



**DEPARTMENT OF  
ELECTRICAL AND ELECTRONICS ENGINEERING**

**CURRENTS - NEWSLETTER**

**JANUARY – JUNE 2026**

**VOLUME 14 – ISSUE 2**







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## Principal's Message

**Dr. Manjunatha**  
Principal, NHCE



It gives me immense pleasure to present the January–June 2026 edition of Currents, the official newsletter of the Department of Electrical and Electronics Engineering at New Horizon College of Engineering.

At NHCE, we believe that education extends beyond academic excellence and aims at nurturing innovative, competent, and socially responsible professionals. In today's rapidly evolving technological landscape, it is essential to bridge the gap between academic learning and industry expectations. Our institution remains committed to providing a holistic learning environment that empowers students with technical expertise, practical exposure, research aptitude, and leadership skills.

The Department of Electrical and Electronics Engineering has consistently demonstrated excellence in academics, research, innovation, industry interaction, and student development activities. This edition of Currents showcases the department's achievements, technical events, industrial visits, expert lectures, student accomplishments, and various initiatives undertaken during the period from January to June 2026. It reflects the dedication, creativity, and collaborative spirit of our students, faculty members, and staff.

I congratulate the editorial team, faculty members, and students for their sincere efforts in bringing out this informative and inspiring newsletter. I am confident that Currents will continue to serve as an excellent platform for documenting achievements, sharing knowledge, and promoting a culture of innovation and excellence. I extend my best wishes to the Department of Electrical and Electronics Engineering and hope that this edition provides an engaging and enriching reading experience for all.

Title

HoD's Message

**Dr. S.Sujitha**  
Prof. & HOD EEE, NHCE



Date

It gives me immense pleasure to present the January–June 2026 edition of Currents, the official newsletter of the Department of Electrical and Electronics Engineering. This publication serves as a reflection of our department's dynamic journey, capturing the significant accomplishments, academic endeavors, technical activities, and milestones achieved during the past six months. The newsletter stands as a collective effort of our dedicated editorial team, faculty members, students, and alumni, whose enthusiasm and commitment have made this edition both informative and inspiring. Every section of Currents highlights the vibrant academic environment, innovative practices, industry interactions, research initiatives, and student-centric activities that continue to strengthen our department's pursuit of excellence.

Over the last semester, the Department of Electrical and Electronics Engineering has organized and participated in numerous seminars, workshops, expert lectures, industrial visits, technical club activities, and research-oriented programs. These activities have provided valuable opportunities for our students to enhance their technical competencies, leadership skills, and industry readiness. This edition also celebrates the achievements of our students and faculty members, showcasing their dedication, creativity, and pursuit of excellence.

Currents is not merely a record of events; it represents the spirit of collaboration, innovation, and continuous learning that defines our department. It serves as a platform to acknowledge the contributions of our students, faculty, alumni, industry partners, and all stakeholders who have played a vital role in our progress. I extend my sincere appreciation to the editorial committee and all contributors for their exceptional efforts in bringing out this edition of the newsletter. I hope that this publication will provide our readers with valuable insights into the diverse activities and accomplishments of our department and continue to inspire greater achievements in the years ahead. I wish all our readers an informative, engaging, and enriching experience with this edition of Currents.

Happy reading!



# New Horizon College Of Engineering

## VISION

To emerge as an institute of eminence in the fields of engineering, technology and management in serving the industry and the nation by empowering students with a high degree of technical, managerial and practical competence.

## MISSION

- To strengthen the theoretical, practical and ethical dimensions of the learning process by fostering a culture of research and innovation among faculty members and students.
- To encourage long-term interaction between the academia and industry through their involvement in the design of curriculum and its hands-on implementation.
- To strengthen and mould students in professional, ethical, social and environmental dimensions by encouraging participation in co-curricular and extracurricular activities.

## QUALITY POLICY

To provide educational services of the highest quality both curricular and co-curricular to enable students integrate skills and serve the industry and society equally well at global level.

## VALUES

- Academic Freedom
- Integrity
- Inclusiveness
- Innovation
- Professionalism
- Social Responsibility

## ABOUT DEPARTMENT

Welcome to the Department of Electrical & Electronics Engineering (EEE) at New Horizon College of Engineering (NHCE), Bangalore. EEE is one of the prestigious branches of Engineering and one among the oldest departments of NHCE-Bangalore started in 2001. The EEE Department has been playing a vital role in producing engineers and technologists of high caliber ever since it was established in the year 2001. The Department is accredited by NAAC with 'A' Grade and accredited by NBA. The vision of EEE Department is to create contemporary Engineers, innovators and entrepreneurs to make a better nation and in turn, a better world. A critical investigation and innovation into the modern state-of-art and cutting edge technology lead to the fact that an electrical graduate fits better in today's competitive world.

The strength of the department is highly qualified faculty members with expertise in various fields of electrical engineering, state of art laboratory facilities. The department is inclined towards bridging the gap between Industry and academia by collaborating with Multinational Companies in the field of Electrical Engineering.

Indo-French Center of Excellence in Electricity, Automation and Energy (IFCEEAE) is one such initiative evolved through "MoU" with French Ministry of National Education and Schneider Electric India Pvt. Ltd., The main objectives of IFCEEAE are

- To train the students of all streams of engineering in automation field
- To facilitate interdisciplinary and applied research with a focus on innovative product development
- To provide excellent career opportunities to students through exchange programs with French Universities, industrial training, innovative learning and R & D activities especially in the areas like Smart Grid, Internet of things (IoT), Energy Management Systems, Embedded systems, Supervisory Control and Data Acquisition (SCADA) and industrial automation.

The Department nurtures the young minds beyond the curriculum by facilitating technical clubs in promoting technical events, community development/society impact and universal value/ethics programs. In supporting to this, Department of Electrical and Electronics Engineering has established Institute of Electrical and Electronics Engineers (IEEE) – Power Electronics Society (PELS) Student Branch Chapter (Geo-Code: SBC66131). Industrial Electronics Society (IES) Student Branch Chapter (Geo-Code: SBC66131B). Power and Energy Society (PES) Student Branch Chapter (Geo-Code: SBC66131D). Which is the non- profitable, world largest technical professional organization for the advancement of technology. The students have a greater exposure and flexibility in campus placements in core industries, IT sectors and Public Sector Units (PSU).



## VISION

To evolve into a centre of excellence in Electrical and Electronics Engineering for bringing out contemporary engineers, innovators, researchers and entrepreneurs for serving nation and society.

## MISSION

- To provide suitable forums to enhance the teaching-learning, research and development activities.
- Framing and continuously updating the curriculum to bridge the gap between industry and academia in the contemporary world and serve society.
- To inculcate awareness and responsibility towards the environment and ethical values.

