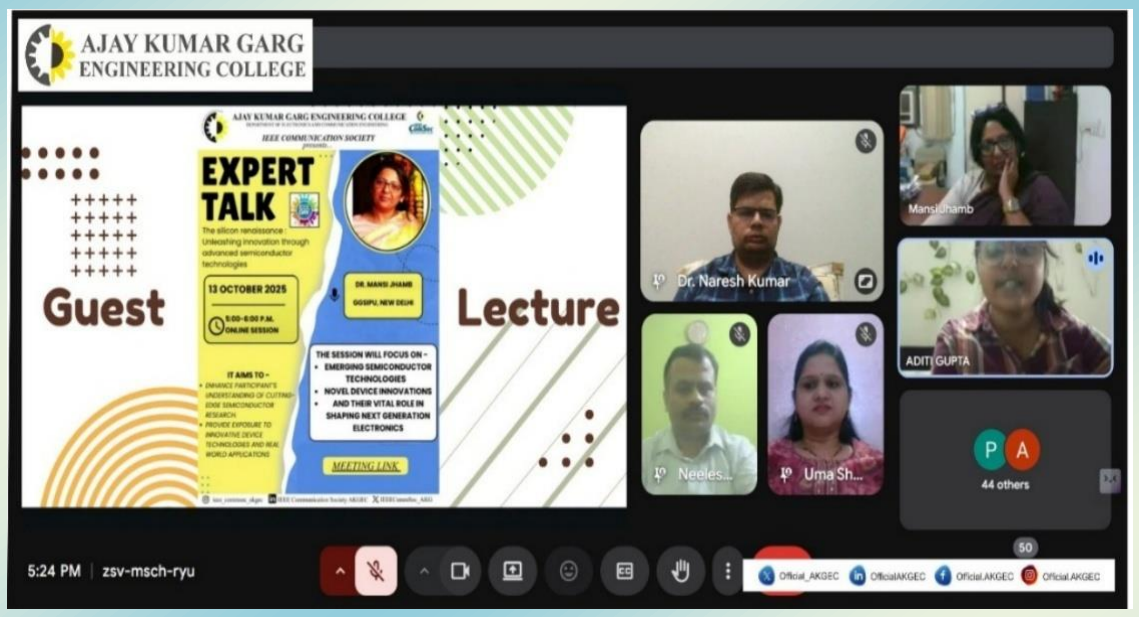
IEEE-Membership Promotion Activity

Connect Today: Lead Tomorrow – Be Part of the IEEE Community

The IEEE Student Branch of Ajay Kumar Garg Engineering College (AKGEC) launched an IEEE Membership Promotion Activity in celebration of IEEE Day 2025, starting from 10th October 2025. The campaign, titled "Connect Today: Lead Tomorrow – Be Part of the IEEE Community", aimed to create awareness about the benefits of IEEE membership among students and faculty members. Informative digital posters and emails were circulated across the campus, highlighting opportunities for research collaboration, career development, technical resources and global networking offered by IEEE. The activity encouraged students to become part of the world's largest technical professional community, dedicated to advancing technology for the benefit of humanity.

Expert Talk on "The Silicon Renaissance: Unleashing Innovation Through Advanced Semiconductor Technologies

The IEEE Student Branch, Ajay Kumar Garg Engineering College (AKGEC) successfully organized an Expert Talk on "The Silicon Renaissance: Unleashing Innovation Through Advanced Semiconductor Technologies" on 13th October 2025 as a part of the IEEE Day-2025 Celebrations. The session was delivered by Dr. Mansi Jhamb, Senior Faculty at Guru Gobind Singh Indraprastha University, New Delhi. Dr. Jhamb captivated the audience with an engaging session on emerging semiconductor materials, novel device innovations and their impact on next-generation electronics. She also conducted a live demonstration using an STM32 microcontroller to implement a



cryptography algorithm through the VIVADO Tool, offering students practical exposure to hardware-level implementation of secure digital systems. The event witnessed active participation from 2nd year ECE students along with IEEE Student Chapter members. It provided a great learning opportunity for students to bridge theoretical knowledge with real-world semiconductor applications.

Technical Workshop on "From Code to Simulation: A MATLAB Exploration Workshop

The ECE Department successfully organized a Technical Workshop titled "From Code to Simulation: A MATLAB Exploration Workshop" on 16th October 2025, marking the conclusion of activities conducted under the IEEE Day-2025 Celebrations. The workshop was designed to enhance the technical competency of 2nd-year ECE students by providing a comprehensive understanding of key concepts such as the Basics of MATLAB, Applications and Industrial Scope of MATLAB, Programming Fundamentals and an Introduction to Machine Learning with MATLAB, complemented by an extensive hands-on practice session.

The valedictory session of the workshop was graced by the Chief guest, Dr. Arun Kumar Singh, Dean Academics & HoD ECE, REC Kannauj and the HAC Chair, IEEE UP Section. The winners of the workshop were awarded prizes, goodies, and certificates by Dr. Arun Kumar Singh and Dr. Neelesh Kumar Gupta, Prof. & HoD ECE, AKGEC, Ghaziabad.

Infrastructure Updates

VLSI R&D Lab – Centre of Excellence (CoE)

The Department of Electronics and Communication Engineering (ECE) at Ajay Kumar Garg Engineering College (AKGEC) has established a state-of-the-art VLSI Research & Development Laboratory as a Centre of Excellence (CoE) to strongly promote a culture of research, innovation and advanced learning within the department. The laboratory is equipped with modern Electronic Design Automation (EDA) tools, including Cadence, Tanner, Visual TCAD, Symica, and Xilinx Vivado, enabling students and faculty members to work on contemporary challenges in VLSI design and semiconductor technologies. This dedicated facility acts as a hub for cutting-edge research, sponsored and self-driven projects, hands-on training and meaningful internship opportunities.

The upgraded CoE reflects the department's clear focus on strengthening research-oriented education, where theoretical knowledge is seamlessly integrated with practical and experimental learning. Students gain in-depth exposure to real-world semiconductor design flows, encouraging them to pursue innovation-driven projects, high-quality publications and industry-relevant skill development. Faculty members also benefit significantly from this advanced infrastructure, as it supports interdisciplinary research, funded projects, consultancy and collaboration with industry and academia, further reinforcing the department's commitment to excellence in research and development. Overall, this Centre of Excellence stands as a strong testament to the department's vision of nurturing skilled researchers, competent engineers and future leaders in the field of VLSI and semiconductor technologies.

New Equipment & Software Tools Added in ECE Laboratories (2025)

The Department of Electronics and Communication Engineering (ECE) at Ajay Kumar Garg Engineering College (AKGEC) continues to strengthen and modernize its laboratory infrastructure through regular upgrades, thereby supporting advanced learning, experimentation and research-driven education. In 2025, the department added several advanced tools and equipment, including the Computer Simulation Technology (CST) Studio Suite Research Pack for high-frequency electromagnetic, antenna and RF research, along with Digital Storage Oscilloscopes (DSOs) and Digital Multimeters for precise signal measurement and analysis. To further support circuit prototyping and experimentation, multiple power supplies and function generators were introduced, along with IC testers for device characterization and verification.

