GL BAJAJ
Institute of Technology & Management
FIND YOUR SPARK
Approved by AICTE & Affiliated to AKTU

DR. ZDISLAW POLKOWSKI

FACE OF COVER

Professor

Jan Wyzykowski University, Wroclaw University of
Economics and Business

UTKARSH

GLBITM RESEARCH NEWS LETTER
NOVEMBER 2025

GL BAJAJ

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PATRONS

Message
from
Face of Cover

DR. ZDZISLAW POLKOWSKI

Adjunct Professor,

Jan Wyzykowski University,

Wroclaw University of Economics and Business

Pioneering Progress Through Research Excellence

Dear Esteemed Readers,

It is with great respect and sincere appreciation that I share my reflections as the featured scholar of the November 2025 edition of the Research Newsletter of G. L. Bajaj Institute of Technology and Management (GLBITM), Greater Noida. I extend my heartfelt gratitude to the leadership and academic community of GLBITM for this honor and for providing a distinguished platform to highlight scholarly contributions and international academic collaboration.I am Dr. Zdzisław Polkowski, Professor at the Faculty of Technical Sciences and Rector's Plenipotentiary for International Cooperation and the Erasmus+ Program at the Jan Wyżykowski University, Polkowice, Poland. Since 2019, I have also served as an Adjunct Professor in the Department of Business Intelligence in Management at the Wrocław University of Economics and Business. Over the years, I have had the privilege of contributing to academia as a visiting and adjunct professor at several institutions across Europe and India, fostering cross-border academic exchange and research collaboration.My academic journey spans diverse leadership and teaching roles, including serving as Dean of the Faculty of Technical Sciences at UZZM in Lubin from 2009 to 2012. I hold a Ph.D. in Computer Science and Management from the Wrocław University of Science and Technology, along with postgraduate qualifications in Microcomputer Systems in Management and Educational Informatics, and an engineering degree in Industrial Computer Systems. These experiences have shaped my interdisciplinary approach to education, research, and innovation.My research interests lie at the intersection of Information Technology in Business, Internet of Things applications, and Educational Technologies. I have authored and co-authored more than 130 journal publications and 35 conference papers, including numerous works indexed in Web of Science, Scopus, and IEEE, and have co-edited several international books published by Springer and CRC Press (Taylor & Francis). I have also had the opportunity to deliver over 70 invited talks at international conferences and to serve on technical program committees, editorial boards, and doctoral research committees across multiple countries.A particularly meaningful milestone in my career was leading a European Commission-funded research project focused on developing innovative methodologies for teaching Business Informatics, reaffirming my belief that education must continuously evolve alongside technological progress. Alongside academia, my engagement with industry through IT consultancy for small and medium enterprises has further strengthened the practical relevance of my research and teaching.GLBITM exemplifies the values I deeply admire in an academic institution—commitment to quality education, international outlook, and a strong culture of research and innovation. The institute's academic achievements and its focus on global collaboration resonate strongly with my own professional philosophy.This Research Newsletter stands as more than a record of accomplishments; it is a celebration of intellectual curiosity, collaborative spirit, and the transformative power of knowledge. I congratulate the editorial team and the entire GLBITM community for sustaining such a meaningful scholarly initiative and encourage readers to explore this November edition with pride and inspiration. May it continue to foster dialogue, partnerships, and innovation toward a future shaped by knowledge and technology.

Message *from* Patrons

MR. PANKAJ AGARWAL
Vice Chairman
G.L. Bajaj Institute of Technology and Management, Greater Noida

MR. KARTIKAY AGARWAL
CEO
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.

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 Editors

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 Rohit Sharma 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.

DR. ROHIT SHARMA

Dean(R&D)

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

As Dean of Research & Development at G.L. Bajaj Institute of Technology and Management, Greater Noida, I am delighted to witness the continued growth of this monthly research newsletter—a platform that truly embodies our institute's unwavering commitment to advancing high-quality research, innovation, and academic excellence. This publication stands as a testament to the vibrant research culture we have collectively cultivated at GLBITM, serving not only as a repository of scholarly contributions but also as a catalyst for interdisciplinary collaboration and intellectual exploration.

At GLBITM, our mission has always been to empower faculty, scholars, and students to engage in impactful research that addresses the pressing needs of society while contributing meaningfully to the global knowledge ecosystem. Through this newsletter, we bring forward diverse research accomplishments, novel ideas, and significant academic milestones that reflect the dedication, rigor, and passion of our research community. It continues to inspire curiosity, promote critical thinking, and strengthen the spirit of innovation across all departments.

With over 15 years of experience in academia and administration, and having worked extensively in high-impact research domains—with more than 200 international publications, 27 authored books, multiple patents, and editorial roles across globally recognized journals—I take immense pride in the research progression at GLBITM. The excellence displayed by our faculty and students resonates strongly with our vision of becoming a premier center of research, innovation, and technological advancement.Our collective achievements, including NAAC A+ accreditation and NBA-certified programs, are not merely institutional milestones but reflections of our consistent pursuit of quality and innovation. This newsletter further amplifies that pursuit by showcasing outstanding research outcomes and fostering a collaborative ecosystem that strengthens GLBITM's position in India's academic landscape and beyond.I extend my heartfelt appreciation to the editorial team, contributors, researchers, and the entire GLBITM fraternity for their relentless efforts in sustaining this academic endeavor. Let us continue to use this platform to push boundaries, exchange knowledge, and elevate the research standards of our institute—driving meaningful impact at both national and global levels.

GLBITM - AT A GLANCE

G.L. Bajaj Institute of Technology and Management (GLBITM), located in Greater Noida, Uttar Pradesh, stands as a distinguished centre of higher education in engineering, management, and computer applications. Established with the mission to nurture skilled professionals, leaders, and innovators, the institute has consistently maintained a strong academic reputation in the region. Governed by the Rajeev Memorial Academic Welfare Society (registered under the Societies Registration Act, 1860), GLBITM is a self-financed institution approved by the All India Council for Technical Education (AICTE), Ministry of Education, Government of India, and affiliated with Dr. A.P.J. Abdul Kalam Technical University (AKTU), Lucknow.

The institute offers a wide array of undergraduate and postgraduate programs, including B.Tech, MBA, and MCA, ensuring comprehensive academic growth. Over the years, GLBITM has secured a leading position among engineering and management institutions under AKTU by consistently achieving top results and maintaining the highest pass percentage in the Noida and Greater Noida region for the last eight years. Its academic excellence has also been recognized at the national level, with the institute being listed among India's top engineering colleges by NIRF (MHRD).

GLBITM holds the unique distinction of being the only private institute in Uttar Pradesh to earn the prestigious NAAC A+ grade in its first cycle of accreditation, reflecting its exceptional standards in teaching–learning processes, research, governance, and infrastructure. Additionally, all eligible engineering departments are accredited by the National Board of Accreditation (NBA), further cementing its commitment to quality education.

The campus of GLBITM is spread across a modern, well-planned environment equipped with state-of-the-art infrastructure. It features technologically advanced classrooms, well-equipped laboratories, a central library with an extensive digital and physical collection, and sophisticated computing facilities. The institute also promotes holistic development through diverse sports amenities, clubs, and recreational spaces.

Industry exposure forms a vital component of the institute's academic ecosystem. Regular workshops, seminars, guest lectures, and corporate interactions ensure that students remain aligned with current industry trends. The dedicated placement cell consistently secures strong placement offers for graduating students from leading multinational companies and reputed organizations.

Research and innovation form an integral part of the institute's ethos. GLBITM encourages faculty members and students to pursue research activities, fostering a culture of inquiry and discovery. With numerous research centres and innovation labs, the institute actively collaborates with national and international universities, industries, and academic bodies.

