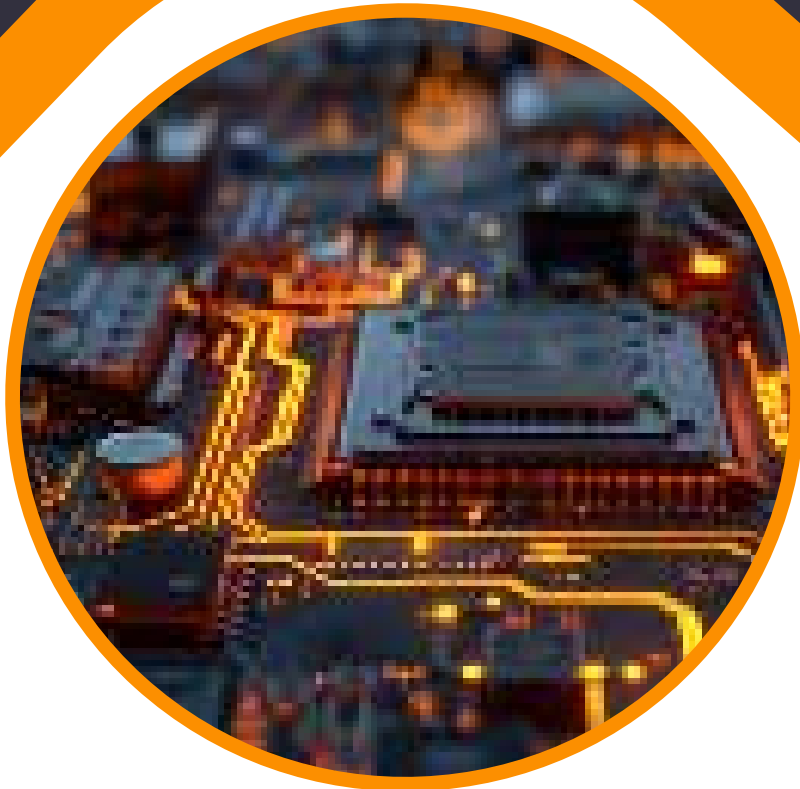




**DEPARTMENT OF
ELECTRICAL AND ELECTRONICS
ENGINEERING**

CURRENTS - NEWSLETTER



JULY - DECEMBER 2024

Volume 13 – Issue 2

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Message from Principal

At NHCE, we firmly believe that Education is more than just completing a syllabus - it's about empowering our students to become future-ready professionals. In today's fast-evolving world, the industry often highlights a gap between graduates' skills and industry expectations. Recognizing this, our institution has always been at the vanguard, bridging this gap and ensuring our students are not just graduates but employable leaders of tomorrow.

It fills me with pride and joy to introduce the 2024 Edition of 'Currents,' the in-house newsletter of the EEE Department. This issue beautifully chronicles the vibrant events, achievements, and initiatives that make our Department a hub of innovation and excellence. Each page reflects the hard work and passion of our students, faculty, and editorial team.

A hearty congratulations to all contributors and the Editorial Board for creating such a captivating and enriching newsletter. Wishing you all an inspiring and delightful reading experience!



Dr. MANJUNATHA
PRINCIPAL, NHCE

Message from HoD-EEE

It brings me great joy to unveil the 2024 edition of our Department's newsletter, aptly titled "Currents." This vibrant publication captures the pulse of the Electrical and Electronics Engineering Department over the past six months, documenting the milestones, events, and achievements that define our collective journey.

The Editorial Team deserves immense appreciation for their dedication in meticulously curating this issue, ensuring every page reflects the energy, innovation, and commitment of our students, faculty, and alumni. Through this newsletter, we aim to showcase the success stories of our major events, attended by enthusiastic participants from diverse corners of the Electrical Engineering domain.

At its core, "Currents" strives to be more than just a record—it stands as a testament to the engagement, inspiration, and collective dedication of everyone connected to our Department, including students, faculty, parents, and alumni. This issue wouldn't have been possible without the unwavering enthusiasm and hard work of our faculty and students.

To our readers, I extend my heartfelt gratitude for your continued support. May this edition inspire and inform, while providing a window into the vibrant world of our Department.



Dr. SAKTHIVEL ARUCHAMY
Prof. & HOD EEE, NHCE

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 the global level.

VALUES:

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

ABOUT THE 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-the-art and cutting edge technology led to the fact that an electrical graduate fits better in today's competitive world.

The strength of the Department are highly qualified faculty members with expertise in various fields of Electrical Engineering, state of the 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
- 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 addition 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 the knowledge of Mathematics, Science, Engineering Fundamentals and Engineering specialization to the solution of complex engineering problems in Electrical and Electronics Engineering.

PO2: Problem Analysis: Identify, formulate, review research literature, and analyse complex engineering problems in Electrical and Electronics Engineering reaching substantiated conclusions using first principles of Mathematics, Natural Sciences, and Engineering Sciences.

PO3: Design / Development of Solutions: Design solutions for complex engineering problems and design system components or processes of Electrical and Electronics Engineering that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments in Electrical and Electronics Engineering, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and Modern Engineering and IT tools including prediction and modelling to complex engineering activities in Electrical and Electronics Engineering with an understanding of the limitations.

PO6: The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Engineering practice in Electrical and Electronics Engineering.

PO7: Environment and Sustainability: Understand the impact of the professional engineering solutions of Electrical and Electronics Engineering in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the Engineering practice.

PO9: Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication Skills: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project Management and Finance: Demonstrate knowledge and understanding of the Engineering and Management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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.

