



# Dr. Akhilesh Das Gupta Institute of Professional Studies

(Formerly Dr. Akhilesh Das Gupta Institute of Technology & Management)



BBD GROUP

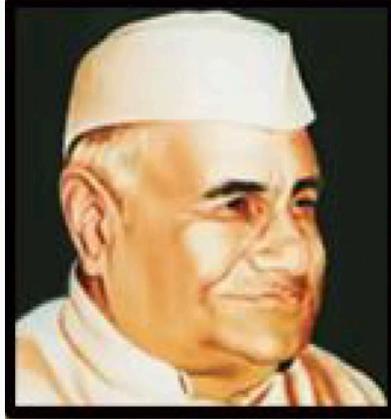
ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

# LECTRON 2023-2024

E - Magazine of ECE Department



# OUR PATRONS



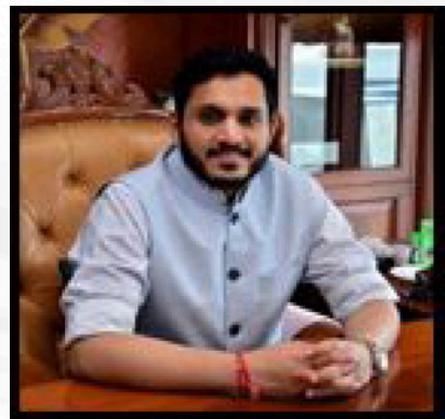
Late Shri Babu Banarasi Das Ji



Late Dr. Akhilesh Das Gupta



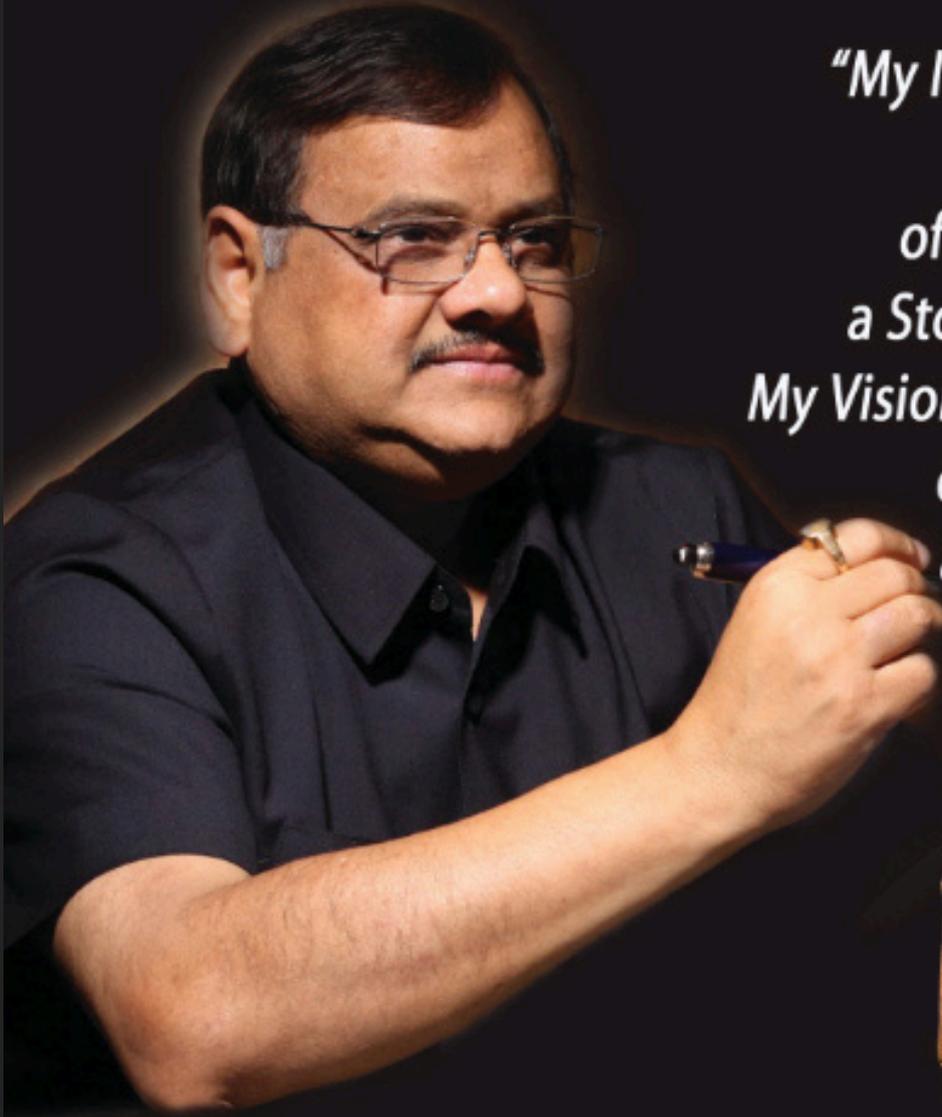
Mrs. Alka Das Gupta



Mr. Viraj Sagar Das Gupta



# AKHIL JYOT



*"My Idea of a Society  
is a River  
of Education &  
a Storm of Success.  
My Vision of life is an Ocean  
of Learning  
& a Tide of  
Humanity"*



शत शत नमन

# Mrs. Alka Das Gupta

Chairperson  
BBD Group of Education



## Message from Chairperson

The Department of Electronics And Communication Engineering has always been the gem of the Dr. Akhilesh Das Gupta Institute of Professional Studies. The perennial zeal of the Department has never left the achievements stagnant. The Department not only gives students the exposure to the regular engineering curriculum but also to the aspirations of today's corporate world, thus inculcating a professional aptitude in them. The dedication of the faculty members has strengthened the learning process ensuring an environment of collaboration, experimentation, imagination, and creativity. It is such a prodigious delight in watching the students cutting edge in technical exploration, enhancing their analytical skills and brushing themselves up for the rapidly changing sector, and establishing themselves as entrepreneurs and engineers.

The Department has always reached new heights and I am looking forward to more wonders and achievements. I wish the very best to the Department of ECE for the launch of the **LECTRON**, the official technical magazine of the Department. The magazine beautifully provides an overview of academic programs, research activities, various laboratories, training and the other fields explored by our faculty members and students.