In addition, new trainer kits for the study of photodiodes, solar cells, BJT multistage amplifiers and MOSFET frequency response were installed, enabling students to gain deeper practical insights into semiconductor devices and analog electronics. These enhancements significantly enrich hands-on learning, encourage project-based innovation and improve the overall quality of laboratory-based education. The continuous upgradation of these facilities is being carried out under the supervision of Dr. Neelesh Kumar Gupta, Prof. & HoD, ECE reflecting the department’s strong commitment to academic excellence, practical competence and a vibrant research culture.

Induction Program for II Year ECE Students

The Department of Electronics and Communication Engineering at Ajay Kumar Garg Engineering College, Ghaziabad conducted an Induction Program for second-year students on 22nd August 2025 under the guidance of Prof. Hemant Ahuja, Director, AKGEC, Ghaziabad. The session led by Dr. Neelesh Kumar Gupta, Professor and HoD, ECE department highlighted the scope of ECE, emerging technologies, academic regulations and departmental resources. Students were also introduced to various departmental clubs and societies, encouraging active participation. The program successfully oriented students towards their academic journey and future career opportunities.

MoU

The ECE Department achieved a successful milestone by receiving official approval from the IEEE-UP section to organize an International Conference, technically co-sponsored by the IEEE UP Section. An MoU in this regard has also been signed between the ECE Department, AKGEC, Ghaziabad and the IEEE-UP Section. The ECE department's conference will be titled "International Conference on Innovations in Electronics, Communication and Computing Techniques (IEC2T-2026)" and is scheduled for 9th–10th September 2026.

Events Organized

Expert Talks

Bridging Academia and Industry: Real-World VLSI Design Insights

The Department of Electronics and Communication Engineering (ECE) at Ajay Kumar Garg Engineering College (AKGEC), Ghaziabad, organized an expert talk on "Practical Implementation of VLSI Design in Industry" on 8th November 2025 for third-year ECE students as part of their Mini Project/Internship (BEC-554) course. The session was delivered by Vaibhav Mishra, Founder of Pine Training Academy, Noida. The talk provided students with first-hand exposure to real-world VLSI design workflows, FPGA implementation and the effective use of industry-standard EDA tools such as Cadence, Synopsys and Xilinx, while also highlighting the rapid growth of India's semiconductor ecosystem.

During the interaction, the speaker discussed multiple career opportunities available to ECE students in the VLSI and semiconductor domain. Students were introduced to roles such as VLSI Design Engineer, focusing on front-end and back-end IC design; FPGA Design Engineer, working on prototyping and hardware acceleration; and Physical Design and Verification Engineer, ensuring performance, power and reliability of complex chips. Career options in EDA tool development and application engineering, ASIC/SoC design and semiconductor testing and validation were also

emphasized. The speaker further highlighted opportunities in research and higher studies, product-based companies, start-ups and core semiconductor industries aligned with India's national semiconductor initiatives. Organized under the VLSI Design Internship course and mentored by Dr. Uma Sharma, Dr. Tukur Gupta, Dr. Pankaj Goel and Dr. Lokesh Soni, the session served as a strong bridge between academic learning and industry expectations. Active student participation, discussions on design challenges, tool optimization and career planning made the event highly interactive and productive, motivating students to pursue industry-oriented skills and future-ready careers in VLSI and semiconductor technologies.

Guest Lectures

Guest Lecture on Semiconductor Design and Infrared Technology

The Department of ECE at AKGEC, Ghaziabad, successfully organized a Guest Lecture on "Exploring Future Opportunities in VLSI Design" on 16th October, 2025**.** The session was delivered by Ms. Shilpa Bhatia**,** Tech Lead at STMicroelectronics, Greater Noida**,** who shared her rich professional journey spanning leading organizations such as Qualcomm**,** SAMEER (IIT Bombay, MeitY)**,** and Ericsson**.** The event commenced with a warm welcome address by Dr. Neelesh Kumar Gupta**,** HoD ECE. Ms. Bhatia began her lecture by introducing the fundamentals of semiconductor design, validation and testing, highlighting the importance of circuit analysis, mixed-signal IP validation (including ADC, DAC, and PLL) and signal/power integrity in modern chip design. The event concluded with a vote of thanks delivered by Prof. Himani Garg**,** who expressed heartfelt gratitude to Ms Shilpa Bhatia for her insightful and inspiring session. Dr. Rakhi Sharma and Mr. Naveen Kumar Saini coordinated the session.

Guest Lecture on Semiconductor Design for Future Defence

The ECE Department organized a guest lecture on 25th February, 2025, featuring Dr. Raghvendra Sahai Saxena, Scientist-F at SSPL, DRDO, Delhi and an expert in Semiconductor Design and Infrared Technology. Dr. Saxena delivered an insightful session on "Semiconductor Design for Future Defence Applications," covering advanced fabrication techniques such as Molecular Beam Epitaxy (MBE), Vapour Phase Epitaxy (VPE) and Liquid Phase Epitaxy (LPE), while emphasizing the importance of infrared technology in modern warfare. The session provided students with valuable knowledge about defence applications and inspired them to explore career opportunities with DRDO.

Guest Lecture on Evolving Role of Engineers in the Era of Generative AI

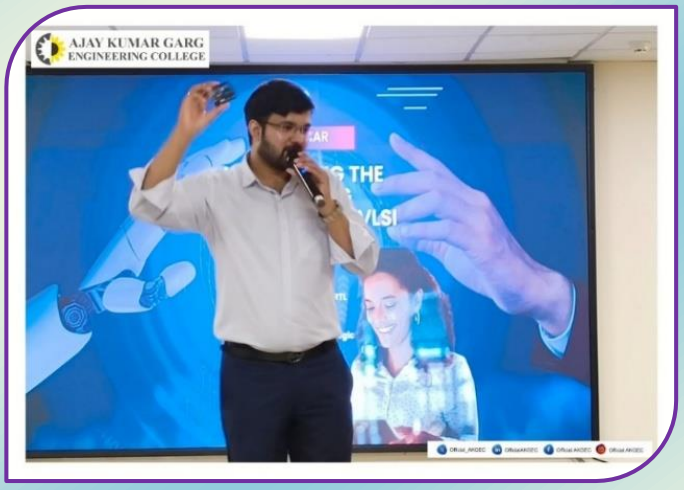
The Department of Electronics and Communication Engineering (ECE) at Ajay Kumar Garg Engineering College (AKGEC) organized a guest lecture on 22nd February 2025 on "Evolving Role of Engineers in the Era of Generative AI." The session was delivered by Hemant Jha, Founder and CEO of Check Trust & 3P Innovations Pvt Ltd, Bengaluru, who shared valuable insights from his experience in AI and emerging technologies.

