



Department of Information Technology

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Message from Vice-Chairman, GLBITM

Congratulations to the Information Technology department for their dedicated work in producing the departmental magazine. Needless to say, efficient communication, in addition to several other factors, plays a critical part in the success of any firm. I am confident that this departmental magazine will reflect the department's work and improve communication among GLBians. I am convinced that the magazine will encourage students to engage in research, with a focus on entrepreneurship.



Mr. Pankaj Agarwal
(Vice Chairman)

Message from Director, GLBITM



Dr. Rajeev Agrawal
(Director)

To begin, I express my gratitude to the Department of Information Technology for their efforts in publishing a magazine dedicated to providing readers with a mix of timely and thought-provoking articles on technology and other topics. I am confident that this will reflect the institution's dedication to open discourse and will provide a glimpse of the department's varied activities and accomplishments. I am convinced that the magazine will encourage students to be more creative, with an emphasis on innovative learning. For their efforts, I express my gratitude to the dedicated staff and their team.

Message from HOD-IT

The concept that our department is publishing a magazine is a wonderful honor. The idea of keeping professors and students up to date on departmental happenings is commendable. It gives me great pleasure to know that our kids have great potential, and I am hopeful that their achievements will encourage other students to reach their goals, which will require them to have a clear vision and the determination to follow through. The Department Editorial Board has done an outstanding job developing and publishing the magazine. I wish the entire crew the best of luck in their future endeavors.



Dr. P.C Vashist
(HOD – IT)

Department Activities

FDP on Pedagogical Techniques for Teaching Learning



Five days Faculty Development Programme on Pedagogical Techniques for teaching-learning was organized by the Department of Information Technology, G L Bajaj Institute of Technology and Management, Greater Noida from 8th July to 12th July 2019. The event is sponsored by Dr. APJ Abdul Kalam Technical University under TEQIP III.

The programme was intended to develop various strategies pertaining to teaching for effectively improving the process of teaching-learning by discussing major concepts and practices. Following eminent faculties talked on the faculty development programme:

Department Activities

1. Dr. Rajeev Agarwal, Director, GLBITM, Greater Noida
2. Dr. P.C Vashisht, HoD-IT, GLBITM, Greater Noida
3. Dr. Nisha Khanna, Psychologist, New Delhi
4. Dr Hemant Ahuja, HOD-EEE, ABESEC, Ghaziabad
5. Dr. Anita Aggarwal, Scientist, DST, New Delhi
6. Dr. Pooja Tripathi, HoD-IT, IPEC Ghaziabad
7. Dr. Pawan Tiwari, AKTU Lucknow
8. Dr. Sanjay Tyagi, Kurukshetra University
9. Mr. M.K Seth, CGM, BSNL Ghaziabad

The targeted audience for this programme were all the teachers who are imparting higher education to students for sustainable growth and development of society. The outcome of this programme is expected to bring about a healthy enhancement in the academic and intellectual environment at their respective institutions of the participating faculties.