# Mr. Viraj Sagar Das Gupta

President, BBD Group



## Message from President

I am extremely happy to witness the shaping up of the next volume of **LECTRON**.

A special mention to the Editorial Board, who were able to capture the noteworthy proceedings of the ECE Department of Dr. Akhilesh Das Gupta Institute of Professional Studies and were also able to present it in an alluring manner. I thoroughly enjoyed myself going through the pages of this technical magazine.

This issue of the technical magazine is an insight to what campus life truly means, the surfeit events together represent the opportunities that one can take and augment their personalities up to the brim and be glorious predominantly.

I hope students and faculty members find this Edition as sound as I did. I congratulate the Department and the Editorial Board for this achievement.

# Dr. Sanjay Kumar

Director General, ADGIPS



## Message from Director

"Engineering is not only the study of the technical subjects, but it is about living an intellectual life."

As the Director General of Dr. Akhilesh Das Gupta Institute of Professional Studies, I strongly believe that education is not only about imparting knowledge but more about opening the individual's mind to self-expression. I have been personally encouraging students to develop an overall sensibility and awareness. Encouraging them to, not try, but make it happen.

I saw an overwhelming response by the students in not only technical domain but also in the branch of sports, art, dance, photography, music and a lot more. Students are our partners in our mission to set a new benchmark in the field of engineering. I am confident that with such a positive and progressive attitude they would be able to justify the credibility of the Department as well as the college by bringing laurels and what not.

I am immensely proud to observe a team of such enthusiasts. The next volume of the technical magazine of the Department of Electronics and Communication Engineering - **LECTRON**, has been able to make a count of all the achievements, hard work and dedication of the faculty members and students alike. I wish them luck.

# Prof. (Dr.) Niranjan Bhattacharyya

Director, ADGIPS



## Message from Director

A child's psychology is the most difficult to understand. We at Dr. Akhilesh Das Gupta Institute of Professional Studies, believe in imparting quality education to the students at a level where they can easily retain the knowledge and clear their basics to the pinnacle. Our staff members have been incessantly redefining the standard of erudition in a manner through which the students are equipped to face the challenges of future with their technical proficiency and scientific knowledge. The institution is highly esteemed with reference to its innovative endeavours, keen involvement and exceptional merit. I am proud to be a part of an institution that believes in putting the education of the students beyond everything. Igniting the youth with knowledge, life skills and ethics, we develop the students into confident, persuasive and practically insightful individuals. We encourage and imbibe them the lessons of self-reliance and discipline by letting them to take up multiple roles in different aspects of life. I extend my heartfelt congratulations to ADGIPS, Delhi for being successful in producing strong individuals who believe in scripting stories of success with their unfailing resoluteness and indomitable will power.

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# 01. ABOUT ECE DEPARTMENT

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The Department of Electronics and Communication Engineering is committed to render-quality and professional pedagogy to pioneering engineers. The ECE department provides opportunity for the students to learn and fulfill the industry demands of Communication Engineering. The Department has state of art equipment, in various laboratories which is necessary to blend the theoretical & practical aspects of engineering. The Department offers Under-Graduate program in Bachelors of Technology. The Department has faculty members having expertise in wide variety of fields in Electronics & Communication. The department has a strong industry institution interaction.



## **VISION**

To produce World class Electronics & Communication Engineers through academic excellence and innovations, who would be competent Technocrats with work ethics to meet the needs of the society.

## **MISSION**

M1. To impart quality education for excelling in the field of Electronics & Communication Engineering to face real world challenges in existing and emerging domains.

M2. To provide a creative platform for promotion of innovations in the field of Electronics & Communication Engineering by keeping close proximity to industry.

M3. To provide conducive environment for development of work ethics and prepare socially responsible citizens.

## **PEOs of ECE Department**

PEO1: Graduates shall excel in the field of electronics and communication engineering by applying their acquired knowledge and skills to develop feasible and viable solutions to engineering challenges of the country.

PEO2: Graduates shall be adaptive to innovations and new technologies which shall lead them to professional excellence.

PEO3: Graduates shall manage resources skillfully and practice the profession with ethics, integrity and social responsibility.



## 02. AKHIL BHARATIYA SHIKSHA SAMAGAM

Students and faculty members of ADGIPS participated in the National Event, Akhil Bharatiya Shiksha Samagam - The celebration of 3rd Anniversary of National Education Policy 2020 at Pragati Maidan on 29 - 30 July 2023.



# 03. SPARK – IEEE

## ABOUT EVENT

Ravindra Desai, Global IEEE Program Manager, orchestrated a highly successful session offering insights into IEEE's role in power and energy. Attendees enjoyed an informative and engaging event, commencing with a warm welcome and an opening address highlighting IEEE's pivotal role in shaping standards and innovation. The distinguished speaker provided a comprehensive overview of IEEE's mission and significance in the field. A key highlight was the detailed exploration of the IEEE Conformity Assessment Program (ICAP) and its role in ensuring adherence to IEEE standards.

**SPARK**  
An IEEE R.10 PES SCC Initiative

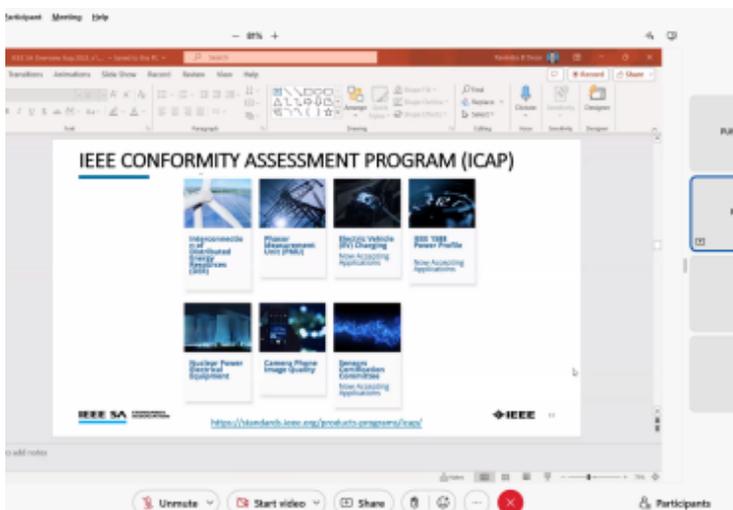
**IEEE PES Standard Association and Industry Connect Program Overview**

