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Institute of Technology & Management

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PROF. LALIT GARG

FACE OF COVER

Professor

Computer information systems,

Faculty of Information and communication technology

University of Malta

UTKARSİİ

GLBITM RESEARCH NEWS LETTER

MAY- SEPTEMBER 2025



GL BAJAJ

Institute of Technology & Management

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GLBITM - AT A GLANCE

G.L. Bajaj Institute of Technology and Management, located in Greater Noida, Uttar Pradesh, India, stands as a beacon of higher education in the fields of engineering and management. Established with the aim of nurturing future leaders and innovators, GLBITM has carved a niche for itself in the academic landscape of the region. It also stands out in its approach to assist and equip the students for their overall development, giving them a strong foundation for a successful future. The institute offers B.Tech, MBA and MCA programs.

This self-financed institute is governed by Rajeev Memorial Academic Welfare Society (Registered Under Societies Registration Act 1860). It is approved by All India Council for Technical Education (AICTE), Ministry of Human Resource Development, Government of India and affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow.

At its core, GLBITM is committed to academic excellence, offering a wide range of undergraduate and postgraduate programs in engineering, management, and computer applications. The institute is affiliated with Dr. A.P.J. Abdul Kalam Technical University (formerly Uttar Pradesh Technical University) and is approved by the All-India Council for Technical Education (AICTE). The institute has been maintaining its positions amongst the top engineering and management colleges in AKTU university results. It has been maintaining the highest pass percentage amongst the engineering and Management colleges in Noida and Greater Noida region under Dr. APJ Kalam University, Lucknow for the last eight years and is listed among the top engineering and management colleges in Greater Noida, Delhi NCR. In fact, this engineering college has been listed among the top engineering of India by NIRF, issued by MHRD, Government of India.

GLBITM has the unique distinction of being the only private institute in Uttar Pradesh to be awarded the prestigious NAAC A+ grade in its first cycle of accreditation. An A+ grade from NAAC in the first cycle is a rare achievement that underscores GLBITM's

exceptional standards in teaching, learning, research, and innovation, as well as its comprehensive infrastructure, faculty quality, and governance. Further solidifying its position as a leader in technical education, all eligible engineering branches at GLBITM are accredited by the National Board of Accreditation (NBA).

GLBITM boasts a sprawling campus equipped with state-of-the-art infrastructure. The campus is designed to foster an environment conducive to learning and innovation. It features modern classrooms, well-equipped laboratories, a central library with a vast collection of books and digital resources, and advanced computing facilities. The institute also provides ample sports and recreational facilities to promote the well-rounded development of its students.

Understanding the importance of industry exposure, GLBITM maintains strong ties with the corporate world. It regularly organizes guest lectures, workshops, and seminars led by industry experts. The institute's active placement cell works tirelessly to secure lucrative job opportunities for its graduates, boasting an impressive track record of placements in top multinational companies and esteemed organizations.

Research and innovation are at the heart of GLBITM's ethos. The institute encourages its faculty and students to engage in research activities, contributing to the advancement of knowledge in their respective fields. It has several research centers and innovation labs where cutting-edge research is conducted in collaboration with industry and academic partners.

GLBITM is not just about academic achievements; it also emphasizes the holistic development of its students. Through a variety of extracurricular activities, clubs, and societies, students are encouraged to pursue their interests and talents beyond the classroom. Leadership, teamwork, and social responsibility are some of the key values instilled in students, preparing them to be not only successful professionals but also conscientious citizens.



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Message from Face of Cover

PROF. LALIT GARG

Professor,

Computer information systems,

Faculty of Information and communication
technology

University of Malta

Pioneering Progress Through Research Excellence

Dear Esteemed Readers,

It is with immense gratitude and joy that I write to you as the featured face of the May- September 2025 edition of the Research Newsletter of G. L. Bajaj Institute of Technology and Management (GLBITM), Greater Noida. I sincerely thank the leadership of GLBITM for honouring me with this recognition and for selecting my profile for such a distinguished platform. As an Associate Professor at the University of Malta, I have had the privilege of working with diverse academic and research communities across the globe. Yet, what sets GLBITM apart is its vibrant, innovative, and forward-looking research culture—a culture defined by passion, dedication, and a clear vision for the future. It is both admirable and inspiring. This newsletter reflects GLBITM's steadfast commitment to academic excellence, innovation, and societal impact. Beyond being a compilation of scholarly contributions, it embodies a dialogue of curiosity, creativity, and collaboration. It celebrates a thriving research ecosystem where faculty, scholars, and students come together to explore, innovate, and expand the boundaries of science, technology, and management. The works featured in this edition are a true reflection of the intellectual rigor and dynamic spirit that characterize GLBITM's academic pursuits. The institute's remarkable achievements—such as its NAAC A+ accreditation and NBA accreditation of eligible programs—are clear markers

of its commitment to continuous growth and global standards of excellence. This publication not only showcases these accomplishments but also invites readers to engage with the groundbreaking ideas and innovations emerging from GLBITM. I encourage you to immerse yourself in this edition, where every article stands as a testament to resilience, creativity, and the pursuit of knowledge. My heartfelt congratulations to the editorial team and the GLBITM community for sustaining this meaningful initiative. May the spirit of inquiry and discovery reflected here continue to grow, fostering new collaborations and guiding us toward a brighter, knowledge-driven future.



Message from Chief Patron

MR. PANKAJ AGARWAL

Vice Chairman

G.L. Bajaj Institute of Technology and
Management, Greater Noida

A Vision Realized: Advancing Our Research Endeavors

Dear Scholars, Innovators, leadership Team
and Researchers,

As the Vice Chairman of G.L. Bajaj Institute of Technology and Management, Greater Noida, and your Chief Patron, I congratulate the Editorial team to come out with this *Research Newsletter 'Utkarsh'*. This initiative embodies the realization of our long-standing vision—to establish GLBITM as a beacon of excellence in innovation, research, and academic growth.

Over the years, GLBITM has earned a distinguished reputation, marked by consistent achievements and a commitment to advancing knowledge. This *Research Newsletter* is more than a publication; it is a testament to our shared dedication, highlighting the intellectual rigor, creativity, and problem-solving mindset of our faculty and students. It serves as a vital platform to exchange ideas,

foster interdisciplinary collaboration, and nurture a research-driven culture that reaches beyond institutional boundaries.

I extend my sincere appreciation to our faculty, students, administrative teams, and industry partners whose dedication and efforts have made this endeavour possible. As you engage with the articles in this edition, I hope it ignites curiosity, inspires innovation, and reinforces our collective commitment to research excellence.

Together, let us continue to push boundaries—questioning, discovering, and innovating—to shape a future defined by knowledge, creativity, and lasting impact.



Message from Chief Patron

MR. KARTIKAY AGARWAL CEO

G.L. Bajaj Institute of Technology and
Management, Greater Noida

A New Chapter in Research and Innovation Begins

Dear Researchers, Innovators, and Knowledge Seekers,

It gives me immense pleasure to introduce the *Research Newsletter* of G.L. Bajaj Institute of Technology and Management, Greater Noida. This initiative marks an important step forward in our ongoing commitment to strengthening the research ecosystem and cultivating a vibrant culture of academic excellence.

GLBITM has always believed in empowering minds through knowledge and innovation. This newsletter reflects that vision—a dedicated platform to highlight the outstanding research contributions of our faculty and students. It serves not only as a channel for sharing

impactful findings but also as a catalyst for expanding our global footprint in research and development.

Through this initiative, we aim to inspire collaborative thinking, encourage interdisciplinary engagement, and promote solutions to real-world challenges. I extend my sincere appreciation to all contributors and supporters who have brought this vision to life. Together, let's continue advancing research as a powerful force for progress and transformation.



Message from Patron

**DR. PREETI
BAJAJ**

Director

G.L. Bajaj Institute of Technology and
Management, Greater Noida

Fostering Excellence and Innovation: A Message from the Director

Dear Esteemed Mentors, Leaders, Teachers, Researchers and Community at Large,
Greetings from G.L. Bajaj Institute of Technology and Management, Greater Noida.

As Director of G.L. Bajaj Institute of Technology and Management, Greater Noida, and Patron of this monthly research newsletter, I take immense pride in seeing this vibrant platform continue to thrive as a reflection of our institute's dedication to fostering a dynamic, research-driven academic culture. This newsletter remains a powerful medium for showcasing groundbreaking research, facilitating interdisciplinary collaboration, and highlighting the significant contributions of our faculty and students to the global academic community.

At GLBITM, we are deeply committed to nurturing a culture of inquiry and innovation. Our vision is to empower students and faculty to pursue high-impact research that addresses both local and global challenges. This ongoing publication plays a pivotal role in reinforcing that vision—by sharing diverse research outcomes and thought leadership, it not only informs but also inspires deeper engagement in meaningful scholarly work.

This platform strengthens our collective ambition to continually elevate research standards. By celebrating achievements and fostering a spirit of curiosity and innovation, it motivates our community to push boundaries and set new benchmarks. In doing so, we advance GLBITM's

reputation as a leader in technological and managerial education, while contributing robustly to India's research ecosystem and global knowledge networks.

Our NAAC A+ accreditation and NBA-certified programs underscore our commitment to excellence, but it is through consistent scholarly effort that we truly distinguish ourselves. This newsletter exemplifies that ongoing pursuit—highlighting research that enhances learning, drives progress, and positions GLBITM as a beacon of academic and research excellence.

Heartiest congratulations to the editorial team, contributors led by Prof Mayank Dean Research and Development and the entire GLBITM family for your relentless pursuit of knowledge and innovation. Let us continue to harness this platform to inspire, collaborate, and lead—raising the bar for research impact locally and globally.

Overview OF GLBITM RESEARCH



The Research and Development department at GLBITM is committed to achieving these vision and mission objectives, guided by our core values of excellence, innovation, collaboration, and societal impact. Through our dedicated efforts, we aspire to contribute significantly to the advancement of science and technology, preparing our students to be leaders in their fields and driving positive change in the world.

At G.L. Bajaj Institute of Technology and Management (GLBITM), Greater Noida, our vision for Research and Development (R&D) is to be a globally recognized center of excellence in research, fostering innovation and advancing knowledge in engineering, technology, and management. We aim to create an ecosystem that nurtures creativity, encourages interdisciplinary collaboration, and contributes significantly to the betterment of society, the environment, and the global economy.

Vision



Mission OUR MISSION IS TO:



- **Promote a Research-Intensive Culture:** Cultivate an environment where faculty, students, and researchers are encouraged to pursue their research interests, pushing the boundaries of knowledge and innovation.
- **Foster Interdisciplinary Collaboration:** Encourage collaboration across different disciplines within the institute and with national and international research organizations, industries, and academic institutions to address complex global challenges.
- **Enhance Research Infrastructure:** Continuously upgrade our research facilities and resources to provide a state-of-the-art environment that supports cutting-edge research and development activities.
- **Focus on Societal Impact:** Direct our research efforts towards solving real-world problems that benefit society, contributing to sustainable development and improving the quality of life.
- **Strengthen Industry-Academia Linkages:** Establish strong connections with industry to ensure that our research is relevant and contributes to technological advancements, innovation, and entrepreneurship.
- **Promote Global Research Collaborations:** Engage in partnerships with leading international universities and research institutions to enhance the global impact and visibility of our research, facilitating exchange programs, joint research projects, and publications.
- **Encourage Research Excellence:** Recognize and reward outstanding research contributions and achievements of our faculty and students, fostering a culture of excellence and continuous improvement.

Glimpses of month

MAY/SEPTEMBER'25

EVENTS ORGANIZED BY DEPARTMENTS

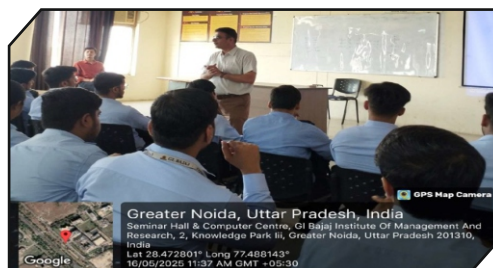
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EVENT NAME: CYBERSECURITY: MERGING INNOVATION WITH INTELLIGENCE

Date: 16 May, 2025

Deptt: Information Technology

The Department of Information Technology organized a workshop on "Cybersecurity: Merging Innovation with Intelligence". The session was graced by Mr. Kunal Gupte, Cybersecurity Expert & Technical Trainer. Mr. Kunal Gupte delivered an insightful and informative session, discussion on how emerging technologies (like AI, ML, blockchain, quantum computing) are reshaping cybersecurity defence mechanisms. He also highlights how combining intelligent systems with human expertise creates a more resilient security posture, and addresses the current cybersecurity challenges (e.g., zero-day threats, ransomware, insider threats) and how innovation can be used to overcome them.



2

EVENT NAME: PROTECTING INTELLECTUAL PROPERTY RIGHTS(IPRS) AND IP MANAGEMENT FOR START-UPS

Date: 21 May, 2025

Deptt: Information Technology

The Department of Information Technology organized a one-day workshop on "Protecting Intellectual Property Rights(IPRs) and IP Management for start-ups". The session was graced by Dr. Arvind Kumar Bhatt, Professor of Marketing and Area Chairperson for International Business at GL Bajaj Institute of Management and Research. Dr. Bhatt delivered an insightful and informative session, highlighting the critical importance of intellectual

property protection and effective IP management strategies for start-ups and emerging entrepreneurs.

The Department of Information Technology extend sincere gratitude to Dr. Bhatt for sharing his expertise and to all the participants for their active engagement, making the event a resounding success.



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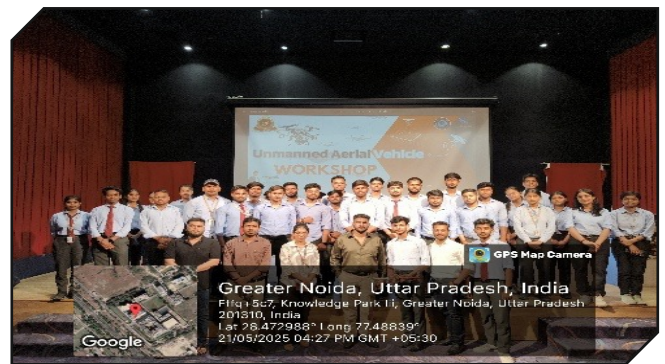
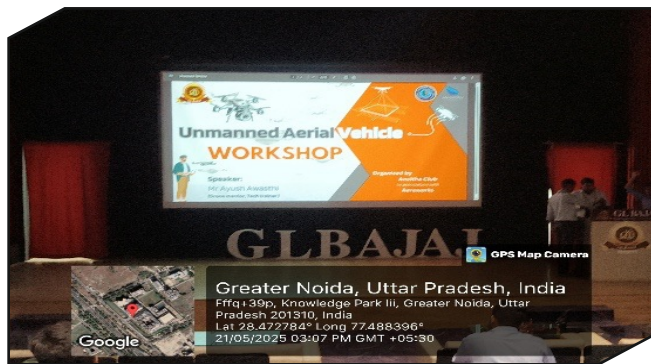
EVENT NAME: WORKSHOP ON UAV (UNMANNED AERIAL VEHICLE)

Date: 21 May, 2025

Deptt.: Electronics and Communication

The Anvitha Club of the Department of Electronics and Communication Engineering (ECE), GL Bajaj Institute of Technology and Management, successfully organized a workshop on Unmanned Aerial Vehicles (UAVs) on 21st May 2025 at the SBG Hall. The workshop aimed to provide students with a practical understanding of UAV technology, its current applications, and its future potential in various sectors. The session was led by Mr. Ayush Awasthi from Aeroworks Technologies, an expert in UAV systems. He was accompanied by Mr. Arpit Goel, the Co-founder of Aeroworks, who added valuable insights into the entrepreneurial and technological aspects of drone development. The two-hour workshop, held from 3:00 PM to 5:00 PM, was highly engaging and informative. The speakers

covered various dimensions of UAV technology, including drone architecture, navigation systems, use-cases in industry and defence, and emerging trends in autonomous aerial systems. The interactive nature of the session encouraged active participation from the attendees. The event was coordinated by Dr. Smriti Sachan and Dr. Rishabh Yadav, faculty members from the ECE Department, who played a pivotal role in ensuring the success of the event. As a token of appreciation, a felicitation ceremony was held wherein saplings and mementos were presented to the esteemed guests by Dr. Dinesh Kumar Singh and Dr. Shilpa Choudhary. This gesture symbolized growth, sustainability, and gratitude.



4

EVENT NAME: INDUSTRIAL VISIT

Date: 6 June, 2025

Deptt.: CSE

On 6th June 2025, the BIS Club of the CSE Department organized an industrial visit to GSC Glass Private Limited, Ecotech-2, Greater Noida, with the participation of 30 students and 2 faculty members – Mr. Ashwani Kumar and Ms. Pragya. Sponsored by the Bureau of Indian Standards (BIS), the event started with an address by Mr. Vishvendra Tanwar, Representative, BIS Noida

Branch Office. The visit provided valuable insights into advanced glass manufacturing processes and demonstrated the integration of IoT and data analytics in industrial systems. It emphasized the significance of Innovation, Entrepreneurship, and modern manufacturing practices in the glass industry.



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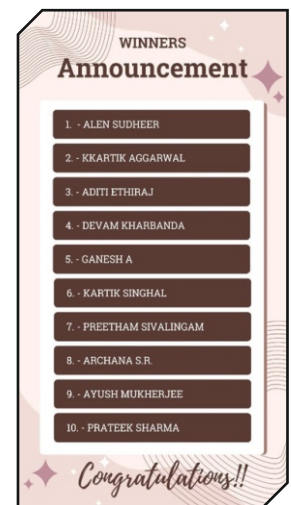
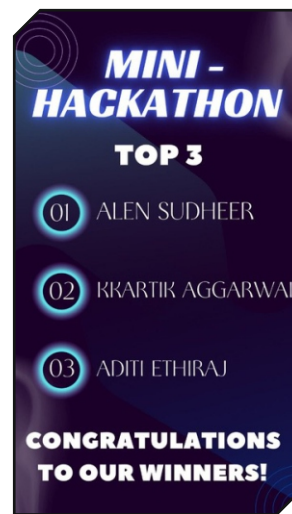
EVENT NAME: AI AGENTS WORKSHOPCLUB: 2-WEEK ONLINE & FREE CERTIFICATION COURSE ON AGENTIC AI

Date: 14 June to 28 June, 2025

Deptt. : CSE(DS)

The AI Agents Workshop was a national-level, two-week online certification program focused on the cutting-edge domain of Agentic Artificial Intelligence. Held from June 14 to June 28, 2025, the workshop was organized by K.A.M.A.L.A (Kapidhwaj Association of Modern Logic, Automation, Learning and Career Advancement) in collaboration with the Yuktikula Club – GLBITM. It was powered by Microsoft Learn, which also served as the official certification partner, and supported by the Microsoft Learn Student Community and GitHub Student Chapter of Amity University. The program was streamed live on YouTube and facilitated via active WhatsApp and Discord communities. Participants explored the fundamentals and applications of AI Agents—autonomous systems powered by large language models (LLMs) capable of reasoning, decision-making, and tool use. Sessions covered technical areas such as LangChain, Retrieval-Augmented Generation (RAG), memory persistence, tool orchestration, and front end deployment with Stream lit and Gradio Hands-on labs, quizzes, daily challenges, and a structured point-based evaluation system kept participants engaged. A highlight was the Mini-Hackathon on June 22, where participants built functional AI agent workflows using platforms like n8n. Finalists showcased their projects on Discord, with winners recognized and featured on the Kapidhwaj Innovations website. Participants received Microsoft Learn badges, Kapidhwaj co-branded certificates, internship opportunities, and

merchandise rewards. The closing day featured a bonus career session by Vaibhav Aggarwal, Software Engineer at Google, who shared valuable insights on cracking technical interviews and succeeding in global tech roles. This workshop not only provided a strong foundation in Agentic AI but also connected learners with industry experts, real-world tools, and meaningful career pathways—delivering comprehensive and inclusive upskilling experience at zero cost. Powered by Kapidhwaj Innovations, K.A.M.A.L.A reaffirmed its mission to bridge campus learning with real-world innovation.