PROGRAM SPECIFIC OUTCOME (PSOs)

PSO1: Graduates will be able to solve real life problems of Power system and Power Electronics using MiPower, PSPICE and MATLAB software tools and hardware.

PSO2: Graduates will be able to develop and support systems based on renewable and sustainable Energy sources.

EDITORIAL TEAM



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CLUB ACTIVITIES

Unlocking Potential: Unleash Your Inner Developer, Unlock the Future!
09.07.2024



The New Horizon College of Engineering, in partnership with the Green Energy Club and the FOSS Club at Government Higher Primary School in Ibbalur, organized a social and technical outreach program titled "Unlocking Potential: Unleash Your Inner Developer, Unlock Future." The program aimed to educate young students about green energy, renewable resources, energy conservation, and computer-related topics, promoting social and technical skills. The event highlighted the importance of sustainable practices and technological innovation.

Workshop-Scratchpad 14.11.2024 to 22.11.2024



From November 14th to 22nd, 2024, a series of events focused on Electrical Engineering, 3D design, and renewable energy. The event introduced microchip design principles and large-scale electrical systems, emphasizing protective devices. Participants gained knowledge of advanced electronics and gained hands-on experience in 3D printing and rapid prototyping.

Field Visit to Jakkur Lake: A Step towards Sustainability 27.11.2024



The Green Energy Club and the Institution's Innovation Council organized a field visit to Jakkur Lake in November 2024, aiming to teach students real-world challenges and promote innovative problem-solving. The visit focused on environmental issues, such as pollution and waste management, and explored technological solutions like IoT-based water quality sensors and solar-powered tools. The visit also highlighted the importance of interdisciplinary teamwork in

creating sustainable solutions. The initiative emphasized the college's commitment to sustainability and inspired participants to contribute to global goals, fostering environmentally conscious innovators ready to tackle global issues.

SEMINARS AND WORKSHOPS

Workshop on IPR in Electrical Engineering

06.09.2024



The Department of Electrical and Electronics Engineering, in collaboration with the Department of Research and Development – IPR Cell, IIC-NHCE, and IEEE IES student branch Chapter, organized a workshop on IPR in Electrical Engineering on 06/09/2024. The interactive workshop, led by Dr. Agalya V, focused on identifying product novelty, securing patents, and best practices for filing a patent.

Motivational Session - From Idea to Impact

07.11.2024



The Institutional Innovation Council and Department of Electrical and Electronics Engineering hosted a session on "From Idea to Impact" on November 7th, 2024. Dr. Siddharth Nair, founder of Zeuron.ai, discussed the importance of innovation, smart strategies, and potential investments. The event sparked interest in future workshops.

Workshop-Industrial Power Quality Audit and its Benefits 15.11.2024



The Department of Electrical and Electronics Engineering at NHCE held a workshop on "Industrial Power Quality Audit and Its Benefits" on November 15, 2024, in collaboration with the IEEE Power and Energy Society Bangalore Chapter and IEEE PES NHCE SBC. Dr. N. Prasanna, Energy Manager at Pranav Clean Energy Engineers, provided insightful sessions on power quality, management, and challenges. Live demonstrations of power quality auditing instruments were also provided.

Webinar on Advanced Data Structures 23.11.2024

A promotional poster for a webinar titled "Advanced Data Structure". The poster is blue and white. At the top left, it says "NEW HORIZON COLLEGE OF ENGINEERING" and "Department of Electrical and Electronics Engineering". To the right, it says "Pantech e Learning". Below this, it says "Webinar" and "Advanced Data Structure". The date and time are "23 November 2024" and "11:30 AM - 12:30 PM". The target audience is "5th Sem EEE Students". The coordinator is "Prof. Sathish Kumar D" and the convener is "Dr. Sakthivel Anusamy". The speaker is "Mr. SATHISH S", Project Engineer at Pantech E-Learning, Chennai. A QR code is at the bottom left.

On November 23rd, 2024, the EEE Department held a webinar on Advanced Data Structures, led by Project Engineer Mr. S. Sathish at Pantech E-Learning. The session provided an in-depth understanding of advanced data structures, their applications, optimizations, and usage in solving complex software development problems, enhancing participants' understanding of both theoretical and applied aspects of data structures.

INDUSTRIAL VISITS

Industrial Visit on DC Machines and Transformers 09.11.2024



The IEEE Power Electronics Society NHCE Student Branch Chapter and IEEE PELS Bangalore Chapter conducted an industrial visit on "DC Machines and Transformers" on November 9th, 2024. The visit took place at Rajamane & Hegde Services Pvt Ltd, a company specializing in the repair and servicing of large electric motors, generators, and servo motors. The visit provided students with

industry exposure and knowledge exchange on the latest advancements in electrical machines.

Industrial Visit- Shivanasamudra Hydro Power Plant 11.11.2024



On November 11th, 2024, the Department of Electrical and Electronics Engineering at New Horizon College of Engineering conducted an industrial visit for 5th semester, Section-A, EEE students. The group, including 60 students, explored the Shivanasamudra Hydro and Solar Power Plant in Mandya, Karnataka, Asia's first hydroelectric facility. The visit also included insights into the Shimsha Hydrel Plant, Solar Plant, and Cauvery Hydro Plant.

Industrial Visit - Shivanasamudra Hydro and Solar Power Plant **12.11.2024**



The Department of EEE at New Horizon College of Engineering conducted an industrial visit to the Shivanasamudra Hydro and Solar Power Plant in Mandya, Karnataka, for 5th-semester EEE students. The plant, Asia's first hydroelectric plant, has a 42 MW power generation capacity and a 10 MW solar power plant, maintained by Bharat Heavy Electricals Limited. The facility uses SCADA supervisory and cloud technologies.