<p style="text-align: center;">One Week FACULTY DEVELOPMENT PROGRAMME ON "Pedagogical Techniques for Teaching Learning" 27-31st May, 2019</p> <p style="text-align: center;">APPLICATION FORM</p> <p>1. Name:</p> <p>2. Sex: Male / Female (please tick) Age:</p> <p>3. Category: Faculty / Research Scholar / Industry</p> <p>4. Accommodation: Required / Not Required</p> <p>5. Designation:</p> <p>6. Employer/Organization:</p> <p>7. Official mailing address:</p> <p>8. Telephone No:</p> <p>9. Mobile No:</p> <p>10. Email:</p> <p>11. Academic Qualifications:</p> <p>12. Specialization:</p> <p>13. Experience:</p> <p>14. Nomination Fee Details: UID Number: & Date:</p>	<p style="text-align: center;">Resource Persons: Professors from IITs, NITs and experts from industries will deliver their talks during the various sessions of the programme.</p> <p style="text-align: center;">Chief Patron (s) : Prof. (Dr.) Vinay Kumar Pathak Hon'ble Vice Chancellor Dr. A.P.J. Abdul Kalam Technical University, Lucknow Dr. R. K. Agarwal Hon'ble Chairman, GLBITM Sh. Pankaj Agarwal Vice-Chairman, GLBITM</p> <p style="text-align: center;">Patron: Dr. (Prof.) Rajeev Agrawal Director, GLBITM</p> <p style="text-align: center;">FDP Convener: Prof. (Dr.) P. C Vashisht Head of Department, Dept. of IT</p> <p style="text-align: center;">FDP Coordinator: Prof. Pushpa Choudhary Dr. Arun K. Singh Dr. Ashish Tripathi Mr. Pardeep Malik</p> <p style="text-align: center;">GLBITM Advisory Committee: Dr. A. L. N. Rao Dr. Mohit Baneal Dr. Madhu S Gaur Dr. Satyendra Sharma Dr. Prashant Mukherjee Dr. V. R. Mishra Dr. R. K. Mishra Dr. Shashank Awasthi Dr. Arun Pratap Srivastava</p> <p style="text-align: center;">Organizing Committee: Ms. Anika Gupta, Mr. Sumit Wadhwa, Mr. Mahesh Kumar Singh, Ms. Eerthy Kapoor,</p>	<p style="text-align: center;"> GL BAJAJ Institute of Technology & Management FIND YOUR SPARK Approved by AICTE, Ministry of HRD, Govt. of India and affiliated to AKTU, Lucknow.</p> <p style="text-align: center;">One Week FACULTY DEVELOPMENT PROGRAMME ON "Pedagogical Techniques for Teaching Learning" 27-31st May, 2019</p> <p style="text-align: center;"></p> <p style="text-align: center;">Sponsored by: Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow</p> <p style="text-align: center;">Organized by:</p>
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Department Activities



Department Achievements



Department Achievements

- Excellent End Term Academic Results: [Batch 2012-16 \(97.34%\)](#), [Batch 2013-17 \(96.62%\)](#) ,
- [Batch 2014-18 \(100%\)](#) [Batch 2015-19 \(98.12 %\)](#) [Batch 2016-20 \(98.61%\)](#)
 - Department student [Sugandha Biswas](#) (Batch 2013-17) scored 2nd Rank([Silver Medal](#)) with 89.45 % in AKTU merit list of year 2016-17.
- RSTC Funded Project Exhibitions : Department has organized [Mandal Stariva Nav Pravartan Pradarshni](#) in association with Regional Science & Technology Centre, Ghaziabad (27th July 2018)
- SERB Funded Conference: Department has organized 2-day conference ICCCT-2018, sponsored by **Science and Engineering Research Board, Govt. of India (SERB)** (7th -8th September, 2018)
- Professional/Student Chapter: [ACM](#) student chapter.
- Student Team of department participated in Smart India [Hackathon](#) 2018 (SIH-2018) and won 4th Prize

Student Achievements



Student Achievements

- Sarthak Verma, student of Department has developed a web application ([e-gaushala](#)) to help stray cows and received funds over ₹ 18 Lacs.
- Department student's Rahul Chugh and Sarthak Verma received [KPIT Inspirational Innovation Award](#) and won 4th place at **Smart India Hackathon under Ministry of Agriculture and Farmers Welfare** for developing a solution for Farmers so that they do not have to burn the wheat stubble in farms.
- Student Sugandha Biswas of IT Department scored 2nd Rank([Silver Medal](#)) in AKTU merit list of year 2016-17.
- Student of department has developed a mobile application for tracking the [Auto-Rikshaw](#) with unique identification.
- Student, Brishketu Pal, won [Karizma ZMR Bike](#) as "Man of the Tournament" in Jabong Turfwar driven by Hero-Season I.
- Team of Students of our department won **first prize** in "[Big Data Thon](#)" event held in ABES College 2017.
- Students of department won the first position in "[ANNUAL SPORTS MEET](#)" organized by NIILM-CMS.
- Student [Entrepreneur](#)

Our Notable Alumni



Our Notable Alumni



Technology Consultant at Deloitte Consulting in Denver, Colorado, USA. **Shirin Yadav**