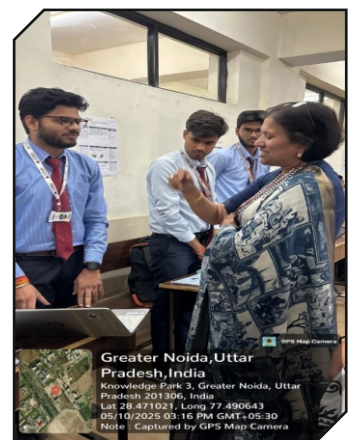
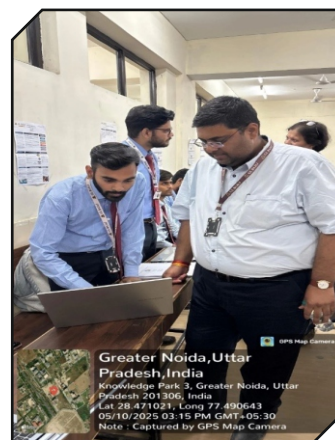
6

EVENT NAME: OPEN HOUSE PROJECT EXHIBITION

Date: 10 May, 2025

Deptt: MCA

On 10th May 2025, the Department of MCA at GL Bajaj Institute of Technology and Management proudly organized an Open House showcasing the innovative and impactful projects of final year students. The event provided a dynamic platform for students to present their technical creativity, research, and problem-solving abilities through a wide array of software and application-based solutions. Director, Deans, Hod's and Faculty members engaged with the presenters, offering valuable feedback and appreciation. The Open House not only celebrated the hard work and dedication of the graduating batch but also fostered a culture of innovation, collaboration, and practical learning within the department. Special thanks to Director Dr. (Prof.) Preeti Bajaj Ma'am for sparing her valuable time to evaluate projects, guide and motivate students.





EVENT NAME: FUSION FEST 2K25

Event Date: 14 May, 2025

Deptt: MCA

Fusion Fest 2K25 was organized on 14 May 2025 by the DreamSpark Aura Club, Department of MCA, GL Bajaj Institute of Technology and Management, Greater Noida to provide students with an interactive and inclusive platform to showcase their creativity, talent, and technical acumen. The primary aim was to foster a holistic campus experience by blending cultural, technical, and intellectual events. The fest promoted active participation, collaboration, and a strong community spirit among students. Over 50 students from multiple departments enthusiastically participated in the fest. A healthy mix of individual and team-based events ensured diverse involvement and inclusive representation from all sections of the student body.

Highlights of FusionFest 2K25

RYTHMCLASH (DANCE & SINGING) :- Solo Dance, Group Dance, Solo Singing, and Group Singing competitions were the heart of the cultural segment.

WEBWIZARD (AD MAD AND WEBSITE DESIGN COMPETITION):- This event offered a hands-on platform for students to showcase their web development and design skills.

CHECKMATE CLASH (CHESS COMPETITION):- A true test of strategy, patience, and intellect.

WORDWEAVE (BLOG WRITING):- Participants penned down thoughts on a variety of themes from technology and innovation to personal experiences

WINNERS AND RECOGNITIONS:- Winners and runner-ups across all categories were awarded certificates and trophies. Every participant was commended for their effort, innovation, and team spirit, which contributed to the vibrant atmosphere of the fest.



INDUSTRY VISIT TO MOTHER DAIRY

Event Date: 28 & 29 May, 2025

Deptt: MBA

The industrial visit to the Mother Dairy Plant, New Delhi aimed to provide the students of the Department of Management Studies with an in-depth understanding of the operational processes in the dairy industry. The visit helped students learn about the processing, packaging, and distribution of dairy products, as well as the company's emphasis on quality, hygiene, and sustainability practices. This visit was conducted on 28th and 29th of May 2025.

Mother Dairy, established in 1974, has nearly 50 years of experience in the Indian dairy industry and is a leading brand known for quality and trust. It plays a significant role in supplying milk and milk products across the country, meeting the nutritional needs of millions of consumers. The visit began with an introduction to Mother Dairy's history, product range, and market reputation. Students observed the automated production process—including milk reception, pasteurisation, homogenization, and packaging.

Students have learned the importance of hygiene and quality in food processing, automated systems and cold chain logistics in the dairy sector and sustainable practices and environmental responsibility.



An engaging visit by students of the Department of Management Studies to learn about the industrial processes at ACC Concrete, a division of Adani Cement. The company specializes in the production and distribution of ready-mix concrete and other construction materials, playing a crucial role in infrastructure development across India.

Introduction Session by Mr. Himanshu Gupta, HR Head (North Zone), who welcomed the student delegation and gave an overview of ACC's core values, employee development programs, and commitment to quality and sustainability. Guided Plant Tour led by Mr. Naresh, Operations Manager, who provided a detailed technical explanation of the entire production line—from raw material handling, crushing, blending, and heating in kilns, to grinding and final concrete dispatch. Mr. Raghvendra, Quality Manager, who explained the quality control measures and testing processes that ensure cement consistency and strength. Live demonstration of Ready-Mix Concrete (RMC) batching and mixing process, along with real-time quality monitoring systems and automated control rooms. Safety Rules Team presentation on plant safety standards including mandatory PPE usage, hazard identification procedures, emergency response systems, and compliance with environmental regulations. Insight into green manufacturing practices, including waste heat recovery, water recycling, and the use of alternative fuels and raw materials to minimize the plant's environmental footprint.

Students have learned the importance of automation and real-time monitoring in ensuring consistency and efficiency in production. Role of sustainability initiatives in reducing the environmental impact of heavy industry. Exposure to industrial safety protocols, PPE enforcement, and emergency preparedness. Understanding of supply chain and dispatch operations critical to large-scale infrastructure development.

The visit to ACC Limited was highly educational and insightful. It offered students a rare opportunity to observe large-scale cement manufacturing in action, interact with industry experts, and gain practical knowledge that complements their academic curriculum. Such industry-academia initiatives are essential for shaping future-ready professionals.



The Department of Electronics and Communication organised an industrial visit to Vivo Mobile India Pvt. Ltd. located at RC-458, Deepak Vihar, Khora Colony Near Vishal Mega Mart, Noida, Uttar Pradesh 201309. This was a one-day visit intended to provide an exposure to students

During the industrial visit to Vivo Mobile India Pvt Ltd, students were given a guided tour through the company's state-of-the-art manufacturing and assembly facilities, providing a comprehensive view of the mobile phone production lifecycle—from PCB fabrication to final quality assurance. They gained in-depth exposure to modern communication technologies, including 4G/5G testing protocols, RF calibration, signal processing workflows, and embedded system testing. The visit also featured live demonstrations of advanced quality control systems, such as environmental testing (temperature/humidity), electromagnetic compatibility (EMC) testing, and mechanical drop-test mechanisms. An interactive session with Vivo's engineers offered valuable insights into mobile hardware architecture, software-hardware integration, and key performance indicators, while also highlighting current industry trends. The visit concluded with a Q&A session that explored topics like supply chain logistics, product lifecycle management, and regulatory and certification processes—giving students a holistic understanding of the electronics and communication industry in a real-world context.



11

MASTERING THE CRAFT: HOW TO WRITE AND PUBLISH HIGH-QUALITY RESEARCH PAPERS

Date: 26 June, 2025

Deptt. : R&D, GLBITM

The Department of Research & Development at GL Bajaj Institute of Technology & Management successfully organized an enlightening session titled "How to Write and Publish High-Quality Research Papers." This highly insightful event provided faculty members with a robust platform to explore effective strategies for structuring impactful research papers, identifying reputed journals, and navigating the peer-review process with confidence. Through engaging discussions and practical guidance, participants delved into the nuances of academic writing and publishing, taking significant steps toward elevating the research standards at GL Bajaj in a collaborative and inspiring environment. The event was held under the guidance and with the support of Dr. Mayank Singh, Dean-Research & Development Department, GLBITM. During the session, the speaker Dr. Ambuj Saxena provided faculty members with highly practical strategies for writing high-quality research papers and achieving success in the peer-review process.

Faculty members from various departments actively participated, strengthening the spirit of collaboration and fostering a vibrant research culture across the campus. By the end of the session, faculty members left equipped with action able strategies to advance their research publication journey and contribute meaningfully to the institute's scholarly growth.



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BEYOND THE SIMILARITY SCORE: A DEEP DIVE INTO TURNITIN

Date: 2 July, 2025

Deptt: R&D, GLBITM

The Department of Research & Development at GL Bajaj successfully organized a thought-provoking session on "Beyond the Similarity Score: A Deep Dive into Turnitin". This insightful session was led by Mr. Gautam Raval (Customer Success Manager, South Asia) and Ms. Manisha Shivpuri (Account Manager, South Asia) from Turnitin, who shared valuable perspectives on how Turnitin truly works beyond just matching text- highlighting its role in promoting academic integrity, empowering scholars to self-check, enhancing instructor confidence, and supporting the responsible use of technology.

The session began with an insightful introduction to the concept of academic integrity and why it is essential for meaningful research. The speakers Mr. Gautam Raval and Ms. Manisha Shivpuri from Turnitin demonstrated how Turnitin works beyond just generating a similarity score, showcasing its advanced features that help uphold originality. The session also highlighted how Turnitin increases instructor confidence by providing a transparent and structured way to address plagiarism concerns



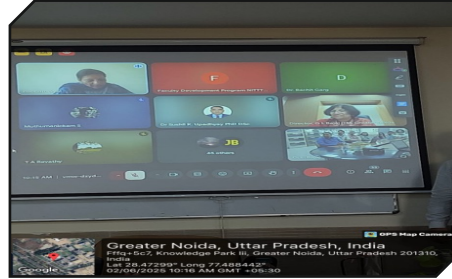
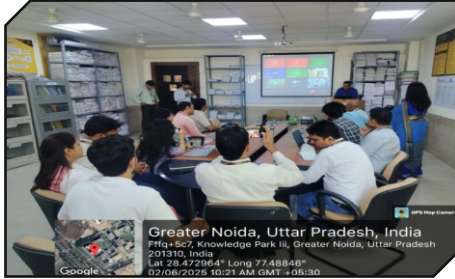
13

GREEN TECHNOLOGIES FOR ENVIRONMENT SUSTAINABILITY

Date: 2 to 6 June, 2025

Deptt. : IT

The Department of Information Technology has organised five days faculty development program on "Green Technologies for Environment Sustainability" from 2.6.25 to 6.6.25 in collaboration with NITTTR. The coordinator of FDP Prof.(Dr.) Poonam Syal delivered the inaugural keynote address and welcomed Respected director, GLBITM Prof.(Dr.) Preeti Bajaj and also addressed all participants. The torchbearer of FDP, Prof.(Dr.) Preeti Bajaj addressed the faculty members by welcoming them to the five days FDP and shared her views on this event. She explained the importance and objectives of organising this FDP. The event was attended by esteemed guests, faculty members, and participants. Around 35 faculty members from GLBITM and various colleges have actively participated and gained useful information from all the sessions. HOD-IT shared his views with faculty participants. He briefed the participants about the subject chosen for the FDP and highlighted the reason and importance. He stressed on three things for learning i.e. Awareness, Management & Technology. The participants were able to understand the need for adopting green technology and sustainable engineering practices.



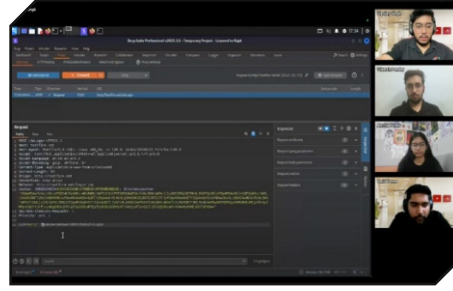
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BEYOND THE CODE – DIVE INTO CYBERSECURITY

Date: 24 May, 2025

Deptt: CSE

"The Beyond the Code" workshop delivered a power-packed learning experience focused on the essentials of cybersecurity. Hosted by GDG On Campus GL Bajaj, this session was designed to provide participants with foundational and practical knowledge to explore the world of ethical hacking, bug hunting, and vulnerability discovery. Topics Covered: Burp Suite and its real-time applications, SQL Injection techniques, and prevention. Fundamentals of bug bounty programs: Cybersecurity essentials and career pathways.



15

AI FOR INDUSTRY 4.0 (FDP)

Date: 04 - 08 August 2025

Deptt. : CSE

The Department of Computer Science and Engineering, G.L. Bajaj Institute of Technology and Management, Greater Noida, successfully organized an AICTE-recognized Faculty Development Programme (FDP) on AI for Industry 4.0 in collaboration with NITTTR, Chandigarh. The FDP was conducted from 04th August 2025 to 08th August 2025 and witnessed active participation from faculty members, enhancing their knowledge in emerging technologies.

Participants engaged actively in the lectures and hands-on sessions. Resource persons shared practical insights aligned with the day's topic. Interactive Q&A sessions further enriched the learning experience. It was based on AI and Predictive Analytics for Smart Manufacturing: Introduction & Case Studies.



16

EXPERT TALK ON “VALUE PROPOSITION FIT” AND “BUSINESS FIT”

Date: 25 Aug, 2025

Deptt. : CSE

The Institution's Innovation Council (IIC), in collaboration with the Department of CSE, organized an expert talk on “Value Proposition Fit” and “Business Fit” by Mr. Abhinav Chauhan, an expert in business strategy and innovation. The session emphasized aligning business offerings with market needs, sustaining startups through customer-centric strategies, and nurturing an entrepreneurial mindset. Students gained valuable strategic insights, making the session highly engaging and impactful.



17

INAUGURATES CENTRE OF EXCELLENCE FOR AR/VR

Date: 30 Aug, 2025

Deptt: CSE

GL Bajaj Institute of Technology and Management inaugurated its Centre of Excellence for Augmented Reality and Virtual Reality (AR/VR), aimed at fostering innovation, research, and strong industry-academia collaboration. With cutting-edge infrastructure and immersive technology tools, the Centre will provide students with hands-on experience, interdisciplinary learning opportunities, and exposure to real-world applications. Supported by leading industry partners, this initiative is set to empower students as future-ready innovators, driving digital transformation across domains like education, healthcare, design, and cultural heritage.



18

WORKSHOP ON “IOT AND ITS APPLICATIONS” AS PART OF FACULTY DEVELOPMENT PROGRAMME

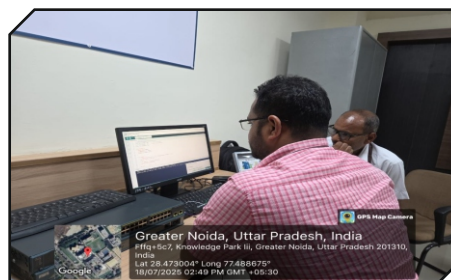
Date: 18 July, 2025

Deptt. : ECE

In view of the growing demand for Industry 4.0-related technological developments, a workshop was organised by the Department of Electronics and Communication Engineering to create awareness and provide hands-on experience in designing real-time IoT-based systems.

The primary objective of the workshop was to introduce faculty to the fundamentals of IoT and its real-world applications. The session aimed to enhance understanding of IoT architecture, components, protocols, and use cases in smart environments.

The IoT Applications Workshop successfully met its objectives, equipping attendees with foundational and applied knowledge of the Internet of Things. It served as a stepping stone for faculty to delve deeper into smart technologies and foster innovation in their academic and professional pursuits.



19

EXPERT TALK ON “VALUE PROPOSITION FIT” AND “BUSINESS FIT

Date: 1 Aug, 2025

Deptt. : GLBCRI / IIC

The highlight of the gathering was an exclusive discussion on Equity and Cap Tables led by seasoned investors Mr. Rajesh Ranjan (O2 Angels Network) and Mr. Maneesh Srivastava (Alphavalue Venture), who shared practical insights on startup structuring, investor expectations, and common fundraising pitfalls. The session provided immense value to early and mid-stage entrepreneurs seeking clarity on fundraising strategies and long-term equity planning. The event was not limited to formal discussions. Founders enjoyed a relaxed networking lunch where they exchanged stories, explored collaborations, and built relationships with fellow innovators and ecosystem supporters. The environment fostered genuine connections and trust, paving the way for collaborative growth.



20

INTRA-INSTITUTIONAL START-UP COMPETITION

Date: 23 Aug, 2025

Deptt: GLBCRI

The Udyami Cell of GL Bajaj Institute of Technology and Management (GLBITM), in collaboration with the GL Bajaj Center for Research & Incubation (GLBCRI), successfully organized the Intra-Institutional Start-up Competition. The event was designed to promote a culture of innovation and entrepreneurship on campus while providing student innovators with a platform to showcase their creative startup ideas, receive valuable feedback, and explore opportunities for mentorship and future growth.



21

ANVITHA CLUB ORIENTATION

Date: 27 August, 2025

Deptt. : ECE

The introductory session for new members of the Anvitha Club, part of the ECE department, was successfully held on August 27, 2025. This informative and engaging session aimed to familiarize newcomers with the club's objectives while facilitating interaction among members.

To conclude the event, a fun activity session was organized, promoting interaction between seniors and juniors. This engaging activity not only helped break the ice but also strengthened bonds within the club, creating a supportive community atmosphere.

The introductory session successfully laid a strong foundation for new members and emphasized the club's core values of teamwork, discipline, and innovation. As we move forward, we anticipate a productive year filled with engaging activities and initiatives that will enrich the Anvitha Club experience for all members. Together, we are excited to explore new opportunities and foster a culture of collaboration and creativity.



22

DEMONSTRATION & HANDS-ON SESSION OF CNC CUTTER

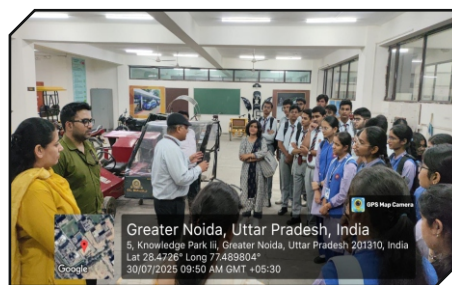
Date: 30 July, 2025

Deptt. : GLBCRI / IIC

The AICTE IDEA Lab at G. L. Bajaj Institute of Technology & Management, Greater Noida, organized a Demonstration and Hands-on Session on CNC Cutter for the visiting students and faculty members of Dayawati Modi Academy, Meerut on 30th July 2025. This initiative aimed to provide exposure to digital fabrication tools and foster interest in emerging technologies among school students. A total number of 30 students along with 03 faculty members participated in the event

In the end, the session successfully created awareness among school students about advanced prototyping and digital manufacturing tools. It fostered hands-on learning and stimulated curiosity about engineering and innovation. The interaction also served to strengthen institutional outreach and promote STEM education at the school level.