Industrial Visit on DC Machines and Transformers **23.11.2024**



The IEEE Power Electronics Society NHCE Student Branch Chapter and IEEE PELS Bangalore Chapter held an Industrial Visit on "DC Machines and Transformers" on November 23, 2024. The visit took place at Rajamane and Hegde Services Pvt Ltd, a pioneer in the repair and servicing of large AC/DC electric motors, generators, and servo motors, recognized by global and OEM manufacturers.

Industrial Visit to Karnataka Hybrid Micro Devices Limited (KHMDL) 05.12.2024



On December 05th, 2024, the Department of EEE had organized an industrial visit for 7th semester students to Karnataka Hybrid Micro Devices Limited (KHMDL). Sixty students, a faculty member, and a lab technician participated. KHMDL, established in 1992, is a leader in hybrid microcircuits for various sectors including Defence, Healthcare, Automotive, and Aerospace. The visit included an overview of production processes, quality assurance procedures, and product applications, emphasizing the company's commitment to innovation and reliability.

Industrial Visit-Zeonics Systech Defence and Aerospace Engineers Pvt. Ltd 16.12.2024



The Department of Electrical and Electronics Engineering (EEE) conducted a visit to Zeonics Systech Defence and Aerospace Engineers Pvt. Ltd. in Bangalore, India, for 7th semester students. Thirty students participated in the visit, which showcased the company's expertise in designing, developing, and manufacturing advanced defense and aerospace systems. The visit aimed to enhance students' understanding and motivation for their future career aspirations.

Industrial Visit-Dynaelectric Equipment Ltd 16.12.2024



The Department of Electrical and Electronics Engineering, in collaboration with IEEE PELS NHCE SBC and IEEE PELS Bangalore Chapter, organized an industrial visit to “Dynaelectric Equipment Ltd” on December 16th, 2024, for 4th year EEE students. The visit offered practical insights into transitioning from campus to industry, focusing on transformer design and core industrial skills. Students learned about technical training, resources, and support systems to become industry-ready engineers.

TEDx TALKS

17.10.2024 and 18.10.2024

NEW HORIZON
COLLEGE OF ENGINEERING

Department of Electrical and Electronics Engineering

TEDx Talk

(RECORDED)

12 Predictions for the Future of Technology

- 17 October 2024
- 8:30 PM - 10:00 PM
- Room No: 309B
- 3rd Semester A and B students
- Speaker: Mr. Vinod Khosla

How to Harness Abundant, Clean Energy for 10 Billion People

- 18 October 2024
- 4:00 PM - 5:00 PM
- Room No: B203
- 2nd Semester A and B students
- Speaker: Mr. Julio Friedmann

A Faster Way to Get to a Clean Energy Future

- 18 October 2024
- 3:00 PM - 4:00 PM
- Room No: B203
- 2nd Semester A and B students
- Speaker: Mr. Ramez Naam

Host: Ms. Kavitha G II
Guest: Dr. Sarathvel Arushamy
Asst. Prof. Professor, EEE

The Department of Electrical and Electronics Engineering (EEE) held a TEDx Talk event on October 17th and 18th for 3rd, 5th, and 7th semester students. The event featured speakers discussing the future of technology and energy. On the first day, Vinod Khosla presented "12 Predictions for the Future of Technology," focusing on the rapid pace of technological innovation and the changes expected in AI, renewable energy, and healthcare. On the second day, Julio Friedmann discussed the challenges and opportunities of creating sustainable energy solutions for a growing global population.

CO-CURRICULAR ACTIVITIES

Coding Contest #1 09.11.2024



New Horizon College of Engineering hosted a coding contest on November 9th, 2024, for 5th semester EEE students. The contest involved solving three complex problems and seven validation cases. Participants used any programming language, and invigilators ensured accuracy. Winners were determined based on accuracy, speed, and time complexity in solving the problems. The event took place in two sessions.

ACHIEVEMENTS

Pictionary held at NISARG – 2024 10.07.2024



Roshan P (1NH22EE093) and Kavin N (1NH22EE058), Semester 4-B students from New Horizon College of Engineering, won first prize in the Pictionary event at NISARG – 2024, an intercollegiate cultural fest organized by the SATRANG Cultural Club, demonstrating exceptional skills and dedication.

**State Level Powerlifting Championship
10.07.2024 to 11.07.2024**



Yashas R. Yadav (1NH21EE126), a student from the Department of Electrical and Electronics Engineering, achieved 3rd place in the VTU State Level Intercollegiate Powerlifting Championship 2024-2025.

**Student Achievement in Table Tennis,
Women State Level Tournament/Competition
18.07.2024 to 20.07.2024**



Shreya N (1NH22EE101), a student from New Horizon College of Engineering, achieved 3rd place in the Table Tennis competition at the VTU Inter Collegiate Women State Level Tournament in Mysuru.

Shreya N (1NH22EE101), from New Horizon College of Engineering's Electrical and Electronics Engineering

Department, won the Table Tennis, VTU Inter Collegiate Bangalore Central division level Tournament at BMS College of Architecture.