August 12, 2023 5:00 PM IST

Scan Here  
or Register at  
[bit.ly/pes\\_spark2](https://bit.ly/pes_spark2)

**RAVINDRA DESAI**  
Program Manager  
Standards at Global IEEE

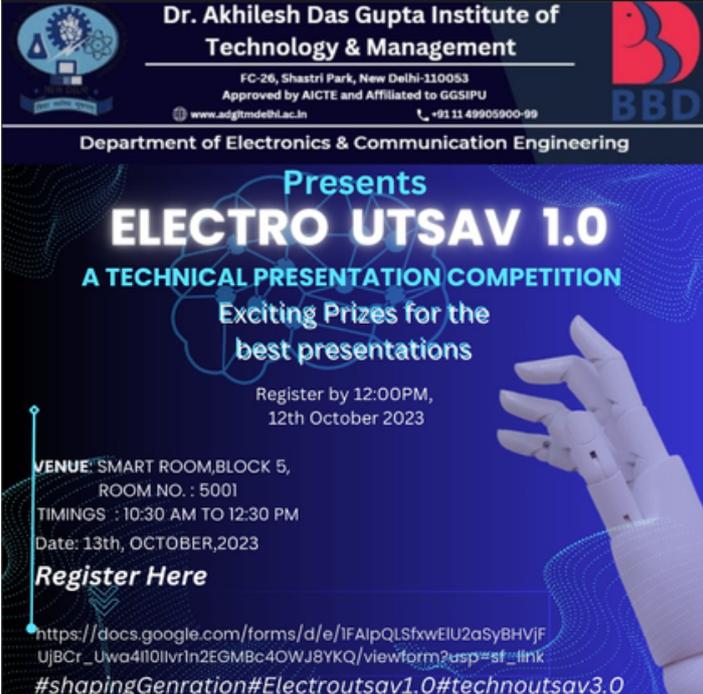
IEEE SB GECT  
IEEE SA



Enhanced understanding of IEEE's contributions to the power and energy sector. Highlighted the importance of standards and conformity assessment. Recognized the meticulous planning and execution by the organizing team. Fostering a platform for learning and collaboration among attendees.

# 04. Electro Utsav 1.0

Department of Electronics & Communication Engineering presents "Electro Utsav 1.0 - A Technical Presentation Competition on 12th October 2023.



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Department of Electronics & Communication Engineering

Presents  
**ELECTRO UTSAV 1.0**  
A TECHNICAL PRESENTATION COMPETITION

Exciting Prizes for the best presentations

Register by 12:00PM,  
12th October 2023

VENUE: SMART ROOM,BLOCK 5,  
ROOM NO. : 5001  
TIMINGS : 10:30 AM TO 12:30 PM  
Date: 13th, OCTOBER,2023

**Register Here**

[https://docs.google.com/forms/d/e/1FAIpQLSfxwEiU2aSy8HVjF-UJBCr\\_Uwa4I10lvr1n2EGMBc4OWJ8YKQ/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSfxwEiU2aSy8HVjF-UJBCr_Uwa4I10lvr1n2EGMBc4OWJ8YKQ/viewform?usp=sf_link)

#shapingGeneration#Electroutsav1.0#technoutsav3.0



# 05.

## INDIA MOBILE CONGRESS (IMC-2023)

Inauguration ceremony by Hon'ble Prime Minister

India Mobile Congress (IMC) was the largest telecommunication, media, and technology forum of the World, jointly organized by the Department of Telecommunications (DoT), Government of India and the Cellular Operators Association of India (COAI). It was a three-day event that focuses on the latest trends in the realm of TMT and ICT. The seventh edition of IMC was held in New Delhi from October 27-29, 2023, with the theme "Global Digital Innovation". The event aimed at bring together industry, government, academia, and other ecosystem players to discuss, deliberate, demonstrate and display the latest trends in the realm of TMT and Information & Communication Technologies (ICT).

The conference featured a range of sessions on topics such as skill development for a connected world, innovation and entrepreneurship for sustainable development (SDGs), The conference also had an exhibition area covering seven Halls (Hall No-1 to 7) At Pragati Maidan where companies showcased their latest products and services.



The faculty members and students of ADGITM got a special invitation from Department of Telecommunication and IT, Government of India, to participated at the inaugural session of IMC 2023 on 27th October, 2023 along with students and faculty of very few reputed Institutions like IIT-Delhi, DTU, NSUT, IGDTU, DU, JNU and NIT-Delhi. All other participating institutions were from Government sector. We could manage passes from PMO for all the 429 students and 14 faculty members who had registered for the event. Out of 429 students of ADGITM, 217 students were from ECE department. Products and services of the Global companies were exhibited in hall no. 1 and 7. Students interacted with the industry experts of Satellite and mobile communication & clarified their doubts regarding latest trends in the emerging fields, after the inauguration of the event by Hon'ble PM.

### **Benefit of ADGIPS in the event:**

The IMC 2023 aimed to bring together industry, government, academia, and other ecosystem players to discuss, deliberate, demonstrate and display the latest trends in the realm of TMT and ICT. ADGIPS tried to expose students and faculty to the Industry through this IMC 2023 in the following ways:

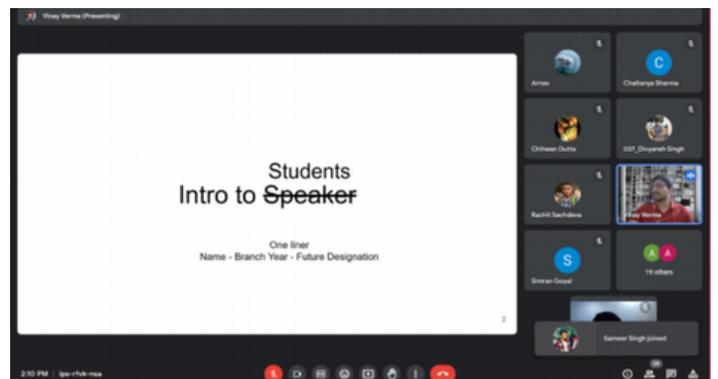
- **Relationship building:** By participating in the event as the only private sector Institution in Delhi, ADGITM added credibility and legitimacy to the industry as well as to the ministry.
- **Efficient and cost-effectiveness:** IMC is a cost-cutting strategy that involves developing and implementing multi-use materials for a product or service. This might open minds of our students towards entrepreneurship.
- **Comprehensive:** It establishes familiarity with latest technology to our students.
- **Memorability:** IMC campaigns are memorable because they use a variety of media to communicate a message. Students could register it in their mind easily.
- **Loyalty:** IMC campaigns build brand loyalty by creating a consistent message across all media. Our college name ADGITM got mentioned along with IIT, NIT, DTU etc.