Up to October 2025, GLBITM has demonstrated remarkable research accomplishments and metrics based on Scopus data. The institute has published 2296 papers and achieved 19,688 citations, reflecting its strong research footprint. The publication categories include 1113 conference papers, 814 articles, 245 book chapters, and 54 review papers. Furthermore, the institute has established research collaborations with 150 universities and institutions worldwide and maintains an impressive H-Index of 56 in Scopus. Notably, 64 publications were recorded in October 2025 alone.

A distinguishing feature of GLBITM's academic ecosystem is its strong network of Centers of Excellence (CoEs), established in collaboration with leading global technology organizations. These Centres of Excellence serve as advanced hubs for hands-on learning, research, innovation, and industry-oriented skill development. They enable students to gain practical exposure to cutting-edge technologies and emerging tools while bridging the gap between classroom learning and real-world applications.

With around 50 patents filed and granted, the institute continues to advance cutting-edge research and foster a spirit of technological innovation

The institute proudly hosts several high-impact CoEs, such as the Palo Alto Cybersecurity Centre of Excellence, which provides state-of-the-art training in network security, threat intelligence, and cyber defence. The Wipro Centre of Excellence enhances competency in next-generation digital technologies and enterprise solutions, while the NVIDIA Deep Learning & AI Lab empowers students and researchers to explore artificial intelligence, machine learning, and GPU-accelerated computing. Additionally, GLBITM houses specialized centres such as the Cisco Networking Centre, the SAP Centre of Excellence, and other domain-focused labs that offer globally recognized training modules, certifications, and experiential learning opportunities.

These Centres of Excellence not only strengthen technical expertise but also foster innovation, entrepreneurship, and skill-based learning. They play a pivotal role in preparing students for the rapidly evolving technology landscape and in ensuring that graduates of GLBITM are industry-ready, globally competitive, and aligned with the expectations of leading organizations.

Overall, GLBITM stands as a premier academic institution dedicated to excellence in education, research, and holistic student development. Through its world-class infrastructure, strong industry linkages, high-quality academic environment, and commitment to innovation, the institute continues to shape competent, responsible, and future-ready professionals.

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*
NOVEMBER'25

EVENTS ORGANIZED BY DEPARTMENTS

1

GIT AND GITHUB WORKSHOP
Date: 24 Nov 2025
Deptt: CSE

Git and GitHub Workshop, an engaging hands-on technical session, was organized by GDG On Campus GLBITM under the Department of Computer Science & Engineering at G. L. Bajaj Institute of Technology & Management on 24th November 2025. Students learned Git from the basics - initialization, commits, and branching—to remote collaboration using GitHub. Each segment strengthened their understanding as they saw their work reflected instantly in shared repositories. Behind the scenes, the GDG On Campus team managed registrations, workshop flow, audio-visual arrangements, and live assistance with dedication. The event was conducted seamlessly under the supervision of Dr. Sansar Singh Chauhan, HOD-CSE, with support from Dr. Payal Garg, Faculty Coordinator and Ratna Priya GDG Lead.

2

RESEARCH-KNOWLEDGE TRANSFER SESSION
Date: 8 Nov 2025
Deptt: CSE

Dr. Nikhil Sharma from the CSE Deptt, shared insights from his latest research publication titled "Blockchain-Based Framework for Secure Medical Data Sharing and Disease Diagnosis Using Optimized Deep Belief Networks," published in the prestigious Q1 Springer journal, Cluster Computing (2025), with an Impact Factor of 4.1. This marks his seventh international journal publication, reflecting his continued contributions to cutting-edge research in the field of Artificial Intelligence and Blockchain for Healthcare.

Dr. Sharma discussed his proposed hybrid healthcare framework, which integrates Blockchain technology and Deep Learning to ensure both data security and accurate early detection of epilepsy. The model employs Elliptic Curve Cryptography (ECC), SHA3-512 hashing, and Ethereum blockchain integrated with IPFS for secure, decentralized medical data sharing. Additionally, the system utilizes an Optimized Deep Belief Neural Network (ODBNN) fine-tuned with a Simulated Annealing–Gradient-Based Optimizer (SA-GBO) for detecting epileptic seizures from EEG signals.

The session provided valuable exposure to emerging interdisciplinary technologies, inspiring faculty members and students to explore innovative research avenues in AI, cybersecurity, and healthcare informatics.

3 HACKBUZZ 2.0
Date: 22&24 Nov 2025
Deptt: CSE AI

HackBuzz 2.0 is scheduled for November 22nd and 24th, 2025, organizedby the Vividhata Club under the Department of CSE-AI. The purpose of theevent is to engage students in a competitive coding environment throughan online elimination round followed by an offline DSA coding round. Thecontest is designed to strengthen participants' problem-solving abilities,logical reasoning, and algorithmic thinking while fostering a culture oftechnical excellence and collaboration.

4 GUEST LECTURE
Date: 19th Nov 2025
Deptt: CSE IT

The Department of Computer Science & Information Technology, GL Bajaj Institute of Technology & Management, organized a Guest Lecture on "Innovative Approaches to Microservices Using Spring Boot for Modern Java Developers" on 19th November 2025. The speaker of the session was Mr. Dhruv Saraswat, our esteemed guest and a Module Lead at HappiestMinds Technologies. The objective of the lecture was to introduce students to microservices architecture and the use of Spring Boot for building scalable and efficient applications. It aimed to provide industry-oriented insights, enhance backend development skills, and familiarize students with modern software design patterns. The lecture enhanced students' understanding of microservices architecture and Spring Boot development. They gained exposure to industry practices, deployment tools, and real-world application design

5 WORKSHOP
Date: 20 Nov 2025
Deptt: CSE IT

The Department of Computer Science & Information Technology at GL Bajaj Institute of Technology & Management organized a focused workshop titled "AI and Industry 4.0 Tools for Innovators and Entrepreneurs" on November 20, 2025, from 9:00 AM onwards in Room No. 701, Academic Block II. Led by Mr. Chandra Shekhar Ram, Assistant Professor and IIC Innovation Ambassador, the 120-minute intensive session introduced participants to the fundamentals of artificial intelligence and Industry 4.0 technologies. The workshop covered key topics including the evolution of industrial revolutions, generative AI tools like ChatGPT and Claude, computer vision and NLP applications, IoT platforms, cloud computing, big data analytics, and digital twin technology. A highlight of the event was a hands-on demonstration where participants explored practical business applications of ChatGPT, enabling them to experience firsthand how AI can transform entrepreneurial ventures. The session provided aspiring innovators and entrepreneurs with essential knowledge about cutting-edge technologies, their business applications, and implementation strategies. Through live demonstrations and interactive discussions, participants gained valuable insights into leveraging AI and I4.0 tools for competitive advantage, leaving them better equipped to integrate these transformative technologies into their innovation journey and startup ecosystems.

