

**Dept. of Electrical and Electronics Engineering** 



GL Bajaj is a cutting-edge Institution where the objective is to provide superlative education and foster intelligentsias who shall change the world of tomorrow. It is not just an institution which imparts forward-looking education, but an experience where everyone associated is part of a team which has a common mission - to nurture truly great leaders of tomorrow. Our college is one of the most eminent Higher Education Institutions today, and it is renowned for the standards of its facilities, students and alumni.

Electrical & Electronics engineering department has been a forerunner in recognizing the needs of the industry and integrating knowledge with professional inputs. Devotion to quality, ethics, and values have been the pivotal ideologies of Electrical & Electronics engineering department at GL Bajaj that are reverberated in every activity of the department. Immense care is taken to instill these standards among our students while modeling and refining their approaches. Electrical & Electronics department has ambitious procedures to elevate and grow its infrastructural facilities so that the expertise within can be of use to a larger section of the student population as well as industry, Industrial Automation Lab is a live example of this by which they resolve to continue making a difference to our society.

It is our fervent hope that the Electrical & Electronics engineering department will keep up their sprites in doing more such efforts that would arm our young minds with engineering & leadership skills. Through this newsletter, I wish the department all the best and congratulate the budding achievers of the department to do more such good work in future.

Best wishes.





I am feeling elated to address all of you through this newsletter. We have stepped into a new academic session with new students and with greater energy. Education is a broader concept that involves acquiring adequate knowledge and imparting the same to educate another. Electrical & Electronics engineering department takes all possible initiatives in offering opportunities of holistic development to the student community as well as to the faculty through active participation in various activities, events and research work. A recent example is the IEEE international conference that took place in the GL Bajaj campus and was organized by Electrical & Electronics engineering department. Such conferences provide an opportunity to collaborate and provides an appropriate platform to the students, research scholars, and academicians to share their knowledge.

We, at GL Bajaj are steadfast to provide adequate opportunities to the nascent technocrats with competencies and capabilities to take on the corporate challenges with confidence. We supplement our promising engineers in their journey of digital transformation and innovation by providing various state of the art facilities like Labs, Classrooms etc. GL Bajaj attract the best talent in India - a melting point of academia, industry and research with a vision to, provide professionally competent and socially sensitive engineers, rooted in Indian ethos and societal values I congratulate Electrical & Electronics engineering department for their pedagogy based on innovative application of technology with a blend of management to enhance the leadership and technical skills of students.

I hope that Electrical & Electronics engineering department will scale newer heights in this new academic session.



Department of Electrical & Electronics engineering is working with a vision to provide transformational education that produces skilled workforce, researchers and innovators of tomorrow with intellectual and technological resources. Our commitment and dedication is to focus on empirical, cooperative and outcome based learning that allows our students to adapt, grow and succeed in solving real world problems. Department thrives to establish partnership with industries, government organizations, & academia and to become collaborative community of faculties, students, staff and alumni to fulfill societal needs with professional ethics. In order to bridge the gap between parents and teachers, regular communication through e-mails and letters are done which gives a feel of ownership to the parents. Faculty members and students regularly update their knowledge by organizing various Faculty Development Programs, Webinars and Workshops etc.

With this News Letter as a medium, we are sharing achievements of the Department during the period Jan'18 to June'18, and I am confident that this showcase of activities/achievements will surely act as an encouragement to our faculty members & students in achieving greater heights.



# **ABOUT THE DEPARTMENT**

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 global perspective for sustainable development of industry and society. The Department aims to foster students to attain professional excellence by imparting them necessary soft skills and technical knowledge. From household to industrial plants, communication, satellite navigation systems, electronic equipment and computers etc. require electricity so Electrical and Electronics Engineering is always an evergreen discipline in terms of scope and career perspective.

Mission

#### **OUR VISION**

To be department of repute in automation to cater the needs of society.

#### **OUR MISSION**

- To achieve academic excellence through dedicated teaching and learning.
- To provide conducive environment for self-learning.
- To develop strong industry-institute interaction.
- To imbibe professional ethics, values and positive attitude in the students.