## PROGRAM OUTCOMES (POS)

- PO1** Engineering Knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization, as specified in WK1 to WK4 respectively, to develop solutions to complex engineering problems.
- PO2** Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems, reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)
- PO3** Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems, components or processes to meet identified needs with consideration for public health and safety, whole-life cost, net zero carbon, culture, society and the environment as required. (WK5)
- PO4** Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge, including the design of experiments, modelling, analysis and interpretation of data to provide valid conclusions. (WK8)
- PO5** Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools, including prediction and modelling, recognising their limitations in solving complex engineering problems. (WK2 and WK6)
- PO6** The Engineer and the World: Analyse and evaluate societal and environmental aspects while solving complex engineering problems, considering their impact on sustainability with reference to the economy, health, safety, legal framework, culture and environment. (WK1, WK5 and WK7)

- PO7** Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national and international laws. (WK9)
- PO8** Individual and Collaborative Teamwork: Function effectively as an individual and as a member or leader in diverse or multidisciplinary teams.
- PO9** Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, and make effective presentations considering cultural, language and learning differences.
- PO10** Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making, and apply these to one's own work as a member and leader in a team, and to manage projects in multidisciplinary environments.
- PO11** Life-Long Learning: Recognise the need for and have the preparation and ability for:
- i) independent and life-long learning
  - ii) adaptability to new and emerging technologies
  - iii) critical thinking in the broadest context of technological change. (WK8)

## **PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

- PEO1** To provide good learning environment to develop entrepreneurship capabilities in various areas of Electrical and Electronics Engineering with enhanced efficiency, productivity, cost effectiveness and technological empowerment of human resource.
- PEO2** To inculcate research capabilities in the areas of Electrical and Electronics Engineering to identify, comprehend and solve problems and adopt themselves to rapidly evolving technology.
- PEO3** To create high standards of moral and ethical values among the graduates to transform them as responsible citizens of the nation.

## KNOWLEDGE AND ATTITUDE PROFILE (WK)

- |            |                                                                                                                                                                                                                                                         |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WK1</b> | A systematic, theory-based understanding of the natural sciences applicable to the discipline and awareness of relevant social sciences.                                                                                                                |
| <b>WK2</b> | Conceptually based mathematics, numerical analysis, data analysis, statistics and formal aspects of computer and information science to support detailed analysis and modelling applicable to the discipline.                                           |
| <b>WK3</b> | A systematic, theory-based formulation of engineering fundamentals required in the engineering discipline.                                                                                                                                              |
| <b>WK4</b> | Engineering specialist knowledge that provides theoretical frameworks and bodies of knowledge for the accepted practice areas in the engineering discipline; much of it is at the forefront of the discipline.                                          |
| <b>WK5</b> | Knowledge including efficient resource use, environmental impacts, whole-life cost, reuse of resources, net zero carbon and similar concepts that supports engineering design and operations in a practice area.                                        |
| <b>WK6</b> | Knowledge of engineering practice (technology) in the practice areas within the engineering discipline.                                                                                                                                                 |
| <b>WK7</b> | Knowledge of the role of engineering in society and identified issues in engineering practice such as professional responsibility towards public safety and sustainable development.                                                                    |
| <b>WK8</b> | Engagement with selected knowledge in the current research literature of the discipline and awareness of the power of critical thinking and creative approaches to evaluate emerging issues.                                                            |
| <b>WK9</b> | Ethics, inclusive behaviour and conduct. Knowledge of professional ethics, responsibilities and norms of engineering practice. Awareness of diversity in terms of ethnicity, gender, age, physical ability with mutual respect and inclusive attitudes. |



## PROGRAM SPECIFIC OUTCOME (PSOs)

- PSO1** Apply knowledge of electrical machines, circuit analysis, electronics, power systems, control, instrumentation, power electronics, signal processing, and embedded systems to analyse, design, and implement solutions for real-world applications using modern hardware and software tools.
- PSO2** Design and develop innovative solutions in renewable energy, electric vehicles, smart grids, and automation with focus on environmental sustainability and societal needs.

## EDITORIAL TEAM



Satishkumar D (Faculty ID: NH-0200)

Sr Assistant Professor

EEE Department, NHCE

## Student Coordinators



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Mohan Kumar KM-USN:  
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Pavan M S - USN:  
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Praveen reddy -  
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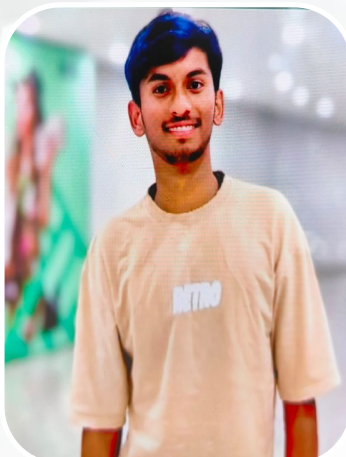
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USN: 1NH24EE099



Zaara Khan - USN:  
1NH24EE126



**Srushti Y B - USN:  
1NH24EE102**



**Yashwanth - USN:  
1NH24EE123**



**Tarun Y S - USN:  
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**Kishan Kumar M - USN:  
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DADDIMANI - USN:  
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**S DINESHA - USN:  
1NH24EE086**



## ALUMNI TALKS

### Beyond Boundaries: My Journey from Electrical Engineering to the Army – Circuits to Command

17.03.2026



On 17th March 2026, the Department of Electrical and Electronics Engineering hosted an Alumni Talk featuring Major Swathi Shantha Kumar, a 2012-2016 alumna and current Indian Army officer. She highlighted her transition from engineering to the military, emphasizing how her education bolstered her problem-solving and leadership skills. Major Swathi outlined various career pathways for engineering graduates in the armed forces and encouraged women to defy stereotypes and consider military careers. The talk covered key themes such as physical fitness, foundational skills, and time management. An interactive Q&A session allowed students to ask about military life, fostering alumni-student engagement and encouraging purposeful career pursuits.

## Chips, Circuits and Careers: Exploring the VLSI Industry

30.03.2026



The Department of Electrical and Electronics Engineering hosted an alumni talk titled “Chips, Circuits and Careers: Exploring the VLSI Industry” on March 30, 2026, led by Mr. Srinivas Abhinav Gandla, a VLSI Analyst at Capgemini Engineering. The session covered the global semiconductor landscape, the importance of VLSI in technologies like smartphones and AI hardware, and the VLSI design flow. Mr. Gandla emphasized the need for strong fundamentals in digital electronics and semiconductor physics, urging students to learn Verilog, SystemVerilog, and EDA tools. He provided practical career advice, including resume building and interview strategies, while discussing emerging opportunities in AI accelerators and India’s semiconductor initiatives. The event concluded with an interactive Q&A session that clarified career pathways and tools, fostering increased interest in VLSI careers.

## Wellness Awareness Programme: What To Do About Your Health

09.05.2026



The Alumni Association of New Horizon College of Engineering hosted an Alumni Talk on May 9, 2026, focused on wellness. Speaker Kumar Himanshu, a wellness coach from Dell Technologies, highlighted preventive healthcare, emphasizing the importance of addressing root causes of health issues linked to stress and unhealthy habits. He advocated for small lifestyle changes, regular exercise, mindful eating, hydration, and proper sleep. The session also addressed mental well-being and stress management, providing practical strategies for busy professionals, and encouraged participant engagement through an interactive format.



## INDUSTRIAL VISITS

Industrial Visit to Rakon India Pvt Ltd (Section A Students)

03.03.2026



The sixth-semester EEE students visited Rakon India Pvt. Ltd. on 3rd March 2026, organized by their Department and IEEE DEIS Student Branch Chapter. They gained insights into Rakon's global expertise in frequency control solutions, observing manufacturing processes for crystal oscillators and quartz crystals. The visit included a tour of the crystal fabrication unit, assembly section, and testing laboratories, where students learned about frequency stability and reliability testing. Industry experts highlighted the significance of precision and cleanroom standards, alongside quality assurance and validation in electronic manufacturing. This experience enhanced the students' understanding of microelectronics and high-reliability electronic systems.