6 IDEARUSH 2025 POSTER PRESENTATION
Date: 22 Nov 2025
Deptt: ECE

IDEARUSH 2025, held on 22 November 2025 at SBG Hall, GL Bajaj Institute of Technology and Management, brought together around 100 participants who presented innovative A1-size posters on themes such as Artificial Intelligence, FinTech, pollution control, 5G/6G communication, and smart sanitation systems. Organized by the Anvitha Club, the event began at 10:00 AM with poster displays, followed by interactive evaluations by judges Mr. Sandeep Kumar and Dr. Shweta Singh. Faculty mentors actively guided students on transforming their ideas into research projects or prototypes. The top winners were 1st Prize: Ctrl + Upgrade (Unnayan, Ranjan & Varshney) -₹2500, 2nd Prize: Recon (Satyam Agrawal, Sharad Verma & Arbaz Nafees) - ₹1500, and 3rd Prize: Mine Scan Solutions (Anant Sahu & Aryan Srivastava) - ₹1000, and all participants received certificates recognizing their contributions

7 CELEBRATING NATIONAL EDUCATION DAY 2025
Date: 11 Nov 2025
Deptt: ECE

Department of Electronics & Communication Engineering, GL Bajaj Institute of Technology and Management, Greater Noida in collaboration with Institution's Innovation Counsil (IIC) GLBITM celebrated "National Education Day" on 11th November, 2025

National Education Day is observed in India every year on November 11 to mark the birth anniversary of Maulana Abul Kalam Azad, the first Education Minister of independent India. The day pays tribute to his remarkable contributions toward building the nation's education system and promoting the value of knowledge and learning. Educational institutions across the country—schools, colleges, and universities—organize seminars, essay writing competitions, and debates to emphasize the pivotal role of education in national progress. The celebration also underscores the importance of inclusive and equitable education for all, echoing Maulana Azad's vision of a forward-thinking and enlightened India.

The keynote address was delivered by Dr. Satyendra Sharma (Professor & HOD, ECE), who enlightened the audience about the life and legacy of Maulana Abul Kalam Azad. He highlighted Azad's unwavering belief in inclusive education, stressing that every child—irrespective of gender, caste, or religion—deserves the opportunity to learn and grow. Dr. Sharma quoted Azad's inspiring words: "Education imparted by heart can bring revolution in the society." These words serve as a powerful reminder of the transformative role of education in shaping not only individuals but the destiny of a nation.

Dr. Krishanu kundu (Associate Professor, ECE) coordinated the whole event. Around 54 students of ECE Department participated in the event.

8 POSTER MAKING COMPETITION ON NATIONAL CANCER AWARENESS DAY 2025

Date: 7 Nov 2025
Deptt: CSE DS

YuktiKula Club, organized a meaningful and socially responsible event on the occasion of National Cancer Awareness Day, held on 7th November 2025 at the CTM Building. The initiative aimed to educate students about cancer prevention, early detection, and the importance of adopting healthy lifestyle practices.A Poster Making & Presentation Competition served as the highlight of the event, providing students with a platform to creatively express powerful messages on cancer awareness, hope, and resilience. The posters displayed thoughtful insights, reflecting the students' sensitivity and commitment toward the cause. The gathering also witnessed a unique moment of unity and patriotism as participants collectively sang "Vande Mataram," commemorating 150 years of its composition. This added a sense of national pride and collective strength to the event.The program concluded with the inspiring message: "Be Aware, Be Strong, and Beat Cancer," encouraging everyone to contribute to a healthier and more informed society.

9 THREADS OF KINDNESS – CLOTHES DONATION DRIVE

Date: 15 Nov 2025
Deptt: CSE DS

YuktiKula Club, Rotaract Club GLBITM, and Vivid Petals Welfare Organization, organized a compassionate initiative titled "Threads of Kindness – Small Act, Big Impact!" from 12th–15th November 2025. The drive encouraged students and faculty to donate warm, usable clothes to support underprivileged families during the winter season.With multiple collection points across campus, volunteers worked together to collect, sort, and distribute jackets, sweaters, blankets, and daily wear items. The distribution near Somerville School brought immediate relief to many families, who expressed heartfelt gratitude for the support.The initiative strengthened values of empathy, social responsibility, and community service among participants, with many donors showing interest in supporting similar drives in the future.

10 FACULTY DEVELOPMENT PROGRAM (FDP) ON "RESEARCH PAPERS, IPR AND PROJECT PROPOSAL WRITING

Date: 17-22 Nov 2025
Deptt: R&D Cell

The Research and Development Department of G. L. Bajaj Institute of Technology & Management (GLBITM) successfully organized a 6-Day Faculty Development Program (FDP) titled "Research Papers, IPR and Project Proposal Writing" from 17th to 22nd November 2025, conducted in online mode. The program was designed to strengthen faculty competencies in research methodology, intellectual property rights, scholarly writing, and effective project proposal development, thereby fostering a robust research culture within the institution.

The FDP witnessed active participation from 150 faculty members, who engaged enthusiastically across all sessions. The program brought together a distinguished panel of national and international experts, offering diverse perspectives on contemporary research practices, innovation, patenting processes, publication strategies, and global funding opportunities. Each session was thoughtfully curated to balance theoretical foundations with practical insights, enabling participants to identify research gaps, enhance academic writing quality, and develop competitive project proposals.

Over the course of six days, the FDP featured eleven expert-led sessions, covering areas such as research ethics, high-impact journal publication, IPR and patent filing, interdisciplinary research, proposal drafting, and international collaboration. Interactive discussions, live Q&A sessions, and reflective exchanges further enriched the learning experience, encouraging participants to think innovatively and collaboratively beyond disciplinary boundaries.

The program concluded with a valedictory session, written assessment, and feedback collection, reflecting a high level of participant satisfaction and positive learning outcomes. The seamless execution of the FDP was made possible through the continuous support of the Institute Management, the guidance of the Respected Director Ma'am, and the dedicated efforts of the programme coordinators and organizing team.

The FDP concluded with a strong message emphasizing the importance of quality research, ethical practices, and innovation-driven academic excellence, reinforcing GLBITM's commitment to advancing research, intellectual property awareness, and professional development among faculty members.
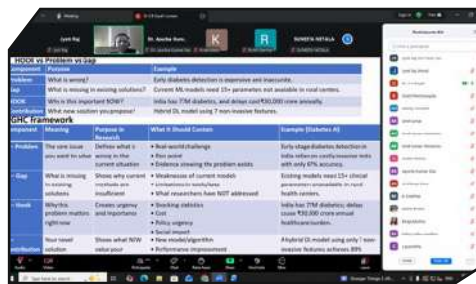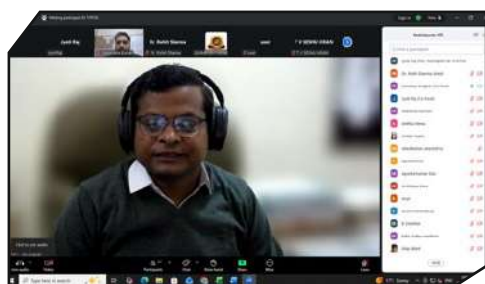
FACULTY ACHIEVEMENTS

DR. VRINDA SACHDEVA HAS SUCCESSFULLY COMPLETED THE NPTEL COURSE

Dr. Vrinda Sachdeva has successfully completed the NPTEL Deep Learning – IIT Ropar course (Jul–Oct 2025) with an Elite score of 84%. ongratulations to her on this achievement.

MS. PRAGYA HAS SUCCESSFULLY COMPLETED THE NPTEL COURSE

Ms. Pragya has successfully completed the NPTEL Online Certification Course on Programming in Java, conducted by IIT Kharagpur, with an Elite Grade, securing 82% marks during the July–October 2025 session.

MS. ARADHNA SAINI HAS SUCCESSFULLY COMPLETED THE NPTEL COURSE

Ms. Aradhna Saini has successfully completed the NPTEL course on Artificial Intelligence: Concepts and Techniques with a consolidated score of 75% (Jul–Oct 2025).