The lecture helped students understand how engineering roles are transforming with Generative AI, highlighting the need for continuous upskilling, adaptability and interdisciplinary knowledge. Students learned about emerging opportunities in AI-driven product development, intelligent automation, AI-integrated systems and technology entrepreneurship, along with challenges such as ethical AI use, data privacy and rapid technological change. The session was attended by third-year ECE students, faculty members and proved highly engaging, motivating participants to prepare for future-ready careers in an AI-driven engineering landscape.

Workshop on "Resume Building & LinkedIn

A workshop on "Resume Building & LinkedIn" was organized to strengthen student's career readiness. The session provided practical guidance to 2nd- and 3rd-year ECE students on crafting impactful resumes and developing a strong professional presence on LinkedIn, thereby significantly enhancing their prospects for internships and placements.

Alumni Talk



The ECE Department hosted an Alumni Talk on 4th September 2025. The session was delivered by Mr. Pranjal Sharma, founder of VLSI Insights and a distinguished alumnus in VLSI design. The session titled "Navigating the Evolving Landscape of VLSI" provided insights into career opportunities in VLSI Design and Verification, bridging academic learning with industry applications. The session sparked curiosity and enthusiasm, motivating students to explore VLSI as a career.

Faculty Development Program

AKGEC reflects its strong commitment to providing students with up-to-date knowledge and exposure to the latest technologies by continuously encouraging faculty members to participate in national-level Faculty Development Programs (FDP) and skill-enhancement initiatives. Along with external collaborations, the institute also actively promotes and organizes in-house FDPs, ensuring continuous professional development of faculty members. Such initiatives directly contribute to

improved teaching quality, industry-relevant curriculum delivery and enhanced learning outcomes for students.

The Department of Electronics and Communication Engineering at AKGEC successfully organized a five-day ICT-based FDP on "Applications of IoT – Project Based (ICT-105)" from 10–14 February 2025, in collaboration with the National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh, through its Information Management and Emerging Engineering (IMEE) Department. The program was coordinated by Dr. Maitreyee Dutta (Program Coordinator, NITTTR Chandigarh), Dr. Neelesh Kumar Gupta, Head of ECE, and Dr. Amit Garg as the local coordinator.

The program emphasized project-based learning in IoT, combining simulation and hands-on experimentation using platforms such as Arduino, ESP-32 microcontroller and a variety of sensors. Faculty participants gained practical exposure to the design and implementation of IoT-based applications relevant to smart systems and emerging engineering solutions. A total of 35 participants benefited from the program, strengthening their technical expertise and pedagogical approaches, which will positively impact teaching practices and student learning outcomes.

Industrial Visit

On 6th June, 2025, B. Tech II Year ECE students from AKGEC, Ghaziabad, visited the Heavy Haul Institute of DFCCIL at Sector-145, Noida. The visit aimed at providing practical exposure to modern railway technologies. Mr. R.K. Sharma, Additional General Manager (S&T), DFCCIL, shared valuable insights on the role of ECE in national infrastructure, which greatly benefited the students. Dr. Gaurav Saxena and Dr. Deepak Yadav, faculty members of ECE, accompanied the students. The visit enhanced students understanding of railway communication, signaling, automation and cutting-edge ECE applications, contributing significantly to their academic and professional growth.

Tech-Quiz Competition "Intellect Quest-Brain Marathon

The Department of Electronics and Communication Engineering organized a Tech-Quiz Competition **"**Intellect Quest–Brain Marathon**"** on 15th April 2025 under the IEEE Communication Society Student Chapter. The event aimed to promote healthy competition and enhance student's technical knowledge in Electronics, Communication and general technology. A total of 13 teams comprising 2nd-year students from various branches participated. Dr. Neelesh Kumar Gupta, Prof. & HoD ECE, motivated the students and felicitated the winners with cash prizes and goodies, while participation certificates were awarded to all. The event was successfully coordinated by Dr. Naresh Kumar, Dr. Uma Sharma, Ms. Palak Verma and the other IEEE student members.

Co-Curricular & Student Chapter Activities

Waves & Wonder

On 20th September 2025, the Phoenix Society of the ECE Department, AKGEC, Ghaziabad proudly celebrated its 20th Founder's Day with a blend of tradition, innovation, and togetherness. A technical board titled "Waves & Wonders: Unlocking the Power of Communication Systems" was displayed near the Back Block, where 3rd-year ECE students presented the theme to faculty and peers. The showcase highlighted how radio waves, fiber optics, satellites and IoT connect the world, paying tribute to engineers who transform signals into stories and networks into lifelines. The event was

graced by Dr. Neelesh Kumar Gupta, along with faculty coordinators, Dr. Dushyant S. Chauhan and Dr. Rakhi Sharma.

IoT Unplugged: Connecting the Future

The Communication Club of the ECE Department organized a seminar on "IoT Unplugged: Connecting the Future" on Wednesday, 16th April 2025, in the ECE Lecture Theatre. The session was conducted by 3rd-year students Tejash Yadav and Vivek Agrawal and was exclusively held for 3rd-year ECE students. The project titled AquaAlert, an IoT-based water monitoring system that detects leakage and tracks usage efficiently, was also showcased. It is developed by the team of members Tejash Yadav, Vivek Agrawal and Krishna Bansal. The Club has also included glimpses from the seminar to showcase the enthusiastic participation and efforts of the students during the event.

COMMQUEST

The Communication Club of the ECE at AKGEC, Ghaziabad, successfully organized a technical event titled "COMMQUEST: The Ultimate Challenge" on 4th November 2025. The event served as an engaging platform for students to showcase their intellect, teamwork and communication skills through three exciting rounds: The General Quiz, The Cryptic Crossword, and The Rapid Fire. A total of ten enthusiastic teams competed with great energy, making the competition both intense and enjoyable. After three thrilling rounds, Team Quantum secured the 1st position, followed by Team Gama 0.1 in 2nd place, and Team Nirman in 3rd place. The event was successfully coordinated by the Faculty In-Charges of the Communication Club, Dr. Rakhi Sharma and Ms. Ankita Sharma, marking the event as a memorable and enriching experience for all.