**Electric Bike Design Challenge (EBDC 4.0)
24.09.2024 to 27.09.2024**



The students of New Horizon College of Engineering (K Jagan, 1NH22EE055; Kavin N, 1NH22EE058; Preetham Raj S, 1NH22EE081; R Gagana, 1NH22EE085; Roshan P, 1NH22EE093; Sudeep Kumar Dutta, 1NH22EE108; Tirotaman K, 1NH22EE120; Srinivas Abinay Gandla, 1NH21EE112; Shashank B S,

1NH21EE107) participated in the Electric Bike Design Challenge (EBDC 4.0) at Sri Ramakrishna Institute of Technology in Coimbatore, India. Their innovative spirit and dedication led to remarkable accomplishments in the field of electric bike design. The students won awards for Best in Endurance and Best Innovation, with cash prizes of Rs 5k each. The students are proud of their achievements and eagerly anticipate their continued success.

**Best Innovation Award in RIDE'2024 National Level
E-bike competition at Karpagam College of Engineering, Coimbatore
04.10.2024**



Team Akruth, students from New Horizon College of Engineering, Bangalore, won the Best Innovation Award in the RIDE'2024 National Level E-bike competition at Karpagam College of Engineering in Coimbatore, Tamil Nadu. The team included K Jagan (USN:1NH22EE055); Kavin N (USN: 1NH22EE058); Preetham Raj S (USN: 1NH22EE081); R Gagana (USN: 1NH22EE085); Roshan P (USN: 1NH22EE093); Tirotaman K (USN: 1NH22EE120)

**VTU Basket Ball (Men) Inter Collegiate Tournament
17.10.2024 to 18.10.2024**



Rakshan L (1NH21EE093) has excelled in the VTU Basket Ball (Men) Inter Collegiate Bangalore Central Division Level and State level Tournaments held at New Horizon College of Engineering. He secured runnerup position in the tournament from October 17-18, 2024, and third place in the tournament from October 19-21, 2024. These achievements demonstrate his skill, dedication, and sportsmanship in basketball. Congratulations to him for his commendable success.

Short Movie Making - SARGAM-24 29.11.2024 to 30.11.2024



Mohammad Arsalan Wani (1NH22EE408) won first place in the Short Movie Making event at SARGAM-24, a prestigious inter-collegiate cultural festival in Bengaluru. His exceptional creativity and filmmaking skills set him apart from other talented participants.

Dr. M S Ramaiah Memorial State Level Inter-Engineering Colleges Basketball Tournament 03.12.2024 to 04.12.2024



Rakshan L (1NH21EE093), a student in the Electrical and Electronics Engineering Department at New Horizon College of Engineering, participated in the 16th Dr. M S Ramaiah Memorial State Level Inter-Engineering Colleges Basketball Tournament, where he and his team achieved the 2nd Runner-Up position, showcasing exceptional skills and teamwork.

Runners-up-Handball event at CMRIT's annual sports fest, SPARDHA 06.12.2024



EEE students of New Horizon College of Engineering, Baru Tejesh (USN: 1NH22EE017) and Pavan Kumar M (USN: 1NH23EE406) secured the II (Runners-up) position in the Handball event at CMRIT's annual SPARDHA event, showcasing their dedication, teamwork, and athletic prowess, earning them recognition and congratulations for their outstanding performance.

OHM-AZING-BUILDATHON - MAGNOVITE 2024 06.12.2024 to 07.12.2024



Kudumula Sivakumar Reddy (1NH23EE046), Jagan Panigrahi (1NH23EE034), N Shrikanth (1NH23EE061), Shashank A (1NH23EE094), and Hrutik Guralingappa Katageri (1NH23EE033) won the OHM-AZING-BUILDATHON event at Christ University's Inter-Collegiate Fest MagnoVITE 2024. Their exceptional innovation, teamwork, and technical prowess earned them the victory. They were awarded a cash prize of 10,000 INR. Congratulations to all team members for their outstanding performance.

State Level Inter-Collegiate Sports Fest-Basketball 08.12.2024 to 10.12.2024



Rakshan L (1NH21EE093), an Electrical and Electronics Engineering student, won the Runner-Up position in the Men's Basketball event at the State Level Inter-Collegiate Sports Fest, thanks to his exceptional performance and teamwork. Congratulations to Rakshan and his team.

**VTU Inter Collegiate Central Karnataka State Level Tournament-Tug of War (Men)
09.12.2024 to 10.12.2024**



Aneel Kumar Madarkhandi (1NH21EE015) and Mohmmad Arslan Wani (1NH22EE408) from the Department of Electrical and Electronics Engineering won third place in the Tug of War (Men) event at the VTU Inter-Collegiate Central Karnataka State Level Tournament on December 9 and 10, 2024.

**VTU Inter-Collegiate Division Level Tournament-Tug of War
09.12.2024 to 10.12.2024**



Aneel Kumar Madarkhandi (1NH21EE015) and Mohmmad Arslan Wani (1NH22EE408), students from New Horizon College of Engineering, won the Runner-Up position in the Men's tug-of-war event at the VTU Inter-Collegiate Division Level Tournament, thanks to their teamwork and determination.

**VTU Bengaluru Central Division Inter Collegiate Handball (Men's) tournament
13.12.2024 to 14.12.2024**



Baru Tejesh (1NH22EE017) and Pavan Kumar M (1NH23EE406) from EEE Department secured the Runner-Up position in the VTU Bengaluru Central Division Inter Collegiate Handball (Men's) tournament, a testament to their hard work and dedication.