SAIJSHREE SRIVASTAVA HAS SERVED AS A REVIEW COMMITTEE MEMBER

Saijshree Srivastava has served as a Review Committee Member for the International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA 2026) and successfully reviewed paper

FACULTY ACHIEVEMENTS

DR. PUSHPA SINGH SERVED AS A REVIEWER AT THE GLOBAL AI SUMMIT 2025

Dr. Pushpa Singh served as a Reviewer at The Global AI Summit 2025, International Conference on Artificial Intelligence and Emerging Technology 2.0, organized by the School of Computer Science, Engineering and Technology, Bennett University from 19–21 November 2025. The event was technically co-sponsored by the IEEE UP Section.
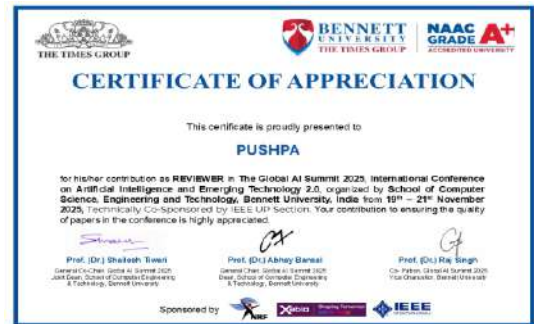
FACULTY RESEARCH ACHIEVEMENT IN ENERGY-EFFICIENT IOT–FOG–CLOUD COMPUTING

Dr. Devinder Singh Mohan served as an Author and Presenter at the 2025 International Conference on Next Generation of Green Information and Emerging Technologies (GIET), where his research paper titled "Optimised Load Balancing for Energy Efficiency in IoT–Fog–Cloud Frameworks" was published by IEEE. The conference was held on 08–09 August 2025 in Gunupur, India, and was technically supported by IEEE.
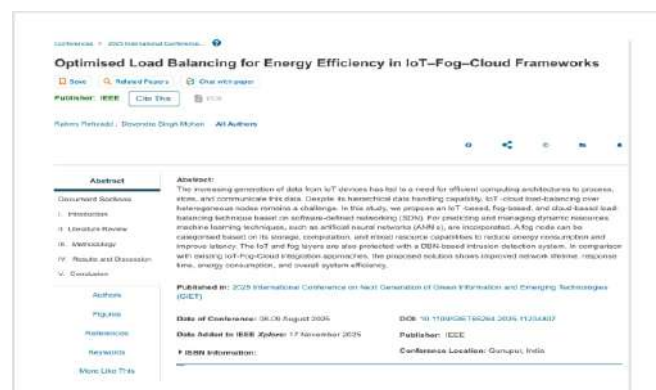
DR. BIRENDRA KUMAR SARASWAT HAS CONTRIBUTED AS SESSION CHAIR

Dr. Birendra Kumar Saraswat has contributed as Session Chair in 5th International Conference on Advancement in Electronics & Communication Engineering (AECE - 2025) at RKGIT, Ghaziabad held on 21 November 2025.

DR. BIRENDRA KUMAR SARASWAT HAS CONTRIBUTED AS SESSION CHAIR

Dr. Birendra Kumar Saraswat has contributed as Session Chair in 2nd International Conference on Emerging Technologies & Innovation for Sustainability- 2025 at NIET, Greater Noida held on 28th-29th November 2025

FACULTY ACHIEVEMENTS

DR. P. C. VASHIST HAS CONTRIBUTED AS SESSION CHAIR

Dr. P. C. Vashist has contributed as Session Chair in 2nd International Conference on Emerging Technologies & Innovation for Sustainability- 2025 at NIET, Greater Noida held on 28th-29th November 2025.

DR. HARIKESH SINGH HAS SUCCESSFULLY COMPLETED THE NPTEL COURSE

Dr Harikesh Singh successfully completed the NPTEL (National Programme on Technology Enhanced Learning) course titled "Accreditation and Outcome Based Learning", offered during the August–October 2025 session as an 8-week course.

MR.ABHISHEK SATYARTHI HAS SUCCESSFULLY COMPLETED THE NPTEL COURSE

Mr Abhishek Satyarthi has successfully completed the NPTEL Online Certification course titled "Deep Learning – IIT Ropar" offered under the Ministry of Education, Government of India. In a 12-week program, conducted during the July–October 2025

MS RACHANA SINGH SISODIA HAS SUCCESSFULLY COMPLETED THE NPTEL COURSE

Ms. Rachana Singh Sisodia has successfully completed the NPTEL course "Human Computer Interaction (In Hindi)" with an impressive 88% score, earning an Elite Certification (Jul–Oct 2025)

FACULTY ACHIEVEMENTS

DR. NAGENDRA KUMAR HAS SUCCESSFULLY COMPLETED THE NPTEL COURSE

Dr. Nagendra Kumar, Associate Professor, on his outstanding academic achievements. He achieved an Elite Top 5% performance with a consolidated score of 73% in the NPTEL–AICTE Faculty Development Programme on "Machine Learning and Deep Learning – Fundamentals and Applications" conducted by IIT Guwahati. In addition, he successfully completed the 6-Day Faculty Development Programme on "Research Papers, IPR and Project Proposal Writing" organized by the Research & Development Cell, GL Bajaj Institute of Technology & Management, Greater Noida.

NPTEL NOVEMBER 2025

Faculty Member	Designation	Department	Marks (%) Obtained	Remark	NPTEL Course Title
Dr.Varun Kumar Tanwar	Assistant professor	AS- Maths	72	Elite	Matrix Computation and its Applications
Dr. Neetu Singh	Assistant professor	AS- Maths	78	Silver	Statistical Learning for Reliability Analysis
Kapil Dave	Assistant professor	AS- Maths	79	Elite	Engineering Mathematics-I
Dr Rahul	Assistant professor	AS- PHYSICS	69	Elite	Experimental Physics I
Dr Varsha Rani	Assistant professor	AS- PHYSICS	75	Topper	Experimental Physics 1
Dr. JASPREET SINGH AULAKH	Assistant professor	AS- PHYSICS	94	Topper	Physics of Nanomaterials
Dr Pooja Rani	Associate professor	AS- PHYSICS	60	Elite	Adolescent Health and Well-Being: A Holistic Approach
Dr.Manvinder Singh	Professor	AS- PHYSICS	71	Elite	Adolescent Health and well being A Holistic Approach
Sanjay Kumar	Assistant professor	AS- PHYSICS	73	Elite	Physics of Nanomaterials
Dr. Vimal	Assistant professor	AS- PHYSICS	90	Gold	Adolescent Health and Well - Being: A Holistic Approach
Rajni Chaudhary	Assistant professor	AS- PHYSICS	65	Elite	Engineering Physics I
Dr ARVIND MISHRA	Professor	AS- PHYSICS	87	Topper	WAVE OPTICS
Dr Pooja Saxena	Associate professor	AS- PHYSICS	79	Silver	Adolescent Health and Well-Being: A Holistic Approach
Dr. Afreen Anjum	Assistant professor	AS- CHEMISTRY	53	Elite	Transition Metal Organometallic Chemistry: Principles to Applications
Dr. Harendra Singh	Assistant professor	AS-EC	73	Elite	Digital Electronics
Dr Medha Joshi	Assistant professor	AS-EC	85	Topper	Cryogenic Electronics for Quantum Computing
Geeta Saini	Assistant professor	AS-EC	65	Elite	Digital circuits
Avinash Kumar	Assistant professor	AS-EC	66	Elite	Digital electronics
Avinash Kumar	Assistant professor	AS-EC	66	Elite	Digital electronics
Avinash Kumar	Assistant professor	AS-EC	61	Elite	Cloud computing
Dr Medha Joshi	Assistant professor	AS-EC	63	Elite	Introduction to Machine Learning
Ramkrishna	Assistant professor	AS-EC	60	Elite	Digital circuit
Dr Uliya Mitra	Assistant professor	AS-EE	88	Silver	Introduction to Industry 4.0 and Industrial Internet of Things
Seraj Ahamad	Assistant professor	AS-EE	51	Elite	Fundamentals of Electrical Engineering
Amit Kumar Rajput	Assistant professor	AS-EE	55	Elite	Mathematical Foundations for Machine Learning
Diksha Kushwahae	Assistant professor	AS-EE	78	Silver	Accreditation and Outcome Based Learning
Vanshika Rajput	Assistant professor	AS-ENGLISH	75	Silver	Reserach Methodology in Humanities and Social Sciences
Dr Amit kumar Shukla	Assistant professor	AS-ENGLISH	66	Elite	Developing Soft skills and Personality
Dr. Priya Agrawal	Assistant professor	AS-ENGLISH	56	Elite	Research Methodology in Humanities and Social Sciences
Vanshika Rajput	Assistant professor	AS-ENGLISH	75	Silver	Research Methodology in Humanities and Social Sciences
Dr. Rashmi Verma	Assistant professor	AS-ENGLISH	69	Elite	Reasearch methodology in humanities and social sciences
Dr Meenu Agarwal	Assistant professor	AS-EVS	69	Elite	Wastewater Treatment and Recycling
Neha Sharma	Assistant professor	AS-EVS	79	Topper	Wastewater Treatment and Recycling
Heena	Assistant professor	AS-EVS	66	Elite	Sustainable Transportation Systems
Vipul Kumar Sharma	Assistant professor	AS-ME	67	Elite	Product Design and Development
BINIT KUMAR	Assistant professor	AS-ME	52	Elite	Product design and development
Dr. Shivam Mishra	Associate professor	AS-ME	71	Elite	Product Design and Development
HARVENDRA SINGH	Assistant professor	AS-ME	64	Elite	Product design and development
Gaurav Gupta	Assistant professor	AS-PPS	64	Elite	AI Concepts and Techniques
Antima	Assistant professor	AS-PPS	60	Elite	Python for data science
Anil Gupta	Assistant professor	AS-PPS	54	Elite	Artificial intelligence: Concepts and Techniques
Gaurav Gupta	Assistant professor	AS-PPS	64	Elite	AI concepts and Techniques