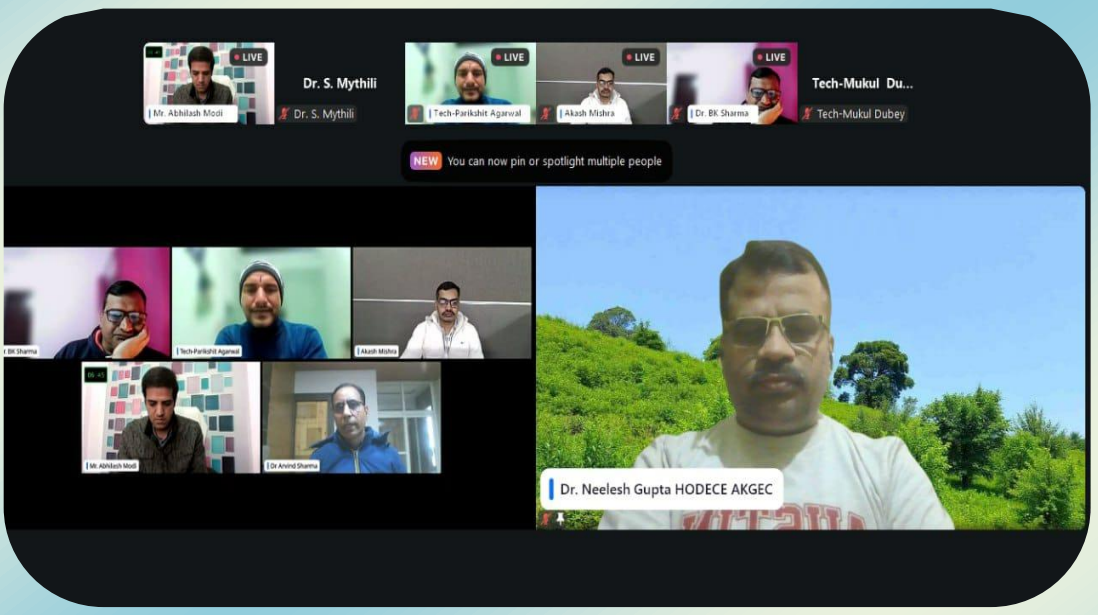
Recognition & Awards

Faculty Recognitions

- **Dr. Neelesh Kumar Gupta,** Prof. & HoD ECE, contributed as an eminent speaker by delivering an informative session during the one-week Faculty Development Program (FDP) titled 'Introduction to IoT, AI and its Applications', held from 10–14 February 2025 at Jaipur Engineering College and Research Centre (JECRC), Jaipur, enriching participants understanding of contemporary IoT and AI applications.

- **Dr. Neelesh Kumar Gupta,** Prof. & HoD ECE, contributed as a Resource Person in the AICTE Training and Learning (ATAL) Academy Online Elementary Faculty Development Program on 'Advanced Sensor Technology for Efficient Biomedical and Energy Management in Smart Cities', held from 03–07 January 2022 at Jaipur Engineering College and Research Centre (JECRC), Jaipur.

- **Dr. Neelesh Kumar Gupta,** Prof. & HoD ECE department, was invited as the Chief Guest in the Science Exhibition, August 2025, at Delhi Mar Thoma Public School, Ghaziabad.
- **Dr. Neelesh Kumar Gupta**, Prof. & HoD ECE department, was invited as the Session chair in the 2nd International Conference on Emerging Technologies & Innovation for Sustainability, organized by NIET, Greater Noida, held on 28 November 2025.



- **Dr. Neelesh Kumar Gupta,** Prof. & HoD ECE department, served as a guest at the 10th International Conference on Human Values in Higher Education (ICHVHE 2025), themed "Empowering Youth through Value-based Education". He participated in a session on 21/12/25 from 12:45 PM to 2:30 PM, actively listening to presentations and providing insights, observations, and feedback aligned with the theme.

- **Dr. Himani Garg**, Professor, was invited as the Session Chair in the 2nd International Conference on Emerging Technologies & Innovation for Sustainability, organized by NIET, Greater Noida, held on 29th November 2025.

- **Dr. Jitender Chhabra**, Associate Professor has provided valuable support in disseminating Outcome-Based Education (OBE) knowledge not only within the department and institute, but also beyond the college. He assisted the OBE team of BRCM College of Engineering and Technology, Behal, in preparing their documentation, contributing to their successful NBA accreditation.

- **Dr. Shailendra Ojha** was invited by IETE Bhopal Centre to deliver a webinar on RF Energy Harvesting. The session encouraged attendees to explore innovative research opportunities in sustainable wireless power solutions. Participants appreciated the clarity of concepts and the interactive discussion.

- **Dr. Pankaj Goel and Dr. Neeti Bansal** represented the AKGEC, Ghaziabad, from the ECE department as resource persons at DAV School, Pratap Vihar, Ghaziabad, on 8 March 2025, delivering an engaging workshop on Internet of Things (IoT) and Artificial Intelligence (AI) technologies.


ATL COMMUNITY DAY


INNOVATION COUNCIL
DAV PRATAP VIHAR
in collaboration with AKGEC, GZB

Student Awards

The Department of ECE at AKGEC proudly congratulates our Final Year student **Mr. Vandit Mishra** (2100270310162), for securing 2nd Rank with the Silver Medal in the AKTU Merit List-2025 for the 2024-25 pass out batch. This remarkable achievement reflects his hard work, perseverance, and dedication.

- A team of ECE students under the guidance of Dr. Himani Garg has successfully cleared the Level-1 of Robofest Gujarat 5.0, organized by GUJCOST, Gandhinagar, Gujarat, under the Senior Level – Aerial Robotics (Minefield Navigation Challenge) category, with a prize of Rs. 50,000/-
- Grand Final for Anveshana-2025 (A National Level Project Competition) was organized at the

National Science Centre, Delhi, on 6-7 February. ECE students proudly represented the college on a national stage while collaborating with underprivileged school students. The first prize of ₹30,000 was awarded to Team Aarambh, comprising students **Vandit Mishra and Sarthak Singh**, under the guidance of Dr. Amit Garg, for their project "Adaptive Traffic Light Control."

- Consolation Prize (₹5,000) was awarded to **Pranjal Saxena (III Year, ECE)** and his team for their project Air Aware, Smart AQI Monitoring.
- The Consolation Prize of ₹5,000 was awarded to Eco Steam Catalyst, with **Nirmit Varshney (II Year, ECE)** as the team member, under the guidance of Dr. Naresh Kumar.
- Six ECE teams, out of 113 participants, qualified for the Semi-Final of Anveshana 2025–26 after winning Mini-Anveshana at AKGEC, Ghaziabad (14–15October 2025), under the guidance of Dr. Amit Garg, Dr. Jitender Chhabra, Dr. Naresh Kumar, Dr. Ritish Kumar, Dr. Garima Varshney, and Ms. Deepti Singh.
- The ECE Department at AKGEC is proud to share that the final year project "Eco-Dairy", developed by

Team BrahMos (Ashutosh Tripathi, Ansh Gupta, Argya Pratap Singh, and Anirudh Tyagi) under the guidance of Dr. Neelesh Kumar Gupta, was selected for the AKTU financial grant by UPCST-Lucknow.

- This IoT-based solution for smart energy monitoring and waste management in dairy plants secured 4th position out of 460 teams at a CSTUP event on 26th April 2025, winning a ₹5000 prize. The team also published a paper at the Scopus-indexed IEEE ICTMIM 2025 Conference.