IEEE Power Electronics Society NHCE Student Branch Chapter (Geo-Code: SBC66131)

Event Organized Details for the AY 2024-2025

Name of the Event	Date	Resource Person	Event Link
National Level Workshop on Research Grant Proposal Writing for DST	21 st August 2024 Wednesday 10:00 AM – 12:30 PM	Dr. J Jayakumar Professor, Division of Electrical and Electronics Engineering, School of Engineering and Technology Karunya Institute of Technology and Sciences Coimbatore 641114, Tamil Nadu, India	https://researchnhce.newhorizoncollegeofengineering.in/wp-content/uploads/2024/08/Event-10.pdf https://events.vtools.ieee.org/m/431262
Awareness on Unlocking Financial Opportunities: Capacity Building for MSME Funding	28 th August 2024 Wednesday 11:00 AM – 01:00 PM	Shashi Kumar M,IEDS Deputy Director, M S M E Development & Facilitation Office, Ministry of Micro, Small & Medium Enterprises, India Dr. Shivanna D M CEO & Co-Founder ARRKS Inovtech Pvt Ltd	https://researchnhce.newhorizoncollegeofengineering.in/wp-content/uploads/2024/09/RD-Event-11_merged_removed.pdf https://events.vtools.ieee.org/m/433336
Webinar on IEEE Authorship and Open Access Symposium: Tips and Best Practices to Get Published from IEEE Editors”	4 th September 2024 Wednesday 04:00 PM – 06:00 PM	Dr. Derrick Abbott University of Adelaide, Australia Dr. Dhanu Pattanashetti Senior Client Services Manager, India IEEE	https://researchnhce.newhorizoncollegeofengineering.in/wp-content/uploads/2024/09/Adobe-Scan-Sep-06-2024.pdf https://events.vtools.ieee.org/m/433453
Expert Talk on “Research in IoT and Smart Buildings”	18 th September 2024 Wednesday 10:00 AM – 12:30 PM	Dr. Gnana Swathika O V Professor, School of Electrical Engineering, Vellore Institute of Technology, Chennai Campus	https://researchnhce.newhorizoncollegeofengineering.in/wp-content/uploads/2024/09/Event-report_merged-1.pdf https://events.vtools.ieee.org/m/437970
Industrial Visit	09 th November 2024, Saturday 09:00 AM – 04:00 PM	Rajamane & Hedge Services Pvt Ltd, Tumkur	https://newhorizoncollegeofengineering.in/wp-content/uploads/2024/10/INDUSTRIAL-VISIT-EEE-POSTER-01-1-scaled.jpg https://events.vtools.ieee.org/m/445594

IEEE Industrial Electronics Society NHCE Student Branch Chapter (Geo-Code: SBC66131B)

Event Organised Details for the AY 2024-2025

Name of the Event	Date	Resource Person	Event Link
National Level Workshop on "Art of Writing a Research Paper in SCI Journals"	08 th August 2024, Thursday 11:00 AM – 04:00 PM	Dr. Kowsalya M Professor (Higher Academic Grade) Department of Energy and Power Electronics School of Electrical Engineering Vellore Institute of Technology Vellore 632 014, Tamil Nadu, India	https://researchnhce.newhorizoncollegeofengineering.in/wp-content/uploads/2024/08/Event-9.pdf https://events.vtools.ieee.org/m/429918
Workshop on IPR in Electrical Engineering	06 th September 2024 Friday 10:00 AM – 12:30 PM	Dr. Agalya V Professor & Associate Head R&D Department of Research and Development New Horizon College of Engineering, Bengaluru, Karnataka, India	https://researchnhce.newhorizoncollegeofengineering.in/wp-content/uploads/2024/09/Edited-EEE-IPR-Event-report.pdf https://events.vtools.ieee.org/m/438000
Expert Talk on "Research in Industrial Applications"	28 th September 2024 Saturday 10:00 AM – 12:30 PM	Mr. Vishal Anand A G Chair, IEEE IES Bangalore Chapter & Director of Engineering Bloom Energy (I) Pvt Ltd, Bengaluru, India	https://researchnhce.newhorizoncollegeofengineering.in/wp-content/uploads/2024/09/RD-Event-publication.pdf https://events.vtools.ieee.org/m/437969
Short Term Training Program (STTP) on "Research Challenges in Advanced Power Converters for Industrial Electronics Applications"	11 th – 15 th November 2024 Monday - Friday 10:00 AM – 04:00 PM	Dr. Vishal Anand A G Chair IEEE IES Bangalore Section Chapter Director of Engineering, Bloom Energy (I) Pvt Ltd, Bengaluru Contact No: 9164004110 Email ID: vishal.Gopalakrishnan@bloomenergy.com	https://newhorizoncollegeofengineering.in/wp-content/uploads/2024/08/Dean-Trifold-broucher.pdf https://events.vtools.ieee.org/m/448428
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		Dr. Agalya V Professor & Associate Head R&D, Department of R&D, New Horizon College of Engineering, Bengaluru 560103, Karnataka, India Contact No: 9840986507 Email ID: dr.agalyav.nhce@newhorizonindia.edu	
		Dr. Vinoth Kumar K Execom Member - IEEE IES Bangalore Section Chapter, Professor & Associate Head R&D, Department of EEE, New Horizon College of Engineering, Bengaluru 560103, Karnataka, India Contact No: 9944808092 Email ID: dr.vinothkumar@newhorizonindia.edu	
		Dr. Shefali Jagwani Vice Chair IEEE IES Bangalore Section Chapter Associate Professor, Department of EEE, Nitte Meenakshi Institute of Technology, P.B.No.6429, Yelahanka, Bangalore 560064, Karnataka, India Contact No: 9035532343 Email ID: shefali.jagwani@nmit.ac.in	
		Dr. Gunapriya B Associate Professor, Department of EEE, New Horizon College of Engineering, Bengaluru 560103, Karnataka, India Contact No: 9994171297 Email ID: gunapriyab@newhorizonindia.edu	