The event was a successful demonstration of GLBITM's commitment to experiential learning and community engagement. The AICTE IDEA Lab continues to serve as a hub for innovation, bridging the gap between theoretical knowledge and practical implementation



23

INNOVATIVE SKILLS FOR INDUSTRY SUCCESS ALUMNI INTERACTION

Date: 23 Aug, 2025

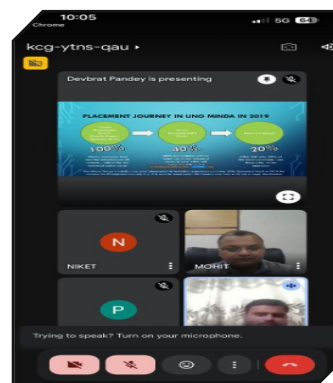
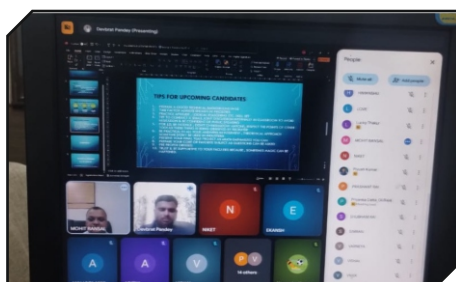
Deptt: EEE

The Department of Electrical and Electronics Engineering (EEE) organized an Alumni Interaction Session on 23rd August 2025, titled "Innovative Skills for Industry Success." The session was conducted to mentor students by highlighting industry expectations, essential skills, and innovative approaches for professional growth and career readiness.

The event began with a warm welcome address by Dr. Nagendra Kumar, who emphasized the significance of alumni interactions in bridging academic learning and industrial practices. Mr. Devbrat Pandey, a proficient alumnus from the 2014–2019 batch and currently serving as Assistant Manager at AVL, Gurugram, shared his professional journey and key strategies for excelling in placements and workplace environments. His session covered problem-solving techniques, communication development, and fostering innovative thinking for industry success.

The session concluded with a heartfelt Vote of Thanks by Dr. Mohit Bansal, Head of Department (EEE), appreciating the speaker for his valuable insights and encouraging students to apply the shared learnings for career advancement.

The session proved highly beneficial, boosting student's confidence, enhancing their technical and soft skills, and motivating them to adopt innovative approaches toward career success. The department plans to host more such sessions to strengthen industry-academia linkage and improve placement outcomes



24

MENTORING SESSION ON “LEAN START-UP & MINIMUM VIABLE PRODUCT/BUSINESS”

Date: 25 Aug, 2025

Deptt. : EEE

A mentoring session on the topic “Lean Start-up & Minimum Viable Product/Business” was successfully conducted on 25th August 2025, organized by the EEE Department, GL Bajaj Institute of Technology and Management, Greater Noida.. The session was aimed at introducing students and budding entrepreneurs to the Lean Start-up methodology—a modern approach that focuses on validating business ideas through continuous feedback and rapid iteration. The goal was to help participants understand how to minimize risk and resources while increasing the chances of start-up success through a structured and customer-focused approach.

The session was delivered by Ms. Deepti Dohare, Convener, IIC (Institution's Innovation Council) and Innovation Ambassador. Drawing on her expertise in innovation and entrepreneurship, she explained key concepts such as the Build-Measure-Learn cycle and the role of a Minimum Viable Product (MVP) in early-stage start-ups. She emphasized the importance of testing business assumptions with real users before scaling, using real-world examples to illustrate how successful ventures often begin with simple MVPs designed to collect user feedback. Ms. Deepti Dohare also introduced participants to various types of MVPs and discussed how early feedback can guide whether to pivot or continue with a business idea. An interactive Q&A session followed, during which students shared their start-up ideas.

The session was well-received and proved highly beneficial for all attendees. The session not only enhanced their understanding of Lean Start-up principles but also encouraged them to take actionable steps toward building innovative, customer-driven businesses.



25

DATA ANALYTICS BOOTCAMP: A STEP TOWARDS FUTURE SKILLS

Date: 12 Sept, 2025

Deptt. : CSE DS

The YuktiKula Club of the Department of Computer Science & Engineering (Data Science) at GL Bajaj Institute of Technology & Management, under the Centre of Excellence (Data Visualization), in collaboration with EDUNET Foundation, successfully organized the Data Analytics Bootcamp on 12th September 2025. The session began with a warm welcome to the speaker, Ms. Drishti, along with dignitaries from EDUNET Foundation, the HoD Dr. Harikesh Singh, faculty coordinators, and students. The program opened with an insightful overview of the importance and benefits of Data and Data Analytics, followed by student registrations for IBM Certifications through the EDUNET platform. Ms. Drishti delivered an engaging talk introducing key terms of data analytics, its role in business decision-making, and practical applications through real-world examples and interactive discussions. The session concluded with a felicitation ceremony, where the EDUNET Foundation members were honored by the HoD for their valuable contributions. Students from CSDS, CSE-AI, and AIML departments actively participated in the event. The audience appreciated the smooth coordination, informative content, and impactful learning experience.



26

INDUCTION PROGRAM ON EMOTIONAL WELLNESS – YOUR DOST

Date: 12 Sept 2025

Deptt: CSE DS

The Induction Program on Emotional Wellness “Your Dost” is organised on 12th September 2025 under the banner of the Yuktikula Club. The session was conducted by Ms. Gunjan Parag Patel, a professional counsellor and passionate mental health advocate from Your Dost, focused on key themes such as emotional wellness, stress management, and balancing academic challenges with personal wellbeing. It highlighted the significance of self-reflection, time management, and coping strategies in handling pressure and overcoming hesitation or stigma related to seeking professional support. Ms. Patel's engaging talk, enriched with real-life experiences, motivated students to express themselves openly, listen empathetically, and cultivate a culture of mutual support within the campus community. The interactive nature of the session allowed students to discuss challenges such as academic stress, anxiety, and fear of failure, making it a highly relatable and encouraging platform, the event witnessed enthusiastic involvement and received highly positive feedback from the audience. The induction program proved to be a motivating platform, equipping students with practical strategies for mental wellbeing and reinforcing the importance of emotional health in both academic and personal journeys.



27

INTERNATIONAL CONFERENCE ON INTELLIGENT SYSTEMS FOR ENGINEERING & SUSTAINABILITY (CISES2025)

Date: 11-13 Aug 2025

Deptt: MCA

The Department of Master of Computer Applications, G. L. Bajaj Institute of Technology & Management, Greater Noida, successfully organized the International Conference on Intelligent Systems for Engineering and Sustainability (CISES 2025) from 11th to 13th August 2025. The conference served as a global platform for academicians, researchers, industry experts, and students to come together and discuss advancements in artificial intelligence, computational intelligence, and sustainable technologies. This year, CISES 2025 received an overwhelming response with 271 registered papers, out of which 125 were presented offline at the institute venue and 146 were presented online, enabling participation from both national and international scholars. This impressive participation reflected the global outreach and relevance of the conference theme.

CISES 2025 proved to be a successful event that brought together eminent experts, researchers, and students from India and abroad. The conference not only showcased high-quality research but also facilitated global collaboration, constructive feedback, and thought-provoking discussions on the future of AI and sustainable engineering. The active participation of distinguished dignitaries, especially Dr. Leandro L. Minku from the University of Birmingham, UK, alongside national experts from IITs, IIITs, and other premier institutions, elevated the stature of the event. The Department of MCA at GLBITM expresses its gratitude to all speakers, authors, volunteers, and participants for their contributions and looks forward to hosting an even larger and more impactful CISES 2026.



EVENT NAME: OPEN HOUSE PROJECT EXHIBITION*Date: 08 May, 2025**Deptt: CS&IT*

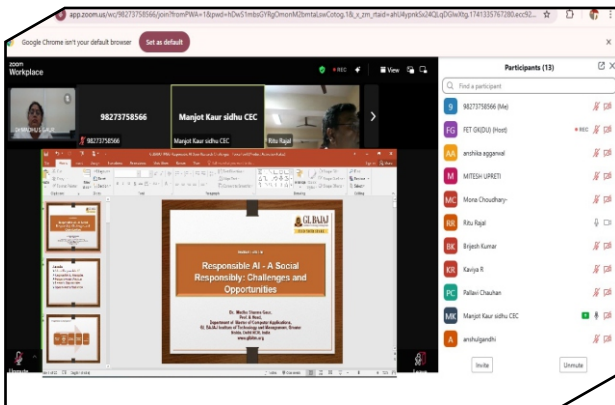
The Department of CS&IT organized an Open House Project Exhibition in the presence of higher authorities like Director, Dean (R&D) and internal project committee, providing a dynamic platform for students to showcase their innovative projects and technical skills. The event featured a diverse range of projects developed as part of academic coursework, industry collaborations, and individual research initiatives. Students enthusiastically demonstrated their prototypes and solutions across domains such as artificial intelligence, cybersecurity, IoT, cloud computing, and enterprise applications. The exhibition not only highlighted the creative and problem-solving abilities of the students but also fostered peer learning, interdisciplinary collaboration, and industry-academic interaction.



FACULTY ACHIEVEMENTS

INVITED LECTURE: RESPONSIBLE AI- A SOCIO-TECHNICAL CHALLENGES AND OPPORTUNITIES BY DR. MADHU SHARMA GAUR

Dr. Madhu Sharma Gaur has delivered an Invited Lecture on Responsible AI- A Socio-Technical Challenges and Opportunities at Gurukul Kangri (Deemed to be University), Haridwar, on 8 March 2025. As in Current scenario AI interventions are rapidly growing in every field for process automation and intelligent solution development. On the other hand, day by day privacy breaches, security threats and attacks are also increasing exponentially, thus It's an urgent need of an hour to be aware about Responsible AI concepts, trends and practices. During Invited talk We explored growing challenges and Responsible AI opportunities for community researchers.



ACHIEVEMENT TITLE: CERTIFIED MENTOR – JAVA FULL STACK (WIPRO TALENTNEXT PROGRAM) BY PIYUSH KUSHWAHA

Piyush Kushwaha achieved the TalentNext Digital Skills Readiness Program certification by Wipro for successfully completing the certification assessment. This recognition designates him as a mentor for project-based learning (PBL) in Java Full Stack, acknowledging his expertise in the field. The certificate, signed by Thirunavukkarasu Palaniappan, Head of TalentNext at Wipro Limited, represents a significant achievement in Piyush's professional journey. Through this program, Piyush has demonstrated his dedication to advancing digital skills and will play a key role in mentoring and shaping the next generation of developers.



KNOWLEDGE TRANSFER SESSION BY DR. BIRENDRA KR. SARASWAT

Dr. Birendra Kr. Saraswat from the Department of Information Technology delivered a Knowledge Transfer (KT) session on " LSTM Networks for Time-Series Prediction of Breast Cancer Progression," exploring the benefits and future scope of this innovative approach. Dr. Saraswat introduced the concept of LSTM networks are designed to work around missing data points, which makes them even more suited for medical data. During the session he discussed the breast cancer remains one of the deadliest cancers among women, and accurate prediction of breast cancer progression is a very important issue in treatment planning. Recurrent Neural Networks can reuse the results of their previous computations, making them very effective for time-series prediction task.

Dr. Saraswat discussed about the LSTMs, as a special type of RNNs, were designed exactly with that in mind. They can learn patterns and remember them for a longer duration, which makes it good for analyzing time series data.



FACULTY ACHIEVEMENTS

KNOWLEDGE TRANSFER SESSION BY Ms. BHUMIKA NIRMOHI

Ms. Bhumika Nirmohi from the Department of CSE-AI delivered a Knowledge Transfer (KT) presentation titled: “Enhancing Business safety and security Through Next Gen Fraud by generating OTP” and “Comparative Analysis of Deep-Fake Detection Methods”.



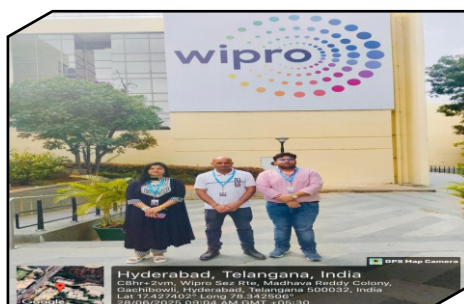
GUEST LECTURE ON AI AND CYBERSECURITY IN EDUCATION

Dr. Bishwajeet Pandey has delivered an Guest Lecture on AI and Cybersecurity in Education “Shaping the Future of Education: The Synergy of AI and Cybersecurity for Safe and Innovative Learning” at Universitas Teknologi Bandung (UTB), Universitas YARSI , on June 26, 2025. The event brought together leading academicians to explore the intersection of Artificial Intelligence and Cybersecurity in shaping the future of education. They shared deep insights into how Artificial Intelligence and Cybersecurity can transform the future of education by ensuring safe, adaptive, and intelligent learning environments. They highlighted real-world applications, ethical challenges, and the role of global collaboration in digital learning.



FACULTY MEMBERS SUCCESSFULLY COMPLETE WIPRO COE ORACLE INTEGRATED COURSE

The Department of Information Technology proudly congratulates Dr. Neeru Singh, Mr. Satyendra Vyas, and Mr. Shivam Agrawal for completing the Wipro Centre of Excellence (CoE) Oracle Integrated Course, aimed at enhancing skills in Oracle database and enterprise technologies. The course was conducted in two phases. By completing this program, the faculty members are now equipped with industry-aligned expertise, ready to contribute further to academic excellence and mentor students for careers as Oracle Developer Specialists.



FACULTY ACHIEVEMENTS

KNOWLEDGE TRANSFER SESSION BY DR. PANKAJ KUMAR

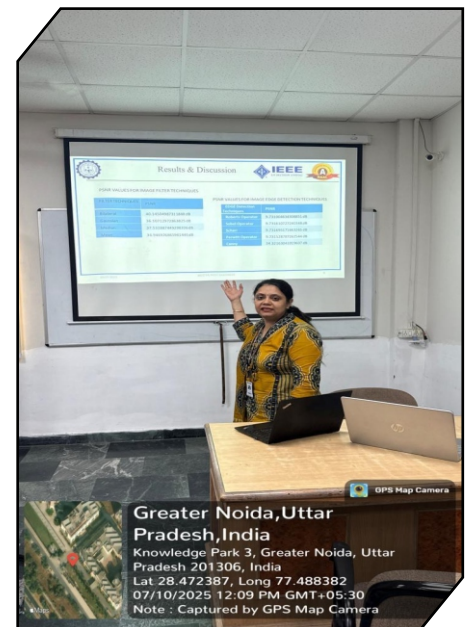


Dr. Pankaj Kumar from the department of Computer Science & Engineering delivered a Knowledge Transfer (KT) session on titled "Hand Motion Sign Language Detection Using Convolutional Neural Network (CNN) and YOLOv5 Object Detection Framework".

The Session focuses on developing a real-time sign language detection model to enhance communication for individuals with hearing disabilities. Sign language, combining hand gestures, facial expressions, and body movements, serves as a vital tool for those with hearing challenges. The proposed system utilizes webcams or built-in device cameras to capture and recognize hand gestures using machine learning algorithms trained on labeled sign language datasets. The model has shown high accuracy under well-lit and controlled conditions and allows users to customize gestures to meet their individual needs. However, the system currently faces challenges in low-light environments and unpredictable backgrounds, which impact its accuracy. Future improvements include expanding the gesture dataset with varied poses and viewpoints to strengthen the algorithm's learning capacity and robustness. Ongoing exploration of advanced machine learning techniques aims to enhance the system's adaptability to real-world environmental variations. Ultimately, this research aspires to create a reliable and inclusive communication tool that bridges the gap between sign language users and the broader community.

KNOWLEDGE TRANSFER SESSION BY DR. VRINDA SACHDEVA

Dr. Vrinda Sachdeva from the Department of Computer Science and Engineering delivered a Knowledge Transfer (KT) session on "Advanced Techniques for Early Prediction from CT Scans," focusing on the importance of medical image preprocessing in enhancing diagnostic accuracy, particularly for lung cancer. Dr. Sachdeva introduced various challenges associated with early-stage detection of cancer and emphasized the significance of image quality improvement through advanced preprocessing methods. During the session, she explained the complete pipeline of preprocessing techniques applied to CT scan images, including image acquisition, resizing, filtering, edge detection, enhancement, and cropping. Using Python and OpenCV as primary tools, Dr. Sachdeva demonstrated how filters such as bilateral, median, and Gaussian, along with edge detection operators like Canny and Sobel, can significantly improve image clarity. The benefits of these techniques were evaluated using PSNR (Peak Signal-to-Noise Ratio) values, identifying bilateral filtering, Canny edge detection, and the filter2D function as the most effective methods. The session also addressed the broader applications of these techniques in medical diagnostics and encouraged the use of automated tools for accurate disease prediction. Participants gained valuable insights into how preprocessing impacts deep learning performance and diagnostic reliability. The session was interactive and engaging, sparking discussions on research opportunities. Overall, it provided a deep technical understanding of image preprocessing in medical diagnostics and its role in improving early cancer detection outcomes.



FACULTY ACHIEVEMENTS

KNOWLEDGE TRANSFER SESSION BY DR. PAYAL GARG



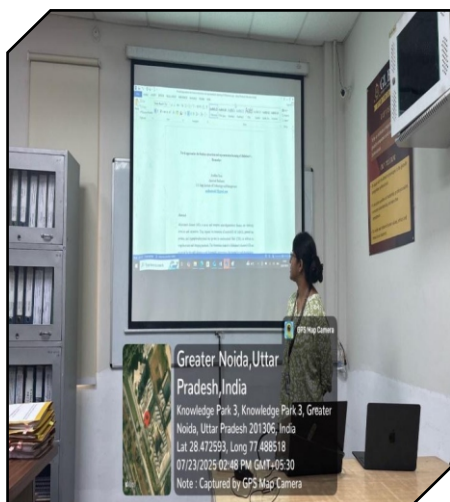
Dr. Payal Garg from the Department of Computer Science & Engineering delivered a Knowledge Transfer (KT) session on "Sentiment Analysis of Movie Reviews using Machine Learning," highlighting the role of NLP and ML in classifying sentiments. During the session, she explained traditional lexicon-based approaches like Bag of Words and TF-IDF for feature extraction. She further discussed the application of deep learning models, focusing on BERT neural networks for accurate classification. Dr. Payal compared various models on the IMDb 50K dataset, detailing their accuracies, precision, recall, and F1 scores. The session emphasised that the DistilBERT model achieved the highest accuracy of 94.15%, outperforming traditional ML classifiers. The session also covered performance evaluation metrics and loss curves for the models. It encouraged interactive discussion on practical applications of sentiment analysis in recommendation systems and film analytics. Overall, the session was informative, engaging, and provided deeper technical insights into machine learning-based sentiment analysis in NLP.

KNOWLEDGE TRANSFER SESSION BY DR. ARUN KUMAR

Dr. Arun Kumar from the Department of Computer Science & Engineering conducted a Knowledge Transfer (KT) Session on the topic "Implementation of Emotion-Based Multifaceted Recommendation System." During the session, he explained an intelligent recommendation system that detects a user's emotional state by analyzing facial expressions and hand gestures. Based on the identified mood, the system generates a personalized playlist of songs, further refined by the user's preferred singer and language of choice. The session offered technical insights into how real-time emotion recognition is achieved from live video frames or static images. The system utilizes previously collected data from various research studies to accurately classify emotional states. While the system is already functional and performs well in real-time conditions, Dr. Kumar acknowledged that there is still significant potential for enhancement and further optimization.



KNOWLEDGE TRANSFER SESSION BY MS. ARADHNA SAINI



Ms. Aradhna Saini from the Department of Computer Science & Engineering conducted a Knowledge Transfer (KT) Session on the topic "Novel approaches for feature extraction and representation learning of Alzheimer's Biomarker." During the session, she explained an intelligent recommendation system that detects a user's emotional state by analyzing facial expressions and hand gestures. Based on the identified mood, the system generates a personalized playlist of songs, further refined by the user's preferred singer and language of choice. The session offered technical insights into how machine learning and neuroimaging techniques are being harnessed to identify early biomarkers of Alzheimer's disease. Using advanced algorithms such as convolutional neural networks and ensemble learning models, researchers have been able to extract structural and functional brain patterns from MRI and PET scans.