# 06. INTRODUCTION TO COMPUTER VISION

IEEE ADGIPS aims to bring information and awareness about latest Technology Trends and upcoming domains that might suits Student's interest. This programs primarily focuses on building Machine learning models that acts on information delivers through images. Vinay Verma, the guest speaker of this webinar has made engaging props that helps students to think about the information grasped by computer and how to teach it to learn new models that might come in future. They learned the fundamentals and underlying concepts that drive Computer Vision.

They got to see the practical workings of image processing techniques that forms the fundamentals of computer vision. Then they understand the machine learning algorithms in enabling machines to 'see' and understand how neural networks works. This Event was hosted by Tushar Rajora (Computer Society Chairperson IEEE ADGIPS). At last the students were given a Question bank for free where they could test themselves with Coding problems.



# 07. LEARN MORE ABOUT POWER AND ENERGY SOCIETY

On September 26, 2023, IEEE Maker's Space hosted an event titled "Learn More about Power and Energy Society." Executive members and the PES Chairman provided an overview of IEEE's Power and Energy Society (PES), highlighting its mission and benefits. Attendees learned about networking opportunities, industry access, and professional resources offered by PES membership. The event also covered available scholarships for academic and professional growth in power and energy.



The poster features the IEEE ADGITM logo at the top left. The main title is "LEARN MORE ABOUT POWER & ENERGY SOCIETY" in large, bold, white letters on a green background. Below the title, a dark green bar contains the text "BENEFITS • SCHOLARSHIPS • INITIATIVES". The event details are listed in a vertical column: "26th Sept 2023" with a calendar icon, "2:15 pm Onwards" with a clock icon, and "IEEE MAKERSPACE 4th Block Basement" with a location pin icon. At the bottom left, there is a green button that says "JOIN FOR FURTHER UPDATES" and a QR code to the right. On the right side of the poster, there is an illustration of a man in a suit standing at a podium.



Approximately 25 students actively participated, showing genuine interest. The event successfully promoted awareness of PES and its benefits. Special thanks to attendees and speakers for their contributions.

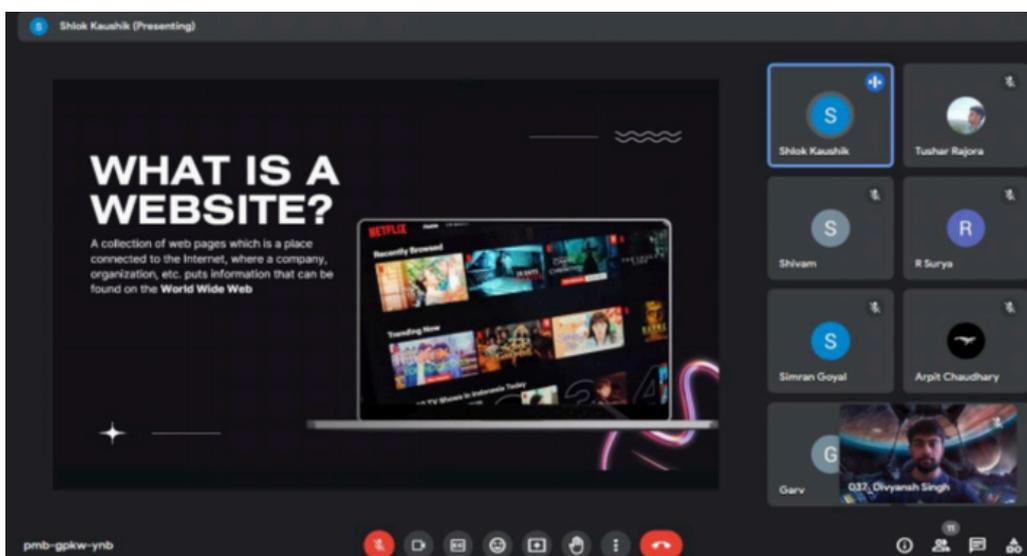
# 08.

## WEB DEVELOPMENT ROADMAP

IEEE ADGIPS aims to bring information and awareness about the latest Technology Trends and upcoming domains that might suit Student's interests. Hosted by CS Society IEEE ADGITM, This program primarily focuses on web development and the path to landing an internship by improving this skill. The speaker Shlok Kaushik, M-tech IIT Patna, has tried to give vast information about learning these skills while keeping the audience engaged and hooked to his presentation.



The sessions begin with covering easy topics like learning Front-end Development with HTML, CSS, Javascript to advance topics like mastering databases management systems and Back-end Development. This session was organized and managed by Tushar Rajora - CS Chairperson, Divyansh and Garv, Under CS Society. Finally, the students were advised to ask their Queries to the speaker which were answered well by the speaker.



# 09.

## TECHNORAX V9.0

IEEE ADGIPS celebrated IEEE Day on October 12th and 13th, 2022, as part of its annual flagship event, TECHNORAX V9.0. This celebration aimed to highlight technological advancements and inspire young minds to innovate. New events like Robo race, LFR Race, and Technopedia were introduced to foster passion for engineering. The event attracted participation from colleges across India, contributing to the growth of the IEEE community.