IEEE Power and Energy Society NHCE Student Branch Chapter (Geo-Code: SBC66131D)

Event Organised Details for the AY 2024-2025

Name of the Event	Date	Resource Person	Event Link
Expert Talk on Interdisciplinary Research- An approach to address societal challenges”	11.09.2024 Wednesday 10:00 AM – 12:30 PM	Dr. Hitesh Datt Mathur Head, School of Interdisciplinary Research and Entrepreneurship (SIRE) Birla Institute of Technology and Science, Pilani, Rajasthan, India	https://researchnhce.newhorizoncollegeofengineering.in/wp-content/uploads/2024/09/Report.pdf https://events.vtools.ieee.org/m/437997
Technical Symposium on BLITZ BASH	04.10.2024 Friday 10:30 AM – 05:00 PM	Office Bearers of NHCE	https://events.vtools.ieee.org/m/438007
Expert Lecture on “Advanced Technologies in Electrical Engineering”	12.11.2024 Tuesday 11:00 AM – 01:30 PM	Dr. Z H Sholapurwala Managing Director, Zeonics Systech Defence & Aerospace Engineers Pvt. Ltd, Bengaluru, Karnataka, India	https://department-of-electrical-and-electronics-engineering.newhorizoncollegeofengineering.in/guest-lecture-on-advanced-technologies-in-electrical-engineering/ https://events.vtools.ieee.org/m/446285
Workshop on “Industrial Power Quality Audit and Its Benefits”	15.11.2024 Friday 10:00 AM – 01:30 PM	Mr. N Prasanna Proprietor BEE Certified Energy Manager, Coimbatore, Tamil Nadu, India	https://department-of-electrical-and-electronics-engineering.newhorizoncollegeofengineering.in/workshop-industrial-power-quality-audit-and-its-benefits/ https://events.vtools.ieee.org/m/446286
Technical Symposium on “CODING CONTEST #1”	09.11.2024 Saturday 10:00 AM – 04:30 PM	Office Bearers of NHCE	https://department-of-electrical-and-electronics-engineering.newhorizoncollegeofengineering.in/coding-contest/ https://events.vtools.ieee.org/m/455921

Faculty competencies in correlation to the MOOC Courses

S.No	Name of the Faculty	Name of the Course	Platform	Academic Year
1	Ms.Soumya KV	Introduction to Internet of Things	NPTTEL	2024-25
2	Ms.Soumya KV	Accreditation and Outcome based Learning	NPTTEL	2024-25
3	Dr. Gunapriya	Advance Course in Social Psychology	NPTTEL	2024-25
4	Ms. Sangeetha CN	Patent Drafting for Beginners	NPTTEL	2024-25
5	Ms. Chenna Reddy Kavitha	Patent Drafting for Beginners	NPTTEL	2024-25
6	Dr. Mausri Bhuyan	Design Thinking- A primer	NPTTEL	2024-25
7	Mr. Satish Kumar D	Digital Controller for Power Applications	NPTTEL	2024-25

PLACEMENT DETAILS: 2024-2025

Sl.No	Name	USN	Placed in Company
1	Achinth Hs	1NH21EE005	Microland
2	Aneelkumar Madarakhandi	1NH21EE015	Capgemini
3	Anusha L	1NH21EE016	Capgemini
4	Apoorva Kulkarni	1NH21EE018	Siemens
5	Bhuvan Singh Rajput	1NH21EE024	BOSCH Limited
6	Gowthami A	1NH21EE033	Capgemini
7	Harshitha N	1NH21EE036	Capgemini
8	K Rajini	1NH21EE040	Siemens
9	Kruthika Dc	1NH21EE048	L&T Technology Services Ltd
10	Jeevan M	1NH21EE052	Capgemini
11	Monika C	1NH21EE065	Siemens
12	N S Meghana	1NH21EE068	Siemens
13	Nikhita Ghalagi	1NH21EE073	Siemens
14	P Indra Reddy	1NH21EE074	Capgemini
15	Poojitha M Reddy	1NH21EE078	Siemens
16	Prakash Raj M	1NH21EE081	Capgemini
17	R Puneeth Kumar	1NH21EE090	Capgemini
18	Raghu Nandan Ks	1NH21EE091	Capgemini
19	Raksha Shankar Kajagar	1NH21EE092	Siemens
20	Riddhi B N	1NH21EE096	Capgemini
21	Kavya S	1NH21EE098	Capgemini
22	Salanke Anni Rao	1NH21EE100	Capgemini
23	Sandeep Naikar	1NH21EE103	Capgemini
24	Shashank B S	1NH21EE107	Stratergi Automation Pvt Ltd
25	Spoorthi R	1NH21EE110	Capgemini
26	Srinivas Abhinay Gandla	1NH21EE112	Capgemini
27	Suchithra .	1NH21EE113	Infogain
28	Suprith U	1NH21EE115	Capgemini
29	Tannu Priya .	1NH21EE119	Capgemini
30	Thanuja K	1NH21EE120	Capgemini
31	Uday A Kammar	1NH21EE122	Capgemini
32	Vaishnavi D	1NH21EE123	Capgemini
33	Jayasourya U	1NH22EE402	Capgemini