- ECE Department proudly announces that Team Enginerds, comprising ECE students, has secured two special category Awards, Best Prototype and Best CAD Design, at the JASC (Janatics Automation Skill Challenge) 2025. National Finals held on 12–13 November 2025 at JSPM Rajarshi Shahu College of Engineering, Pune. Team Enginerds qualified as the only team

representing the Northern Region after the regional round hosted at AKGEC on 13th October 2025. Team Enginerds comprised **Harsh Kumar (CSE), Shobhit Maurya (ECE), Mansi Singh / Ayush Singh (ECE),** under the mentorship of Mr. Mahendra Dutt Dwivedi. Their achievement highlights the college's continued excellence in automation skills, hands-on learning and industry-oriented problem solving.

- A team "UDBHAV" of ECE students (**Nirmit Varshney, Mohak Sharma, Mohit Kumar and Monisha Malik)** under the guidance of Dr. Suvarna Mujumdar, participated in Emerson's NI-System Design Constest-2025 held at IIT Madras on 12-13 November 2025 and won the competition by securing 1st position, winning a ₹150000 prize.
- A Team "Uavision," mentored by Ms. Deepti Singh, secured a place among the Top 10 finalists with their innovative project titled "Disaster Response UAV." The efforts and dedication of the CLAD-certified ECE student members, **Suraj Singh, Saransh Sharma, Kartikesh Upadhyay, and Sarthak Gupta** are highly appreciated for their significant contributions to the team's achievement.
- Two teams of ECE students, guided by Dr. Himani Garg and Dr. Suvarna Mujumdar, have been shortlisted for the final round of the Smart India Hackathon (SIH) 2025 National Level Competition.
- Team KRISHINETRA, mentored by Dr. Suvarna Mujumdar, continued its strong presence at Smart India Hackathon (SIH) 2025 and competed at IIT Kharagpur with a project on an Automated Compliance Checker for Legal Metrology Declarations on E-Commerce Platforms for the Ministry of Consumer Affairs, Food & Public Distribution.
- **Priyanshu Singh,** a 3rd-year student of the ECE branch, secured 2nd position in the event "Saksham 2025: Fit India 2025", held at AKGEC, Ghaziabad.

- **Madhur Dwivedi,** a 2nd year student of the ECE branch, secured 3rd position in the event "Commquest". The event was held at the Admin block of AKGEC, Ghaziabad. The Communication Club organise an Commquest event on 4th November 2025.
- **Mohak Sharma**, a 3rd year student of the ECE branch, secured 1st position in the event "NI System Design Contest 2025". The event was held at IIT Madras Research Park, Chennai, Tamil Nadu from 21–23 October 2025.
- **Sneha Tiwari**, a 2nd year student of the ECE branch, secured 1st position in the event "Udghosh". The event was held at IIT Kanpur on 5th October 2025.

- **Shashank Shekhar**, a 2nd year student of the ECE branch, secured 1st position in the event "INNOVISION 25", held at AKGEC, Ghaziabad, on 18th November 2025.

- **Shivpujan Mishra**, a 3rd-year student of the ECE branch, secured 2nd position in the event "Eco pitch arena (VE cell)". The event was held on the top floor of the Admin Block, AKGEC, Ghaziabad. He designed a food management system.
- **Parth Srivastava**, a 3rd-year student of the ECE branch, secured 2nd position in the event "AKTU Zonals Basketball". The event was held at RKGIT, Ghaziabad.
- **Sakshi Singh**, a 3rd-year student of the ECE branch, secured 1st position in the event "Kho Kho". The event was held at Galgotia College, Greater Noida. AKGEC won the gold medal in the zonal as well as the state level of AKTU.

- **Aaruhi Bhardwaj**, a 3rd-year student of the ECE branch, secured 1st position in the event "Scrolls'25". The event was held at the Admin Block Seminar Hall, AKGEC, Ghaziabad, on 29th October 2025.

- **Madhav Girdhar**, a 2nd-year student of the ECE branch, secured 2nd position in the event "Saksham (Powerlifting)". The event took place at BH-1, AKGEC, on 14th October 2025.
- **Raj Srivastava**, a 2nd-year student of the ECE branch, secured 1st position in the event "INNOVISION - 2025 (mini project exhibition)". The event took place across LT-1, LT-2 and LT-3 at AKGEC on 18th November 2025.
- **Tushar Karn**, a 3rd-year student of the ECE branch, secured 2nd position in the event "ECO PITCH ARENA - VASUDHA 2025". The event was held at the Mini Seminar Hall, Administrative Block (Top Floor), AKGEC, Ghaziabad, from 29th April to 2nd May 2025.

- **Ashish Kuntal**, a 2nd-year student of the ECE branch, secured 2nd position in the event "Athletics (Discus throw)". The event was held at RKGIT, Ghaziabad.

- **Achintya Thakur**, a 2nd year student of the ECE branch, secured 1st position in the event "INNOVISION 2025". The event was held at LT-1, LT-2 and LT-3, AKGEC, Ghaziabad, on 18th November 2025.
- **Adarsh Gupta**, a 2nd-year student of the ECE branch, secured 1st position in the event "INNOVISION 2025". The event was held at LT-1, LT-2 and LT-3, AKGEC, Ghaziabad, on 18th November 2025.
- **ADAMYA AGGARWAL**, a 2nd-year student of the ECE branch, secured 1st position in the event "INNOVISION 2025". The event was held at LT-1, LT-2 and LT-3, AKGEC, Ghaziabad, on 18th November 2025.
- **Aditya Dev Chaudhary**, a 2nd-year student of the ECE branch, secured 1st position in the event "INNOVISION 2025". The event was held at LT-1, LT-2 and LT-3, AKGEC, Ghaziabad, on 18th November 2025.
- **Ketan Narula**, a 2nd-year student of the ECE branch, secured 3rd position in the event "SCROLLS". The event was held at AKGEC, Ghaziabad.
- **Monisha Malik, Nirmit Varshney,** 3rd-year students of the ECE branch, secured 1st position in the event "NI context design and system 2025". The event was held at the IIT MADRAS research park. Their team Bhoomitra won 1st position at IIT Madras in the NI LabVIEW-based System Design Contest. The system uses NI myRIO for real-time data acquisition and compost automation. Judges appreciated its accuracy, dashboard clarity and practical deployment readiness.
- **Nirmit Varshney**, a 3rd-year student of the ECE branch, has achieved several remarkable milestones through his innovative projects. He secured 1st position in "Samadhan 2K25" held at IIT Delhi, where his project Bhoomitra, an IoT-based smart compost monitoring and automation system, was recognised for its real-time sensing, automation capability and community-level environmental impact; the grand finale round is still pending. He also secured 3rd position in the "Anveshna Innovation Challenge" at the National Science Centre, New Delhi, for Eco Steam Catalyst, a hydrogen-generating steam–catalyst system aimed at reducing pollution and supporting clean fuel production. This project earned a national Top 10 rank, finishing 5th overall and received appreciation for its scientific approach and sustainability.