Day one featured a 12-Hour Hackathon, T-Hacks 6.0, with 28 teams selected from 1128 registrations. The winning teams, The Enciphers and Fascinated Unique Coder Knights, were awarded cash prizes and certificates. A cake cutting ceremony marked the energetic conclusion of the day. Day two included various events like Robo wars, Robo Soccer, and Tech-Expo, along with gaming stalls for non-tech experiences. The event not only showcased technical projects but also served as a source of inspiration for attendees.

TECHNORAX V9.0 concluded with a closing ceremony acknowledging the efforts of the organizing team and participants.



# 10. Workshop on Cyber Security Awareness

Department of ECE conducted workshop on Cyber Security and Ethical Hacking on 18th October, 2023.





**Congratulations Ms. Suraj Sharma - Alumni of B.Tech. (ECE) Batch 2013-17, who lead Delhi Team as a Coach and secured 5 Gold, 2 Silver and 7 Bronze medals in 37th edition of the National Games in Panaji, Goa. Hon'ble Prime Minister Shri Narendra Modi Ji inaugurated the event.**



# 11. DARK PATTERNS BUSTER HACKATHON

Dark Pattern Buster Hackathon 2024 is a nationally recognized initiative that aims to give the students a forum to resolve actual problems while also fostering a culture of product creation and a problem-solving mindset. As a stepping stone to the DPBH, the Dr. Akhilesh Das Gupta Institute of Professional Studies (ADGIPS) hosted an internal hackathon.

It was a one-day internal hackathon held on the January 30, 2024 to select the top 10 teams that will be nominated for DPBH 2024. The selection procedure consisted of delivering an idea presentation that included a team introduction, a problem statement that included the student's approach to the solution, and the execution of the solution. In total, 15 teams competed in this event under multiple categories, each working on an idea or problem statement and offering a solution.



A digital product development competition in which the majority of the team members had prior programming experience. Multidisciplinary teams with a healthy mix of Engineers and Programmers engaged in the hardware version.

In total, 15 teams competed in this event out of which 2 teams of ECE department participated under multiple categories, each working on a separate idea or problem statement and offering a solution. The hackathon's programming edition had been a digital product development competition in which the majority of the team members had prior programming experience. Multidisciplinary teams with a healthy mix of Mechanical Engineers, Computer Engineers, IT Engineers, Electronic Engineers, Product Designers, and Programmers engaged in the hardware version.

# 12.

## EXPERT TALK ON INTELLECTUAL PROPERTY RIGHTS & IT'S SIGNIFICANCE IN RESEARCH AND INNOVATION

### TO MOTIVATE STUDENTS TO INVESTIGATE THEIR INCLINATIONS TOWARD IPR & IT'S SIGNIFICANCE IN RESEARCH AND INNOVATION.

ECE Department of ADGIPS, Delhi had organized an expert talk by Dr. Prachi Chopra, Founder and Director in Intellect Bastion LLP on the topic Intellectual Property Rights and its significance in research and innovation on 16th Feb, 2024.

The aim of this expert talk would be effective research activities and patent filling process. Enable students to Understanding Intellectual Property (IP), Importance of IP in Research and Innovation, IP Management and Enforcement, Global Perspectives and Legal Frameworks, Ethical and Social Implications and also encourage active participation and engagement from participants through discussions, Q&A sessions, and interactive activities. Over 60 students have participated in the event.



# 13.

## WORKSHOP ON INDUSTRIAL AUTOMATION - PLC SCADA

### MOTIVATE STUDENTS TO LEARN ABOUT THE BASIC FUNDAMENTALS OF AUTOMATION TOOLS.

CE Department of ADGIPS, Delhi had organized a workshop by Mr. Parmish Chaudhary (Sr. Automation Trainer) From Live Wire, on the topic of Industrial Automation PLC AND SCADA on 15th Feb, 2024.

The aim of this workshop is to clear the basic fundamentals of some automation tools like PLC, SCADA, HMI and VFD with the use of Hardware and Software. Students learn how to program PLCs using industry-standard programming languages such as ladder logic, function block diagrams (FBD), structured text (ST), or sequential function charts (SFC). They understand how SCADA systems collect real-time data from sensors, meters, and other devices, and how to visualize and monitor this data using SCADA software. Also they gain a foundational understanding of industrial automation principles, including how PLCs and SCADA systems are used to control and monitor industrial processes.



# 14.

## INDUSTRIAL VISIT TO IIT ROORKEE

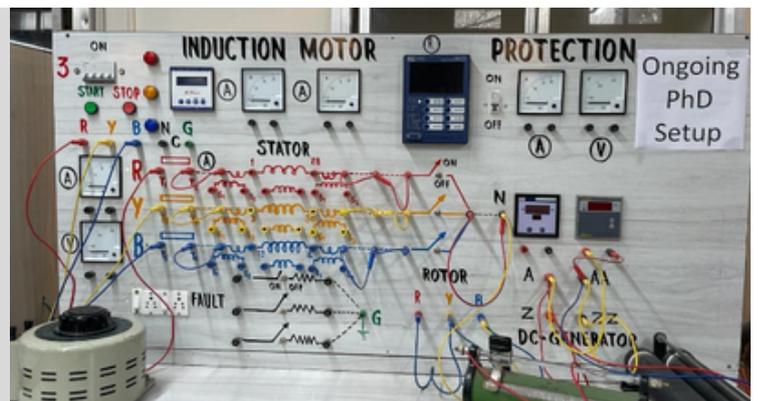
### INDUSTRIAL VISIT TO DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING STUDENTS TO DEPARTMENT OF ELECTRICAL ENGINEERING AT INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

To provide students with practical insights into state of Electrical Labs and the recent trends in research and Development as well as Industrial Consultancy by the Departments. It is pertinent to mention that major electronics labs are in Electrical Engineering Department at IIT's.

The visit comprised several activities designed to enhance students' understanding of the modern Labs and their operational processes.



Students gained practical exposure to state-of-the-art the advanced control lab, Advanced Robotics Lab, Applied Electronics Lab, Applied Instrumentation Lab, Autonomous Vehicle Dynamics and Control Lab, Bio-Medical Instrumentation Lab, Control & Robotics Lab, Embedded Systems Lab, Instrumentation & Signal Processing Lab, Machine Learning Lab, Microprocessor and Computer Lab, Power Electronics Lab, Power System Protection Lab, Power System Simulation Lab, which complemented their theoretical knowledge acquired in the classroom.