34	Mallesha K	1NH22EE407	Capgemini
35	Sagar	1NH22EE410	Capgemini
36	Akshata Sutar	1NH22EE400	Capgemini
37	Likith R	1NH22EE406	Blue liquid solutions
38	Monica G	1NH21EE064	Blue liquid solutions
39	Rishab R	1NH21EE097	EY
40	Shankaranand Anandu Maha	1NH21EE112	DYNALEKTRIC EQUIPMENT PVT LTD
41	Manohar J S	1NH21EE056	DYNALEKTRIC EQUIPMENT PVT LTD
42	Keerthi T E	1NH21EE042	DYNALEKTRIC EQUIPMENT PVT LTD
43	Darshan Mk	1NH21EE028	DYNALEKTRIC EQUIPMENT PVT LTD
44	Mahima Yadav	1NH21EE053	intellipaat
45	Harshitha S	1NH21EE037	intellipaat
46	S Praveen Babu	1NH21EE085	intellipaat

PUBLICATION DETAILS: 2024-2025

Sl. No.	Faculty name	Paper Title	Month/Year	Journal/Conference details	Source (Scopus/Wos)	Publication type	DOI
1.	R.Mohan Das	Explosive metal detection using sensors and microcontroller	August 2024	2024 2nd International Conference on Sustainable Computing and Smart Systems (ICSCSS)	Scopus	Conference	10.1109/ICSCSS60660.2024.10625134
2.	Anitha Nair A.S	Explosive metal detection using sensors and microcontroller	August 2024	2024 2nd International Conference on Sustainable Computing and Smart Systems (ICSCSS)	Scopus	Conference	10.1109/ICSCSS60660.2024.10625134
3	Surat Pyari Atti	An innovative method for improving lifetime ratio in a wireless sensor network for EV vehicles using improved cybernated clustering scheme	October 2024	024 2nd World Conference on Communication & Computing (WCONF)	Scopus	Conference	10.1109/WCONF61366.2024.10691913.
4	Sujitha S	Design of Electric Vehicle with Self-Balance Approach using Gyroscopic Effect and Autonomous Systems	September 2024	2024 8th International Conference on Inventive Systems and Control (ICISC)	Scopus	Conference	10.1109/ICISC62624.2024.00095
5	Sujitha S	Implementation of Intelligent Farm Guards: Utilizing Bidirectional Monitoring for Motor Efficiency	September 2024	2024 8th International Conference on Inventive Systems and Control (ICISC), Coimbatore	Scopus	Conference	10.1109/ICISC62624.2024.00113
6	Sujitha S	Electromagnetic Compatibility in Wireless EV Charging System	October 2024	2024 Second International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI), Coimbatore	Scopus	Conference	10.1109/ICoICI62503.2024.10696865

7	Sujitha S	Therapeutic Treadmill and Foot Pedal for Physically Challenged Children	August 2024	2024 Second International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI), Coimbatore	Scopus	Conference	10.1109/ICoICI62503.2024.10696163
8	Karthika M	Modified Arithmetic optimization algorithm based torque ripple minimization for a sensorless BLDC motor	October 2024	International journal of electronics	Scopus	Journal	10.1080/00207217.2024.2408789
9	Mausri Bhuyan	Frequency analysis in a combined hybrid microgrid tuned by DBOA algorithm	November 2024	2024 IEEE third international conference on power electronics intelligent control and energy system	Scopus	Conference	10.1109/ICPEICES62430.2024.10719105
10	Mausri Bhuyan	Solution of economic load dispatch for dealing with solar power uncertainty using pelican optimization algorithm	November 2024	2024 IEEE third international conference on power electronics intelligent control and energy system	Scopus	Conference	10.1109/ICPEICES62430.2024.10719195
11	Vinoth Kumar K	An analysis of IOT based smart garbage level of detection system	December 2024	2024 8th International Conference on Electronics, Communication and Aerospace Technology (ICECA), Coimbatore	Scopus	Conference	10.1109/ICECA63461.2024.10800952.
12	Satish Kumar D	Optimized thermal control of EV battery systems with fuzzy logic and PSO on Arduino Uno	December 2024	2024 3rd International Conference for Advancement in Technology (ICONAT), GOA	Scopus	Conference	10.1109/ICONAT61936.2024.10774666

Patent Details : 2024-2025

SL. NO	TITLE OF PATENT	JURISDICTION/ PUBLISHED IN INDIAN PATENT JOURNAL/ PUBLISHED DATE	INVENTORS' NAME (FACULTY / STUDENTS)
1.	Design of harnessing highway wind for sustainable lighting solutions using vertical axis wind turbines Application Number: 202441071492 A dated 21/09/2024	India Dated 27/09/2024	Soumya KV, Vinoth Kumar K, Sangeetha CN, Mausri Bhuyan, R Kiran Kumar, Md Faizan, Abhishek Rajkumar
2.	Design of smart balanced battery system Application Number:202441071472 A dated 21/09/2024	India Dated 27/09/2024	Vinod Kumar S, Vinoth Kumar K, Aashish Thomas Oomen, Achutha EB, Bhuvan Gowda SS
3.	Design of dual axis smart solar tracking for EV charging station Application Number: 202441071468 A dated 21/09/2024	India Dated 04/10/2024	Sangeetha CN, Vinoth Kumar K
4.	Design of motorist tiredness recognition and vigilant system Application Number: 202441071469 A dated 21/09/2024	India Dated 04/10/2024	Vinoth Kumar K, Sangeeth CN
5.	Design of an smart rechargeable push bike Application Number: 202441071466A dated 21/09/2024	India Dated 04/10/2024	Vinoth Kumar K
6.	Design of portable freezer for pastoral process Application Number: 202441071465A dated 21/09/2024	India Dated 04/10/2024	Vinoth Kumar K
7.	Design of smart street light with inbuilt collision warning system Application Number: 202441071480 A dated 21/09/2024	India Dated 04/10/2024	Vinoth Kumar K, Rishab R, Shashank BS, Uday A Kammar
8.	Design of two probe neurodiagnostic EEG system Application Number: 202441071493 A dated 21/09/2024	India Dated 04/10/2024	Mausri Bhuyan, Soumya KV
9.	Design of monitoring voltage in batteries using IOT Application Number: 202441071501 A dated 21/09/2024	India Dated 04/10/2024	Vinoth Kumar K
10.	Design of wearable electrocardiogram monitoring device for remote cardiac health management Application Number: 202441071505 A dated 21/09/2024	India Dated 04/10/2024	Vinod Kumar S, Vinoth Kumar K
11.	Design of waste segregation bin in smart cities Application Number: 202441071463 A dated 21/09/2024	India Dated 04/10/2024	Vinoth Kumar K
12.	A design of paralysis healthiness administration for hospitals Application Number: 202441071464 A dated 21/09/2024	India Dated 04/10/2024	Vinoth Kumar K
13.	Design of smart indoor air quality monitoring device for healthcare system Application Number: 202441071471 A dated 21/09/2024	India Dated 04/10/2024	Vinoth Kumar K, Vinod Kumar S
14.	Silent chain for enhanced E-Bike performance Application Number:202441081796 A dated 26/10/2024	India Dated 08/11/2024	Dr. R Mohan Das, Dr. Sujitha S, Jayasourya U, S Suhel Ahmed
15.	Safety integrated multi pin harness system for two wheelers Application Number: 202441081787 A dated 26/10/2024	India Dated 08/11/2024	Dr. Sujitha S, K Jagan, Kavin N, Preetham Raj, R Gagana, Roshan P, Tirotaman K