  At AKGEC, Ghaziabad, Nirmit won 1st position in the "Navachar Electronics Club 2K25" event, where the Bhoomitra poster clearly showcased its architecture, sensor integration and environmental benefits. He again secured 1st position in the "Vasudha 2K25 – Eco Pitch Arena" for presenting Bhoomitra as a sustainable, community-based compost automation model focusing on IoT monitoring and waste-to-resource conversion. Additionally, he earned 1st position in the "Multisim Circuit Design Contest" for and designing a Secure Digital Lock with Home Automation using Multisim, praised for circuit accuracy practical relevance. Nirmit also achieved 1st place in the "IEEE (Electrical) Poster Presentation" for Eco Steam Catalyst,

highlighting clean hydrogen generation via steam–catalyst reactions, which was recognised for its innovation and environmental impact. Furthermore, he secured 2nd position in the "IEEE (Electrical) Technical Presentation" for Bhoomitra, where he detailed sensor modules, ESP/myRIO architecture, cloud dashboards and compost optimisation techniques, earning recognition for technical clarity and real-world usefulness.

Placements & Internships

Alumni Achievement

The ECE Department proudly celebrates the exemplary placement performance of its students, who have secured positions in renowned organizations such as Ericsson, VIVO Mobiles, Infosys, TCS, HCL and Sunwoda Electronics. This stellar outcome stands as a testament to their strong technical foundation, professional competence and the department's sustained focus on holistic engineering education and industry readiness.

Adding further distinction to this success story, 85 students from the department completed impactful internships that culminated in pre-placement offers from esteemed companies, including Emerson, Jakson Technologies, KUKA India, NMTronics, among others. These internship-to-offer conversions underscore the high level of trust the industry places in our students and highlight the effectiveness of the department's consistent efforts in strengthening academia–industry linkages. Our alumni continue to make us proud with their remarkable achievements across diverse fields.

- **Akshat Shukla,** serving as an R&D Engineer at Rohde & Schwarz, a prestigious German technology firm, contributes to cutting-edge projects closely aligned with the needs of the Indian defence forces.

- Heartiest congratulations to **Mr. Nav Khanna** (2025 Batch) on his selection as an Officer in the Indian Air Force (Aeronautical Engineering – Electronics Branch). He secured an impressive AIR 38 in the final round of AFCAT, showcasing

his dedication, technical excellence and commitment to serving the nation.

- Adding to these accomplishments, **Vandit Mishra** is pursuing a Master of Technology in RF & Microwave Engineering at IIT Dhanbad, furthering his expertise in an advanced and highly specialised domain. Their successes continue to inspire current students and reflect the excellence our college strives to nurture.
- **Shant Shukla** selected as R & D Engineer with Indian Defence Forces.

Faculty Achievements & Research

Faculty Achievements

In line with its Annual Confidential Report (ACR) policy, AKGEC consistently recognizes and rewards faculty members for their exceptional academic, research and professional contributions. The ACR policy is designed to motivate faculty excellence by acknowledging sustained performance in teaching, research, innovation and institutional development. As part of this policy, incentives are awarded to faculty members who demonstrate outstanding commitment and impact in their respective domains.

Accordingly, during the academic session 2024–25, four faculty members from the Department of Electronics and Communication Engineering Dr. Jitender Chhabra, Dr. Naresh Kumar, Dr. Uma Sharma and Dr. Dushyant Singh Chauhan, were awarded an incentive of ₹5,000 per month each for their extraordinary performance. This recognition under the ACR policy not only reinforces AKGEC's culture of merit and excellence but also encourages faculty members to continuously

strive for higher standards in teaching, research and professional growth, ultimately benefiting the student community and the institution as a whole.

Faculty Research Seminar

AKGEC has established a structured Research Development Policy, reinforcing research as a core pillar of academic excellence. The policy provides incentives, reimbursements and recognition to faculty, staff and students for high-impact work in areas such as Electronics, Artificial Intelligence and Communication Technologies. Through financial rewards for quality publications, support for conferences, patents and professional memberships and oversight by the Research Development Incentive Committee (RDIC), AKGEC promotes a strong research culture. Emphasizing ethical practices, industry collaboration, student mentorship and global visibility through Scopus/WoS publications and innovation, the policy positions AKGEC as a growing hub for technology-driven and interdisciplinary research.

Sl. No.	Name of Faculty	Research Topic
1	Dr. Seema Garg	Vibration Response and Processing During Rotary Pilling for Constructing Bridges
2	Dr. Amita Asthana	Design and Analysis of AI AI-Enhanced Photonic Biosensor for the Detection of Colon Cancer
3	Dr. Dushyant Singh Chauhan	Deep Learning Framework for Constellation Signal Classification in UOWC System
4	Dr. Prashant Mani Tripathi	ECG Signal Analysis Using QRS Complex Detection by FrFT
5	Dr. Pankaj Goel	FPGA Implementation of HF-LMS Adaptive Filter for Denoising Applications
6	Ms. Ankita Sharma	Current Conveyors for Design of Analog Filters
7	Dr. Shailendra Singh Ojha	Six-Band Rectenna for Efficient RF Energy Harvesting and IoT Power Solutions
8	Dr. Deepak Yadav	Optimizing OAM Beam's Divergence Angle in RF with Hemi-Spherical Dielectric Lenses
9	Ms. Prachi Agarwal	Fuzzy Logic-Based Non-Coherent FSK for Ambient Backscatter Across OFDM Signals
10	Dr. Rakhi Sharma	The Structural Brain Connectivity Analysis
11	Dr. Neeti Bansal	Power Aware Aggregated Search: Enhancing Spectrum and Energy Efficiency of Sensor Networks
12	Dr. Garima	Fractional Order Signal Processing and Signal Generating Circuits
13	Dr. Lokesh Soni	Low Power Near-Threshold Schmitt-Trigger driven 11T CNTFET SRAM cell with Improved Performance

Faculty Human Value Seminar

The ECE Department not only focuses on cutting-edge research and technical excellence but also places strong emphasis on the development of human values among its students and faculty. The department strives to nurture professionals who are not only competent engineers but also responsible, ethical and compassionate individuals capable of contributing meaningfully to society. To further this vision, the department regularly organizes dedicated Human Values Seminars by faculty members. These sessions provide a reflective platform to discuss ethics in engineering, empathy in teaching, responsible use of technology and value-based decision-making. Through interactive talks and experience sharing, faculty are encouraged to integrate human values into teaching, mentoring and research guidance, thereby creating a learning environment that shapes both the minds and character of future engineers.