The visit facilitated networking opportunities with professionals and researchers working in the field of the technological development sector. Students could establish connections, seek guidance for future projects or research endeavours, and explore potential internship, research, and job opportunities in the Electronics Field.

# 15. SAMVEDNA PAWSITIVITY SESSION

## PROMOTING RESPONSIBLE ANIMAL HEALTH CARE PRACTICES

The event commenced with a warm welcome from the organizers, followed by a brief introduction to the mission and values of Pawsitivity Society of ADGIPS for Animal Health Care, focusing on how volunteers work to care for the health and well-being of stray/pet animals.

The session served as a reminder of the importance of empathy and care towards all living beings, reflecting our values in nurturing not only technical expertise but also compassion and social responsibility.



Attendees were encouraged to actively participate and share their experiences throughout the session. The interactive format included distributing chocolates to those who participated in the questionnaire, followed by a Q&A session where attendees had the opportunity to seek personalized advice.



Participants raised insightful questions on a wide range of topics, fostering meaningful dialogue and knowledge exchange among attendees and speakers. Throughout the event, participants were informed about and encouraged to get involved in animal care initiatives.

# 16. SAMVEDNA- DONATION DRIVE

## SUPPORTING UNDERPRIVILEGED CHILDREN THROUGH DONATION DRIVE

On February 6, 2024, the National Service Scheme (NSS) of ADGIPS, in collaboration with Vrikshit Foundation, organized a Donation Drive aimed at supporting underprivileged children. The drive sought donations of essential items such as packed foods, books, notebooks, pens, pencils, and other school supplies to benefit the less fortunate.

The event took place throughout the day near the canteen, offering convenient access for participants to contribute to the cause. Attendees were encouraged to donate items that would positively impact the lives of disadvantaged children.



Additionally, attendees were briefed about the Vrikshit Foundation and its initiatives, and they were encouraged to join the foundation and contribute to its noble cause. The Donation Drive garnered significant support, with more than 30 donations received.



The generous contributions from participants demonstrated community's willingness to unite and support those in need. The conclusion, the Donation Drive organized by NSS and Vrikshit Foundation exemplified the power of collective action in addressing social issues and supporting underprivileged children. Through the generosity and support of participants, the event successfully contributed to improving the lives of those less fortunate while also promoting the mission of the Vrikshit Foundation.

# 17.

## SAMVEDNA

### VRIKSHIT SPEAKER SESSION

#### FOSTERING ENVIRONMENTAL AWARENESS AND CIVIC RESPONSIBILITY

On February 6, 2024, the National Service Scheme (NSS) of ADGIPS, in collaboration with Vrikshit Foundation, hosted an event aimed at fostering environmental awareness and civic responsibility. The event focused on inspiring students to contribute to noble causes for a cleaner and healthier India.

Speakers from Vrikshit Foundation, including Prerna Bhura, Team Coordinator, and Pranjal Jain, HR Recruiter, shared insights into the organization's goals, responsibilities, and projects. Prerna Bhura's inspiring speech highlighted Vrikshit Foundation's impactful initiatives such as wall paintings, pond clean-ups, and park revitalization projects.



Q&A session was held, where students posed questions about the challenges faced during the implementation of these projects and the strategies employed to overcome them. They provided insightful answers, sharing their experiences and offering practical solutions to address environmental issues.



The event served as a catalyst for providing a sense of responsibility towards our planet. Attendees actively engaged with the speakers through discussions, reflecting on their role in preserving the environment. Students were eager to learn more about sustainable practices and expressed their commitment to implementing them in their daily lives. The importance of community engagement in creating a greener, more sustainable future for our communities was underscored, with students pledging to actively participate in future initiatives.

# 18. UTKARSH 2024

## ANNUAL-TECHNO CULTURAL FEST - UTKARSH 24

Utkarsh-2024 (Annual-Techno Cultural Fest of ADGIPS) was organised on 13-15th March 2024 at ADGIPS, Delhi in which following technical events with details have been carried out by IEEE-ADGIPS (technical society).

### A. Battle of Webtitans

The event aimed to foster creativity and innovation in addressing pressing global issues through web design. Participants were given the opportunity to select one theme from three provided options: Sustainable Cities, Quality Education, and Gender Equality. They were then tasked with developing the frontend framework for their chosen theme. The winning team was awarded with exciting goodies and certificates in recognition of their outstanding achievement.



### B. Coding War

The "Coding War" event took place on 14th March in the IEEE room, starting from 12 pm. It was an intellectually stimulating event that aimed to test participants' knowledge in various domains of computer science, including Data Structures and Algorithms (DSA), Operating Systems, Compiler Design, and more. The format of the event included a quiz conducted on the Kahoot platform, allowing for an engaging and interactive experience for all participants.





### C. Treasure Hunt

The Treasure Hunt event in collaboration with Kritrim Dhi was held at IEEE Room & ML Lab, with an aim to blend technical prowess with adventurous spirit, the event saw teams engage in a thrilling quest for hidden treasures. Each team, comprising 1-5 members, was equipped with basic technical knowledge and tasked with decoding clues to unveil the ultimate treasure.



### D. Project Exhibition

IEEE-ADGIPS invited all the departments of ADGIPS to display their innovative projects in Technical Exhibition. Whether the students have been working on a scientific experiment, a cutting-edge technological solution, a captivating art piece, or any other project, IEEE-ADGIPS encouraged the participants to share their ideas with peers, faculties, and guests.