## Industrial Visit to Rakon India Pvt. Ltd (Section B Students)

05.03.2026



The 6th semester B.E. (Section B) students visited Rakon India Pvt. Ltd. on 05th March 2026, organized by the Department of Electrical and Electronics Engineering with the IEEE DEIS Student Branch Chapter. They learned about the company's global operations and high-precision frequency control solutions, including the manufacturing of crystal oscillators and quartz crystals. Students explored the assembly and testing areas, gaining insights into frequency stability, cleanroom standards, and quality assurance. The visit enriched their understanding of microelectronics and automation, connecting theoretical knowledge with practical engineering applications.

## Industrial Visit-TUV Rheinland India Pvt. Ltd (Section B Students)

01.04.2026



The Department of Electrical and Electronics Engineering, in collaboration with the IEEE NHCE and IEEE DEIS student branches, organized an industrial visit for 4th Semester EEE Section B students to TUV Rheinland India Pvt. Ltd. on April 1, 2026. The visit aimed to provide practical exposure to industrial testing, inspection, and certification processes for electrical and electronic equipment. Students learned about TUV Rheinland's role in ensuring product safety and compliance with international standards through presentations and a guided laboratory tour. The experience enhanced their understanding of quality assurance and the significance of certification in Electrical Engineering, effectively linking academic learning with industrial applications.



## Industrial Visit-TUV Rheinland India Pvt. Ltd (Section A Students)

02.04.2026



The Department of Electrical and Electronics Engineering (EEE), in collaboration with IEEE NHCE and DEIS Student Branches, organized an industrial visit for 4th Semester EEE Section A students at TUV Rheinland India Pvt. Ltd., Bengaluru, on April 2, 2026. The visit aimed to provide practical exposure to industrial testing, inspection, and certification processes in electrical equipment. Students engaged in an introductory session about TUV Rheinland's global operations, attended presentations on product safety and testing procedures, and toured testing laboratories. Interactions with industry experts enhanced their understanding of quality assurance and certification's significance in Electrical Engineering, effectively linking academic learning with real-world practices.

## TEDx TALKS

### Engineering a World Where Everyone Belongs

17.03.2026



The Department of Electrical and Electronics Engineering, in partnership with IEEE NHCE Student Branch and IEEE DEIS, held a TEDx Talk titled “Engineering a World Where Everyone Belongs” on March 17, 2026, for 6th-semester EEE students. The speaker, Broecke Mia, discussed the importance of inclusivity and diversity in engineering, emphasizing user-centered design to address societal needs. She highlighted challenges posed by inaccessible systems and the role of empathy and ethics in technological development. The talk included case studies on innovative design practices and encouraged student engagement in discussions about inclusivity. Overall, the session motivated students to think about the societal impact of their work and aspire to create a more equitable world through engineering.

## Net Zero is an Electricity Story

17.03.2026

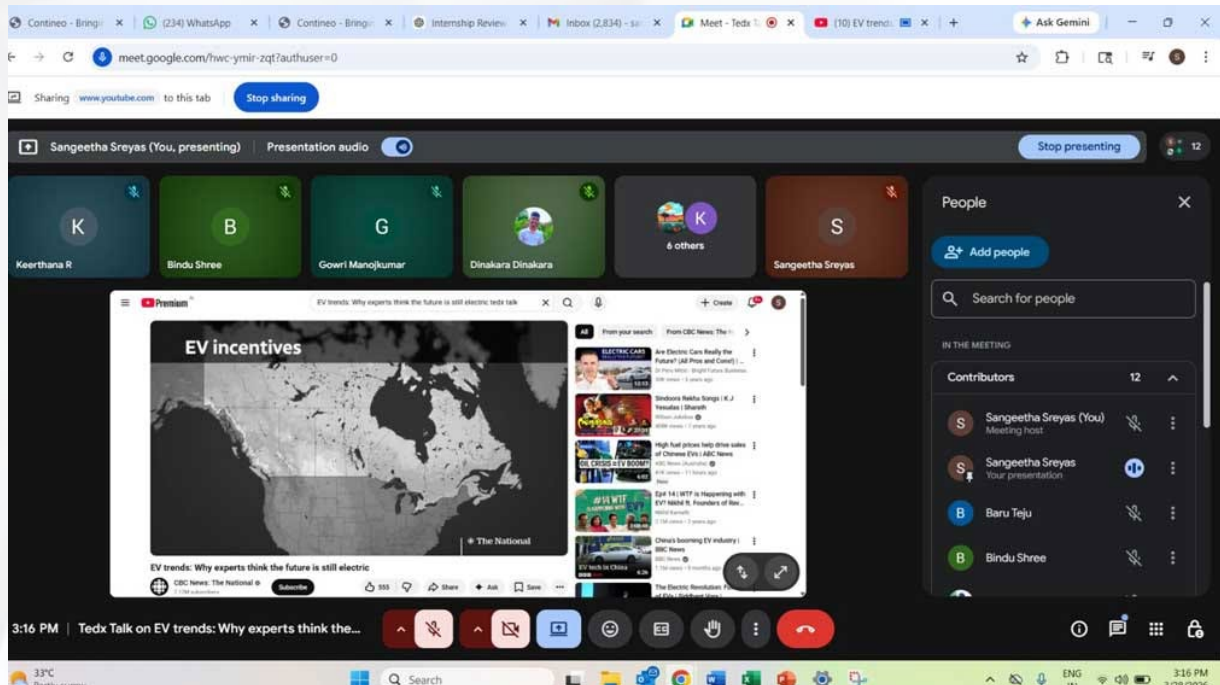


The Department of Electrical and Electronics Engineering held a TEDx talk on 17th March 2026 for 4th-semester EEE students, focusing on net-zero emissions and its connection to the electricity sector. Speaker Abhijeet Agarwal discussed the need for transitioning from fossil fuels to renewable sources like solar and wind power, emphasizing the electrification of transportation to cut carbon emissions. Key topics included smart grids, advanced energy storage, and necessary policy frameworks for sustainable technology adoption. The session underscored the critical role of engineers in developing clean energy solutions and encouraged students to integrate sustainability into their engineering practices. The event prompted active participation and discussions, offering valuable insights into the future of energy and engineers' responsibilities in creating a carbon-neutral world.