# **INSIDE THE ISSUE**

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#### PATRONS

- Dr. RAM KISHORE AGARWAL (Chairman)
- Mr. PANKAJ AGARWAL (Vice-Chairman)
- Dr. RAJEEV AGARWAL (Director)
- Dr. MOHIT BANSAL (H.O.D)

#### **EDITOR**

Mr. RAJAT MEHROTRA

### **STUDENTS SUPPORT**

- SONAL SINGH (3rd year)
- KHUSHBOO YADAV (3rd year)
- SHIVANGI GARG (3rd year)
- SHIVAM RAI (3rd year)
- ASHUTOSH SINGH (3rd year)
- NIKITA YADAV(2nd year)

# IEEE International Conference on Power Energy, Environment And Intelligent Control

An IEEE International conference on "Power, Energy, Environment & Intelligent Control" (PEEIC-2018) was organized on 13th & 14th April'18 at G.L. Bajaj campus. The conference was started by welcoming Dr. S.N. Singh, (Vice-chancellor MMMUT, Gorakhpur), Dr. A.P. Mittal, Member Secretary AICTE-New Delhi; Prof. Vincenzo Piuri ;Mr. Pankaj Agarwal, Vice-chairmen GL Bajaj, Dr. Rajeev Agrawal, Director GLBITM; Dr. N.K. Sharma, Dean & Head and other esteemed guests like Dr. P.K. Sadhu, IIT Dhanbad, Dr. Neeraj Sharma, advisor DST, New Delhi and Dr. Asheesh Srivastava, Vice chairman IEEE UP Section. The two-day conference observed nine sessions each day covering all the allied subject of the conference. More than 500 papers were received out of which only 169 papers were presented at the conference and selected papers were published in IEEE explore.

Dr. Rajeev Agrawal, Director-GL Bajaj welcomed the guest and said that the world of Power, Energy, Environment & Intelligent Control is an exciting area to work and we will continue to meet and bring high end technical minds together in forums like this.

Speaking at the inception of the conference Dr. S.N. Singh (Vice-Chancellor MMMUT, Gorakhpur) said that such conferences provide a platform to share and discuss ideas through papers, exhibitions, plenary talks and gives an opportunity to update ourselves with the new innovations and products.

Dr. A.P. Mittal (Member Secretary AICTE-New Delhi) during his discourse at the conference said: "Enabling technologies have reformed the technical ecosystem by bringing not only enhanced features and amended timelines but above all a progressive role in saving our resources, energy and time."



**By:-Sonal Singh** 



This international conference was organized for the first time in GL BAJAJ by our EEE department. The theme of conference was based mainly on energy conservation. This is listed below:

Track 01:- Power & energy

Track 02:- Green Technologies

Track 03:- Advance Technology Developments

Track 04:- Environment & Ecology.

Track 05:- Smart Grid & Communication System.

Prof. Vincenzo Piuri from University of Milan, Italy said that

such conferences aims to bridge the gulf between the researchers working in academia and other professionals through research presentations. It reflects our growth in terms of technological advancement.

Mr. Pankaj Agarwal in his address said that it is a high time now to promote research activities among the nascent professionals to make this world a better place. Consequently, those who are linked with teaching and research

related profession had to polish their professional expertise through such international conferences.

Plenary talks were given by Prof. Kailash Srivastava, Vice-Chancellor, Symbiosis University Indore; Prof. Sudipto Sarkar, McMaster University, Canada; Mr. Anshuman Tripathi, Head of consulting, America.

A total of 169 research papers from national and international scholars, researchers, Industry professionals were presented in the two day international conference.

The two-day international conference ended on 14th April 2018 with a cultural event organized by G.L.Bajaj College followed by a vote thanks by the conference chair Dr. N.K. Sharma.





### ELECRAMA – 2018

"ELECRAMA, the biggest showcase of the world of electricity". On 12th March -2018 students of Electrical & Electronics Engineering deptt. G.L. Bajaj, had visited ELECRAMA- 2018 a premier showcase of Indian Electrical Sector.

ELECRAMA- is the World's largest confluence of the power transmission and distribution community.it brings together the complete spectrum of solutions that powers the planet. Featuring not just equipment & technology, but peerless thought leadership platforms for everything electric-from technical conferences to industry summits.

ELECRAMA as an exhibition features the biggest names in the global electricity T&D industry ,to whom it serves as the perfect launch vehicle to introduce latest product and technology .it showcase products and technology through the entire voltage spectrum, from 220V to 1200Kv, conforming to global standard and specifications.