Government Sector
Manager at State Bank of India. **Shalini Singh**



Higher Studies: Institute: Northeastern University, Boston, Massachusetts. **Current Position:** Research Intern, Philips, Cambridge, Massachusetts. **Gautam Pawar**



Entrepreneur: Company Established: Safebix.com, Current Position: Senior Consultant at IBM Global Business Process. **Shivam Pratap Singh**



Senior Software Engineer in TCS in Oslo (Norway) **Rahul Srivastava**

Industrial Visits

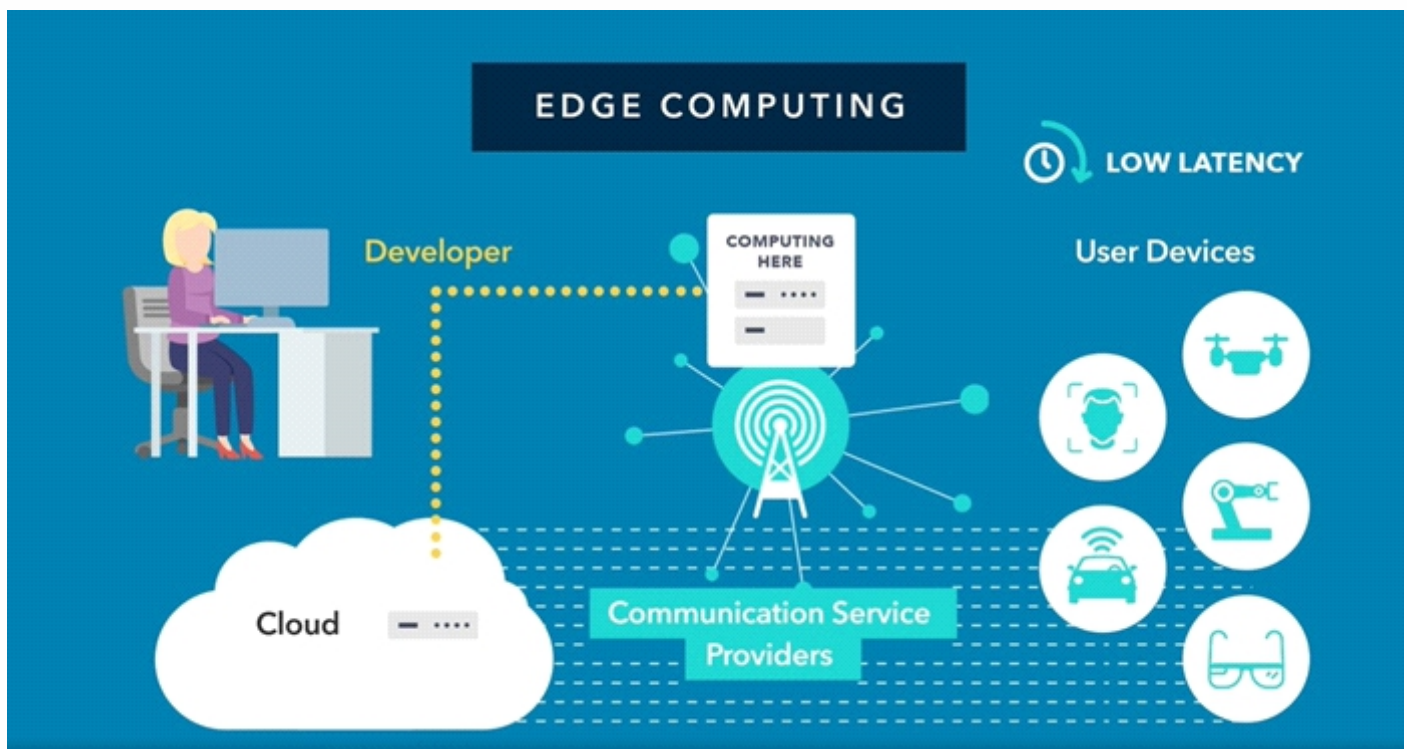
Industrial Visits



New Technology Trends

Enhanced Edge Computing

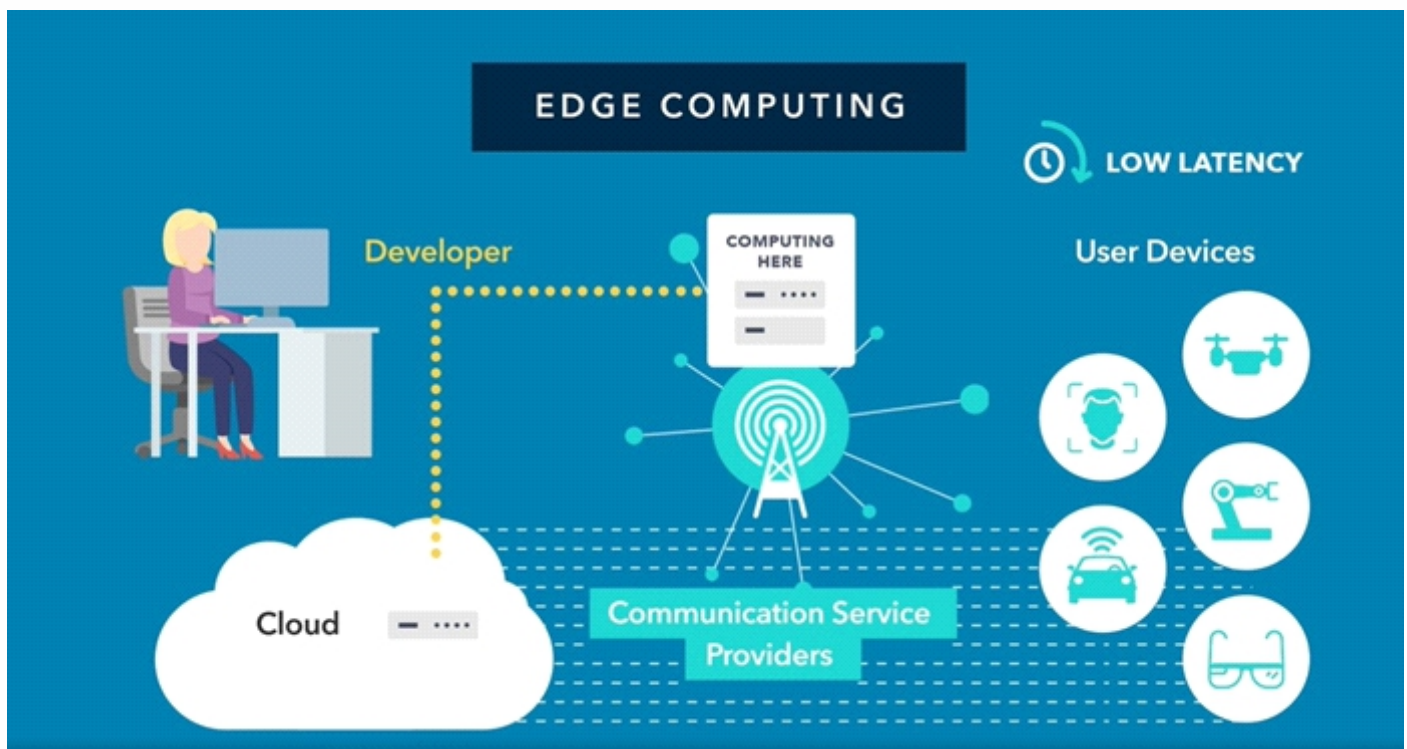
Edge computing is a trend that relates most specifically to the [Internet of Things](#). It consists in placing intermediate points between connected objects. Data can be processed at these intermediate points, thus facilitating tasks that can be performed closer to where the data has been received, thus reducing traffic and latency when responses are sent. With this approach, processing is kept closer to the end point rather than having the data sent to a centralized server in the cloud. Still, instead of creating a totally new architecture, cloud computing and edge computing will be developed as **complementary models with solutions in the cloud**, administered as a centralized service that runs not only on centralized servers but also on distributed servers and in the edge devices themselves.



New Technology Trends

Enhanced Edge Computing

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Immersive Experiences in Smart Spaces

Chatbots integrated into different chat and voice assistance platforms are changing the way people interact with the digital world, just like [virtual reality](#) (VR), [augmented reality](#) (AR), and [mixed reality](#) (MR). The combination of these technologies will dramatically change our perception of the world that surrounds us by creating smart spaces where more immersive, interactive, and automated experiences can occur for a specific group of people or for defined industry cases.