FDP/MDP/Training Program/Workshop

Faculty Member	Department	Title	Days
Mr. Abhishek Singh	CSE AI	Artificial Intelligence: Concepts and Techniques	12 Weeks
Ms. Nidhi Kataria Chawla	CSE AI	"FDP on AI and Cloud-Based Tools for Effective Teaching Learning Organised by NITTTR,Chandigarh"	5 Days
Dr. Avadhesh Kumar Sharma	CSE AI	Signal Processing Algorithms and Architectures	04 Weeks
Dr Meenu Agarwal	ASH	Wastewater treatment and recycling	12 weeks
Neha Sharma	ASH	Wastewater treatment and recycling	12 weeks
Ms. Vanshika Rajput	ASH	AI in Education	6 Days
Shrishti Parihar	ASH (Soft Skills)	Research Proposal Writing& Research Grants	5 Days
Shrishti Parihar	ASH (Soft Skills)	Research Approaches & Questionnaires Designing	5 Days
Dr Manvinder Singh	ASH(PHYSICS)	Adolescent Health and Well-Being : A Holistic Approach	4 weeks
Dr.Manvinder Singh	ASH [PHYSICS]	AECE 2025	2days
Dr Pooja Saxena	ASH(PHYSICS)	Research Papers, IPR and Project Proposal Writing	6 days
Dr Pooja Rani	ASH(PHYSICS)	Research Papers, IPR and Project Proposal Writing	6 days
Diksha Kushwahae	EEE (ASH)	Accreditation and Outcome based learning	8 weeks
Dr. Purnendy Shekhar Pandey	ECE	Research Papers, IPR and Project Proposal Writing	5 Days
Dr. Purnendy Shekhar Pandey	ECE	Technology & Innovation Conclave (ESTIC-2025)	3 Days
Dr. Jay Singh, Professor	EEE	Advanced Trends for the Optimization, Protection and Control in Electrical Based Systems	6 Days
Mr. Rahul Singh	EEE	Advanced Trends for the Optimization, Protection and Control in Electrical Based Systems	6 Days
Dr. Priyanka Datta	EEE	Research Papers, IPR and Project Proposal Writing	5 Days
Dr.Nagendra Kumar	EEE	Research Papers, IPR and Project Proposal Writing	5 Days

Dr. Birendra Kumar Saraswat, Mr. Chandra Shekhar Ram from the Department of CSIT actively participated in a 6-days FDP on Research Papers, IPR and Project Proposal Writing organized by Research & Development Cell, GL Bajaj Institute of Technology & Management, Greater Noida on 17th November 2025 to 22nd November 2025

Mr. Md Sohaib Iqubal from the Department of CSIT actively participated in a 6-days ATAL FDP on Innovation and Entrepreneurship for India's Sustainable Future at National Institute of Technology Patna from 10/11/2025 to 15/11/2025.

Mr. Md Sohaib Iqubal from the Department of CSIT actively participated in a 6-days ATAL FDP on Future Intelligent Network Toward 6G: 5G and beyond with Reconfigurable SDR and Machine Learning at National Institute of Technology Rourkela from 24/11/2025 to 29/11/2025

Dr Shruti Traymbak participated in the Five-Day National Level Workshop on Essential Statistical Tests for Research using SPSS from 11.11.2025 to 15.11.2025 through Online Mode.

Ms. Sugandha Chakraverti successfully participated in the AICTE Training and Learning (ATAL) Academy Faculty Development Program titled "Role of Responsible Artificial Intelligence (AI) in Driving Global Progress Towards Sustainable Development Goals (SDG)."

Dr. Purnendy Shekhar Pandey from the Department of ECE actively participated in a 6-days FDP on Research Papers, IPR and Project Proposal Writing organized by Research & Development Cell, GL Bajaj Institute of Technology & Management, Greater Noida on 17th November 2025 to 22nd November 2025

Dr. Purnendu Pandey participated in the Emerging Science, Technology & Innovation Conclave (ESTIC-2025), held from 3rd to 5th November 2025 at Bharat Mandapam, New Delhi. The conclave served as a national platform bringing together policymakers, researchers, academicians, and industry leaders to deliberate on cutting-edge advancements and future directions in science, technology, and innovation. The event emphasized interdisciplinary collaboration, knowledge exchange, and innovation-driven development aligned with India's technological and research aspirations.

Dr. Jay Singh, Professor (EEE), successfully completed the prestigious AICTE−ATAL Faculty Development Programme on "Advanced Trends for the Optimization, Protection and Control in Electrical Based Systems" conducted at J.C. Bose University of Science and Technology. This achievement reflects his strong commitment to academic excellence, advanced technical expertise, and continuous professional development.