FACULTY ACHIEVEMENTS

KNOWLEDGE TRANSFER SESSION BY MS. KIRAN SINGH



Ms. Kiran Singh from the Department of Computer Science Engineering delivered a Knowledge Transfer (KT) session on "Hybrid CNN-SVM Framework for Rice Leaf Disease Detection to Promote Sustainable Agriculture," highlighting the role artificial intelligence (AI) in agriculture, specifically for early and accurate detection of rice leaf diseases using a hybrid CNN-SVM model. During the session, she explained the session aimed to disseminate knowledge from the published research paper, focusing on the integration of Artificial Intelligence (AI) in agriculture. Specifically, the paper highlights the use of a hybrid Convolutional Neural Network (CNN) and Support Vector Machine (SVM) model for the early and accurate detection of rice leaf diseases, ultimately supporting sustainable farming practices.

DR. SHASHANK AWASTHI APPRECIATED BY THE IEEE PRESIDENT, USA

It is a matter of immense pride for the Department of Computer Science & Engineering that Dr. Shashank Awasthi has been honoured with special appreciation from the IEEE President, USA during the IEEE India Council Golden Jubilee Celebration held on 23rd July. This recognition highlights not only Dr. Awasthi's dedication to research, teaching, and professional excellence but also reflects the growing contributions of our department at a global platform. Such acknowledgments motivate the entire CSE fraternity to strive for higher goals in innovation, leadership, and knowledge dissemination.



DR. SANSAR SINGH CHAUHAN INVITED AS A GUEST AT ICAAAIML 2025

.Dr. Sansar Singh Chauhan, Head of CSE, GL Bajaj Institute of Technology and Management, was invited as a Distinguished Guest to inaugurate the 5th International Conference on Advances and Applications of Artificial Intelligence and Machine Learning (ICAAAIML-2025) at Sharda University, Greater Noida, on 18th July 2025. His presence added immense value to the conference and brought pride to the institute, highlighting its commitment to research excellence and global collaboration.



FACULTY ACHIEVEMENTS

Ph.D COMPLETED BY DR. PRIYANKA DATTA

EEE Department, GLBITM extends heartfelt congratulations to Ms. PRIYANKA DATTA, Assistant Professor, EEE Department, for completing her Ph.D. Viva Voce at Delhi Technological University (DTU) on 19th August 2025. Her research work, titled "Analysis of Medical Images Using AI Techniques," demonstrates excellence in the application of artificial intelligence in the healthcare domain. This remarkable academic achievement is a demonstration of her dedication and expertise in the field.



RESEARCH GRANT RECEIVED BY DR. REENA SINGH

Dr. Reena Singh, Department of Management Studies, has received a grant of 8 Lakh rupees from ICSSR for her project "The Role of women from Rural India and their traditional practices towards Environmental Sustainability" under the scheme Punyashloka Ahilya Bai Holkar Special Call for Women Led Development.



INDUSTRY-INSTITUTE ENGAGEMENT BY DR. HARIKESH SINGH AT BRIDGE 2025

Dr. Harikesh Singh, head of department (CSE-DS) has participated in the 66th Edition of BRIDGE 2025 – Delhi, a high-impact Industry Institute Interaction event. The prestigious event was organized by ICT Academy, held on 3rd September 2025 at the Oval, Hyatt Regency, Delhi. BRIDGE 2025 brought together leaders from academia and industry to foster collaboration, knowledge exchange, and innovation for the future of education and technology.



DR. AMBUJ SAXENA RECEIVE THE AKTU BEST TEACHER AWARD 2025

G. L. Bajaj Institute of Technology & Management proudly congratulates Dr. Ambuj Saxena on being honored with the AKTU Best Teacher Award 2025 by Dr. A.P.J. Abdul Kalam Technical University, Lucknow. This recognition highlights his dedication to quality teaching, research, and innovation, and reflects the strong academic environment at GLBITM. Dr. Saxena has expressed gratitude to the leadership, colleagues, and students for their constant support and inspiration. His achievement is a matter of pride for the institute and reinforces our commitment to academic excellence.



FACULTY ACHIEVEMENTS

KNOWLEDGE TRANSFER SESSION BY DR. BIRENDRA KR. SARASWAT

Dr. Birendra Kr. Saraswat from Department of CS&IT delivered a Knowledge Transfer (KT) session on "LSTM-Based Predictive Modeling for Personalized Breast Cancer Treatment," exploring the benefits and future scope of this model. Dr. Saraswat introduced the concept of Breast cancer. This disease is treated in a complex manner, needing an individualized approach as each person's cancer responds differently to certain treatments. Consequently, there is a need for more efficient predictive models which can direct decisions on treatment. This model uses data from patients with medical records, such as tumor characteristics, treatments they received, and the outcomes they reached, to predict which treatment would be effective for a specific patient. Predictive modeling has attracted much attention to assist in patient-specific breast cancer treatment using Long Short-Term Memory models.



RECOGNITION AS CO-CONVENER AT THIRD WORLD INNOVATION PATENT AND COPYRIGHT CONCLAVE

Dr. Birendra Kumar Saraswat is recognized for his valuable contribution as Co-Convener in the Third World Innovation Patent and Copyright Conclave on September 4, 2025 organized by IILM University Gurugram and confab 360 degree.



MCA FACULTY VISIT ABROAD

Dr. Bishwajeet Pandey has delivered an Guest Lecture on AI and Cybersecurity in Education "Shaping the Future of Education: The Synergy of AI and Cybersecurity for Safe and Innovative Learning" at Universitas YARSI on 25 June 2025, and at Universitas Teknologi Bandung (UTB), on June 26, 2025. The event brought together leading academicians to explore the intersection of Artificial Intelligence and Cybersecurity in shaping the future of education. He shared deep insights into how Artificial Intelligence and Cybersecurity can transform the future of education by ensuring safe, adaptive, and intelligent learning environments. He highlighted real-world applications, ethical challenges, and the role of global collaboration in digital learning.



FDP/MDP/Training Program/Workshop

SL.No.	Faculty Member	Department	Title	Days	Institution/ Industry
1	Mr. Rohit Sahu	ME	Future trained	5	AICTE & MIC
2	Dr. Ambuj Saxena	ME	Cad Fundamentals	5	Sharda University
3	Dr. Tarun Kumar Gupta	ME	Cad Fundamentals	5	Sharda University
4	Mr. Rohit Sahu	ME	Transforming Research Methodology	6	GLBITM, GREATER NOIDA
5	Mr. Rohit Sahu	ME	SEBI investor Awareness	1	NISM
6	Mr. Rohit Sahu	ME	Future Trend in Automation and Smart mobility	5	VFSTR
7	Dr. Tarun Kumar Gupta	ME	Transforming Research Methodology	6	GLBITM, Greater Noida
8	Dr. Ambuj Saxena	ME	Transforming Research Methodology	6	GLBITM, Greater Noida
9	Mr. Akash Deep	ME	Transforming Research Methodology	6	GLBITM, Greater Noida
10	Mr. Nagendra Kumar Maurya	ME	Transforming Research Methodology	6	GLBITM, Greater Noida
11	Dr. Abhishek Pandey	ME	Transforming Research Methodology	6	GLBITM, Greater Noida
12	Dr. Gunjan Verma	MCA	Advanced AI Development and Research Challenges	5	Rajkiya Engineering College Banda
13	Mr. Tapas Kumar Mishra	IT	Exploring Large Language Models: Innovations, Applications & Future Prospects	7	Sharda University
14	Ms. Ayasha Malik	CSE(DS)	Innovations and Challenges in Building a Secure Digital Future in the AI and Quantum Computing Era	5	Amity University Tashkent
15	Ms. Ayasha Malik	CSE(DS)	Enhancing Academic Research Excellence: A Comprehensive Approach to Research Methodology and AI Integration,	5	Poornima University, Jaipur,

FDP/MDP/Training Program/Workshop

SL.No.	Faculty Member	Department	Title	Days	Institution/ Industry
16	Ms. Neha Yadav	CSE(DS)	Hands on Deep learning : Implementing CNN and LSTM for Real World Problems	05	Tirumala Engineering College, Narasaraopet, Guntur
17	Ms. Rachana Singh Sisodia	CSE(DS)	MultiModal generative AI: Techniques, Applications and	05	IIT Roorkee
18	Dr. Rituparna Sarma	CSE(DS)	Cybersecurity Reimagined: Innovating with Insight and Illumination	01	IEEE Women in Engineering (WiE) India Council
19	Ms. Yasha Istwal	CSE(DS)	Generative AI with LLM	05	STEP-National Institute of Technology
20	Ms. Yasha Istwal	CSE(DS)	Innovations, Sustainability & Leadership	05	IEEE Region 10 Adhoc Committee on Entrepreneurship &
21	Ms. Rachana Singh Sisodia	CSE(DS)	Emerging Technologies Shaping the Future: A 2025 Perspective	05	Sanskriti University, Mathura
22	Ms. Priya Singh	CSE(DS)	Emerging Technologies Shaping the Future: A 2025 Perspective	05	Sanskriti University, Mathura
23	Ms. Sugandha Chakraverti	CSE(DS)	TACT-AI 2025: Technology, AI & Community Transformation for	01	Amity University, Tashkent
24	Ms. Yasha Istwal	CSE(DS)	Generative AI Deep Dive: From Fundamentals to Advanced	05	Xebia Academy and SRM.
25	Dr. Madhu S. Gaur	MCA	Developing the Future Workforce: Designing an AI & Analytics curricular	5	SAS Institute Inc
26	Dr. Gunjan Verma	MCA	"Innovations and Challenges in Building a Secure Digital Future in the AI and Quantum Computing Era"	5	Amity University
27	Dr. Gunjan Verma	MCA	Cybersecurity Reimagined: Innovating with Insight and Illusion	1	IEEE
28	Dr. Gunjan Verma	MCA	Machine Learning and Deep Learning for educators: Building a foundation for future skills	5	Poornima College of Engineering

FDP/MDP/Training Program/Workshop

SL.No.	Faculty Member	Department	Title	Days	Institution/ Industry
30	Dr. Kajal Rai	MCA	Workshop on Generative AI for Academic Workflow Automation	11	Udacity
31	Dr. Kajal Rai	MCA	IEEE Panel Discussion on Cybersecurity Reimagined: Innovating with Insight and Illumination	1	IEEE
32	Dr. Kajal Rai	MCA	Workshop on Bright Minds, Secure Networks: The Future of Cybersecurity	1	IEEE
33	Dr. Lalan Kumar	MCA	INTRODUCING GENERATIVE AI WITH AWS	11	Udacity
34	Kavita Singh	MCA	Secure Systems and Privacy Enhancing Technologies	5	Amity University, Jaipur
35	Kavita Singh	MCA	Workshop on Generative AI for Academic Workflow Automation	11	Udacity
36	Akhilesh Nagar	MCA	Secure Systems and Privacy Enhancing Technologies	5	Amity University, Jaipur
37	Akhilesh Nagar	MCA	Workshop on Generative AI for Academic Workflow Automation	11	Udacity
38	Pragya Siddhi	MCA	Workshop on Generative AI for Academic Workflow Automation	11	Udacity
39	Shanta Satyapathi	MCA	Workshop on Generative AI for Academic Workflow Automation	11	Udacity
40	Nirmal Kumar Saraswat	MCA	Training Program in DotNet Full stack Development	15	Wipro Certified FDP
41	Dr. Gunjan Verma	MCA	Advanced AI Development and Research Challenges	5	Rajkiya Engineering College Banda
42	Dr . Arun Kumar	CSE	Workshop on Generative AI for Academic Workflow Automation	12	Amity University
43	Ms. Karishma Chauhan	CSE	Workshop on Generative AI for Academic Workflow	12	Amity University
44	Ms. Kiran Singh	CSE	Transforming Research Methodology: Advanced Tools, AI Integration and Innovative Practices for Future Ready Research	7	Accurate Business School
45	Dr Pushpa	CSE	Conference Quality and Management Workshop	1	IEEE Uttar Pradesh Section
46	Dr. Praveen Kumar Rai	CSE	Conference Quality and Management Workshop	1	IEEE Uttar Pradesh Section

FDP/MDP/Training Program/Workshop

SL.No.	Faculty Member	Department	Title	Days	Institution/ Industry
47	Dr. Sajeev Kumar Pippal	CSE-AI	Transforming Research Methodology: Advanced Tolls, AI Integrations and Innovative Practices for Future Ready Research	6	Accurate Business School
48	Mr. Kaleem Ur Rehman	CSE-AI	Transforming Research Methodology: Advanced Tolls, AI Integrations and Innovative Practices for Future Ready Research	6	Accurate Business School
49	Mr. Suresh Kumar	CSE-AI	Transforming Research Methodology: Advanced Tolls, AI Integrations and Innovative Practices for Future Ready Research	6	Accurate Business School
50	Mr. Satyam Kumar Sainy	CSE-AI	Workshop on Generative AI for Academic Workflow Automation held at Amity University, Noida,	6	Accurate Business School
51	Mr. Rudra Kumar Sinha	CSE-AI	Transforming Research Methodology: Advanced Tolls, AI Integrations and Innovative Practices for Future Ready Research	6	Accurate Business School
52	Mr. Abhishek Singh	CSE-AI	Transforming Research Methodology: Advanced Tolls, AI Integrations and Innovative Practices for Future Ready Research	6	Accurate Business School
53	Ms. Manisha Bhati	CSE-AI	Transforming Research Methodology: Advanced Tolls, AI Integrations and Innovative Practices for Future Ready Research	6	Accurate Business School
54	Mr. Himanshu Nandanwar	CSE-AI	Transforming Research Methodology: Advanced Tolls, AI Integrations and Innovative Practices for Future Ready Research	6	Accurate Business School
55	Mr. Suresh Kumar	CSE-AI	Workshop on Generative AI for Academic Workflow Automation	12	Amity University, Noida
56	Dr. Avadhesh Kumar Sharma	CSE-AI	Methods of research and publication ethics	5	
			Application of AI-ML in Emerging Fields	5	
			Digital Image Processing	12 Weeks	
			Foundations of Wavelets and Multirate Digital Signal Processing	04 Weeks	
			NPTEL E- Awareness workshop	1	

FDP/MDP/Training Program/Workshop

SL.No.	Faculty Member	Department	Title	Days	Institution/ Industry
57	Dr. Madnesh Kumar Gupta	CSE-AI	Smart Systems and Intelligent Media: AI Across Software, Image, and Text Domains	5	IIT Roorkee and JNU
58	Mr. Piyush Kushwaha	CSE-AI	Faculty Updation Program on Cryptography for Information Security (CIS25)	5	GL Bajaj, Greater Noida
			Faculty Training Program(FTP'25) on "Gen AI"	1	VVDN Technologies
59	Dr. Prem Chand Vashist	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
60	Dr. Birendra Kumar Saraswat	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
61	Dr. Uma Tomer	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
62	Mr. Arun Mittal	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
63	Mr. Md Sohaib Iqbal	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
64	Ms. Monika	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
65	Mr. Neeraj	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
66	Dr. Neeru Singh	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
67	Ms. Pooja Tomar	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
68	Ms. Rajani Singh	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
69	Dr. Ratnesh Kumar Shukla	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
70	Mr. Sandeep Kumar Singh	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
71	Mr. Satyendra Vyas	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
72	Mr. Shivam Agarwal	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
73	Ms. Shivani Garg	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
74	Mr. Tapas Kumar Mishra	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
75	Dr. Anand Muni Mishra	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
76	Ms. Ritika	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida
77	Dr. Ratnesh Kumar Shukla	CSE-IT	Green Technologies For Environment Sustainability	5	GL Bajaj, Greater Noida

FDP/MDP/Training Program/Workshop

SL.No.	Faculty Member	Department	Title	Days	Institution/ Industry
78.	Dr Amit Wadhwa	CSE	AI for Industry 4.0	5	NITTTR, Chandigarh
79.	Dr. Pankaj Kumar	CSE	AI for Industry 4.0	5	NITTTR, Chandigarh
80.	Dr. Praveen Kumar Rai	CSE	AI for Industry 4.0	5	NITTTR, Chandigarh
81.	Dr Pushpa	CSE	AI for Industry 4.0	5	NITTTR, Chandigarh
82.	Dr Vrinda	CSE	AI for Industry 4.0	5	NITTTR, Chandigarh
83.	Dr Payal Garg	CSE	AI for Industry 4.0	5	NITTTR, Chandigarh
84.	Dr. Arun Kumar	CSE	AI for Industry 4.0	5	NITTTR, Chandigarh
85.	Md. Shadab Hussain	CSE	AI for Industry 4.0	5	NITTTR, Chandigarh
86.	Ms. Amrita Rai G	CSE	Salesforce Agentblazer Champion	10hr	ICT ACADEMY
87.	Dr Pushpa	CSE	Transforming teaching through interactive and data-driven learning	5	Indian Institute of Technology Ropar (IIT Ropar)
88.	Mr. Ashwani Kumar	CSE	GENERATIVE AI	5	NITTR, Chandigarh
89	Prof. (Dr.) Deepak Pandey	MBA	Upskilling Faculty for Future-Ready Education in Industry 4.0	1 week	ATAL FDP, RISHI UBR WOMENS COLLEGE
90	Dr. Priyanka Naagar	MBA	Upskilling Faculty for Future-Ready Education in Industry 4.0	1 week	ATAL FDP, RISHI UBR WOMENS COLLEGE
91	Dr. Satish Kumar Singh	MBA	AI for Teaching and Learning	2 week	Electronics & ICT Academy Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India Indian Institute of Technology Guwahati
92	Kaleemur Rehman	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
93	Suresh Kumar	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
94	Avadhesh Kumar Sharma	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
95	Nair Ul Islam	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
96	Gurucharan Purte	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
97	Bhumika Nirmohi	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
98	Abhishek Singh	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
99	Mayank Kumar Mongia	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
100	Horesh Kumar	CSE-AI	Generative AI in Collaboration with Intel	5	GL Bajaj, Greater Noida
101	Avadhesh Kumar Sharma	CSE-AI	Center/Local Coordinator of the remote center	5	GL Bajaj, Greater Noida