# EV Trends: Why Experts Think the Future is Still Electric

28.03.2026

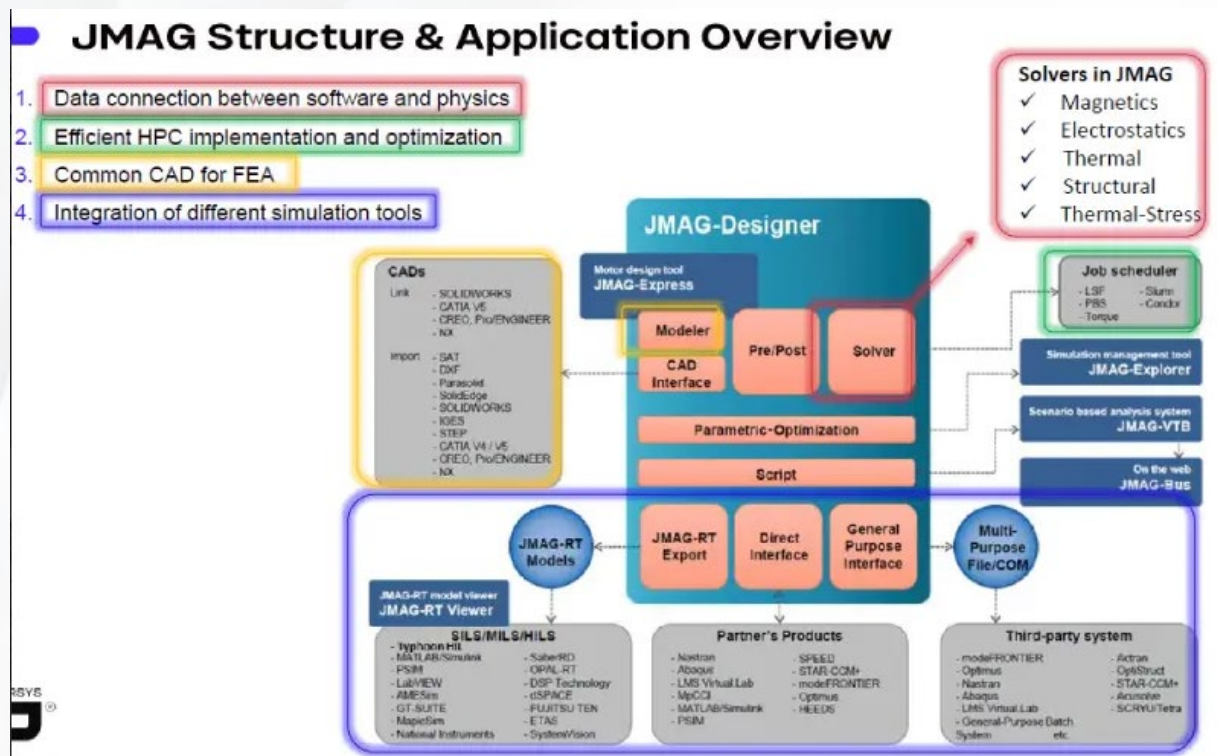


The Department of Electrical and Electronics Engineering hosted a TEDx talk titled "EV Trends: Why Experts Think the Future is Still Electric" on March 28, 2026, featuring industry expert Mr. Punith Goyal. He discussed the transition from internal combustion engines to electric vehicles (EVs), driven by technology, policy, and sustainability. Mr. Goyal highlighted advancements in battery technology and charging infrastructure, addressing challenges like battery costs and range anxiety. He emphasized India's leadership in EV innovation and the importance of interdisciplinary skills for students in the sector. The session included active student participation, motivating them to explore opportunities in the expanding EV industry and contribute to sustainable mobility solutions.

## SEMINARS AND WORKSHOPS

### Webinar-Design of Interior Permanent Magnet (IPM) Motor Using JMAG

04.05.2026



The webinar organized by the Department of Electrical and Electronics Engineering at NHCE on 4 May 2026 focused on the design of Interior Permanent Magnet (IPM) and SynRM motors using JMAG software. Conducted by Mr. Jeevan S, FEA Support Engineer at Powersys Engineering Solutions, the session discussed the significance of electric machines in sectors like electric vehicles and renewable energy. Key topics included the operating principles of IPM and SynRM motors, motor design workflow focusing on parameters like speed and efficiency, rotor designs, and FEA techniques for predicting motor performance. The webinar also highlighted JMAG's multi-physics simulation capabilities and the integration of motor designs with power electronics, bridging theoretical concepts with practical applications in electric motor design and simulation.

## One Day Workshop on Drone Technology

15.05.2026



The One Day Workshop on Drone Technology, held on May 15, 2026, at Falconry Hall, was organized by the Department of Electrical and Electronics Engineering in collaboration with IEEE DEIS and MS Innovations. Aimed at students of New Horizon College of Engineering, the workshop provided insights into modern drone technologies, robotics, and IoT applications. Led by certified professionals, Mr. Biswendu Biswas and Mr. Sujith M S, the event included sessions on drone components, industry applications, a hands-on demonstration, and discussions on future career opportunities. The workshop successfully enhanced the students' understanding and inspired them to engage in innovative projects in drone technology.



## GREEN ENERGY CLUB ACTIVITIES

### Green Campus Initiative Campaign

22.04.2026 to 24.04.2026



The Green Energy Club of New Horizon College of Engineering organized a successful Green Campus Initiative, led by Mr. Vinod Kumar S, with participation from 120 students. The initiative promoted sustainable living and featured activities aimed at reducing energy consumption and waste. Highlights included an Inauguration Ceremony that emphasized sustainability, various events such as a Quiz Competition and a Walkathon, and an Awareness Session focused on green energy technologies. These efforts motivated students to adopt eco-friendly practices and contribute to a greener campus.

## Quiz Competition-Green Quest Challenge

22.04.2026 to 24.04.2026



The Quiz Competition, held from April 22-24 by the Green Energy Club and the Department of Electrical and Electronics Engineering, aimed to enhance student knowledge of sustainability and renewable energy. It included rounds on general knowledge, concept-based questions, and rapid-fire sessions, covering topics like global warming and green technologies. The event encouraged engagement, quick thinking, teamwork, and heightened awareness of environmental issues, while strengthening critical thinking and problem-solving skills, promoting eco-friendly habits among students.

## Green Canvas Poster Making Competition 2026

22.04.2026 to 24.04.2026



The Green Energy Club, organized by the Department of Electrical and Electronics Engineering, held the "Green Canvas" poster-making competition from April 22 to 24, 2026, at Schneider Lab. With 120 participants from New Horizon College of Engineering, the event aimed to creatively convey environmental messages. Students used art to highlight ecological issues and propose solutions while promoting critical thinking. Posters were judged on originality, clarity, relevance, and presentation skills. The competition successfully enhanced environmental awareness and students' communication and expressive abilities.



## Green Action Reel Making Challenge

23.04.2026



The Green Action Reel Making Challenge on April 23, 2026, engaged students in producing short video reels that promoted environmental awareness and sustainable living. Participants showcased eco-friendly practices like energy conservation, waste management, and reducing plastic usage through creative storytelling and digital editing. The initiative enhanced students' digital creativity and communication skills, motivating them to translate awareness into actionable steps for a greener future.

## Green Walkathon 2026

24.04.2026



The Green Walkathon, held on April 24, 2026, by the Green Energy Club and the Department of Electrical and Electronics Engineering, aimed to promote environmental responsibility as part of the Green Campus Initiative. It encouraged public participation in sustainability by demonstrating unity and commitment to eco-friendly lifestyles. Participants carried placards to raise awareness about environmental issues like pollution control and renewable energy. The event not only supported environmental protection but also emphasized the link between physical fitness and a healthy environment, fostering social responsibility and teamwork among students. Overall, it underscored the significance of collective action in fostering a sustainable future.

## Green Campus Initiative - Role of Engineers in Climate Resilience

25.04.2026



The Department of Electrical and Electronics Engineering held an awareness programme titled “Role of Engineers in Climate Resilience” on 25 April 2026, in celebration of its Silver Jubilee Year and Green Campus Initiative. Co-organized with IEEE NHCE and DEIS Student Branches, the event focused on educating students about climate change and the essential contributions of engineers to sustainable solutions. Chief Guest Dr. J. V. Jagannatha Venkataramaiah highlighted climate change impacts and the significance of innovations like renewable energy and sustainable urban practices, advocating for interdisciplinary collaboration among engineers, scientists, and policymakers. An interactive session allowed students to explore sustainable engineering concepts, successfully enhancing their understanding of environmental stewardship and innovation for a sustainable future.