Mr. Rahul Singh, Assistant Professor (EEE Deptt), successfully completed the prestigious AICTE−ATAL Faculty Development Programme on "Advanced Trends for the Optimization, Protection and Control in Electrical Based Systems" conducted at J.C. Bose University of Science and Technology. This achievement reflects his strong commitment to continuous learning and excellence in advanced electrical engineering education and research

Dr. Priyanka Datta and Dr.Nagendra Kumar (EEE Deptt)successfully participated in the 6 Days Faculty Development Programme on "Research Papers, IPR and Project Proposal Writing" organized by the Research & Development Cell, GL Bajaj Institute of Technology & Management, Greater Noida. The program strengthened her skills in academic research, intellectual property rights, and effective project proposal writing, marking a valuable step in her professional growth and research excellence

GLBITM
Research
Highlights for
JOURNAL PUBLICATIONS
NOVEMBER 2025

Journal articles published

Name of Faculty	Department	Title of Journal	Title of Paper	Category	Indexing
Abhishek Pandey	ME	MAPAN	Development and Characterization of Functionally Graded Al2024-Ni Metal Matrix Composite Leaf Plate under T3 Heat Treatment	Journal	SCIE
Ambuj Saxena	ME	Journal of Materials Engineering and Performance	Synergistic Mechanisms in Magnetic Abrasive Finishing Process: Optimizing Precision and Internal Roundness of Inconel-718 Superalloys for Aerospace Applications	Journal	SCIE
Ambuj Saxena	ME	Mapan	Development and Characterization of Functionally Graded Al2024-Ni Metal Matrix Composite Leaf Plate under T3 Heat Treatment	Journal	SCIE
Ambuj Saxena	ME	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	Representative volume element (RVE) based FEA investigation on the plastic flow behaviour of friction-stir processed AA7075/Si3N4 composite under constrained deformation conditions	Journal	SCIE
Anand Muni Mishra	CSIT	Applied Stochastic Models in Business and Industry,	An Approach to Explore Consumer Behavior Patterns in Retail Markets Using Market Basket Analysis	Journal	SCIE
Ashutosh Mishra	CSE	Sustainable Chemistry for Climate Action	Microbe-driven valorisation of bio-waste for biofertilizer production: A comprehensive review	Journal	Scopus
Bishwajeet Pandey	MCA	Journal of Mechanics of Continua and Mathematical Sciences	Resource-efficient FPGA implementation of CRYSTALS-Kyber: achieving ultra-low-power post-quantum cryptography with minimal hardware footprint	Journal	Scopus
Dinesh Kumar Singh	ECE	Scientific Reports	Flexible four-port MIMO antenna loaded with frequency selective surface for on-body applications	Journal	SCIE
Durvesh Yadav	ME	Progress in Computational Fluid Dynamics, an International Journal	Non-dimensional parametric optimisation of hydraulic performance of centrifugal pump using response surface analysis	Journal	SCIE
Jay Singh	EEE	Electrical Engineering, Springer Nature	Enhancing power transfer efficiency of wind energy to the grid using a three-phase matrix converter with optimization-based delta PWM control	Journal	SCIE
Kajul Bharti	MBA	Journal of Financial Services Marketing	Consumers adoption of healthy lifestyle: Understanding the influence of upcycling drivers on LOHAS consumer behavior	Journal	Scopus

Journal articles published

Name of Faculty	Department	Title of Journal	Title of Paper	Category	Indexing
Manvinder Singh	ASH	OPTICAL AND QUANTUM ELECTRONICS	Chronic kidney disease detection device using 2D photonic crystals	Journal	SCIE
Nagendra Kumar Maurya	ME	Journal of Materials Engineering and Performance	Development and Parameter Optimization of Electrodes to Enhance Mechanical Properties in Underwater Wet Direct Current Welding of Fe 410 Steel	Journal	SCIE
Nagendra Kumar Maurya	ME	Arabian Journal for Science and Engineering	Friction Stir Processed AA6063/TiB2/B4C Composite: Assessment of Mechanical and Wear Properties	Journal	SCIE
Nagendra Kumar Maurya	ME	MAPAN	Development and Characterization of Functionally Graded Al2024-Ni Metal Matrix Composite Leaf Plate under T3 Heat Treatment	Journal	SCIE
Pinki Sagar	CSE AIMLS	IEEE Transactions on Consumer Electronics (Volume: 71, Issue: 4, November 2025)	Explainable Contrastive Learning Framework for EEG-Based Affective Computing in Privacy-Preserving Consumer Devices	Journal	SCIE
Rajesh Prasad Verma	IQAC	Archives of Thermodynamics	Exploring potential of paraffin wax: A phase change material for improving yield of solar still	Journal	Scopus
Ranjeet Kumar Singh	ME	MAPAN, Springer Nature	Development and Characterization of Functionally Graded Al2024-Ni Metal Matrix Composite Leaf Plate under T3 Heat Treatment	Journal	SCIE
Rohit Sahu	ME	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	Performance of single slope solar still with various operation parameters—An experimental, statistical, and CFD simulation approach toward optimality	Journal	SCIE
Shruti Traymbak		Quality & Quantity	Analysing the influence of conscientiousness on job performance in India's hotel industry: an empirical study	Journal	Scopus
Upendra Dwivedi	CSSE AIML	IEEE Transactions on Consumer Electronics	Explainable Contrastive Learning Framework for EEG-Based Affective Computing in Privacy-Preserving Consumer Devices	Journal	SCIE
Upendra Dwivedi	CSE AIMLS	Wireless Personal Communications	Energy-efficient multi factor authentication protocols in sustainable security for wireless networks using machine learning algorithm	Journal	Scopus
Vineet Kumar Sharma		Process Integration and Optimization for Sustainability	Optimizing Sustainable Production Systems: An EPQ Model Integrating Rework, Carbon Emissions with Fuzzy, and SGO	Journal	Scopus

Conference Publications

Name of Faculty	Department	Title of Conference	Title of Paper	Category	Indexing
Mahfooz Alam	MCA	AISMA-2025: International Workshop on Advanced Information Security Management and Applications	Blockchain Driven Generative AI: Ensuring Data Provenance and Model Integrity	Conference	Scopus
Mahfooz Alam	MCA	AISMA-2025: International Workshop on Advanced Information Security Management and Applications	Budget Aware Load Balancing Algorithm with Strict Deadline Constraints for Efficient Resource Utilization in Fog and Edge Environments	Conference	Scopus
Kajal Rai	MCA	THE 2ND MAKASSAR CONFERENCE OF APPLIED SCIENCES (MCAS): Synergizing Research and Innovation for Mitigating Climate Change	Forecasting cyber security threats: A machine learning approach with decision trees leading the way	Conference	Scopus
Krishanu Kundu	ECE	Advanced Computing and Intelligent Technologies. ICACIT 2024. Lecture Notes in Networks and Systems	Design and Development of an Electrically Small EBG Antenna for Modern Communication Systems	Conference	Scopus
Birendra Kumar Saraswat	CSIT	A Dynamic Optimization Approach for Secure Block Chain Transactions in Smart Grid Applications/Data Mining and Information Security (ICDMIS 2024)/7-8 October 2024/Eminent College of Management and Technology (ECMT), West Bengal, India	A Dynamic Optimization Approach for Secure Block Chain Transactions in Smart Grid Applications	Conference	Scopus
Rituparna Sarma	CSEDS	Innovative Computing and Communications	Comparative Analysis for the Detection of Cancerous Cells in Liver Organ of Patients Using Marker-Controlled Watershed Transform Segmentation Algorithm Versus Adaptive Region Growing and Graph Cuts	Conference	Scopus