Faculty as participants in Faculty development / Training activities / STTPs for the academic year 2024-2025

SL.No	Name of the Faculty	STTP/FDP/Workshop/Training Activities	Dates	Organisation
1	Mrs. Surat Pyari Atti	Empowering Futuristic Research Avenues in Energy, Sustainability & Climate change for Industrial Innovation	11/11/2024 To 16/11/2024	Sir M Visvesvaraya Institute of Technology
2	Dr. Vinoth Kumar K	Revolutionizing Energy: The role of Disruptive Technologies in Electrical Systems	02/12/2024 To 07/12/2024	SNS College of Engineering
3	Sangeetha CN	Analog and Digital IC Design Flow using Cadence EDA Tools	31/08/2024 To 06/07/2024	East point College of Engineering and Technology
4	Sangeetha CN	Cutting Edge Developments in Electric and Hydrogen cell vehicles for Educators	02/12/2024 To 07/12/2024	The Oxford College of Engineering
5	Dr. M Karthika	Power Electronics Applications in Microgrid using AI (peamgai-2024)	09/12/2024 To 14/12/2024	Jain Deemed to be University Faculty of Engineering and Technology
6	Mr. Satish Kumar D	Integrating Electric vehicles with smart grid: Innovations for sustainable mobility solutions	16/12/2024 To 21/12/2024	Sri Venkateswara college of engineering and technology

Conference Presentation details for the AY 2024-2025

Name of the faculty	Title of the Paper	Name of the Conference	Venue	Date
Sujitha S	Therapeutic Treadmill Foot Pedal for physically challenged children	2nd International conference on Intelligent cyber physical systems and Internet of Things	JCT College of Engineering and Technology	28-30 August 2024
Sujitha S	Electromagnetic compatibility in wireless EV Charging System	2nd International conference on Intelligent cyber physical systems and Internet of Things	JCT College of Engineering and Technology	28-30 August 2024
A.S Anitha Nair	Control of frequency deviation and area control error using Genetic algorithm tuned FOPID by minimising performance index	Springer 7th International Conference on Intelligent computing and communication ICICC-2024	CMR Technical campus, hydereabd, Telangana	30-31 August 2024
Surat Pyari Atti	An innovative method for improvig lifetime ratio in a wireless sensor network for EV vehiclesmusing improved cybernated clustering scheme	2nd world conference on communication & computing (WCONF-2024)	Kalinga University	12-14 July 2024
Satish kumar D	Optimized thermal control of EV battery systems with fuzzy logic and PSO on Arduino Uno	3rd International conference for advancement in Technology (ICONAT)	Rajarambapu Institute of Technology	13-15 September 2024
Sujitha S	Prototyping a smart medication management system with machine learning based dosage recommendations	5th International conference on smart electronics and communication (ICOSEC 2024)	Kongunadu College of Engineering and Technology Trichy, tamil Nadu	18-20 September 2024

Name of the faculty	Title of the Paper	Name of the Conference	Venue	Date
Sujitha S	Rescue Rover: All Terrain Emergency Response and exploration vehicle	8th Internatioal conference on I-SMAC (IoT in Social,mobile, analytics and cloud) (I-SMAC 2024)	Purwanchal campus, Institute of Engineering, Tribhuvan University, Nepal	3-5 October 2024
Sujitha S	Therapeutic Innovative Rehabilitation tools: Treadmill and pedal machines for children with physical impairments	4th International conference on soft computing for security applications (ICSCSA 2024)	Dhirajlal Gandhi College of Technology, Salem	24-25 September 2024
Sujitha S	Agrismart robspider for spraying and weed cutting	5th International conference Data Intelligence and Cognitive Informatics	SCAD College of Engineering and Technology, Cheranmahadevi, Tamil Nadu	18-20 November 2024
Kavitha Chenna Reddy	Agrismart robspider for spraying and weed cutting	6th International conference Data Intelligence and Cognitive Informatics	SCAD College of Engineering and Technology, Cheranmahadevi, Tamil Nadu	18-20 November 2025



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