## EXPERT/GUEST LECTURES

Guest Lecture on “AI & Innovation Sprints: Rapid Prototyping for Digital Transformation

05.03.2026



The Department of Electrical and Electronics Engineering hosted a Guest Lecture on “AI and Innovation Sprints: Rapid Prototyping for Digital Transformation” on 5th March 2026, in collaboration with several IEEE societies. Dr. Siddhartha Nair, CEO of Zeuron.ai, discussed AI's role in digital transformation and how innovation sprints aid in fast idea testing. Key topics included machine learning, data analytics, and intelligent automation in addressing real-world challenges, as well as the importance of design thinking and collaborative innovation. Dr. Nair emphasized advanced materials like nanocomposites for improved insulation under high-frequency conditions while advocating for interdisciplinary cooperation in tackling technological issues. The seminar was well-received, engaging students in discussions about EMF effects and AI applications in smart city development.

## Expert Talk on Advancement in Electric Vehicles with Artificial Intelligence in the Automotive Domain

31.03.2026



The Department of Electrical and Electronics Engineering hosted an expert lecture on “Advancement in Electric Vehicles with Artificial Intelligence in the Automotive Domain” on 31 March 2026. Mr. Ojaswit Gautam, an Automotive Software Engineer at Brigosha Technology Pvt. Ltd., presented on electric vehicle architecture and the transformative role of Artificial Intelligence in the EV ecosystem. Key topics included intelligent Battery Management Systems, machine learning for energy optimisation, AI in autonomous driving, and predictive maintenance. Real-world applications like AI-based route optimisation and smart charging infrastructure were discussed. The session engaged students, enhancing their understanding of sustainable mobility and revealing career opportunities in EV software and autonomous technologies. Overall, the lecture effectively bridged academic knowledge with industry advancements in intelligent electric transportation.



## Expert Talk on Industry Practices in Managing Product Strategy for Transportation Electrification

02.04.2026



The Department of Electrical and Electronics Engineering at New Horizon College of Engineering hosted an expert talk on April 2, 2026, focusing on "Industry Practices in Managing Product Strategy for Transportation Electrification Systems." Led by Mr. Venkata Vinod Pasumarthi from Ather Energy, the session aimed to connect academic learning with industry practices in electric mobility. Key topics included product strategy, lifecycle management, power electronics integration, charging infrastructure, and challenges in EV design. The talk also emphasized user experience and digital integration, using Ather Energy's practical examples. Students participated actively, enhancing their understanding of industry expectations and inspiring career interests in electric mobility and sustainable transportation technologies.



## Expert Lecture on Smart Prototyping for IoT and Embedded Systems Using Z Boards

15.04.2026



The Department of Electrical and Electronics Engineering hosted an expert talk on “Smart Prototyping for IoT and Embedded Systems Using Z Boards” on April 15, 2026, led by Dr. M. M. Sravani from Synopsys India Pvt. Ltd. The session covered modern embedded technologies, FPGA technology, PYNQ board demonstrations, and VLSI design flow. It emphasized career prospects and necessary skills in these fields and included an interactive Q&A to engage students on technical and career-related inquiries.

## Guest Lecture on Energy Saving Auditing for a Sustainable Future Environment

23.04.2026



On April 23, 2026, the Department of Electrical and Electronics Engineering at New Horizon College of Engineering hosted a guest lecture titled “Energy Saving Auditing for a Sustainable Future Environment,” presented by Mr. Arunakumara T S, MD & CEO of SEESCON. The lecture focused on raising awareness among 6th semester students about energy conservation and sustainable development, covering energy auditing fundamentals, practical conservation techniques, and instruments used in the field. Topics included renewable energy, HVAC optimization, and energy efficiency programs, equipping students with a solid understanding of energy auditing principles and encouraging the adoption of sustainable practices in their careers.

Guest Lecture on Verilog HDL for Digital Design, Concepts and Applications

08.05.2026



A guest lecture titled “Verilog HDL for Digital Design and VLSI Industry Insights” was delivered by Dr. Praveen Kumar Reddy K from Truechip Technologies to 4th-semester EEE students. It addressed practical digital hardware design using Verilog HDL, covering key topics such as modules, data types, operators, and circuit design, including combinational and sequential circuits, flip-flops, counters, and finite state machines. Various modelling styles—behavioural, structural, and dataflow—were demonstrated with examples. The interactive lecture linked theory with real-world applications, featuring Verilog programmes for components like Half Adder and Counters, and discussed VLSI industry insights, career opportunities, and chip design methodologies.