FDP/MDP/Training Program/Workshop

SL.No.	Faculty Member	Department	Title	Days	Institution/ Industry
102	Ms. Rachana Singh Sisodia	CSE(DS)	Introduction to Programming in C	8 weeks	NPTEL
103	Ms. Renu Mishra	CSE(DS)	Salesforce Agentblazer Champion	10 hours	ICT Academy
104	Mr. Abhishek Satyarthi	CSE(DS)	Generative AI	05	NITTTR, Chandigarh
105	Mr. Abhishek Satyarthi	CSE(DS)	AI, ML & Deep Learning for Autonomous Vehicles	05	NITK, in collaboration with Pantech eLearning
106	Ms. Priya Singh	CSE(DS)	Augmented Reality / Virtual Reality (AR/VR)	05	Dr. Vithalrao Vikhe Patil College of Engineering, Ahilyanagar, Maharashtra
107	Ms. Shweta Kushwaha	CSE(DS)	Transforming Teaching and Research with Generative AI	05	AICTE Training and Learning (ATAL) Academy
108	Ms. Ayasha Malik	CSE(DS)	Psychological First Aid	01	Symbiosis Teaching Learning Resource Centre
109	Ms. Ayasha Malik	CSE(DS)	Emerging Technologies Shaping the Future: A 2025 Perspective	05	Sanskriti University, Mathura
110	Shanta Satyapathi	MCA	Exploring the Role of Artificial Intelligence in the Evolving Media Landscape and Rural Entrepreneurship	05	AICTE Training and Learning (ATAL) Academy
111	Shanta Satyapathi	MCA	Data Structures and Algorithms (with Java)	05	E & ICT Academy , IIT Kanpur
112	Shanta Satyapathi	MCA	Cyber Security using AI	05	E & ICT Academy , IIT Kanpur
113	Pragya Siddhi	MCA	Cyber Security Using AI	05	E & ICT Academy , IIT Kanpur
114	Pragya Siddhi	MCA	Data Structures and Algorithms (with Java)	05	E & ICT Academy , IIT Kanpur
115	Dr. Kajal Rai	MCA	Bright Minds, Secure Networks: The Future of Cybersecurity	01	IEEE Women in Engineering (WiE) Affinity Group, Delhi Section.
116	Dr. Kajal Rai	MCA	Applied AI: Practical Implementations	05	Edunet Foundation (TechSaksham)
117	Dr. Kajal Rai	MCA	Leveraging AI for Information and Cybersecurity	11	Electronics and ICT Academy (Phase-II), Pandit Dwarka Prasad Mishra IIT, Design and manufacturing, Jabalpur
118	Dr. Kajal Rai	MCA	Generative AI	05	E & ICT Academy, IIT Kanpur

FDP/MDP/Training Program/Workshop

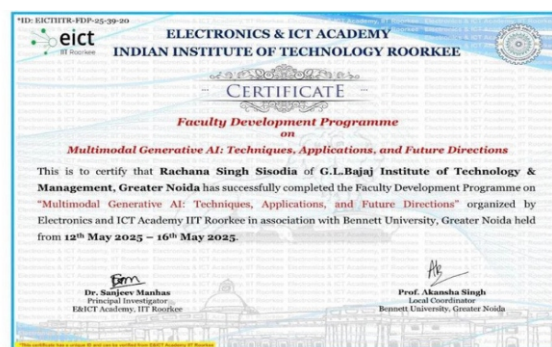
SL.No.	Faculty Member	Department	Title	Institution/ Industry	Days
119	Dr. Kajal Rai	MCA	Introducing Generative AI with AWS	Udacity	2 Months
120	Dr. Kajal Rai	MCA	Cyber Reimagined: Innovating with Insight and Illumination	IEEE Women in Engineering (WiE) India	1 Day
121	Niharika Singh	MCA	IOT with Drones	E & ICT Academy , IIT Kanpur	5 Days
122	Niharika Singh	MCA	Data Science (ML & AI)	E & ICT Academy ,IIT Kanpur	5 Days
123	Kavita Singh	MCA	Methods of research and publication ethics	NITTR Chandigarh	5 Days
124	Kavita Singh	MCA	Data Structures and Algorithms (with Java)	E & ICT Academy IIT Kanpur	6 Days
125	Kavita Singh	MCA	Secure Systems and Privacy Enhancing Technologies	Amity University Rajasthan	7 Days
126	Niharika Singh	MCA	Advance Excel with Power BI	E & ICT Academy ,IIT Kanpur	5 Days
127	Niharika Singh	MCA	Methods of research and publication ethics	NITTR Chandigarh	5 Days
128	Kavita Singh	MCA	Introducing Generative AI with AWS	Udacity	2 Months
129	Kavita Singh	MCA	Cyber Security (On Premises Hacking)	E & ICT Academy	5 Days
130	Niharika Singh	MCA	An Integrated Approach for Computing Resources:Cloud with Internet of Things	Bennett University , Greater Noida	5 Days

FDP/MDP/Training Program/Workshop

SL.No.	Faculty Member	Department	Title	Institution/ Industry	Days
131	Nirmal Kumar Saraswat	MCA	Methods of research and publication ethics	NITTR Chandigarh	5 Days
132	Nirmal Kumar Saraswat	MCA	Advance Excel with Tableau	& ICT Academy ,IIT Kanpur	5 Days
133	Nirmal Kumar Saraswat	MCA	Machine Learning with Python	& ICT Academy ,IIT Kanpur	5 Days
134	Niharika Singh	MCA	Generative AI	NITTR Chandigarh	15 Days
135	Niharika Singh	MCA	AI & ML	& ICT Academy Guwahati	5 Days
136	Dr. Upasana Dohare	MCA	Quantum Computing	EICT Academy Training academy, MNIT	20 days (40 hours)
137	Dr. Kajal Rai	MCA	Next-Gen Cybersecurity: Trends and Technologies	& ICT Academy ,IIT Kanpur	15 days (40 Hours)

HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

Ms. Rachana Singh Sisodia from CSE(DS) Department has successfully completed the Faculty Development Programme on “Multimodal Generative AI: Techniques, Applications, and Future Directions”, organized by the Electronics and ICT Academy, IIT Roorkee, in association with Bennett University, Greater Noida. The FDP was conducted from 12th May 2025 to 16th May 2025 and focused on advanced topics in Generative AI, including multimodal techniques, practical applications, and future research trends.



Ms. Ayasha Malik from GL Bajaj Institute of Technology and Management successfully participated as a reviewer for the International Conference on “Emerging Smart Technology for Sustainable Development(ESTSD-2025)” held from 28th June to 29th June at Sharda University, Greater Noida.



Ms. Ayasha Malik from GL Bajaj Institute of Technology and Management successfully participated in two impactful Faculty Development Programs (FDPs) in June 2025, showcasing her commitment to academic growth and technological advancement. The first FDP, titled “Innovations and Challenges in Building a Secure Digital Future in the AI and Quantum Computing Era,” was held from June 2 to 6, 2025, and organized by Amity University Tashkent. It focused on the convergence of AI, Quantum Computing, and Cybersecurity, offering insights into building secure digital infrastructures and addressing emerging tech challenges.

She also completed a second online FDP on “Enhancing Academic Research Excellence: A Comprehensive Approach to Research Methodology and AI Integration,” conducted by Poornima University, Jaipur, from June 23 to 28, 2025. This program emphasized AI-driven research practices and strategies to strengthen academic output.

Ms. Malik's active involvement in both programs reflects her dedication to continuous learning and her proactive engagement with cutting-edge research and innovation.



Ms. Priya Singh has been awarded a Certificate of Participation for her involvement in the Faculty Development Programme titled “Emerging Technologies Shaping the Future: A 2025 Perspective,” organized by the School of Engineering and Information Technology, Sanskriti University, Mathura, from July 17 to 22, 2025. This certificate stands as formal recognition of her dedication to professional growth and her enthusiastic pursuit of advanced knowledge in the rapidly evolving field of emerging technologies.



HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

Ms. Sugandha Chakraverti from G. L. Bajaj Institute of Technology & Management, Greater Noida successfully completed one week Faculty Development Program on “Innovations, Sustainability & Leadership (WISL”, organized by IEEE Region 10 Adhoc Committee on Entrepreneurship & Innovation (ACEI), Ambassador Team, Delhi Section in collaboration with IEEE Delhi Section. Held from 14th July to 18th July 2025, the FDP focused on contemporary advancements in Sustainability, particularly in innovations, practical implementations, and emerging research opportunities.



Ms. Yasha Istwal from G. L. Bajaj Institute of Technology & Management, Greater Noida has recently completed two notable Faculty Development Programs in the domain of Artificial Intelligence. She successfully participated in 5-days FDP on “Generative AI with LLM, organized by STEP-National Institute of Technology, Karnataka in association with Pantech e-Learning, which focused on the latest advancements in AI and its real-world applications. Additionally, Ms. Istwal has completed FDP on “Innovations, Sustainability & Leadership (WISL”, organized by IEEE Region 10 Adhoc Committee on Entrepreneurship & Innovation (ACEI), Ambassador Team, Delhi Section in collaboration with IEEE Delhi Section.

Dr. Rituparna Sarma from G. L. Bajaj Institute of Technology & Management, Greater Noida actively participated in the Panel Discussion on “Cybersecurity Reimagined: Innovating with Insight and Illumination”, conducted on 27th June 2025 by the IEEE Women in Engineering (WiE) India Council. The event was part of the Golden Jubilee celebrations of the IEEE India Council and IEEE WIE Day 2025.



Ms. Rachana Singh Sisodia has been awarded a Certificate of Participation for her involvement in the Faculty Development Programme titled “Emerging Technologies Shaping the Future: A 2025 Perspective,” organized by the School of Engineering and Information Technology, Sanskriti University, Mathura, from July 17 to 22, 2025. This certificate formally acknowledges her dedication to professional development and her commitment to enhancing her expertise in the rapidly evolving world of emerging technologies.

HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

Mr. Karan Siwach, Assistant Professor at G. L. Bajaj Institute of Technology and Management, Greater Noida, actively participated in the International Seminar on "Youth Empowerment Through AI and Digital Skills" held

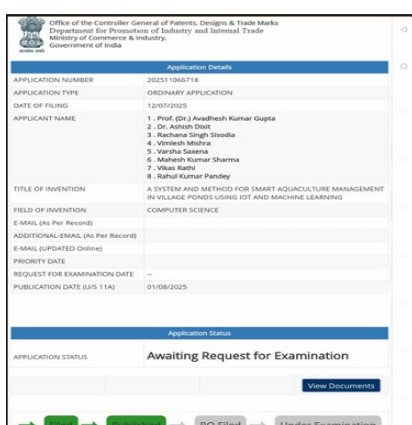
on July 15, 2025, in celebration of UN/UNESCO-UNEVOC World Youth Skills Day 2025. The event was organized by the International Council for Education, Research and Training (ICERT), India & USA, and aligned with the global agenda to promote digital inclusion and youth development. In addition to this international seminar, Mr. Siwach also engaged in a prestigious webinar conducted by Springer Nature, reinforcing his commitment to continual learning and scholarly engagement with the latest trends in research, publishing, and academic excellence. His dual participation demonstrates a proactive role in fostering educational growth, technological awareness, and empowering the academic community with futureready skills.



Ms. Neha Yadav has been awarded a certificate of participation for attending the Five-Days Faculty Development Program titled "Hands On Deep Learning: Implementing CNN & LSTM for Real World Problems," organized by the Department of Computer Science and Engineering (AI & ML),

Tirumala Engineering College, Narasaraopet, Guntur. Held from July 1st to July 5th, 2025, this program offered in-depth, practical exposure to advanced neural network architectures and their real-world applications.

The Department of Computer Science and Engineering at G.L. Bajaj Institute of Technology & Management congratulates Dr. Harikesh Singh for successfully presenting his research paper titled "A Review on AI-Based Cognitive Systems for Digital Wellbeing" at the 10th National Conference on Computer Vision, Image Processing, and Graphics (NCVPRIG-2025).



The Department of Computer Science and Engineering – Data Science at G.L. Bajaj Institute of Technology & Management proudly recognizes the achievements of Ms. Rachana Singh Sisodia. She has co-authored the IEEE-published paper "Performance Analysis of Optimizer for Hyperparameter Tuning in Image Captioning" at the 2025 International Conference on Communication, Security, and Artificial Intelligence, contributing to advancements in deep learning and computer vision. Additionally, she is a co-inventor of the published patent "A System and Method for Smart Aquaculture Management in Village Ponds Using IoT and Machine Learning" (Application No. 202511066718), showcasing impactful innovation for sustainable aquaculture.

HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

We are delighted to announce that Ms. Sugandha Chakraverti actively took part in TACT-AI 2025: Technology, AI & Community Transformation for Humanitarian Impact, which took place on August 15, 2025. This event was organized by the IEEE PES Humanitarian Activities Committee (New Initiatives) in partnership with Amity University, Tashkent. It gathered participants from various academic and professional backgrounds to explore how Artificial Intelligence and emerging technologies can transform communities and generate significant humanitarian impact.



The Department of Computer Science and Engineering – Data Science at G.L. Bajaj Institute of Technology & Management congratulates Ms. Yasha Istwal for successfully participating in the 5-Day Faculty Development Program on “Generative AI Deep Dive: From Fundamentals to Advanced Techniques”, held from 4th August to 8th August 2025. The FDP was organized by Xebia Academy and SRM.

The Department of Computer Science and Engineering – Data Science at G.L. Bajaj Institute of Technology & Management proudly congratulates Ms. Priya Singh for her outstanding achievement at the International Conference on Computing, Intelligence and Application (CIACON 2025), organized by Dr. B.C. Roy Engineering College, Durgapur on July 18–19, 2025



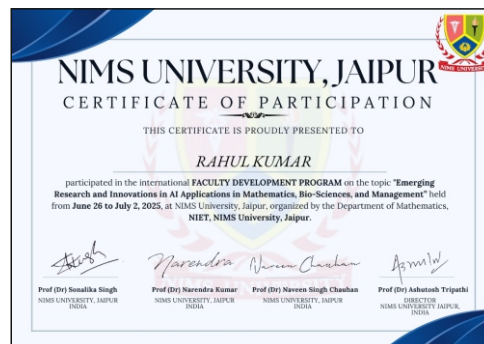
Dr. Shaiya Dixit has presented a research paper titled “Artificial Intelligence and Its Impact on Economic Development” in the 9th International Conference on Redefining Innovative Practices in the Age of AI 2025. This conference was organized by the KIET Group of Institution on 27th and 28th June 2025.

Dr. Nisha Sharma has successfully completed an FDP titled “Transforming Education through AI and Emerging Technologies: Empowering Educators for the Future” from 24th to 30th June 2025. This FDP was conducted by Cordia College (Affiliated to Punjabi University, Patiala, Punjab).



HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

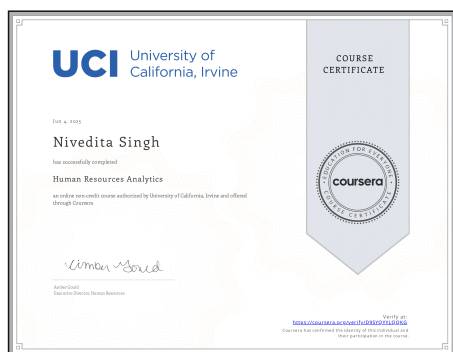
Mr. Rahul Kumar has successfully completed an FDP titled “Emerging Research and Innovations in AI Applications in Mathematics, Bio Sciences and Management” held from 26th June to 2nd July 2025. This FDP was conducted by the Department of Mathematics, NIMS University, Jaipur, Rajasthan.



Ms. Jyoti Gaur has successfully completed an FDP titled “Transforming Education through AI and Emerging Technologies: Empowering Educators for the Future” from 24th to 30th June 2025. This FDP was conducted by Cordia College (Affiliated to Punjabi University, Patiala, Punjab).



Dr. Samarth Sharma has successfully completed an FDP titled “Machine Learning & Deep Learning for Educators: Building a Foundation for Future Skills.” held from 23rd to 27th June 2025. This FDP was conducted by the Department of Advanced Computing, Poornima College of Engineering, Jaipur, Rajasthan.



Dr. Nivedita Singh has completed a MOOC course in Human Resources Analytics, from the University of California, Irvine, through the Coursera Platform. This Online certification was completed in the period of 28th April to 4th June 2025.

Dr. Nisha Sharma has participated in NPTEL e-awareness workshop through the NPTEL Platform. This Online certification was completed on 23rd July 2025.



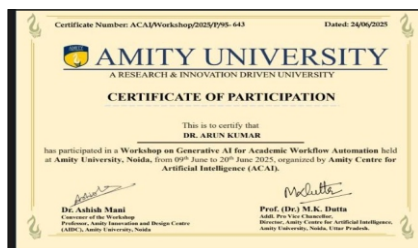
HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

Dr. Swati Raj has participated in the Five-day FDP on “Indian Knowledge System: Roots, Relevance and Reimagination”, organized by the Department of Engineering in collaboration with the Department of Applied Science and Humanities and the Institution's Innovation Council at Greater Noida Institute of Technology, Greater Noida. This FDP was completed in the period of 14th July to 18th July 2025



Dr. Aarti Loomba has participated in the Five-day FDP on “Indian Knowledge System: Roots, Relevance and Reimagination”, organised by the Department of Engineering in collaboration with the Department of Applied Science and Humanities and the Institution's Innovation Council at Greater Noida Institute of Technology, Greater Noida. This FDP was completed in the period of 14th July to 18th July 2025.

Ms. Surbhi Agarwal has successfully completed an FDP titled “Advanced Qualitative Research Methodology” held from 14th July to 19th July 2025. This FDP was conducted by the at ABES Business School, Greater Noida.



Dr. Arun Kumar and Ms. Karishma Chauhan has participated in a Workshop on Generative AI for Academic Workflow Automation held at Amity University, Noida, from 09th June to 20th June 2025, organized by the Amity Centre for Artificial Intelligence (ACAI). This workshop aimed to enhance faculty proficiency in using Generative AI tools for streamlining academic and research workflows.



Dr. Pushpa and Dr. Praveen Kumar Rai participated in the Workshop “Conference Quality and Management Workshop” held on May 24, 2025. The event took place at Noida Institute of Engineering & Technology, Greater Noida. Workshop and organized by IEEE Uttar Pradesh Section. This workshop provided insights into organizing conferences, including the roles of various committees and essential management aspects.



Ms. Kiran Singh has participated successfully in a one-week Faculty Development Program on "Transforming Research Methodology: Advanced Tools, AI Integration and Innovative Practices for Future Ready Research" organized by Accurate Business School from 02nd-07th June 2025. This FDP aims to enhance research efficiency, broaden analytical capabilities, and foster new discoveries.

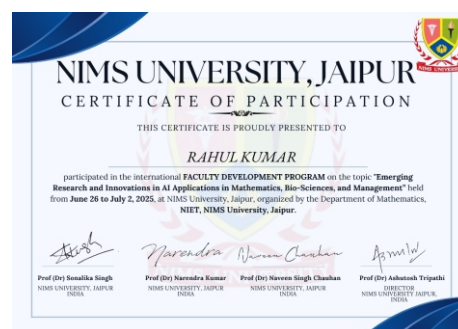
HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

Dr. Shaivya Dixit has presented a research paper titled "Artificial Intelligence and Its Impact on Economic Development" in the 9th International Conference on Redefining Innovative Practices in the Age of AI 2025. This conference was organized by the KIET Group of Institution on 27th and 28th June 2025.



Dr. Nisha Sharma has successfully completed an FDP titled "Transforming Education through AI and Emerging Technologies: Empowering Educators for the Future" from 24th to 30th June 2025. This FDP was conducted by Cordia College (Affiliated to Punjabi University, Patiala, Punjab).

Mr. Rahul Kumar has successfully completed an FDP titled "Emerging Research and Innovations in AI Applications in Mathematics, Bio Sciences and Management" held from 26th June to 2nd July 2025. This FDP was conducted by the Department of Mathematics, NIMS University, Jaipur, Rajasthan.



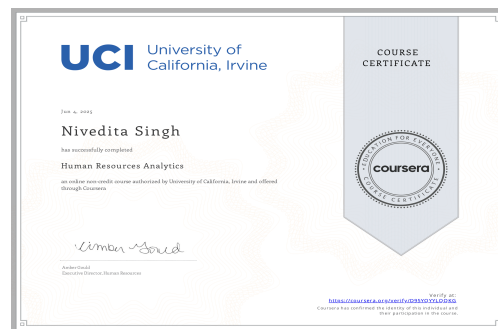
Ms. Jyoti Gaur has successfully completed an FDP titled "Transforming Education through AI and Emerging Technologies: Empowering Educators for the Future" from 24th to 30th June 2025. This FDP was conducted by Cordia College (Affiliated to Punjabi University, Patiala, Punjab).