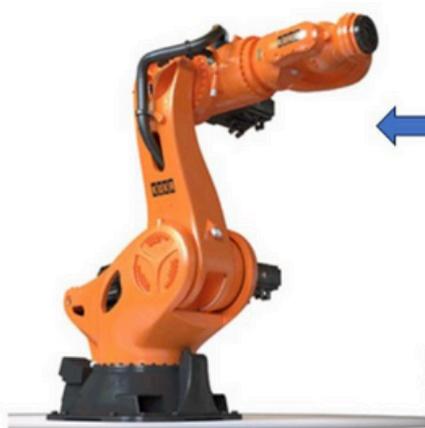
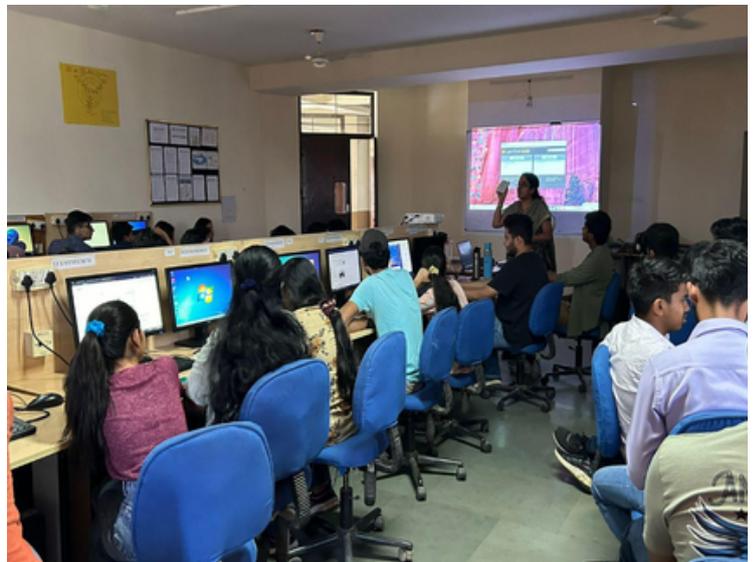
# 19. WORKSHOP ON BASICS OF ROBOTICS AND BASICS OF LABVIEW

## TO MOTIVATE STUDENTS TO LEARN ABOUT THE BASIC FUNDAMENTALS OF ROBOTICS AND LABVIEW

ECE Department of ADGIPS, Delhi had organized a workshop by Ms. Suvarna Mujumdar, Centre Incharge, NI labView Academy, AKGEC skills foundation, on the topic of Basics of Robotics and Basics of LabVIEW on 22nd April, 2024.

The aim of this workshop is to clear the basic fundamentals of some automation LabVIEW and how the labView can be used for the successful operations of robotics and other control related activities. LabVIEW is a graphical programming environment that provides unique productivity accelerators for test system development., such as an intuitive approach to programming, connectivity to any instrument, and fully integrated user interfaces. Also, they gain a foundational understanding of industrial automation principles

Over 50 students have participated in the event.



<p><b>Basics of Robotics</b> Applications Coordinate System Robot Jogging Glimpse of robot programming</p> <hr/> <p><b>Basics of LABVIEW</b> Data logging using LABVIEW Sensor Integration with LABVIEW Simulation with NI hardware (*Please carry your laptop)</p>
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# 20. NATIONAL CONFERENCE ON BRIDGING INNOVATIONS FOR A SUSTAINABLE FUTURE IN ELECTRICAL, MECHANICAL, ELECTRONICS AND COMMUNICATION ENGINEERING

The main objective of the conference (NCBISF-24) is to serve as an integrated platform for various ideas, disciplines & technologies related to current and future trends in Electrical, Mechanical and Electronics & Communication Engineering.

The theme of the conference is to bring together specialists and experts from industries, research institutes, government agencies and academics to provide a detailed understanding of various trends and advances, thus, giving theory a practical approach.

The Electrical, Mechanical & Electronics and Communication Department organized a NATIONAL CONFERENCE ON BRIDGING INNOVATIONS FOR A SUSTAINABLE FUTURE-24 for 4th year students. The NCBISF-24 was led by the honourable GENERAL Director. Sanjay Sharma with Director Dr. Niranjan Bhattacharya and Head of Department (ECE) Mr. Surender Dhiman allowed interaction with honourable chief guests Dr. Mukesh Khandelwal (Delhi University) and Dr. Rashmi Gupta (NSUT, EAST CAMPUS).

**Day 1.** Our day kicks off with registration, a moment where we formally acknowledge the presence of each participant, signaling the commencement of our shared experience. This is followed by the solemn ceremony of lamp lighting, a tradition that symbolizes the dispelling of darkness and the illumination of knowledge.



**Session Chair -  
Dr. Mukesh Khandelwal (Delhi University)**

**Topic:**  
Introduction to microwave and different types of antenna.



**Session Chair - Dr. Rashmi Gupta (NSUT, EAST CAMPUS)**

**Topic:** Artificial Intelligence and its significance



**Session Chair -  
Dr. Ashish Aggarwal ( Director,  
School of Engineering & Technology, IGNOU )**

**Topic:** Brief introduction about sustainable development goals.



**Session Chair -  
Dr. Hemant Ahuja (Director, AKGEC)**

**Topic:** Wind energy conversion systems-  
topologies & control velidictory section.





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संक्षिप्त समाचार...  
तीन दिवसीय राष्ट्रीय सम्मेलन का आगाज



**दैनिक भास्कर**  
एडीजीआईएस के तीन दिवसीय राष्ट्रीय सम्मेलन हुआ समाधान

**विकसित भारत 2047 की ओर प्रगतिशील कदम: निदेशक डा0 निरंजन भट्टाचार्या**

भारतभारत... डॉ. अजीत कुमार गुप्ता इंस्टीट्यूट ऑफ प्रोफेशनल स्टडीज में शुरू हुआ राष्ट्रीय सम्मेलन... डॉ. अजीत कुमार गुप्ता, निदेशक, एडिजीआईएस, दिल्ली के उद्घाटन कार्यक्रम में संबोधित करते हैं।

**दैनिक भास्कर**  
एडीजीआईएस के तीन दिवसीय राष्ट्रीय सम्मेलन हुआ समाधान

**विकसित भारत 2047 की ओर प्रगतिशील कदम: निदेशक डा0 निरंजन भट्टाचार्या**

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**NCBISF'24**  
Media Coverage