ELECRAMA visitors consist of a wide spectrum of industry stakeholders, offering them an international framework for display, discussions and deliberations. It brings together manufacturers and supplies to interface with key customer segments like private and public transmission and distribution utilities, EPCs consultants and specifications, members of the government and policy makes. It also brings together global engineering professionals& technologists, professional and academia, it all through high power panel discussions, premier conferences, technical workshops, tutorials and seminars held concurrently with the exhibition. It also hosts international diplomatic and trade visitor delegations from various countries and large country pavilions from leading manufacturing nations from around the world.

By:-Khushboo Yadav



#### **ENIGMA YOUTH FEST – 2**



Enigma youth fest organized by the members of Enigma club of Electrical and Electronic Department was the Departmental event held on 29th March 2018.

The event was organized under the guidance and support of Mr. Rajat Mehrotra. Events were organized by the members of the club, main aim of the event was enhance the extracurricular skills of the students other than academics. The event was consisted of various events like 'TARK – VITARK', MATLAB-MASTERS' 'QUIZZICALLY' .The topic of 'TARK-VITARK' and 'QUIZZICALLY' was based on the Social issues Political issues and Right to education.

The main purpose of this event was the newly introduced event which was the 'TARK-VITARK'. This event

was carried in two rounds in which some topics were given to the participants and they were discuss on the given topic. The topic were related to Social and Political issues. The students of second and third year actively participated in the event. This event provide a platform to the students to explore their talent and inculcate a sense of focus towards extra-curricular activities. The students of second and third year went through series of interaction with the seniors and faculty members. The faculty members were very supportive throughout the events. The events was managed by the coordinators of the event. At last, prize distribution ceremony was carried out in which the winner received their deserving prizes by the faculty members. Altogether the event was a great success.







# Expert Lecture on Renewable Energy and Smart Grid



On 12th January 2018 G.L. Bajaj Institute of Technology and Management Greater Noida organized an expert lecture for The students and members on the topic( "Renewable Energy And Smart Grid .") by a prominent international speaker Dr. Ramesh Bansal (prof. University of Pretoria , South Africa ).

The program was started by presenting a bouquet to the speaker Dr. Ramesh Bansal by Head EEE Deptt..The program aimed to give the students an insight of smart grid and how it is integrated with solar and wind energy .Number of students, Faculty members, Dean academic and Director GLBITM had participated in the program. Several interesting topic of renewable energy have been discussed during the talk.

By:-Ashutosh Singh



# **GUEST LECTURE ON POWER ELECTRONICS**



On 1st february 2018, G.L. Bajaj Institute of Technology and Management Greater Noida organized an expert lecture for the students on the "Power Elecronics" by an eminent speaker Dr. P.K. Sadhu (Prof. ISM Dhanbad). He elucidated many important concept to students in power electronics & that the capabilities and economy of power electronics system are determined by the active devices that are available .Their characteristics and limitations are a key element in the design of power electronics systems.

According to him Power electronics is the application of solid state electronics to the control and conversion of electrical power. In modern system the conversion is performed with semiconductors switching devices such as diodes, thyristor and transistors etc.

An AC/DC converter is the most typical power electronic device found in many consumers electronics devices exp- Tv sets, computers etc. Dr. P.K. Sadhu told the student about the capabilities and economy of power electronics system. He shares his experience in this field with the faculty member and student of EEE department.

Students who at attend this seminar has got an opportunity to understand the importance of power electronics and uses for future development . Dr. P.K. Sadhu shares his knowledge about the power electronics devices uses in the field of renewable sources of energy.

At the last of the session students gets opportunity to ask their questions related to the power electronics devices and they got their satisfied answers by our authorities which helps the students to create an revolutionary steps in the field of power electronics in the future use and make our country one step ahead in comparison with another countries in this field.



# EXPERT LECTURE BY PETROLEUM CONSERVATION RESEARCH ASSOCIATION

Electrical & Electronics department of G.L. BAJAJ institute of technology and management has organized an expert lecture by an organization PCRA. Petroleum Conservation Research Association (PCRA) is a registered society set up under the aegis of Ministry of Petroleum & Natural Gas, Government of India. As a non-profit organization, PCRA is a national government agency engaged in promoting energy efficiency in various sectors of economy. It helps the government in proposing policies and strategies for petroleum conservation, aimed at reducing excessive dependence of the country on oil requirement.