GLBITM
Research
Highlights for
BOOK/ BOOK CHAPTERS
PUBLISHED
NOVEMBER 2025

Books/ Book Chapter Published

Name of Faculty	Title	Gener	Indexing
Ambuj Saxena	Advanced Composite Materials: Modeling, Analysis, and Applications For Graduate and Postgraduate Mechanical/Production Engineering students, and researchers	Book	NA
Tarun Kumar Gupta	Advanced Composite Materials: Modeling, Analysis, and Applications For Graduate and Postgraduate Mechanical/Production Engineering students, and researchers	Book	NA
Bishwajeet Pandey	Solar energy to sustainable development goals: A case study	Book chapter	Scopus
Bishwajeet Pandey	Thermal and power-efficient hardware design of solar panel on reconfigurable architecture	Book chapter	Scopus
Bishwajeet Pandey	Optimization of power for solar panel optimizer using different FPGAs	Book chapter	Scopus
Bishwajeet Pandey	A comprehensive review of cybersecurity challenges in solar grids	Book chapter	Scopus
Birendra Kumar Saraswat	Sensor-Based Optimization of Water Distribution Systems Using IoT and Reinforcement Learning Model	Book chapter	Scopus
Rajani Singh	Sensor-Based Optimization of Water Distribution Systems Using IoT and Reinforcement Learning Model	Book chapter	Scopus
Anand Muni Mishra	Real-Time Watermarking in Cloud-Edge Computing-Optimizing Latency and Security	Book chapter	Scopus
Kiran Malik	Blockchain-Based Identity Management for Secure CIoT Interactions	Book chapter	Scopus
Kiran Malik	Blockchain-Enabled Edge Computing for Cognitive IoT	Book chapter	Scopus
Kiran Malik	Decentralized Data Management for CIoT Using Blockchain Technology	Book chapter	Scopus
Kiran Malik	AI Predictive Maintenance in CIoT Using Blockchain	Book chapter	Scopus
Vrinda Sachdeva	Smart Healthcare Systems with IoT and Blockchain	Book chapter	Scopus
Pankaj Kumar	Digitalizing Agriculture: Empowering Farmers Through Technology and Governance	Book chapter	Scopus
Ayasha Malik	Nanorobots in the Treatment of Cancer A Revolutionizing and Precision Medicine With Advantages and Limitations	Book chapter	Scopus
Arun Mittal	Quantum-Resistant Digital WatermarkingPreparing for PostQuantum Cryptography	Book chapter	Scopus

TOP 20 FINALIST AT A NATIONAL PLATFORM: SAMSUNG SOLVE FOR TOMORROW

Name: Ansh Maurya
Deptt: CSIT

Ansh Maurya, a third-year student from IT Department, has achieved a remarkable milestone by being selected among the Top 20 finalists at the Pan-India level in Samsung Solve for Tomorrow. Representing Team "Drop of Hope", he secured a prestigious Top 5 position in the "Environment Sustainability" track, highlighting innovative and impactful ideas aimed at addressing environmental challenges. This outstanding achievement comes with a cash prize of ₹1.2 lakh and goodies worth ₹2.5 lakh, marking a moment of pride for the institution and showcasing the spirit of innovation, sustainability, and excellence among its students.

FIRST POSITION AT HACK-O-OCTO 3.0: A NATIONAL-LEVEL ACHIEVEMENT

Name: Aayush Kumar Shrivastav, Sanskar Mishra, Saisha Handa
Deptt: AIDS

Team Data Dynamos from G.L. Bajaj Institute of Technology and Management secured First Position at Hack-O-Octo 3.0, a national-level 24-hour hackathon hosted by Chandigarh University. The team comprised Aayush Kumar Shrivastav (3rd Year B.Tech, CSE–AI), Sanskar Mishra (3rd Year B.Tech, AIDS), and Saisha Handa (3rd Year B.Tech, AIDS). Their outstanding performance earned them a cash prize of ₹11,000, along with a winner's trophy, certificates, and exclusive swags. This achievement stands as a testament to their innovation, teamwork, and strong technical expertise, bringing pride to the institution.

## AMRUTA SABAR EARNS 'A' GRADE AT NCC UP DIRECTORATE'S SUPER 50 CAMP

Name: Amruta Sabar
Deptt: CSE DS

G.L. Bajaj Institute of Technology & Management proudly celebrates the achievement of Ms. Amruta Sabar, a fourth-year B.Tech CSE DS student, for her outstanding performance at the UP Directorate's Super 50 NCC Coaching Camp held in Prayagraj. Selected among the top 50 cadets out of 111 participants, she demonstrated exceptional discipline, leadership, and perseverance throughout the intensive NCC training, which included PPT presentations, drills, introductory exercises, oratory, snake race, group discussions, written assessments, psychological tests, and interview sessions. Her consistent excellence, particularly in interview, psychology, and obstacle-based activities, earned her an impressive 'A' grade, bringing great pride and recognition to the institute.

RESEARCH FACILITIES AVAILABLE IN COMPUTING DEPARTMENTS
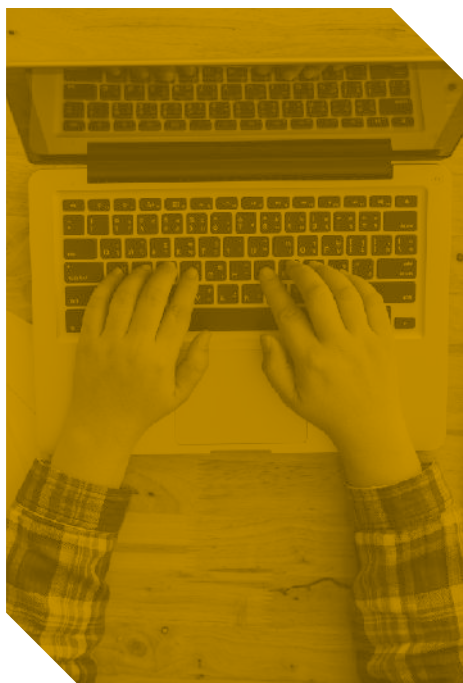
GL Bajaj Institute of Technology and Management offers comprehensive instructions in the mathematical and computational underpinnings of computer science and engineering. It is a dynamic and forward-thinking academic unit focusing on applied mathematics, computer science, and scientific engineering applications. 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.**

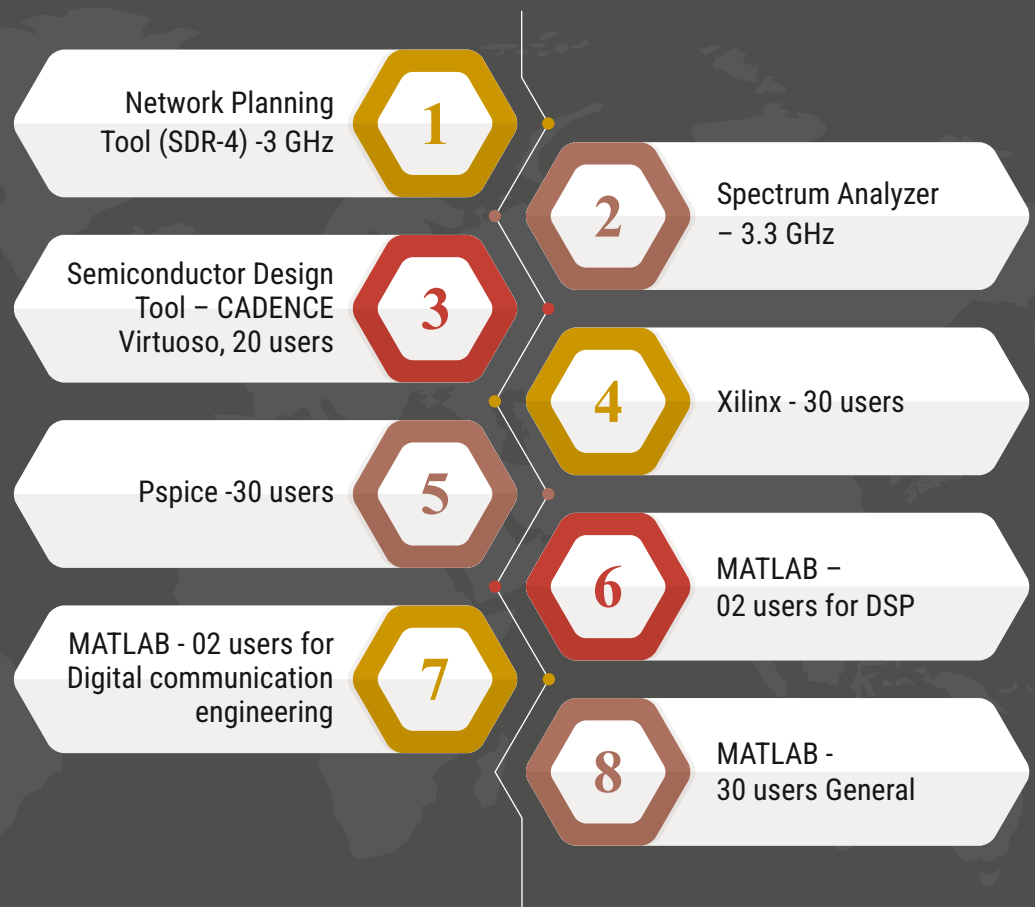# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