## ACHIEVEMENTS

### National Level Game Development – Runshastra Gameathon 2026

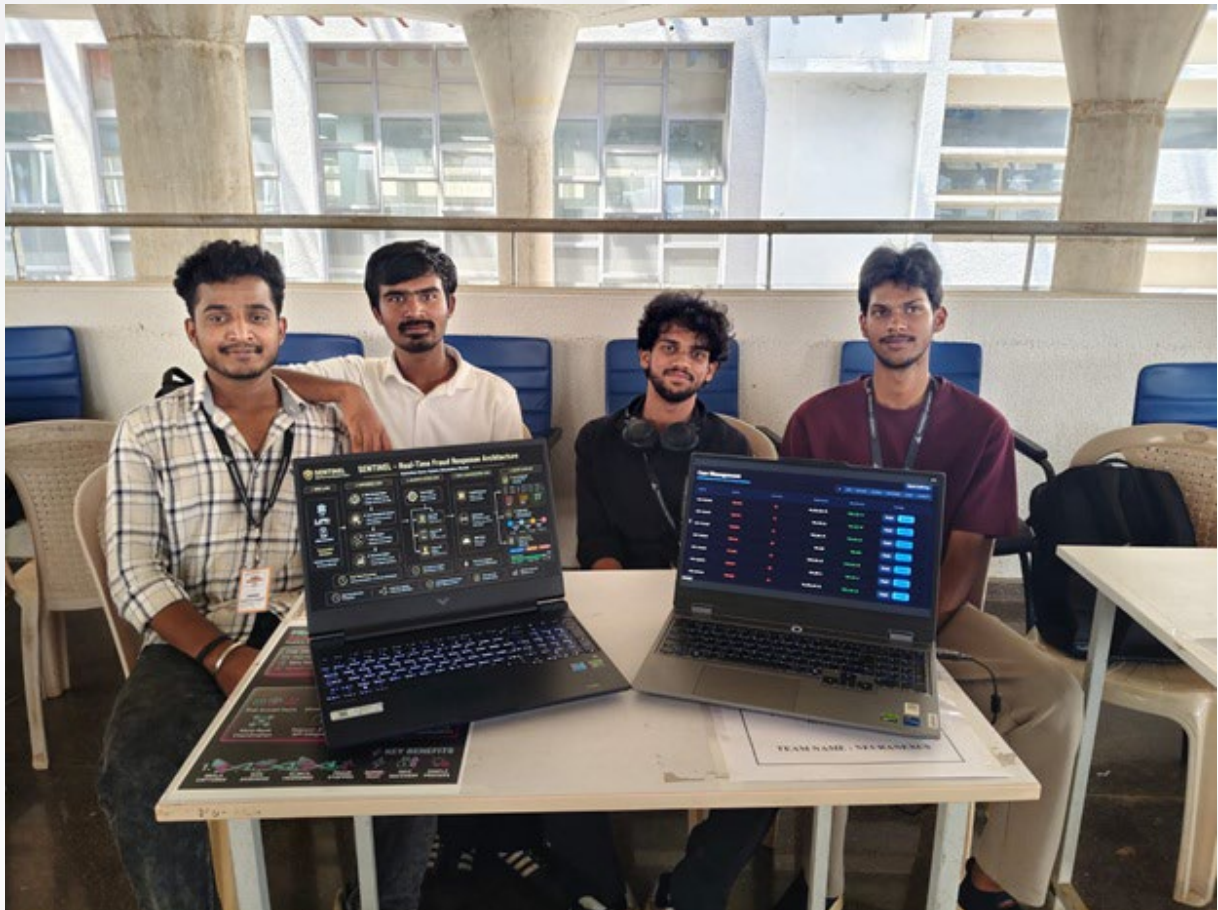
19.02.2026 to 21.02.2026



We are proud to announce that Akash Yadav (1NH24EE009) participated in the National Level Game Development event, a 36-hour Gameathon at Alliance University from 19th to 21st February 2026, and secured the First Prize among seven teams. This achievement showcases their innovation, technical skill, and teamwork, reflecting the excellence of our student community. Congratulations to Akash Yadav on this accomplishment and best wishes for future success.

## National Level Hackathon- Namma Suraksha 2.0

28.04.2026 to 30.04.2026



The NHCE team, led by Prasad Santosh Bant USN: 1NH24EE074 (II Year EEE) and including members Adithya N, Adithya K, and Abrakant Rout, won First Place at the national hackathon "Namma Suraksha 2.0" held at Presidency University, Bengaluru. Their project addressed the theme of Criminal Investigation, focusing on real-time intelligence sharing and fund recovery. The team received a cash prize of ₹30,000 for their innovative solution, highlighting the potential of students in solving real-world issues through technology. Congratulations to the team for this achievement!

## Handball Runners-Up Honours

27.04.2026 to 29.04.2026



Baru Tejesh (1NH22EE017) and M. Pavan Kumar (1NH23EE406), 8th Semester students from the Department of Electrical and Electronics Engineering, achieved the Runners-Up position in Men's Handball at the State Level Inter-Collegiate Sports Fest held at New Horizon College of Engineering from April 27th to 29th, 2026. Their performance highlights exceptional teamwork and sporting excellence, contributing to the department's accomplishments.



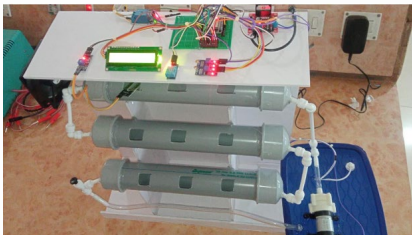
## EEE Student Wins at ADRISHT 2K26

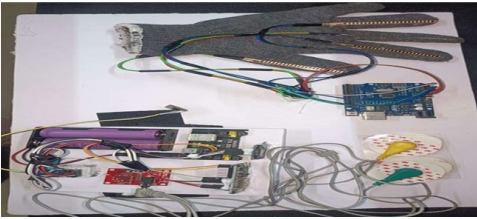
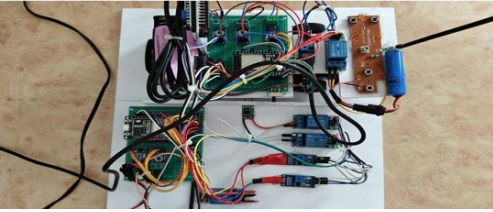
25.05.2026 to 27.05.2026



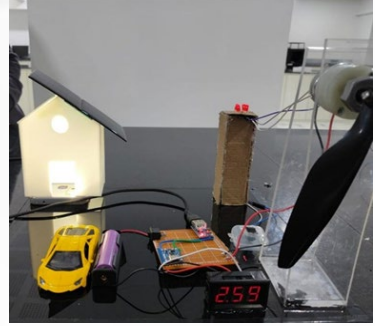
We are proud to share that Apeksh Singh (1NH23EE007) from the Department of Electrical and Electronics Engineering (EEE), NHCE, emerged victorious in the Tug of War event at ADRISHT 2K26, held on 25th, 26th, and 27th May 2026. The event was organized by the Department of Management Studies, JSS Academy of Technical Education. His achievement reflects the spirit of teamwork, determination, and sportsmanship, bringing laurels to the department and the institution.

## STUDENTS PROJECT/PROTOTYPE DETAILS

| S. No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Title of the product                                     | Faculty Involved | Name and USN of the Students                                                                               | Photograph                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Neuro Bike                                               | Dr. S Sujitha    | ROSHAN P(1NH22EE093)<br>KAVIN N (1NH22EE058)<br>PRAJWAL B(1NH22EE077)<br>PREETHAM Raj(1NH22EE058)          |    |
| <b>Description:</b> This product has a Smart Handlebar with an Integrated Automatic Fingerprint Sensor designed for biometric authentication and proactive rider safety monitoring. The fingerprint sensor is embedded directly within the handle grip area, enabling automatic scanning when the rider naturally places their finger on the bar. The system verifies the rider's identity through stored biometric data and permits ignition only for authorized users, thereby preventing theft and underage or unauthorized riding. |                                                          |                  |                                                                                                            |                                                                                      |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Smart Multi – Level Hydroponic Farming Chamber for Space | Ms. Soumya K V   | CHETHAN S (1NH22EE029)<br>DHANESH (1NH22EE036)<br>DHANYA SHREE S (1NH22EE040)<br>DINAKARA K L (1NH22EE041) |  |
| <b>Description:</b> This product integrates a vertical hydroponic design with sensors and automated controls, ensuring optimal growing conditions across all layers. It provides a controlled environment where plants receive balanced nutrition, adequate lighting, and proper climate regulation. Its multi-level configuration maximizes space utilization, while the automation components maintain consistency in plant growth with minimal manual intervention.                                                                 |                                                          |                  |                                                                                                            |                                                                                      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                          |                    |                                                                                                                      |                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Smart Assistive Health Monitoring system | Ms. Sangeetha. C.N | SUPRITHA(1NH22EE112)<br>GOWTHAMI K (1NH22EE050)<br>SHUBHASREE (1NH22EE105)<br>BHUVAN R (1NH22EE024)                  |    |
| <p><b>Description:</b> This product incorporates sensor-based technology to continuously track important health parameters such as heart rate, breathing patterns, oxygen levels, movement activity, posture, and temperature. Once the sensors start collecting information, the data flows to the central control unit— usually a microcontroller or microprocessor. Once data is analysed, the system checks for thresholds and abnormal patterns.</p> |                                          |                    |                                                                                                                      |                                                                                      |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                         | WIRELESS EV CHARGER                      | Mr. Satish Kumar D | MAHENDRA KUMAR S (1NH22EE064) MOHAN KUMAR (1NH22EE067) SHREYAS R (1NH22EE084) TEENU YASHAS R (1NH22EE117)            |   |
| <p><b>Description:</b> This product includes an inductive power transfer (IPT) based wireless EV charger prototype for 5V 8-10Ah batteries, overcoming conventional plug-in limitations like mechanical wear, exposure risks, and misalignment sensitivity that degrade connectors and efficiency. ESP32-based EV charging units measure voltage and current with <math>\pm 1.5\%</math> accuracy.</p>                                                    |                                          |                    |                                                                                                                      |                                                                                      |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Smart Sprayer                            | Dr. Agalya V       | PUNITH KUMAR (1NH23EE407)<br>PAVAN KUMAR (1NH23EE406)<br>INDRA VARMA (1NH22EE052)<br>YATHISH KUMARA D R (1NH23EE410) |  |
| <p><b>Description:</b> This product is an advanced agricultural spraying device designed for safe, efficient, and comfortable pesticide or fertilizer application. It is lightweight and powered by a rechargeable battery, reducing manual effort and increasing spraying efficiency. The smart sprayer includes features such as adjustable spray control, low power consumption, and uniform chemical distribution.</p>                                |                                          |                    |                                                                                                                      |                                                                                      |