**2024**

एडीजीआईएस का राष्ट्रीय सम्मेलन विकसित भारत 2047 की ओर बढ़ता कदम: डॉ. भट्टाचार्या



दैनिक भास्कर, एडीजीआईएस के उद्घाटन कार्यक्रम में संबोधित करते हैं।

**दैनिक भास्कर**  
एडीजीआईएस के तीन दिवसीय राष्ट्रीय सम्मेलन हुआ समाधान

**अखिलेश दास गुप्ता इंस्टीट्यूट ऑफ प्रोफेशनल स्टडीज में शुरू हुआ राष्ट्रीय सम्मेलन**

**अनुसंधान और विकास को बढ़ावा देने के लिए ऐसे राष्ट्रीय सम्मेलन आवश्यक हैं: डॉ संजय कुमार**

भारतभारत... डॉ. अजीत कुमार गुप्ता इंस्टीट्यूट ऑफ प्रोफेशनल स्टडीज में शुरू हुआ राष्ट्रीय सम्मेलन... डॉ. अजीत कुमार गुप्ता, निदेशक, एडिजीआईएस, दिल्ली के उद्घाटन कार्यक्रम में संबोधित करते हैं।



दैनिक भास्कर, एडीजीआईएस के उद्घाटन कार्यक्रम में संबोधित करते हैं।

# 21. INDUSTRIAL VISIT OF DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING STUDENTS TO DUCAT, PITAMPURA

## TO PROVIDE STUDENTS WITH THE EXPOSURE OF LATEST TECHNOLOGIES IN THE FIELD LIKE- VLSI, EMBEDDED SYSTEMS, ROBOTICS AND NETWORKING.

The visit comprised several activities designed to enhance students' understanding of the academy's offerings, facilities, and the learning environment.

The activities included:

**Welcome and Orientation Session:** Students are greeted by the staff and given an overview of the academy, its history, mission, and vision. A brief outline of the day's activities is provided so students know what to expect.



**Interactive Workshops:** Participation in sample classes or workshops to experience the teaching methodologies and curriculum.

**Networking Opportunities:** Guest lectures or talks by industry professionals discussing current trends and future opportunities.



### Benefit to the Students from this Visit:

1. Provide students the in-depth corporate knowledge of the technology.
2. Gives the students a change to apply into actual practice the fundamentals that they learned in their curriculum.
3. A taste of working life for students who do not have a work experience. Helps student in deciding the kind of specialization they want to pursue.
4. Interact With renowned Industry Experts.
5. Get thorough insight into Industry Standards being practiced. Hands on Demonstrations of latest Technologies.
6. Will also enhance Interview preparation skills by talking to Industry experts.



# STUDENTS ACHIEVEMENTS

**DR. AKHILESH DAS GUPTA**  
INSTITUTE OF PROFESSIONAL STUDIES  
(Formerly Dr. Akhilesh Das Gupta Institute of Technology & Management)  
FC-26, Shastri Park, Delhi - 110 053  
Approved by AICTE & BCI and Affiliated to GGSIPU  
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**BBD**

Congratulations to **Team Swaranjali** (The Official Music Society of ADGIPS) for securing the First Position in the Group Singing Competition at Synapse – the Annual Cultural Fest of Maulana Azad Medical College, New Delhi, on Dec 13, 2023.

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**DR. AKHILESH DAS GUPTA**  
INSTITUTE OF PROFESSIONAL STUDIES  
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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

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**YASH SINGH**  
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B.TECH(IT)

**DHRUV TREHAN**  
B.TECH(IT)

**YOGESH KUMAR GUPTA**  
B.TECH(IT)

**DR. AKHILESH DAS GUPTA**  
INSTITUTE OF PROFESSIONAL STUDIES  
(FORMERLY ADGITM)  
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

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**Congratulations**

Sandeep Ray of  
ECE 3rd Yr  
accompanied  
through Tabla by  
Hardik Pruthi of  
IT 2nd yr for  
winning first  
position Solo  
Classical Singing  
in ICFAI  
Business School  
(IBS) Gurugram

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**CONGRATS MR. DEVRAJ GAUTAM**

Your hard work paid off.

**ECE Department**

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**DR. AKHILESH DAS GUPTA**  
INSTITUTE OF PROFESSIONAL STUDIES  
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Sending warmest congratulations to you for reaching this incredible milestone.

**DR. SANJAY SHARMA**

**CONGRATULATION**  
*for successfully completing PhD*

**ECE Department** **NBA**

**DR. AKHILESH DAS GUPTA**  
INSTITUTE OF PROFESSIONAL STUDIES  
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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

**Congratulation** **ACADEMIC ACHIEVEMENTS**

**DR. PRATUL ARVIND**



DELIVERED GUEST LECTURE ON 5 DAY FACULTY DEVELOPMENT PROGRAM - INTERNATIONAL WEBINAR SERIES ON "RESEARCH TOOLS AND METHODOLOGIES" AT SHRI KRISHNA ADITYA COLLEGE OF ARTS AND SCIENCE, COIMBATORE

SESSION CHAIR IN "3RD INTERNATIONAL CONFERENCE ON "POWER ENERGY ENVIRONMENT AND INTELLIGENT CONTROL", GREATER NOIDA.

SESSION CHAIR IN "4TH ELECTRICAL POWER AND RENEWABLE ENERGY CONFERENCE", NIT JAMSHEDPUR

PUBLISHED BOOK ENTITLED "FUTURISTIC IN ENERGY AND AUTOMATION SECTORS: A BRIEF REVIEW OF NEW TECHNOLOGIES DRIVING SUSTAINABLE DEVELOPMENT", BENTHAM SCIENCE PUBLISHERS LIMITED (SINGAPORE)

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**DR. AKHILESH DAS GUPTA**  
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*Congratulation*

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**CONGRATULATIONS**  
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**Dr. Richa Malhotra**  
EDITOR



I am extremely delighted to introduce the latest edition of ECE Departmental technical magazine "LECTRON" for the session 2023 - 2024.

LECTRON provides you a perfect opportunity to immerse oneself in the technical developments of ECE DEPARTMENT as it gives you insights about the latest achievements in the field of technology, placements, high quality publishing, original contributions & happening events from both i.e. faculty and students.

I would like to thank all the members of the editorial board for putting up such a brilliant piece of work within such a short span of time which included collection of data, compiling, proof reading, editing, checking plagiarism etc.

I would also like to thank all the people who have contributed in some way or the other towards the magazine release.

It will be highly appreciated if our team is provided with your valuable suggestions for the further improvement and enrichment of our upcoming volumes.