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

1. Network Planning Tool (SDR-4) -3 GHz
2. Spectrum Analyzer – 3.3 GHz
3. Semiconductor Design Tool – CADENCE Virtuoso, 20 users
4. Xilinx - 30 users
5. Pspice -30 users
6. MATLAB – 02 users for DSP
7. MATLAB - 02 users for Digital communication engineering
8. MATLAB - 30 users General

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:**

Wireless Communication → VLSI Design → IoT → DSP & Antenna Design is the few attractive research of this department
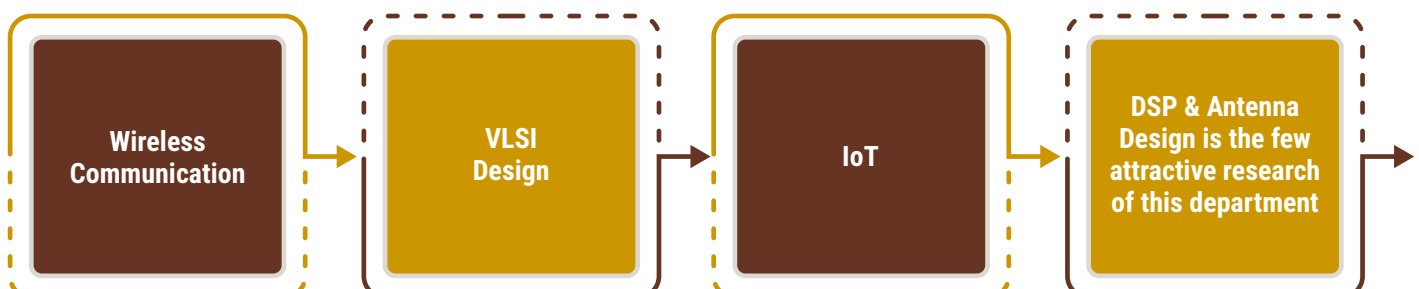
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

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.
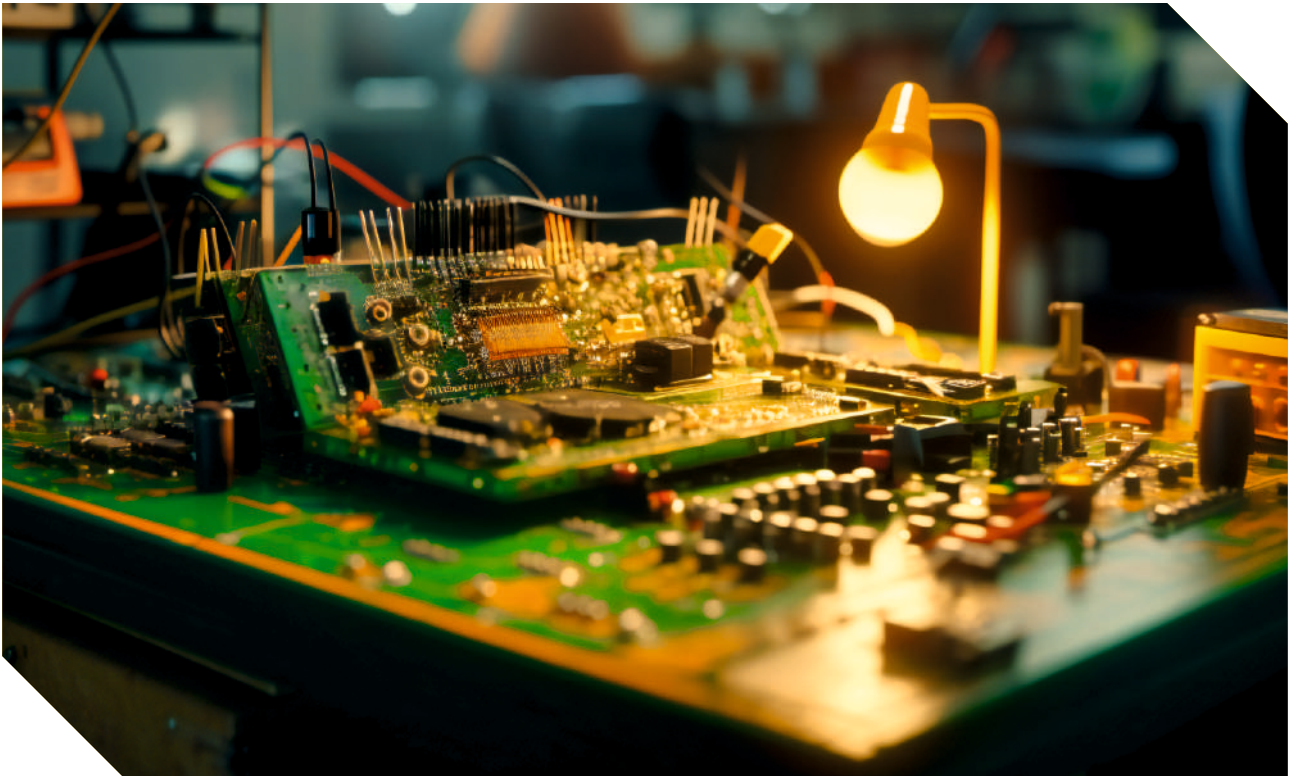
RESEARCH FACILITIES
IN THE DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

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 facilitates 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	Robotic Milling machine
Rockwell hardness testing machine	Robotic welding machine
Impact testing machine	CNC lathe machine
Torsion testing machine	CNC milling machine
Fatigue testing machine	Additive manufacturing set-up (3D printers)
Stir-casting setup	Muffle furnace
Double disc polishing machine	Pallet making machine

Glimpses of
RESEARCH FACILITIES / LABS

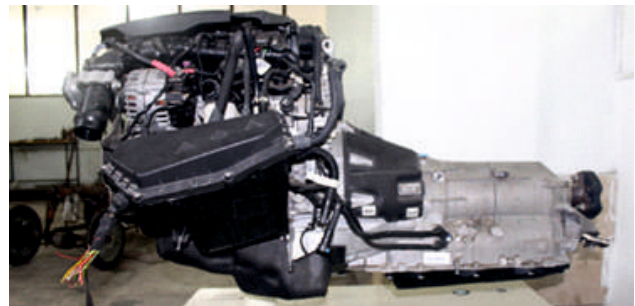

CSE / ACSE
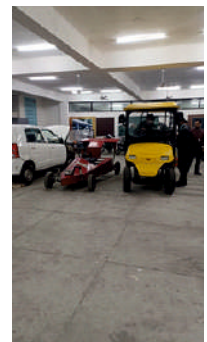
EEE

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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