Dr. Samarth Sharma has successfully completed an FDP titled "Machine Learning & Deep Learning for Educators: Building a Foundation for Future Skills." held from 23rd to 27th June 2025. This FDP was conducted by the Department of Advanced Computing, Poornima College of Engineering, Jaipur, Rajasthan.



HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

Dr. Nivedita Singh has completed a MOOC course in Human Resources Analytics, from the University of California, Irvine, through the Coursera Platform. This Online certification was completed in the period of 28th April to 4th June 2025.



Dr. Nisha Sharma has participated in NPTEL e-awareness workshop through the NPTEL Platform. This Online certification was completed on 23rd July 2025.



Dr. Swati Raj has participated in the Five-day FDP on "Indian Knowledge System: Roots, Relevance and Reimagination", organized by the Department of Engineering in collaboration with the Department of Applied Science and Humanities and the Institution's Innovation Council at Greater Noida Institute of Technology, Greater Noida. This FDP was completed in the period of 14th July to 18th July 2025.



Dr. Aarti Loomba has participated in the Five-day FDP on "Indian Knowledge System: Roots, Relevance and Reimagination", organised by the Department of Engineering in collaboration with the Department of Applied Science and Humanities and the Institution's Innovation Council at Greater Noida Institute of Technology, Greater Noida. This FDP was completed in the period of 14th July to 18th July 2025.



Ms. Surbhi Agarwal has successfully completed an FDP titled "Advanced Qualitative Research Methodology" held from 14th July to 19th July 2025. This FDP was conducted by the at ABES Business School, Greater Noida.



HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

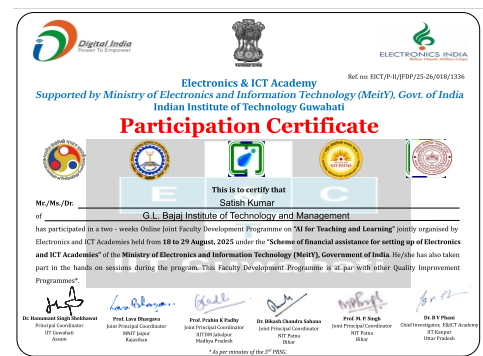
Prof. (Dr.) Deepak Pandey, Professor, Department of Management Studies, G. L. Bajaj Institute of Technology & Management, Greater Noida has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Upskilling Faculty for Future-Ready Education in Industry 4.0 at RISHI UBR WOMENS COLLEGE from 08/09/2025 to 13/09/2025.



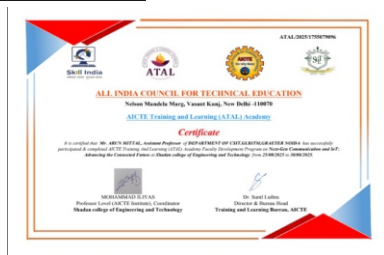
Dr. Priyanka Naagar, Assistant Professor, Department of Management Studies, G. L. Bajaj Institute of Technology & Management, Greater Noida has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Upskilling Faculty for Future-Ready Education in Industry 4.0 at RISHI UBR WOMENS COLLEGE from 08/09/2025 to 13/09/2025.



Prof. (Dr.) Satish Kumar of GLBITM has participated in a two - weeks Online Joint Faculty Development Programme on "AI for Teaching and Learning" jointly organised by Electronics and ICT Academies held from 18 to 29 August, 2025 under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" of the Ministry of Electronics and Information Technology (MeitY), Government of India. He/she has also taken part in the hands on sessions during the program. This Faculty Development Programme is at par with other Quality Improvement Programmes



Dr. Birendra Kumar Saraswat, Ms. Ritika, Mr. Md Sohaib Iqbal, Mr. Arun Mittal, Mr. Satyendra Vyas and Mr. Adityan Gupta from the Department of Information Technology actively participated in a 5-days Next-Gen Communication and IoT: Advancing the Connected Future organized by Shadan college of Engineering and Technology. One of the key advantages is this enables real-time responses

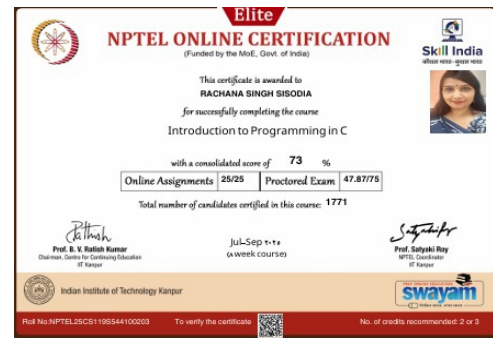


Mr. Chandra Shekhar Ram from the Department of Information Technology actively participated in a 5-days on AI for Industry 4.0 organized by Department of CSE at GLBITM Greater Noida. One of the advantage of this FDP is AI-driven analytics can detect patterns and predict equipment failures before they occur. AI continuously analyzes operational data to optimize production schedules, material flow, and energy use. Enables intelligent robots and machines that adapt to different tasks and



HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

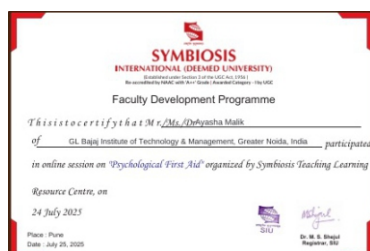
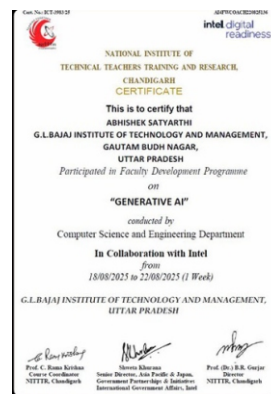
Ms. Rachana Singh Sisodia from CSE(DS) department has successfully completed the NPTEL 8-week certification course along with Faculty Development Program (FDP) titled "Introduction to Programming in C" (July–September 2025 session), showcasing her strong academic capabilities through commendable performance



Ms. Renu Mishra has successfully participated in the 10-Hour Faculty Development Program on Salesforce Agentblazer Champion, organized by ICT Academy from 8th to 12th September 2025. This FDP, conducted online, aimed to enhance knowledge and practical expertise in Salesforce technologies, thereby contributing to continuous professional development. Ms. Mishra's participation reflects her dedication to academic excellence and her commitment to upgrading skills in emerging domains

Mr. Abhishek Satyarthi has successfully completed two Faculty Development Programmes in Artificial Intelligence. He attended a programme on "Generative AI" organized by NITTTR, Chandigarh, with Intel from August 18-22, 2025, focusing on expertise in Generative AI.

He also participated in a 5-Day programme on AI, ML & Deep Learning for Autonomous Vehicles at NITK, in collaboration with Pantech eLearning, from July 28 to August 1, 2025, emphasizing practical applications in autonomous vehicles.



Ms. Ayasha Malik has actively participated in professional development programs, including the "Emerging Technologies Shaping the Future: A 2025 Perspective" Faculty Development Programme at Sanskriti University and a session on Psychological First Aid by Symbiosis Teaching Learning Resource Centre. Her co-authorship of Scopus-indexed book chapters and recognition as an Author Attendee at ICSIT 2025 highlight her dedication to research and academic excellence

Ms. Yasha Istwal is recognised for her valuable contribution as a Reviewer at the 4th IEEE International Conference on Technology, Engineering, Management for Societal Impact using Marketing, Entrepreneurship & Talent (TEMS-MET 2025), organized by the National Institute of Technology, Delhi, held from October 8–10, 2025.



Dr. Rituparna Sarma has contributed as a Reviewer at the 2nd International Conference on Machine Learning Algorithms (ICML ALGO 2025), held on 29th–30th August 2025 at Chitkara University, Himachal Pradesh, India

HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

Ms. Priya Singh has participated in the Faculty Development Program on Augmented Reality / Virtual Reality (AR/VR). The FDP was jointly organized by the Dr. Vitthalrao Vikhe Patil College of Engineering, Ahilyanagar, Maharashtra, C.V. Raman Global University, Odisha, and C.V. Raman Polytechnic, Bhubaneswar, in collaboration with ExcelR Edtech Pvt. Ltd., from 25th August 2025 to 31st August 2025.



Ms. Shweta Kushwaha has successfully participated in the AICTE Training and Learning (ATAL) Academy Faculty Development Program titled "Transforming Teaching and Research with Generative AI." The program was conducted at the Global Institute of Management Sciences. Ms. Kushwaha's commitment to advancing her knowledge and skills in cutting-edge AI technologies exemplifies her dedication to academic excellence and continual professional development.



Certified by MG Motors and upGrad as a qualified teaching faculty for the Employability Skill Development Program launched by JSW MG Motors in August 2025



Completed industrial in-plant training on Connected, Autonomous, and Electric Vehicles (CAEV) with Artificial Intelligence at JSW MG Motors India Pvt. Ltd., Halol, Vadodara, Gujarat, and certified by MG Motors as training faculty for the course in August 2025

Mr. Rohit Sahu, from the Department of Mechanical Engineering, successfully completed two Faculty Development Programs (FDPs) in July–August 2025. The first FDP, titled "National Education Policy-2020: Future Ready Transformations of Universities", was organized by the Internal Quality Assurance Cell (IQAC), MVN University, Palwal, Haryana, from 21st to 25th July 2025.

He further enhanced his academic and professional learning by attending a one-week FDP on "Entrepreneurship and Innovation Management in Real Estate Industry", conducted by the Entrepreneurship Development and Industrial Coordination Department, NITTTR, Chandigarh, from 28th July to 1st August 2025. These programs reflect his commitment to continuous professional development and active participation in initiatives that bridge education, innovation, and industry.



HIGHLIGHTS OF THE FDP/ WORKSHOP ATTENDED

Rohit Sahu successfully completed the NPTEL+ online workshop Introduction to Practical Entrepreneurship conducted by IIT Madras from 2 June to 20 July 2025. The programme, led by Dr. C. Bhaktavatsala Rao, emphasized experiential learning and innovation-driven entrepreneurial practices. Such initiatives strengthen the academic-industry interface and contribute to developing research-informed entrepreneurial competencies in higher education




Delhi Technological University proudly conferred the Research Excellence Award 2025 with a prize money of ₹100000 to Mr. Ranjeet Singh, Assistant Professor, Department of Mechanical Engineering, G. L. Bajaj Institute of Technology and Management, Greater Noida, in recognition of his outstanding research contributions during the year 2024. This honor reflects his dedication to academic excellence, innovative spirit, and impactful scholarly work, while also reinforcing DTU's commitment to fostering a culture of research and innovation that advances knowledge and benefits society.

GLBITM *Research* Highlights for JOURNAL PUBLICATIONS MAY/SEPTEMBER 2025



1

Kumar, Akshi, Aditi Sharma, and Saurabh Raj Sangwan. "DynaMentA: Dynamic Prompt Engineering and Weighted Transformer Architecture for Mental Health Classification using Social Media Data." *IEEE Transactions on Computational Social Systems* (2025).


 : <http://dx.doi.org/10.1109/TCSS.2025.3569400>

Mental health classification is inherently challenging, requiring models to capture complex emotional and linguistic patterns. Although large language models (LLMs) such as ChatGPT, Mental-Alpaca, and MentalLLaMA show promise, they are not trained on clinically grounded data and often overlook subtle psychological cues. Their predictions tend to overemphasize emotional intensity, while failing to capture contextually relevant indicators that are critical for accurate mental health assessment. This article introduces dynamic prompt engineering and weighted transformer architecture dynamic prompt engineering and weighted transformer architecture for mental health classification (DynaMentA), a novel dual-layer transformer framework that integrates the strengths of BioGPT and decoding-enhanced BERT with disentangled attention (DeBERTa) to address these challenges. BioGPT captures fine-grained biomedical indicators, while DeBERTa provides context-aware disambiguation. The ensemble mechanism dynamically weights their outputs, guided by a simulated feedback loop that refines the

predictions during training. Unlike previous studies that treat classification statically, DynaMentA incorporates dynamic prompt engineering to better align with evolving linguistic and emotional signals. Evaluated on three benchmark datasets, DepSeverity, suicide versus depression classification natural language (SDCNL), and Dreddit, DynaMentA achieves precision of 92.6%, 91.9% F1-score, and 0.94 AUC-ROC, consistently outperforming the existing benchmark, including general-purpose LLMs and domain-specific mental health models. This scalable and interpretable framework establishes a state-of-the-art methodology for computational mental health analysis in high-stakes applications, such as suicide risk assessment and crisis intervention and early detection of severe depressive episodes.

2

Singh, Ajay Pratap, et al. "Enhancing solar drying performance with heat storage technologies and nanoparticles integration: A clean energy production." *Journal of Energy Storage* 105 (2025): 114669.

 : <https://doi.org/10.1016/j.est.2024.114669>

Drying, a conventional and energy-intensive process, needs to transition from dependency on high-grade energy sources like electricity to renewable energy in the food processing industry. This shift will help to reduce environmental pollution and sustainable development. Solar dryers, equipped with modern technologies, offer a significant ability to dry moist materials efficiently, particularly agricultural commodities. Solar dryers with built-in heat storage technology may show promise in enhancing performance and significantly reducing drying times. The latent heat storage or PCM incorporated in solar dryers enables the system to perform by storing excess energy, which can be used during peak demand. Nonetheless, PCM charging and discharging are restricted due to low thermal conductivity. The integration of nanoparticles in PCM can improve its thermal

characteristics, enhancing the drying system's overall performance. This paper explores various drying systems incorporating different types of heat storage material and nanoparticle-embedded PCM. The specific energy consumption of solar dryers integrated with SHS and LHS ranged from 1.89 to 10.803 and 3.266 to 7.3 kWh/kg, respectively. Moreover, the overall efficiency of dryers utilizing SHS and LHS ranged from 7.65 % to 11.65 % and 10.61% to 20.2 %, respectively. The overall efficiency was found to be 36.4 % for nanoparticle-embedded PCM-integrated solar dryers. Future advancements could include further integrating cutting-edge technologies such as nanofluids, recycling techniques, and good thermal properties nanoparticles within the dryer to improve the solar dryers' performance.

3

Bhardwaj, Seema, et al. "High-performance workplace system: a literature review." *International Journal of Organizational Analysis* (2025).



: <http://dx.doi.org/10.1108/IJOA-06-2024-4599>

Purpose High-performance workplace systems (HPWS) have evolved from being mere buzzwords to essential pillars for organisational success. This calls for in – depth examination by both academic scholars and industry professionals. The study aims to offer a comprehensive academic assessment of the significance of HPWS in enhancing human resource management. **Design/methodology/approach** In this study, the authors conducted a literature review (bibliometric and content analysis) of 152 peer-reviewed scholarly articles published from 2003 to 2024. This study used Vosviewer software and the bibliometrics package in R software to investigate publishing patterns, influential contributors, themes and topics underpinning HPWS. **Findings** The work offers a thorough and insightful examination of the ideas, components and effects of HPWS on

businesses and workers. It presents three research fronts that collectively contribute to the understanding of HPWS. **Practical implications** This work emphasises the significance of incorporating high-performance workplace processes to cultivate a culture of excellence and enhance employee engagement. Organisations can use evidence-based strategies identified in the literature to boost performance, promote job satisfaction and retain high-performing employees. **Originality/value** The study applies HPWSs to inform organisational policy development by acknowledging firms' inherent capabilities and competencies to integrate HPWS effectively. The results serve as compelling evidence for recognising the capacity of HPWS to impact various facets of an organisation.

4

Kumar, Manoj, et al. "Investigating SnOx/Graphene Oxide heterostructure for methane sensing and its application as a tunable light absorber for optoelectronic devices." *PloS one* 20.7 (2025): e0326657.



: <https://doi.org/10.1007/s11831-025-10238-3>

This study investigates the optical and electronic properties of SnOx/Graphene Oxide (SnOx/GO) heterostructures, focusing on their sensitivity and selectivity to methane adsorption and its tunable light absorption capabilities across different wavelength ranges. By categorizing SnOx/GO heterostructures into four types based on the oxygen mole fraction (x) of SnOx, notable differences are observed in their light absorption, extinction coefficient, and reflectance. Among these, Type-C heterostructures demonstrate the highest absorption coefficient ($\sim 1.8 \times 10^5 \text{ cm}^{-1}$), indicating strong potential for UV and visible light applications. Building upon the optimized Type-C SnOx/GO heterostructure, we further examine the effect of varying concentrations of methane molecules adsorbed on its surface. This leads to the classification of four additional heterostructure types- Type-I to Type-IV which are based on the methane molecules concentration adsorbed on the surface of an optimized SnOx/GO heterostructure. The interaction with methane further modulates the optoelectronic properties of heterostructure, with Type-II heterostructures demonstrating the highest extinction

coefficient (~ 8.0 at 1000 nm) and strong near-infrared absorption. In contrast, Type-IV structures, characterized by the highest methane concentration, show a significant increase in reflectance (~ 0.85) and a reduction in absorption. Additionally, an energy distribution analysis of various atmospheric gases, such as CH_4 , H_2O , and CO_2 were conducted to evaluate the selectivity of SnOx/GO heterostructure based sensors. The aim was to ensure minimal interference from other ambient gases. The analysis revealed that CH_4 exhibits a more negative energy state, indicating higher stability and a greater affinity for adsorption on the sensor surface compared to the other atmospheric gases. This stabilization highlights the interaction dynamics of the material, reinforcing its potential for diverse applications, including UV absorption, infrared transparency, and trace methane detection. Overall, these findings establish SnOx/GO heterostructures, particularly the Type-C variant with an optimal oxygen mole fraction (x), as promising candidates for advanced optical and methane gas-sensing technologies.

5

Datta, Priyanka, and Rajesh Rohilla. "Comprehensive Survey on Computational Techniques for Brain Tumor Detection: Past, Present and Future." *Archives of Computational Methods in Engineering* (2025): 1-24.



: <https://doi.org/10.1007/s11831-025-10238-3>

Radiology also termed as the medical imaging is the medical specialty that involves the creation of images of the body parts for the purpose of diagnostics or treatment. The procedures involved therefore helps the medical professionals in diagnosing the diseases and injuries. The medical image analysis of the brain is considered as the major area of interest because of its complexity and significance and the automation of the same can be done using various tools and techniques. There are variety of image processing techniques used for the brain image analysis, to name

a few are the Deep Learning, Machine Learning, hybrid models etc. There are variety of reasons such as the shape, dimension, textures and other related features due to which the analysis of the brain tumors tends to become complicated. Henceforth, this review will give a comprehensive review of the brain tumor image analysis, with the inclusion of the topics such as the fundamentals of brain tumors, brain imaging, actions involved in brain image analysis, models utilized, characteristics of brain tumor images, metrics for model evaluation and datasets of brain tumor and medical images that are available.