|   |                           |                   |                                                                                                            |                                                                                     |
|---|---------------------------|-------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 6 | Bidirectional EV Charging | Mr. Vinod Kumar S | MEENAKSHI JC (1NH22EE065)<br>RESHMA RAJ KR (1NH22EE092)<br>SHREYA N(1NH22EE101)<br>TIROTAMAN K(1NH22EE120) |  |
|---|---------------------------|-------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

**Description:** This product is based on the design, modelling, and performance analysis of a hybrid solar–wind powered EV charging system that operates on a common DC bus architecture and incorporates vehicle-to-home (V2H) capabilities using a bidirectional EV charger. The proposed system integrates photovoltaic (PV) solar modules and a wind turbine as complementary renewable energy sources, exploiting the natural diversity in their generation profiles

|   |                                   |                 |                                                                             |                                                                                     |
|---|-----------------------------------|-----------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 7 | Autonomous Outdoor Cleaning Robot | Dr. R Mohan Das | VISHAL D ZOUSA(1NH23EE120)<br>PUNITH K S(1NH23EE079)<br>THARINI(1NH23EE109) |  |
|---|-----------------------------------|-----------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

**Description:** This product is an intelligent robotic system designed for automated cleaning of outdoor environments such as roads, sidewalks, campuses, parking areas, and industrial premises. The robot utilizes motor-driven cleaning mechanisms such as rotating brushes, vacuum systems, and water-spraying units to efficiently remove dust, debris, and waste materials. It operates using rechargeable battery-powered drive systems with optimized energy management for extended operational efficiency.

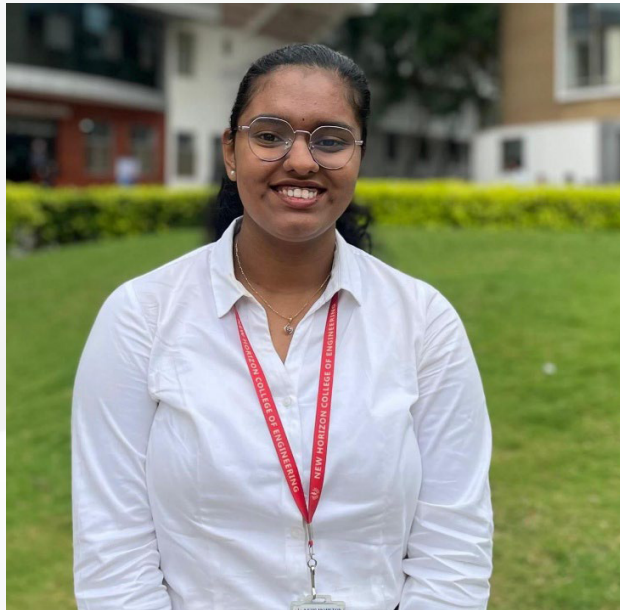
## ALUMNI TESTIMONIALS

G R YASHWANTH (USN:1NH22EE045)



"My experience with the Department of Electrical and Electronics Engineering at New Horizon College of Engineering has been both rewarding and transformative. The department fostered an environment that encouraged learning, innovation, and professional growth. The unwavering support of the faculty, combined with practical exposure through laboratories, technical projects, and industry-oriented activities, helped me develop a strong foundation in engineering. Beyond academics, the department instilled confidence, discipline, and a problem-solving mindset that will continue to guide me throughout my career. I am truly grateful for the opportunities, mentorship, and memorable experiences that have shaped me into the individual I am today."

GOWRI MANOJKUMAR (USN:1NH22EE048)



"My journey through the Electrical and Electronics Engineering department at New Horizon College of Engineering has been truly transformative. Beyond the strong technical foundation, the department gave me opportunities to grow as a leader — I was happy to be contributing to the IEEE chapters in the college and was able to host events that brought the community together. The faculty encouraged us to go beyond textbooks, which led me to work on KSCST-funded research and develop real-world projects. The skills I built here — analytical thinking, problem-solving, and the confidence to communicate ideas clearly — directly shaped my internship experience and prepared me for the professional world. I'm proud to be part of the NHCE EEE family."



SHREYA N (USN: 1NH22EE101)



"My journey at the Electrical and Electronics Engineering Department, New Horizon College of Engineering, has been an incredible learning experience. Along with strong academic knowledge, I had the opportunity to participate in technical clubs, extracurricular activities, workshops, and team projects that enhanced my technical and leadership skills. The department's dedicated faculty, industry interactions, and excellent placement support played a significant role in shaping my career. I am thankful for the opportunities and guidance that prepared me for the corporate world, and I am proud to be a part of the NHCE alumni family."

SHATAKSHI PATTANAIK (USN:1NH22EE099)



I sincerely appreciate the Electrical and Electronics Engineering Department at New Horizon College of Engineering for creating an environment that encouraged learning, innovation, and personal growth. Throughout my time here, the faculty have been supportive mentors who inspired us to stay curious, work hard, and continuously improve ourselves. The academic curriculum, practical exposure, and opportunities beyond the classroom have helped me build confidence and prepare for the professional world. I am thankful for the guidance and experiences that I have gained during my journey at NHCE, and I will always look back on these years with gratitude and pride.

ROSHAN P (USN: 1NH22EE093)



My journey at New Horizon College of Engineering has been one of continuous learning and growth. The faculty members have always been approachable, supportive, and dedicated to helping us succeed academically and professionally. Through technical projects, workshops, internships, and extracurricular activities, I have gained practical knowledge, confidence, and problem-solving skills. The college has provided an excellent learning environment that has helped me prepare for my career. I am grateful to my teachers and the institution for guiding me throughout my academic journey.



I am grateful to New Horizon College of Engineering for providing me with an incredible four-year journey in the Department of Electrical and Electronics Engineering (EEE). The constant support from the faculty, hands-on laboratory experience, and industrial visits every semester, and placement-focused training helped me build strong technical skills. The coding expert sessions took me from the basics to advanced programming, enabling me to grow beyond my core branch. Along with academics, annual college fests such as Sargam and other cultural and technical events made my college life memorable and enjoyable, creating lifelong memories and friendships. The opportunities provided through clubs, technical events, and serving as an Anchor greatly improved my communication, leadership, and networking skills. With the guidance of the HRD team and the EEE faculty, I was fortunate to secure placement offers from both Infosys and Amazon. I sincerely thank the HRD team, faculty, and everyone at New Horizon College of Engineering for supporting me throughout my journey and helping me grow academically, technically, and personally. It has truly been an unforgettable and life-changing experience.