Digital Ethics and Privacy

Digital ethics and privacy are topics that are receiving more and more attention from both private individuals as well as associations and government organizations. For good reason, people are increasingly concerned about how their personal data is being used by public and private sector organizations. Therefore, we conclude that the winning organizations will be those that proactively address these concerns and are able to **earn their customers' trust**.



Topper of IT Department

Year wise topper list

8th Sem 1st Topper: KIRTI GUPTA (1519213051)

8th Sem 2nd Toppers: SOUMYA GARG (1519213111)

6th Sem 1st Topper: ANMOL PANDEY (1619213021)

6th Sem 2nd Topper: RIDHIMA KAPOOR (1619213078)

4rd Sem 1st Topper: DIMPAL KUMARI (1719213040)

4rd Sem 2nd Topper: DIVYANSHI SINGH (1719213045)

Vision

To develop competent IT professionals catering to the needs of Industry and society in a global perspective.

Mission

To attain academic & professional excellence with collective efforts of all stakeholders through

M1: Dissemination of basic concepts and analytical skills.

M2: Exposure to new tools in the area of Information technology.

M3: Effective interaction with industry for better employability.

M4: Inculcating values and professional ethics with social responsibility.

Program Educational Objectives

PEO1: To provide students a strong foundation in mathematical and IT fundamentals with emphasis on different programming languages/ platforms.

PEO2: To prepare students with a strong foundation in IT tools and analytical skills.

PEO3: To analyze, design, and develop efficient and cost-effective IT solutions for society.

PEO4: To become a successful professional in the software industry with leadership quality and value.

PEO5: To provide a supportive academic environment and guidance for life-long learning.

Program Outcomes (PO's)

Students of this Program are expected to demonstrate:

PO1- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the Solution of complex engineering problems.

PO2- Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

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

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

PO5 - Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6 - The Engineer and Society: Apply to reason informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

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

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

Program Outcomes (PO's)

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

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

PO11-Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader.

PO12 - Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in th

Program-specific Outcomes

PSO 1: Design and develop an application/product that efficiently utilizes system software and hardware to cover current user requirements in social and economic form.

PSO 2: Apply and acquire knowledge of computer network in the implementation of secure data communication and reliable network system.

PSO 3: Design and implement knowledge-based discovery, machine-based learning by using the concept of DBMS, soft computing, neural network, image processing, and pattern recognition etc.

PSO 4: Design and develop mobile-based applications that use the concepts of the latest application system development technologies.

Department of Information Technology

The Department of Information Technology at G.L. Bajaj Institute of Technology & Management was founded in 2007 with the goal of producing qualified IT professionals who can meet the needs of industry and society on a global scale. By exposing students to new IT tools and technologies, the Department hopes to help them achieve professional greatness. The flagship branch of engineering, information technology, focuses on scientific research, scientific programming, application programming, and software engineering. The Department has well-equipped laboratories, lecture halls, seminar halls, tutorial rooms, and faculty sections, all with cutting-edge technology and software. The Department has a mix of senior and junior faculty members who serve as mentors to the department's equally dedicated and hardworking students.

From HOD's Desk

It gives me great joy to congratulate the editorial team on continuing and publishing their collective thought process as a magazine. It serves as a display of their research efforts and accomplishments, as well as a reflection of the department's creative and cultural activities. It gives me great pleasure to know that our students have enormous potential, and I am hopeful that the accomplishments of the students featured in this magazine will encourage other students to reach their goals, which will require them to have a clear vision and determination to pursue it. The Department Editorial Board has done an outstanding job developing and publishing the magazine. I send my warmest greetings.

PATRONS

Dr. Ram Kishore Agarwal
(Chairman)

Mr. Pankaj Agarwal
(Vice Chairman)

Dr. Rajeev Agrawal
(Director)

Dr. P.C Vashist
(HOD – IT)

EDITORIAL BOARD

Dr. Pushpa Choudhary

www.glbitm.org



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FIND YOUR SPARK
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