Purpose High-performance workplace systems (HPWS) have evolved from being mere buzzwords to essential pillars for organisational success. This calls for in – depth examination by both academic scholars and industry professionals. The study aims to offer a comprehensive academic assessment of the significance of HPWS in enhancing human resource management. **Design/methodology/approach** In this study, the authors conducted a literature review (bibliometric and content analysis) of 152 peer-reviewed scholarly articles published from 2003 to 2024. This study used Vosviewer software and the bibliometrics package in R software to investigate publishing patterns, influential contributors, themes and topics underpinning HPWS. **Findings** The work offers a thorough and insightful examination of the ideas, components and effects of HPWS on businesses and workers. It presents three research fronts that collectively contribute to the understanding of HPWS. **Practical implications** This work emphasises the significance of incorporating high-performance workplace processes to cultivate a culture of excellence and enhance employee engagement. Organisations can use evidence-based strategies identified in the

literature to boost performance, promote job satisfaction and retain high-performing employees. **Originality/value** The study applies HPWSs to inform organisational policy development by acknowledging firms' inherent capabilities and competencies to integrate HPWS effectively. The results serve as compelling evidence for recognising the capacity of HPWS to impact various facets of an organisation. **businesses and workers.** It presents three research fronts that collectively contribute to the understanding of HPWS. **Practical implications** This work emphasises the significance of incorporating high-performance workplace processes to cultivate a culture of excellence and enhance employee engagement. Organisations can use evidence-based strategies identified in the literature to boost performance, promote job satisfaction and retain high-performing employees. **Originality/value** The study applies HPWSs to inform organisational policy development by acknowledging firms' inherent capabilities and competencies to integrate HPWS effectively. The results serve as compelling evidence for recognising the capacity of HPWS to impact various facets of an



This systematic review examines the health risk assessment of fluoride and nitrate concentrations in drinking water sources across india. 1250 studies on fluoride and nitrate in indian waters were examined between 2015 and 2024; following thorough evaluation and exclusion, 55 high-quality, pertinent papers were chosen. The results were shown using a geographic information system (gis) and corresponding zoning maps. Alarmingly, more than 40 % and 50 % of samples investigated exceeded the allowable level set for fluoride and nitrate concentration in potable water 1.5 mg/l and 50 mg/l, posing potential health risks. The results indicated that the hq of fluoride and nitrate across all targeted groups (children, teenagers, and adults) exceeded 1. The hq values were 3.206, 2.466, 1.9764 for fluoride and 6.487, 4.99, 3.998 for nitrate. Significantly, the order of vulnerability was children > teenagers > adults, with children being the most vulnerable group to fluoride and nitrate consumptions in the

investigated locations. This research study shows that a detailed investigation of the hydro geochemistry of fluoride and nitrate can predict groundwater quality zones of the state using machine-learning techniques, viz., artificial neural network (ann) and extreme gradient boosting (xgboost) regression. The ann and xgboost models, with their high r2 values of 0.9991 and 0.9992 in training, and 0.9868 and 0.8943 in testing, inspire confidence in their predictive power. The average rmse values during training were 0.0441 and 0.0067 for fluoride. Similarly, the r2 values of 0.9998 and 0.9985 in training, and 0.9956 and 0.9448 in testing, along with the average rmse values of 0.0441 and 0.0067 for nitrate, further reinforce the models' predictive capabilities. Therefore, fluoride and nitrate amounts must be measured in diverse water sources to determine the optimal removal technique and limit human health risks.

Biodegradable polymers have emerged as alternative materials for conventional plastics, providing an eco-friendly solution for pollution management, natural resource conservation, and energy efficiency. Unlike conventional plastics, which generally do not decompose and remain in the environment for years, biodegradable polymers tend to decompose naturally and thus help in reducing waste pollution and ecological damage. These polymers are generally obtained from renewable resources. This review highlights the potential of biodegradable polymers in environmental management applications such as water purification, controlling pollution, and progress in agricultural fields. Along with environmental benefits, these polymers have several advantages in the field of energy storage and harvesting

systems which are discussed in this review. Under this category, polymers such as polylactic acid, polyhydroxyalkanoates, and polycaprolactone have been explored for specific purposes, as well as their combination with advanced materials such as nanomaterials and other bio-additives to further improve their functional properties. Due to all these factors, certain challenges such as high production cost, scaling problems, and limited mechanical performance have arisen, which need to be addressed to provide a stable and solid solution. This review examines the role of biodegradable polymers in promoting sustainability by reducing dependence on fossil fuels and enhancing the circular economy.

The increasing load from electric vehicles (EVs) in distribution networks presents significant challenges, including heightened power losses and voltage deviations. This paper proposes a solution through the combined optimal allocation of wind-based distributed generators (DGs) and shunt capacitor banks (CBs). An artificial protozoa optimizer (APO) is introduced for the optimal siting and sizing of distributed generators (DGs) and combined batteries (CBs), complemented by network reconfiguration (NR). The primary objectives of this approach are to minimize active power loss, reactive power loss, and voltage deviations.

Additionally, the impact of EV load penetration, ranging from 20% to 100%, is thoroughly analyzed, along with an assessment of its associated uncertainty. Various scenarios are tested on the IEEE 33-bus distribution test system. The simulation results demonstrate the effectiveness of the proposed method, achieving reductions in active power losses, reactive power losses, and voltage deviations by 80.53%, 76.88%, and 69.96%, respectively. Compared to other optimization algorithms, the APO shows superior performance.

As monkeypox is spreading rapidly, the incidence of monkeypox has been increasing in recent times. Therefore, it is very important to detect and diagnose this disease to get effective treatment planning. The prominent aim of this paper is to design an effective monkeypox detection and classification model by utilizing deep learning and classification models. In this study, a novel Adaptive Generative 3D VNet model is presented to effectively classify the monkeypox lesions. Different data augmentation approaches, deep learning, and adaptive fusion are integrated into the proposed model to attain better results in disease classification. The major objective of the proposed model is to mitigate the challenges of limited labeled data by generating synthetic augmented images and combining them with real images for robust classification. The two major components of the proposed system are the Adaptive Generative Network and the 3D VNet. Additional training models are generated by the adaptive

generative network through augmentation approaches including cropping, rotation, and flipping, thereby increasing the diversity of the dataset. The 3D VNet processes these images in a volumetric manner to capture spatial relationships within the lesions, improving classification accuracy. The fusion layer then adaptively combines the predictions from the real and augmented data to optimize the overall effectiveness of a model. Key performance metrics including accuracy, precision, sensitivity, specificity, Jaccard Index, Hausdorff distance, and Dice Similarity Coefficient are used to compute the effectiveness of a model. The findings show that the Adaptive Generative 3D VNet model outperforms traditional 2D models by significantly improving the classification accuracy and robustness, especially in the presence of limited labeled data. Therefore, the simulation results demonstrate that the proposed model achieves high accuracy and precision of 98.8% and 98.5%, respectively based on the Monkeypox Skin Lesion Dataset.

11

Anuj Gupta, Ashu Goyal, Vineeta, Uma Tomer, Aman Singh Saluja, & Er. Neeraj Yadav
 “Real-Time Image Fusion Using Nature-Inspired Optimization Techniques” International Journal of Environmental Sciences

 : <https://doi.org/10.64252/wqg5dr41>

This paper presents a real-time image fusion method utilizing a nature-inspired optimization technique. The approach enhances adaptability by employing an objective function to determine the most suitable parameters for image fusion processes. To accomplish this, various techniques such as bilateral and speckle filtering, gamma correction for image enhancement, and fusion through stationary wavelet transform (SWT) are integrated. The optimization of these techniques is guided by the Yellow Saddle Goatfish (YSG) algorithm, which mimics the foraging behavior of the fish. The YSG algorithm stands out among other nature-

inspired methods due to its strong exploration capabilities, making it effective in identifying optimal solutions. The proposed method is assessed using both quantitative metrics and visual evaluation. The findings reveal that the optimal parameters differ for each image, indicating the YSG algorithm's ability to adapt based on image-specific characteristics. Moreover, the experimental results confirm that the proposed fusion model produces higher-quality fused images compared to traditional approaches.

12

Ashish Tripathi, Abhijat Mishra, Rajnesh Singh, Bhoopendra Dwivedy, Amit Kumar, & Kuldeep Singh “Facial Emotion-Based Song Recommender System Using CNN ” International Journal of Engineering Trends and Technology.

 <https://doi.org/10.14445/22315381/IJETT-V72I6P129>

It is observed that many times, people are not able to recognize what kind of song they really want to listen to on the basis of their current mood. Sometimes, people end up searching for the perfect song according to their mood, and it eventually leads to a waste of time in finding the exact requirements of the song. In the era of technology and research, specifically in the world of Artificial Intelligence (AI), implementing these technologies in the advancement of song recommender systems will help people recognize the exact requirements and recommend songs accordingly. It will be the perfect combination of technology and the requirements of the user. This research basically focuses on

the recommendation of a song to the person based on his/her current mood. According to the mood of an individual, the song is recommended. The process goes like this: the user first takes a photo of the user with the help of a webcam on the laptop, with the user's permission. After that, the number of photos is matched with the data stored, and when the particular emotion is identified with the help of a CNN (convolutional neural network), it is then redirected to YouTube. According to the mood of the user, the song is played. Hence, the basic requirement of the song recommender system is completed.

13

Dr. Vrinda Sachdeva, Dr. Anitha Bolimela, Manoj Kumar Goyal, Lakshmi Chandrakanth Kasireddy, Prem Kumar Sholapurapu, Dr. Aman Dahiya, Kavita Goyal “Deep Learning Algorithms for Stock Market Trend Prediction in Financial Risk Management” Revista Latinoamericana de la Papa

 <https://doi.org/10.52783/rev-alap.90>

This article discusses how the hybrid deep learning algorithms can be used in predicting the trend in a stock market and manage financial risk. The proposed architecture serves as a combination of Convolutional Neural Networks (CNN) and the Long Short-term Memory (LSTM) networks whereby it takes advantage of both models. The historical data of the stock market should be used to extract important features, including price trends and technical indicators by CNNs, and the long-term dependencies of the time-series data can be captured to forecast future movement with LSTMs. Hybrid model is developed to forecast the trends (up/down) in stock prices or to categorize the trend of the market movement, helping in making an informed decision of the investment. In addition to this, the management of financial risk is also incorporated into the model with the incorporation of the key

financial risks analysis metrics that include Value-at-Risk (VaR) and Conditional VaR which quantitatively estimates the financial risk being undertaken. Accuracy, precision, recall, and risk adjusted measures are used to assess the performance of the model and the results are also back-tested into historical coloration of the stock market data to show whether the model performs under actual conditions. This is expected to increase the forecasting abilities of stock market models and at the same time reduce the risk exposure. The results are indicators of how the CNNs and LSTMs can provide a powerful framework of predicting and managing the risks better in financial markets to foretell the trend and implement more arranging and intelligent business procedures in terms of investments.

Journal articles published

Name of the Faculty	Department	Title of Paper	Name of Journal	Publisher	Index in Journal
Saurabh Raj Sangwan	CSE(AIML)	DynaMentA: Dynamic Prompt Engineering and Weighted Transformer Architecture for Mental Health Classification Using Social Media Data	IEEE Transactions on Computational Social Systems	IEEE	WOS
Shivesh Tripathi	ECE	Enhancing solar drying performance with heat storage technologies and nanoparticles integration: A clean energy production	Journal of Energy Storage	Elsevier	SCOPUS & WOS
Dipanwita Chakraborty	MBA	High-performance workplace system: a literature review	International Journal of Organizational Analysis	Emerald Publishing	SCOPUS
Priyanka Datta	IEEE	Comprehensive Survey on Computational Techniques for Brain Tumor Detection: Past, Present and Future	Archives of Computational Methods in Engineering	Springer Science and Business Media B.V.	SCOPUS
Reena Singh	MBA	An Exploration of Flexible Marketing Research: Publication Trends, Research Collaboration, and Emerging Research Areas	Global Journal of Flexible Systems Management	Springer	SCOPUS
Azhar Shadab	CSE (DS)	Machine learning-based health risk assessment of fluoride and nitrate in indian drinking water: A systematic review	Journal of Food Composition and Analysis	Academic Press Inc.	SCOPUS & WOS
Pooja Saxena	AS	A Green Approach to Sustainability: Biodegradable Polymers in Environmental and Energy Applications	ECS Journal of Solid State Science and Technology	IOP Science	WOS
Mohit Bansal	EEE	Combined Allocation of Renewable-Based Distributed Generators and Shunt Capacitor Banks in Distribution Networks with Electric Vehicle Load Penetration	Journal of Studies in Science and Engineering	EngiScience Publisher	SCOPUS
Purnendu Shekhar Pandey	ECE	Investigating SnOx/Graphene Oxide heterostructure for methane sensing and its application as a tunable light absorber for optoelectronic devices	PLOS ONE	Public Library of Science	SCOPUS

Journal articles published

Name of the Faculty	Department	Title of Paper	Name of Journal	Publisher	Index in Journal
Praveen Kumar Rai	CSE	An Adaptive Generative 3D VNet Model for Enhanced Monkeypox Lesion Classification Using Deep Learning and Augmented Image Fusion	Journal of Imaging Informatics in Medicine	Springer Nature	SCI
Vineeta	CSE	Real-Time Image Fusion Using Nature-Inspired Optimization Techniques	International Journal of Environmental Sciences	Integrated Publishing Association	SCOPUS
Kuldeep Singh	CSE	Facial Emotion-Based Song Recommender System Using CNN	Seventh Sense Research Group	Seventh Sense Research Group	SCOPUS
Vrinda	CSE	Deep Learning Algorithms for Stock Market Trend Prediction in Financial Risk	Revista Latinoamericana de la Papa		ESCI
Dr. Sanjeev Kumar Pippal	CSE AI	Blockchain-Enabled Healthcare: Critical Analysis of Applications, Limitations, and Technical Solutions	SN Computer Science - Springer		SCOPUS JOURNAL
Suresh Kumar	CSE AI	Visible light communication and quadrant photodiode based vehicle positioning for enhanced road safety	Journal of Optical Communications		SCOPUS
Mubashshir Uddin Khairoowala	CSE AI	An iterative algorithm for split variational inclusion, a system of variational inequalities and fixed point problem	Journal of Analysis		SCOPUS / ESCI
Horesh Kumar	CSE AI	Designing error-correcting and combinatorial cryptographic solutions using discrete mathematics	Journal of Discrete Mathematical Sciences & Cryptography		SCOPUS Q1
Manuha Nagpal	MCA	Innovative talent management practices for a seamless digital employee experience with mediation of shared leadership in the information technology (IT) industry	Journal of Innovation and Entrepreneurship	Springer	Scopus
Gunjan Verma	MCA	Underwater image enhancement using hybrid transformers and evolutionary particle swarm optimization	Scientific Reports	Springer Nature	Scopus & WOS
Ambuj Saxena & Tarun Kumar Gupta	ME	Synergistic mechanisms of temperature and strain rate on plastic deformation in SLM 3D printed SS316L utilizing hot processing map analysis	Scientific Reports	Springer Nature	Scopus & WOS
Suresh Pratap	ME	Enhancing the mechanical performance of sustainable high-performance concrete using thermally treated natural fibers: Experimental evaluation and machine learning-based predictive modeling	Construction and Building Materials	Elsevier Ltd	Scopus
Mahfooz Alam	MCA	LWLCM: A novel lightweight stream cipher using logistic chaos function and multiplexer for IoT communications	PLOS ONE	PLOS	Scopus & WOS
Shivam Mishra	ME	Response surface methodology-based optimisation of intercooled gas turbine featuring ceramic matrix composite blades	Thermal Science and Engineering Progress	Elsevier Ltd	Scopus
Divya Sharma	ASH	Integrating Bayesian methods with neural networks for enhanced climatology models	Physica Scripta	IOP Science	Scopus
Nagendra Kumar Maurya & Ambuj Saxena	EEE & ME	Experimental investigation on implications of SLMbased 3D printing parameters on the grain morphology, phase formation, fracture deformation, and mechanical properties of 316 L stainless steel: finite element analysis and parametricoptimizations	Applied Physics A	Springer Nature	Scopus
Azhar Shadab	CSE (DS)	Advanced supervised machine learning methods for precise diabetes mellitus prediction using feature selection	Frontiers in Medicine	Frontiers	Scopus & WOS
Shivani Joshi	CSE	Innovative detection of IoT cyber threats using a GBiTCN-Temformer and MKOA framework ⁵⁸	Journal of Network and Computer Applications	Elsevier Ltd	Scopus

Journal articles published

Name of the Faculty	Department	Title of Paper	Name of Journal	Publisher
Dr. Mahfooz Alam	MCA	LWLCM: A Novel Lightweight Stream Cipher Using Logistic Chaos Function and Multiplexer for IoT Communications	PLOS ONE	Public Library of Science
Dr. Lalan Kumar	MCA	Comparative Study of Machine Learning Algorithms for Skin Cancer Detection	Journal Of Computer Science	
Biky Chouhan, Bishwajeet Pandey	MCA	Edge Computing Based Emulator Design for Low-Latency IoT Health Monitoring System	International Journal of Information Technology	Springer
Bishwajeet Pandey	MCA	Real Time Monitoring of Communication Protocols in 6G Mobile Network Consumer Electronics Applications using Intelligent Surface and Internet of Things	IEEE Transactions on Consumer Electronics, July 2025, (Impact Factor: 10.9, Q1, Electronic ISSN: 1558-4127 Print ISSN: 0098-3063)	IEEE
Bishwajeet Pandey	MCA	Federated Learning With Small and Large Models With Privacy-Preserving Data Space for Holographic Internet of Things in Consumer Electronics	IEEE Transactions on Consumer Electronics, July 2025, (Impact Factor: 10.9, Q1, Electronic ISSN: 1558-4127 Print ISSN: 0098-3063)	IEEE
Bishwajeet Pandey	MCA	Memory forensic: detecting unusual intrusion activity in dump of RAM memory using FTK imager	International Journal of Information Technology	Springer
Bishwajeet Pandey	MCA	Power and area efficient hardware architecture of lightweight cryptography for IoT and embedded systems	International Journal of Information Technology	Springer
Bishwajeet Pandey	MCA	Development of malware in Windows sandbox and Kali MSFvenom for hacking Android and Windows Operating Systems	International Journal of Information Technology	Springer
Dr. Sanjeev Kumar	MCA	The Search-o-Sort Theory	AppliedMath MDPI	

Journal articles published

Name of the Faculty	Department	Title of Paper	Name of Journal	Publisher
Ms. Deepkiran	MCA	The Search-o-Sort Theory	AppliedMath MDPI	
Dr. Upasana Dohare	MCA	Towards precision agriculture: utilizing IoT and deep learning for automatic farm fire detection	Peer-to-Peer Networking and	Springer
Dr. Upasana Dohare	MCA	Intrusion detection in internet of things using differential privacy: A hybrid machine learning approach	Ad Hoc Networks	Elsevier
Dr. Sanjeev Kumar		Radicalized Family of Hyperbolic Secant (RadSech) Iran as an activation function	Journal of Computer Science	Springer
Dr Bishwajeet Pandey	MCA	AES Cryptography Enabled Responsible Federated Foundation Model Using Transformer LLM and LSTM for Smart Grid IIoT Networks	IEEE IOT Journal	IEEE
Dr. Sanjeev Kumar	MCA	Machine Learning-Based Crop Recommendation System using Soil Ecology for Sustainable Agriculture	Environment Conservation Journal	Action for sustainable efficacious development and Awareness (ASEA)
Dr. Sanjeev Kumar	MCA	SAFPRS: Novel Framework of Sentiment Analysis for Lifestyle Product Recommendation System	International Journal of Mathematical, Engineering and Management Sciences	Ram Arti Publisher
Dr. Sanjeev Kumar	MCA	Optimized Ensemble Physics Informed Neural Networking framework for forecasting of Extreme Events	Scientific Reports	Nature