## PARENT TESTIMONIALS

Mr. MANOJ KUMAR,  
SENIOR BUISNESS CONSULTANT  
TECH MAHINDRA



As a parent, I am immensely proud of the remarkable transformation I have witnessed in my daughter, Gowri Manojkumar (USN: 1NH22EE048), during her academic journey with the Electrical and Electronics Engineering (EEE) Department at New Horizon College of Engineering. The department has not only provided her with a strong technical foundation but has also encouraged her holistic development through leadership opportunities in IEEE, research initiatives, and real-world projects. The continuous support, mentorship, and guidance from the faculty members have helped her develop confidence, analytical thinking, and problem-solving abilities, preparing her exceptionally well for internships and her future professional career. I sincerely express my gratitude to the EEE Department and the entire NHCE community for nurturing and shaping her into a confident, skilled, and responsible young engineer. I wish the department continued success in empowering many more students in the years to come.

## PLACEMENT DETAILS – AY: - 2025-2026

| Sl.No | USN        | NAME                    | COMPANY PLACED         |
|-------|------------|-------------------------|------------------------|
| 1     | 1NH22EE001 | AASHISH THOMAS OOMMEN   | Amazon                 |
| 2     | 1NH22EE002 | ABHISHEK A GOWDA        | Capgemini-VLSI         |
| 3     | 1NH22EE003 | ABHISHEK J              | Capgemini-VLSI         |
| 4     | 1NH22EE005 | ACHUTHA E.B             | Infosys                |
| 5     | 1NH22EE008 | ADITYA PRASAD           | TE coonectvity         |
| 6     | 1NH22EE009 | AISHWARYA C S           | Capgemini-VLSI         |
| 7     | 1NH22EE015 | ASHITHA SUBBAIAH        | Plivo                  |
| 8     | 1NH22EE020 | BHAVANA C               | Rinac India Ltd        |
| 9     | 1NH22EE024 | BHUVAN R                | TE coonectvity         |
| 10    | 1NH22EE025 | CHANDINI N              | Manjushree Technopack  |
| 11    | 1NH22EE026 | CHARAN KORA             | Amazon                 |
| 12    | 1NH22EE028 | CHAUDHARY MANAS RAY     | Infosys/capgemini PLM  |
| 13    | 1NH22EE034 | DEEPU T                 | Amazon                 |
| 14    | 1NH22EE040 | DHANYA SHREE S          | Siemens Global Service |
| 15    | 1NH22EE045 | G R YASHWANTH           | Infosys/Siemens Global |
| 16    | 1NH22EE048 | GOWRI MANOJKUMAR        | IEUCINE                |
| 17    | 1NH22EE056 | KALPANA CHAWLA S        | Federal Bank           |
| 18    | 1NH22EE058 | KAVIN N                 | Solar Square Energy    |
| 19    | 1NH22EE061 | KODE KAVYASRI           | IBM                    |
| 20    | 1NH22EE063 | LALITH NARAYAN          | Temenos                |
| 21    | 1NH22EE065 | MEENAKSHI J CHODAVARAPU | Siemens                |
| 22    | 1NH22EE067 | MOHAN KUMAR M           | Toyata Kirloskar       |
| 23    | 1NH22EE070 | MUHAMMED SINAN K V      | Netradyne/Capgemini G  |
| 24    | 1NH22EE071 | NAYAN M                 | Amazon                 |
| 25    | 1NH22EE072 | NISHANT GUPTA           | Capgemini-VLSI         |
| 26    | 1NH22EE073 | NOOR ZOYA               | Federal bank           |
| 27    | 1NH22EE077 | PRAJWAL B               | Solar Square Energy    |
| 28    | 1NH22EE078 | PRAJWAL MR              | Amazon/Bosch India Ltd |
| 29    | 1NH22EE081 | PREETHAM RAJ S          | Solar Square Energy    |
| 30    | 1NH22EE082 | PREETY GUPTA            | Amazon                 |

|    |            |                       |                             |
|----|------------|-----------------------|-----------------------------|
| 31 | 1NH22EE083 | PURVIK J H            | AKshayakalpa ORGANIC LTD    |
| 32 | 1NH22EE088 | RAJ SINGH             | Gilbarco, Vontier, Invenc   |
| 33 | 1NH22EE090 | RANI GUPTA R          | Capgemini-VLSI              |
| 34 | 1NH22EE091 | RENUKA R RAMAKRISHNAN | Plivo/SipanyEnergy          |
| 35 | 1NH22EE092 | RESHMA RAJ KR         | Amazon                      |
| 36 | 1NH22EE093 | ROSHAN P              | Solar Square Energy         |
| 37 | 1NH22EE094 | S BINDUSHREE          | Capgemini-VLSI              |
| 38 | 1NH22EE095 | SAHANA PATTAR         | Capgemini-VLSI              |
| 39 | 1NH22EE097 | SAKSHI S M            | Manjushree Technopack       |
| 40 | 1NH22EE099 | SHATAKSHI PATTANAIK   | Temenos                     |
| 41 | 1NH22EE101 | SHREYA N              | Manjushree Technopack       |
| 42 | 1NH22EE105 | SHUBHASHREE MM        | TCS (VLSI)                  |
| 43 | 1NH22EE107 | SUDEEP J              | Amazon                      |
| 44 | 1NH22EE108 | SUDEEP KUMAR DUTTA    | Infosys                     |
| 45 | 1NH22EE112 | SUPRITHA.K            | LTI Mindtree/Ericsson       |
| 46 | 1NH22EE114 | SUSHIL                | Kristalball smart solutions |
| 47 | 1NH22EE115 | SYED ROSHAN A         | Capgemini -General          |
| 48 | 1NH22EE116 | T PURUSHOTHAM         | Kristalball smart solutions |
| 49 | 1NH22EE119 | THAVANYA MARIA SINGH  | Merck                       |
| 50 | 1NH22EE120 | TIROTAMAN K           | Amazon                      |
| 51 | 1NH22EE121 | V BHARGAV             | Rinac India Ltd             |
| 52 | 1NH22EE122 | VEERESH DODDAMANI     | Infosys/Amazon              |
| 53 | 1NH22EE125 | YASHASWINI B S        | Nokia/Dexian Technologies   |
| 54 | 1NH23EE408 | R KIRAN KUMAR         | Siemens Global Service      |
| 55 | 1NH23EE409 | THIPPESWAMY S         | Amazon                      |
| 56 | 1NH22EE035 | DHANANJAYA H          | Hitachi Energy              |
| 57 | 1NH22EE084 | SHREYAS R             | Moonrider                   |



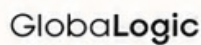
# Industry Skill Lab



## INTERNATIONAL COLLABORATIONS



## INDUSTRY COLLABORATIONS



# Student Clubs

## CO-CURRICULAR CLUBS



Aerobots Club



Business & Information Technology Club



Cybersecurity & Ethical Hacking Club



Data Analytics Club



ED & Start Up Club



Emsys Club



Evolve.AI



Foss Club



Green Energy Club



Healthxcel Club



Innovation Club



Robohorizon Club



STEM Club



Tech Forge Club



Mobile App Development Club

## EXTRA CURRICULAR CLUBS



Rotaract NHCE



Dance Club



Music Club



Art Club



Literary Club



TEDx Club



NSS Club



Socio-Political Club



Fitness Club



Media Club



Fashion Club



Leo Club



Green Warriors



Drama Club



Alumni Club

## SPORTS CLUBS



Volley Ball Club



Basket Ball Club



Badminton Club



Kabaddi Club



Football Club





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