Sr. No.	Name of Faculty	Topic
1	Dr. Gopal Babu	Changing Perspectives: From Fragmented to Holistic World View
2	Dr. Jitender Chhabra	Healing Relationships through the Realization of Inherent Co-Existence in Existence
3	Dr. Amit Garg	Karm, Vichar, Bhav, Dhyan, aur Sakshi
4	Dr. Naresh Kumar	Right Understanding
5	Dr. Prashant Mani Tripathi	The Body as an Instrument of Self
6	Ms. Ankita Sharma	Respect or Differentiation
7	Dr. Deepak Yadav	The Right Understanding: The Key to Environmental Harmony
8	Dr. Neeti Bansal	Mental Health- Key to Happy Life
9	Ms. Prachi Agarwal	Earth – Our Shared Home: Responsibility Beyond Borders

Publications & Intellectual Property

Journal Publications

AKGEC has established a structured Research Development Policy, reinforcing research as a core pillar of academic excellence. The policy provides incentives, reimbursements and recognition to faculty, staff and students for high-impact work in areas such as Electronics, Artificial Intelligence and Communication Technologies. Through financial rewards for quality publications, support for conferences, patents and professional memberships and oversight by the Research Development Incentive Committee (RDIC), AKGEC promotes a strong research culture. Emphasizing ethical practices, industry collaboration, student mentorship and global visibility through Scopus/WoS publications and innovation, the policy positions AKGEC as a growing hub for technology-driven and interdisciplinary research. The knowledgeable faculty members of the ECE Department have published several research papers in reputed national and international journals and conferences across diverse domains of electronics and communication engineering. In addition to their scholarly publications, they have also filed multiple Intellectual Property Rights (IPRs), reflecting a strong culture of innovation, originality and research-driven development within the department.

- Sharma, R., **Garg, H.**, & Agrawal, C. (2025). Decentralized EV Charging Network with Tokenized Access and Adaptable Scheduling. Franklin Open, 100314.

- Raikwar, S., Gupta, A., **Srivastava, K.**, Singh, M., Anand, N., & Verma, R. K. (2025). Design of Compact and Quad Band Gap Coupled Ring-Shape Microstrip Patch Antenna for WLAN/ISM/WiMAX/5G Applications. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 38(3), e70060.
- Pritty, & **Sharma, U.** (2025). High-Performance Low-Power Digital Oscillator Using CMOS Technology. Transactions on Electrical and Electronic Materials, 1-14.
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- **Sharma, D.**, Mehra, R., & Raj, B. (2025). Various Materials and Structures for Heterojunction Organic Solar Cells Design for Efficiency Enhancement. Nano, 2550021.
- **Sharma, D.**, Mehra, R., & Raj, B. (2025). Effective perovskite solar cell design employing mixed halide and copper thiocyanate: D. Sharma et al. Optical and Quantum Electronics, 57(6), 368.
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- **Ojha, S. S.**, Singhal, P. K., & Thakare, V. V. (2025). Dual ultra-wideband high-efficiency rectenna for RF energy harvesting from UMTS and UNII bands. Analog Integrated Circuits and Signal Processing, 122(2), 15.

Impact & Recognition

These research contributions have significantly enhanced the department's reputation in the academic and research community, positioning the ECE Department at AKGEC as a Centre of excellence for contemporary research in electronics and communication engineering. The publications reflect the department's commitment to:

- Conducting cutting-edge research aligned with industry needs
- Publishing in high-impact, peer-reviewed journal.

Conference Proceedings

- **N. K. Gupta**, A. Bhargava, R. B. Jeyavathana, P. Jaiswal, P. Gupta and R. Tiwari, "A Stacked Machine Learning Prediction Model for Enhanced Heart Disease Detection," 2025 International Conference on Engineering Innovations and Technologies (ICoEIT), Bhopal, India, 2025, pp. 102-108.
- Tripathi, A., Gupta, A., Singh, A. P., Tyagi, A., & **Gupta, N. K.** (2025, April). Eco Dairy: Advanced IoT for Sustainable Dairy Management. In 2025 5th International Conference on Trends in Material Science and Inventive Materials (ICTMIM) (pp. 1249-1252). IEEE.

- Khanna, N., Yadav, A., Patel, D., Pandey, D., & **Gupta, N. K.** (2025, March). AvianGuard-Signal Disruption Drone. In 2025 5th International Conference on Expert Clouds and Applications (ICOECA) (pp. 442-446). IEEE.
- Mishra, V., Shukla, S., Singh, S.K., Srivastava, S., & **Garg, A.** (2025). Real-Time Adaptive Traffic Control System with Emergency Vehicle Detection Based on Computer Vision and Sound Frequency Monitoring. 2025 2nd International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE), 1-6.
- Singh, R., **Jitender**, (2025, February). Advanced Image Dehazing Techniques using Optimized Filters and Globally Guided Image Filtering. In 2025 2nd International Conference on Computational Intelligence, Communication Technology and Networking (CICTN) (pp. 632-637). IEEE.
- Singh, R., **Jitender**, (2025, May). Image/Video Dehazing Techniques & Challenges. In 2025 5th International Conference on Pervasive Computing and Social Networking (ICPCSN) (pp. 1552-1559). IEEE.
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- Gupta, R., Kumari, P., Jaiswal, R., & **Gupta, T.** (2025, January). Area and Power Modeling of FPGA Based Binary-to-Gray Code Converter Circuit for Rotary Encoder. In 2025 International Conference on Cognitive Computing in Engineering, Communications, Sciences and Biomedical Health Informatics (IC3ECSBHI) (pp. 642-647). IEEE.

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ECE Department in Media

एकेजी इंजीनियरिंग कॉलेज में दो दिवसीय द्विभाषी वीएलएसआई कार्यशाला का आयोजन

गाजियाबाद करंट क्राइम। एन.एच. -24 स्थित अजय कुमार गर्ग इंजीनियरिंग कॉलेज के कैंपस में शुक्रवार को ईसीई विभाग की ओर से में दो दिवसीय द्विभाषी वीएलएसआई कार्यशाला का का आयोजन किया गया।

हिंदी में आयोजित इस कार्यशाला ने वीएलएसआई डिजाइन और सेमीकंडक्टर तकनीकों की अहम भूमिका को रेखांकित किया गया। विशिष्ट अतिथि प्रो. (डा.) अमिता देव (सलाहकार, ए.के.जी.ई.सी.) ने शिरकत की। कार्यक्रम का स्वागत भाषण प्रो. (डा.) नीलश कुमार गुप्ता, विभागाध्यक्ष (ईसीई विभाग) एवं कार्यशाला के संयोजक ने दिया।