GLBITM Research

**BOOK/ BOOK CHAPTERS
PUBLISHED**

JAN TO SEPTEMBER 2025



BOOKS/ BOOK CHAPTERS PUBLISHED

Name of the Faculty	Department	Category	Title of Book	Published by	Indexing
Dr. Birendra Kumar Saraswat	CSIT	Book Chapter	Security and Privacy in IoE Systems: Computer Vision Approaches for Surveillance and Threat Detection	IGI Global	Scopus
Brij Kishore Tiwari	AS	Book Chapter	Synergistic Approaches for Wastewater Treatment	IGI Global	Scopus
Kiran Malik	CSE (AIML)	Book Chapter	Secure data protection in federated learning for IoT	Institution of Engineering and Technology	Scopus
Vaishali Gupta, Gaurav Jindal	MBA, MCA	Book Chapter	Impact of AI on Operations Management	CRC Press	Scopus
Kiran Malik	CSE (AIML)	Book Chapter	Energy consumption and efficiency in federated learning (FL) for IoT	Institution of Engineering and Technology	Scopus
Kiran Malik	CSE (AIML)	Book Chapter	Federated learning frameworks and algorithms for energy-efficient IoT	Institution of Engineering and Technology	Scopus
Kiran Malik	CSE (AIML)	Book Chapter	Energy harvesting and energy-efficient communication protocols in IoT	Institution of Engineering and Technology	Scopus
Rakesh Kumar	CSE (AI)	Book Chapter	Advanced techniques and best practices for phishing detection	IGI Global	Scopus
Vishwa Ratan Mishra	ME	Book Chapter	Revaluation of 3D Printing Technology and Process Parameters	CRC Press	Scopus
Arvind Nath Sinha	MBA	Book Chapter	Quality assurance in marketing data: Ensuring accuracy and reliability	Emerald Publishing	Scopus
Rupa Rani Sharma, Ravendra Kumar Mishra	AS	Book Chapter	Generic computation of Meyer-Konig and Zeller operators scientific along with numerical computing	CRC Press	Scopus
Subeer Banerjee	MBA	Book Chapter	The impact of virtual storefront aesthetics and shoppable videos on customer shopping experience with customer engagement as mediator: Reflection from South Asian countries	IGI Global	Scopus

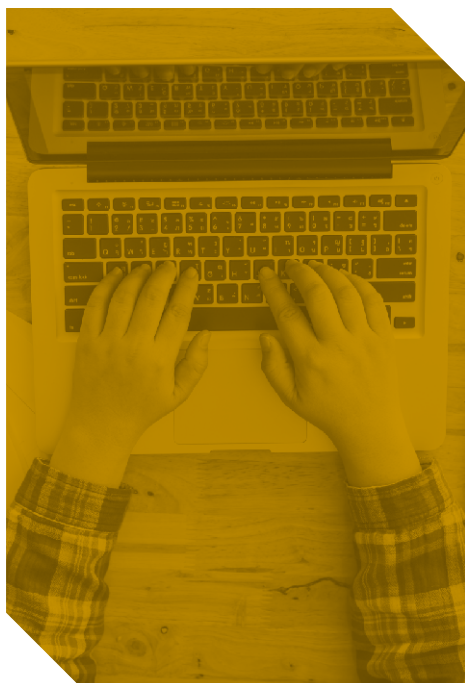
BOOKS/ BOOK CHAPTERS PUBLISHED

Name of the Faculty	Department	Title of Book	Publisher Name
Gaurav Sharma, Kavita Singh, Dr. Bishwajeet Pandey	MCA	Karuna Bites: A smart Platform for reducing food wastage and combating Hunger through Technology	Kindle
Bishwajeet Pandey	MCA	Static and Dynamic Malware Analysis: on Remnux, Kali and Windows Sandbox	Kindle
Bishwajeet Pandey	MCA	Telehealth and Remote Patient Monitoring System	Kindle
Bishwajeet Pandey	MCA	Design and Development of an Efficient Methodology to Bypass Ransomware Attack	Kindle
Bishwajeet Pandey	MCA	Ultrasonic Radar System: A Hands-On Guide to Smart Object Detection	Kindle
Bishwajeet Pandey	MCA	Cryptography tools in ethical hacking	CRC Press
Bishwajeet Pandey	MCA	Cryptography in digital forensics	CRC Press
Bishwajeet Pandey	MCA	Low power design of DES encryption algorithm on 28 nm FPGA using HSTL IO standard	CRC Press
Bishwajeet Pandey	MCA	Output load capacitance scaling based on a low-power design of the ECC algorithm	CRC Press
Bishwajeet Pandey	MCA	Cryptanalysis using CrypTool and AlphaPeeler	CRC Press

BOOKS/ BOOK CHAPTERS PUBLISHED

Name of the Faculty	Department	Category	Title of Book	Published by	Indexing
Devendra Singh Mohan	CSE (AIML)	Book Chapter	Sentiment analysis and emotional recognition: Enhancing therapeutic interventions	IGI Global	Scopus
Kaleemur Rehman	CSE (AI)	Book Chapter	Deep learning and AI in behavioral analysis for revolutionizing mental healthcare	IGI Global	Scopus
Prem Narayan Singh	CSE (DS)	Book Chapter	Real-world case studies: Transforming mental healthcare with natural language processing	IGI Global	Scopus
Gunjan Verma	MCA	Book Chapter	Explainable artificial intelligence in healthcare: Transparency and trustworthiness	John Wiley and Sons Inc.	Scopus
Rupa Rani Sharma, Ravendra Kumar Mishra	AS	Book Chapter	Analyzing Meyer-König and Zeller operators in scientific and numerical computing	CRC Press	Scopus
Arun Kumar	CSE	Book Chapter	Deep Learning-Driven IoT Framework for Detecting Pancreatic Neuroendocrine Tumors	Springer Nature	Scopus
Subeer Banerjee	MBA	Book Chapter	Exploring the Nexus Between Ethical Climate, Affective Commitment, and Job Embeddedness in Higher Education Institutions	IGI GLOBAL	Scopus
Samarth Sharma	MBA	Book Chapter	Exploring the Beauty of Seven Sisters of India: Role of Travel Influencers in Tourism	Springer Nature	Scopus
Upendra Dwivedi	CSE (AIML)	Book Chapter	Medical Image Analysis and Morphology Using Artificial Intelligence	Springer	Scopus
Upendra Dwivedi	CSE (AIML)	Book Chapter	Simulation of Biological Structures Using Generative Artificial Intelligence	Springer	Scopus
Dhanjay Gupta	ECE	Book Chapter	Applications of IoT in biomedical engineering	Bentham Science Publishers	Scopus
Manoj Singhal	CSIT	Book	Network security and data privacy in 6G communication: Trends, challenges, and applications	CRC Press	Scopus

RESEARCH FACILITIES AVAILABLE IN COMPUTING DEPARTMENTS



GL Bajaj Institute of Technology and Management offers comprehensive instructions in the mathematical and computational underpinnings of computer science and engineering. It is a dynamic and forward-thinking academic unit focusing on applied mathematics, computer science, and scientific engineering applications. The department is committed to imparting deep knowledge and skills to its students in cutting-edge computational techniques for real-world science and engineering applications to meet industry demand. With experienced faculty and state-of-the-art resources, we strive to nurture the next generation of professionals and drive advancements in this rapidly evolving field.

1. NVIDIA DGX A – 100 Server Access

2. Listing for E-resources

- ◆ IEEE Xplore Digital Library -
<https://ieeexplore.ieee.org/browse/periodicals/title>
- ◆ Springer - <https://link.springer.com/>
- ◆ EBSCO Business Source ELite - <https://www.ebsco.com>
- ◆ Science Direct-<https://www.sciencedirect.com/>
- ◆ Perlego - <https://www.perlego.com/>
- ◆ (Please click on the link, a video explaining how to access and manage the account:
<https://share.vidyard.com/watch/QYaxSrnfppNC4FyF2Pw7fA?>)
- ◆ DELNET - <https://discovery1.delnet.in/>
- ◆ MyLoft - <https://app.myloft.xyz/user/login?institute=ck4o420t2s5ya099816x5aby9>
- ◆ Knimbus - <https://glbitm.knimbus.com/user#/home>
- ◆ NDL - <https://ndl.iitkgp.ac.in/>
- ◆ NPTEL - <https://nptel.ac.in/courses>

3. Turnitin: Plagiarism Detection Software

4. Research Tools: Anaconda, Scilab, WEKA tool, Draw.io, CISCO Packet Tracer, Wireshark, ORACLE, JDK, Linux, Windows OS, Apache.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

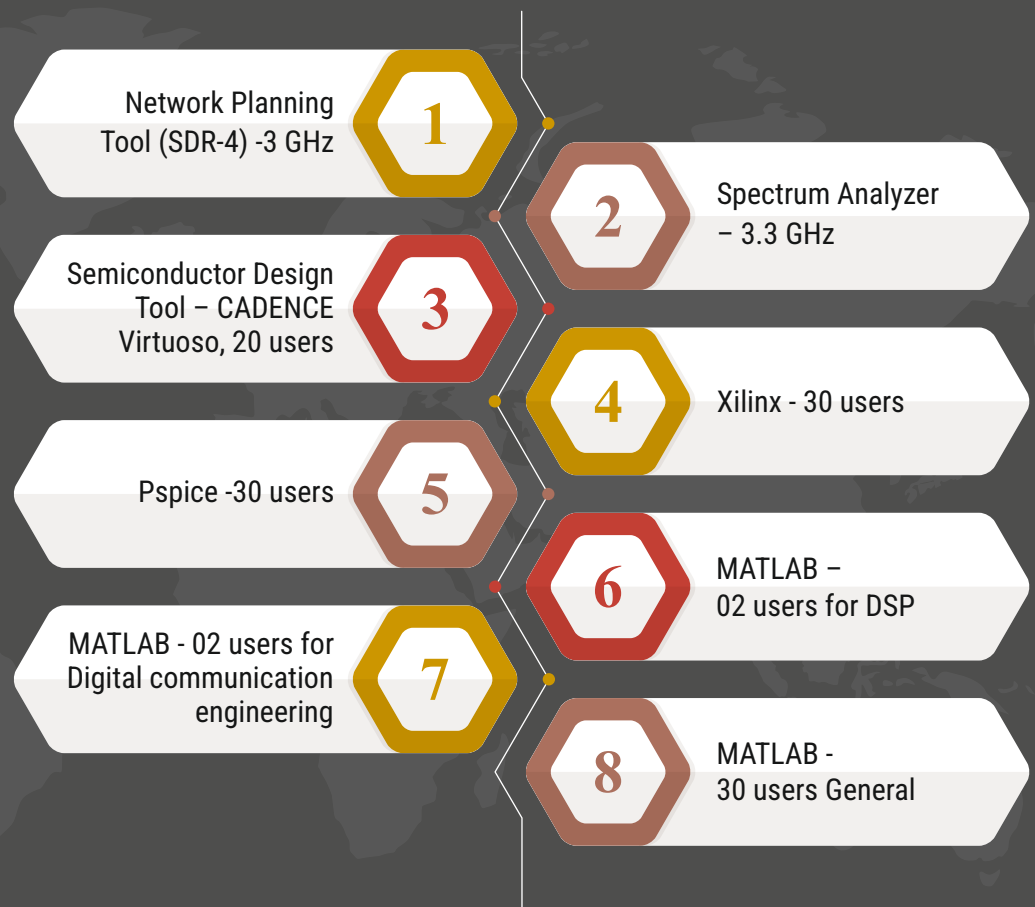
ECE department was established in the year 2005 with an intake of 60 students. It has progressed to an intake of 180 due to our best support and quality TLP. The whole world is looking for our product in every field of day-to-day needs. Electronic products have completely changed the needs of this universe. Engineering is a rigorous part of the verification process which yields quality products. The application of electronics engineering is diversified. Medical applications are lifesaving elements for all the creatures on this earth. Therefore,

accuracy plays a vital role in these applications. We can refer to many such an application as aeronautics, robotics in surgery, welding, automation, etc. Many application of processing needs the highest accuracy hence again verification is on priority. Taking many such an application as a challenge, the department of ECE has started a critical task of learning with an initiative of project/research-based learning.

Research-based learning needs progressive and computational environments to support research.

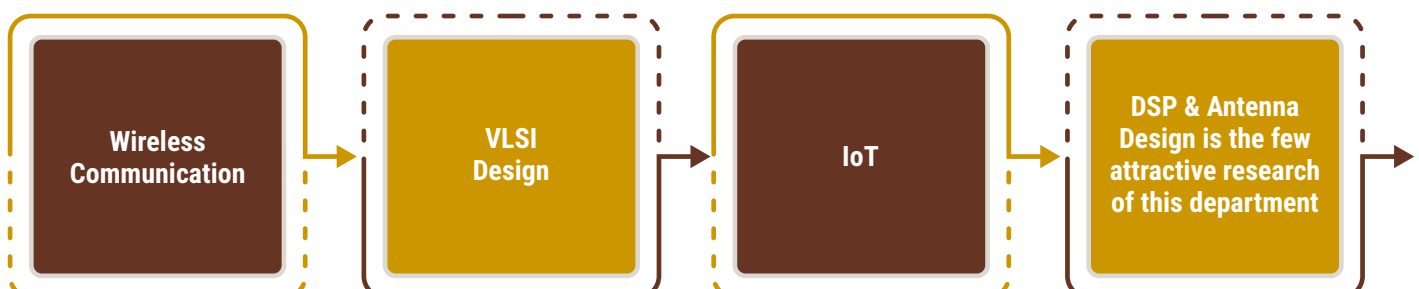
RESEARCH FACILITIES

IN THE
DEPARTMENT OF
ELECTRONICS AND
COMMUNICATION
ENGINEERING



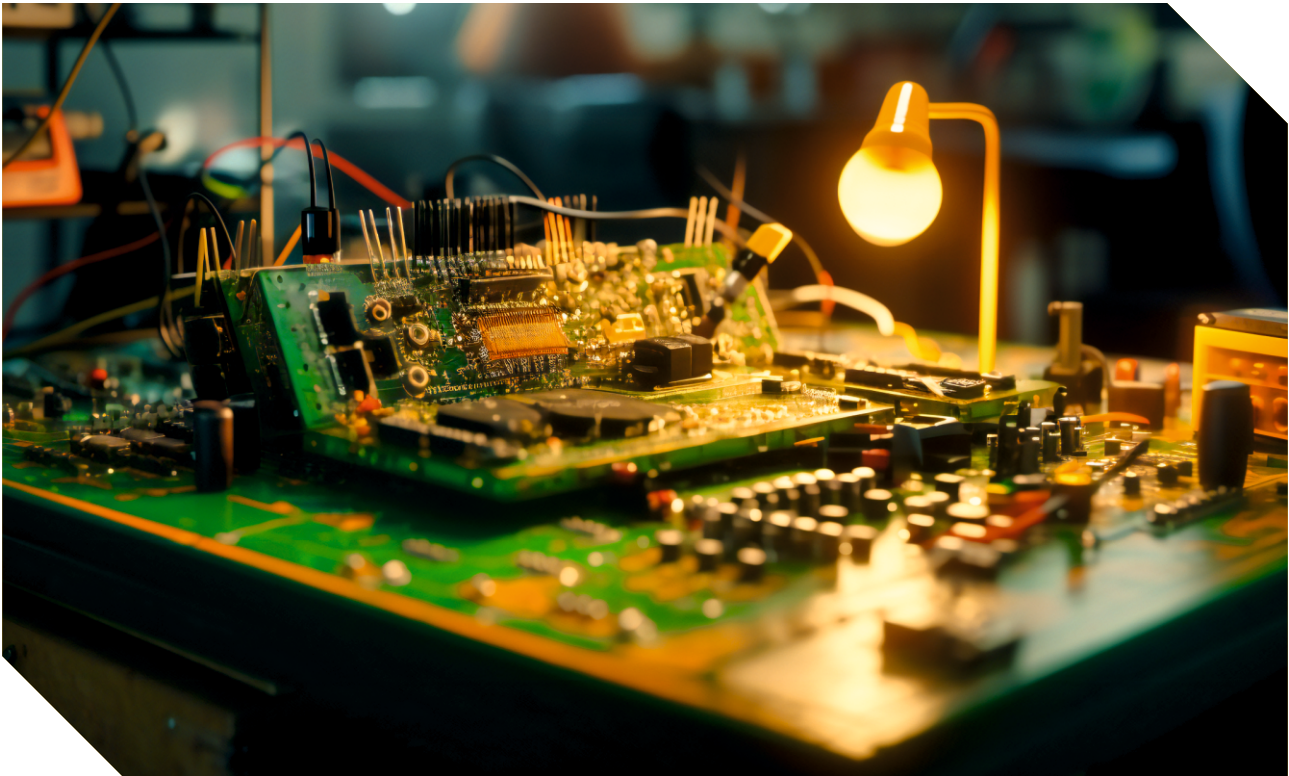
Provision of Research Tools facilitated numerous research papers in the department. At present, Total 135 research papers have been published during the last 05 years and many are under review. The department holds a very effective cadre ratio with good researchers.

17 Ph. D.s from very reputed organizations are the research strength of the ECE department. **The area of research strength of this department is as:**



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

The Department of Electrical and Electronics Engineering at GL Bajaj Institute of Technology & Management was established in the year 2005 with a vision to impart quality education and provide competent professionals to fulfill the needs of industry and society in a global perspective for the sustainable development of industry and society.



RESEARCH FACILITIES

IN THE DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

MAJOR EQUIPMENT'S

3-D Printer, EV Testing equipment

PLC Wiring Panel, HMI with Enclosures

VFD Panel with motor

DC Regulated Power Supply, DSO

1-3 phase electrical machines with
different load arrangements, etc

MAJOR LABS

Workshop Lab

Automation Lab, Software Lab

Power System Lab, Power Electronic
Lab

Analog & Digital Electronics Laboratory

Electrical Machine Laboratory,
Instrumentation Laboratory

Microprocessor Lab

EV Lab, Idea Lab

DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering at GL BAJAJ Institute of Technology & Management, Greater Noida was established in 2005. The department offers 4 year B. Tech. Program in Mechanical Engineering. The department provides a strong foundation for the overall growth and development of the students by enriching them with technical, analytical, quantitative, reasoning, ethical & and linguistic qualities. The department has a pool of well-qualified and experienced faculty having backgrounds from IIT, NIT, and other nationally and internationally recognized institutes in various research areas including Computational Fluid Dynamics, FEM, Rapid prototyping, Smart materials, Combustion, etc.

The following research facilities have been associated with the department, It would be very beneficial for all of us to club with a central research facility.



RESEARCH FACILITIES IN THE DEPARTMENT OF MECHANICAL ENGINEERING

FACILITIES

Conventional Universal testing machine-400kN

Rockwell hardness testing machine

Impact testing machine

Torsion testing machine

Fatigue testing machine

Stir-casting setup

Double disc polishing machine

Robotic Milling machine

Robotic welding machine

CNC lathe machine

CNC milling machine

Additive manufacturing set-up (3D printers)

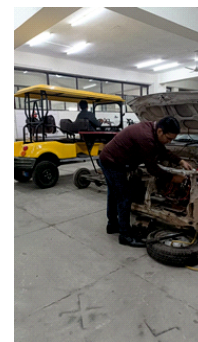
Muffle furnace

Pallet making machine

Glimpses of RESEARCH FACILITIES / LABS



CSE / ACSE



EEE

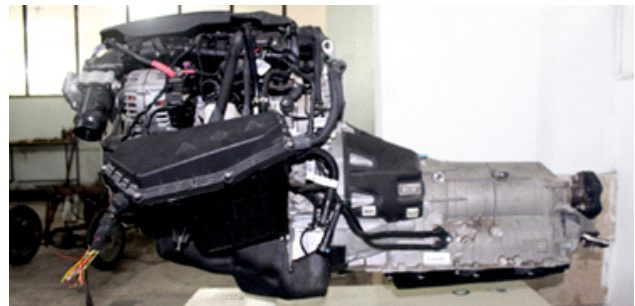


ABB Centre for Robotic Welding

Glimpses of RESEARCH FACILITIES / LABS



BMW Skill Next Automotive Learning Centre



SEIMENS Centre for Mechatronics and Industry 4.0



SEIMENS Centre for Mechatronics and Industry 4.0





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