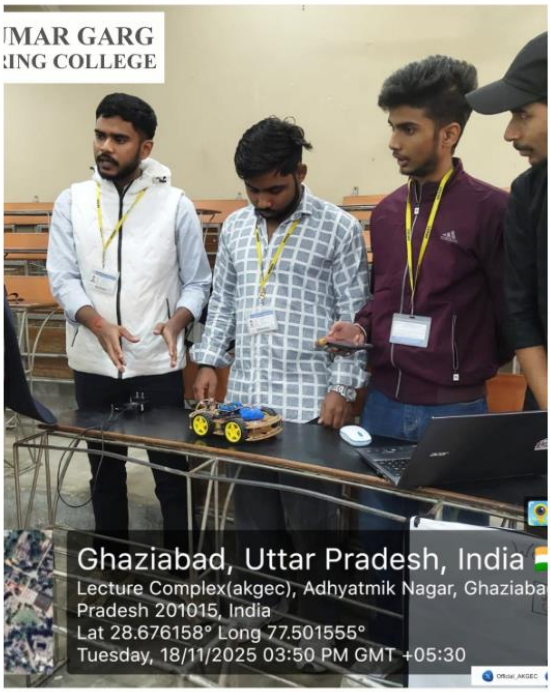
इस अवसर पर कई विशेषज्ञों ने अपने विचार साझा किए, जिनमें प्रीत यादव (एनएक्सपी सेमीकंडक्टर्स), डा. अंबिका प्रसाद (आईआईटी जम्मू), और प्रो. नीता पांडे (दिल्ली प्रौद्योगिकी विश्वविद्यालय) शामिल थे। विशेषज्ञों ने बदलते हुए सेमीकंडक्टर परिदृश्य, वर्तमान शोध चुनौतियों और उद्योग-अकादमिक सहयोग पर अपने महत्वपूर्ण विचार प्रस्तुत किए। कार्यशाला का सह-संयोजन प्रो. हिमानी गर्ग द्वारा किया गया।

एकेजी इंजीनियरिंग कॉलेज में दो दिवसीय कार्यशाला का आयोजन

● जनी ऑफ सक्सेस

गाजियाबाद। अजय कुमार गर्ग इंजीनियरिंग कॉलेज के कैंपस में शुक्रवार को ईसीई विभाग, एकेजीईसी में दो दिवसीय द्विभाषी वीएलएसआई कार्यशाला का उद्घाटन अजय कुमार गर्ग इंजीनियरिंग कॉलेज के इलेक्ट्रॉनिक्स एवं संचार इंजीनियरिंग विभाग द्वारा फ्रंट-एंड टू बैक-एंड: इनोवेशन एंड प्रैक्टिस इन वीएलएसआई डिजाइनद्ध विषय पर एक दो दिवसीय द्विभाषी कार्यशाला का सफलतापूर्वक उद्घाटन किया गया। यह कार्यशाला एआईसीटीई-वाणी के अंतर्गत 26-27 सितम्बर 2025 को आयोजित की जा रही है। मुख्यतः हिंदी में आयोजित इस कार्यशाला ने वीएलएसआई डिजाइन और सेमीकंडक्टर तकनीकों की अहम भूमिका को रेखांकित किया, जो नवाचार को प्रोत्साहित करने और भारत की तकनीकी आत्मनिर्भरता की दिशा में योगदान देती हैं। उद्घाटन सत्र 26 सितम्बर को आयोजित हुआ, जिसमें विशिष्ट अतिथि प्रो. (डा.) अमिता देव (सलाहकार, ए.के.जी.ई.सी.) ने शिरकत की। कार्यक्रम का स्वागत भाषण प्रो. (डा.) नीलश कुमार गुप्ता, विभागाध्यक्ष (ईसीई विभाग) एवं कार्यशाला के संयोजक ने दिया। इस अवसर पर कई विशेषज्ञों ने अपने विचार साझा किए, जिनमें श्री प्रीत यादव (एनएक्सपी सेमीकंडक्टर्स), डा. अंबिका प्रसाद (आईआईटी जम्मू), और प्रो. नीता पांडे (दिल्ली प्रौद्योगिकी विश्वविद्यालय) शामिल थे। इन विशेषज्ञों ने बदलते हुए सेमीकंडक्टर परिदृश्य, वर्तमान शोध चुनौतियों और उद्योग-अकादमिक सहयोग पर अपने महत्वपूर्ण विचार प्रस्तुत किए। उनके व्याख्यान ने युवा इंजीनियरों को सैद्धांतिक ज्ञान और व्यावहारिक अनुप्रयोग के बीच की खाई को पाटने में मार्गदर्शन दिया। कार्यशाला में फैकल्टी सदस्यों, शोध विद्वानों और स्नातकोत्तर विद्यार्थियों की उत्साही भागीदारी रही। इसने ज्ञान साझा करने, कौशल विकास और सहयोगात्मक अधिगम के लिए एक सशक्त मंच प्रदान किया। कार्यशाला का सह-संयोजन प्रो. हिमानी गर्ग द्वारा किया गया।

Faculty-Student Interaction



ECE Students in Sports

Future Plans of the ECE Department

Pursuing EDA Tools Access via C2S Program

The department plans to secure access to advanced EDA tools through the college's ongoing request proposal to CDAC under the Government of India's Chips to Startup (C2S) Program. The department applied on October 25, 2025, requesting Cadence, Synopsys, Siemens and Silvaco EDA tools. The institute awaits notification from CDAC as the request is currently being processed.

Department-Level Project Exhibition

A department-level project exhibition is planned in the even semester of the academic session 2025-26 to showcase student innovations and foster collaboration among peers and faculty. The planned project exhibition serves as a platform for students to present their innovative projects and practical work, fostering a culture of creativity and technical excellence. It encourages peer learning, interdisciplinary collaboration and boosts student's confidence in their abilities. Such exhibitions enable industry experts and faculty members to identify promising talent and solutions, potentially leading to further research, internships, or industry partnerships. Regular exhibitions also help students develop essential skills such as project management, technical communication and teamwork, which are vital for their professional growth.

In-House Training cum Internship Support

The department is planning to provide in-house training and internship support to 2nd and 3rd-year students in emerging fields like VLSI fabrication and other state-of-the-art technologies. This initiative bridges the gap between theoretical education and practical industry demands, enhancing student's employability. Training in cutting-edge areas prepares students for the rapidly evolving technology landscape, enabling them to contribute effectively to high-tech industries. Internship support further allows students to apply classroom learning in real-world scenarios, fostering deeper understanding and skill development critical for their career success and innovation capacity in the semiconductor and electronics sectors

AJAY KUMAR GARG ENGINEERING COLLEGE, GHAZIABAD

1st International Conference
on
Innovations in Electronics, Communication and Computing Techniques (IEC2T-26)

Technically Co-Sponsored by IEEE U.P. Section (India)

9th–10th September, 2026 (Offline Mode)

Conference Record No. #68910

Call for Paper

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Track 1: Semiconductor and VLSI
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Track 5: AI/ML & Computing Techniques
Track 6: Trends in Signal and Image Processing
Track 7: Interdisciplinary Innovations and Technology for Humanity

Publication

Accepted and presented papers will be submitted for inclusion in IEEE Xplore digital library subject to meeting IEEE Xplore's scope and quality requirements.

Important Dates

Full Paper Submission Starts : **December 10, 2025**
Full Paper Submission Ends : ~~January 10, 2026~~ **April 10, 2026**
Notification of Acceptance : ~~March 10, 2026~~ **June 10, 2026** onwards
Camera-Ready Paper Submission & Registration Starts : ~~May 10, 2026~~ **July 10, 2026**
Last date of Registration : ~~June 10, 2026~~ **August 10, 2026**

Important Links

Paper Submission Link:
https://cmt3.research.microsoft.com/IECT2026/Submission/Index
Website Link:
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