Over the years, PCRA has enlarged its role in improving productivity in use of various sources of energy over the years, PCRA has developed a number of films, TV spots and radio jingles in various languages for promoting oil conservation. PCRA also publishes quarterly a journal and a newsletter. Active Conservation Techniques (ACT), is a journal containing articles on technology by energy experts. It also brings out successful case studies leading to conservation of energy. For the benefit of various target groups of petroleum products, PCRA has developed literature containing simple ready to implement conservation tips and techniques. Special low cost green leaflets have also been developed to educate the masses on the ill effects of pollution caused due to incomplete combustion and its impact on health.

The vision of PCRA is to become a center of excellence for conservation of hydrocarbons & environment protection for sustainable development on our inherent strength.



# FACULTY DEVELOPMENT PROGRAM

It is my proud privilege to notify you that department of Electrical & Electronics Engineering, GL BAJAJ Institute of Technology & Management, Greater Noida has organized a five days (25th -29th June 2018) faculty development program on Advance Application of MATLAB in Engineering sponsored by AKTU under the Scheme of Technical Education Quality Improvement Program Phase-III.

Numbers of technical sessions have been organized as follows:-

NAME OF SPEAKER	DELIVERED TALK	AFFILIATION
Dr. Anil Singh Parihar	Basic Concept of Image Processing	Delhi Technological University
Dr. Amit Agrawal	Concept of simulation on MATLAB	Galgotia college of Engineering & Technology
Dr. Dinesh Vishwakarma	Fuzzy logic	Delhi Technological University
Dr. Bhavesh Kumar	Signal processing	NSIT, New Delhi
Dr. M.A. Ansari	Image Processing	Gautam Buddha University
Dr. Nidhi singh	Control system toolbox	Gautam Buddha University
Mr. Ashish Kumar	Concept of Modeling and Simulation	СЕТРА
Mr. Vikash kalra	Parallel Computing	СЕТРА

Faculty from different department of GLBITM and from different institutions have participated in the program. Various interesting lectures and practical session were performed by the speakers, which were interactive and memorable.





By:-Mayank pandey



# **SHINING STARS OF EEE DEPARTMENT**

# Nishkarsh Kumar Tomar :- (2010-14 Batch)

Nishkarsh Kumar Tomar is an Alumni of EEE department and was among the bright students of the department. After completing his B.Tech. He pursued his Master's (MBA) from IIM KOZHIKODE and is currently working at a very good package in a reputed MNC.







# Akshay Kumar Tripathi (2013-17 Batch)

Akshay Kumar Tripathi was one of the bright Student of Electrical & Electronics Department and was topper of his batch. Currently he is pursuing his higher studies from SYMBIOSIS Pune, Maharashtra.



# **PLACEMENT HIGHLIGHTS**



ANNU DABAS (Kallows Eng.Pvt. Ltd)



ALANKITA KUMARI (Vak lightning India Pvt.Ltd.)



# SHARIB JAWED (BOSCH)



NEELMANI (Chemitech.Eng. Pvt.Ltd.)



NEERAJ KUMAR MAURYA (Cowi India)

# **TOPPERS OF DEPARTMENT**



Rishabh Kumar (90.2%) (1st year 2nd sem)





Sonal Singh(84.1%) (2nd year, 4th sem)





Syed Md. Haider Rizvi (82.3%) (4th year, 8th sem)



SHUBHAM DUBEY(85.5%) (3rd year,6th sem)

### **DEPARTMENTAL UPDATES**





Mr. Shivendra kaura Asst. Professor EEE Department of G.L.BAJAJ institute of technology and management has been selected as a PhD. Scholar through GATE score at Uttarakhand technical university Dehradun .We Congratulate him on his success and wish him all the best in his future endeavors.

# **Program Outcomes/Program Specific Outcomes**

Engineering Graduates will be able to:

- 1. Engineering knowledge: An Ability to apply the knowledge of basic sciences and fundamental engineering concepts in solving complex Electrical and Electronics engineering problems and related field.
- 2. Problem analysis: An Ability to identify, formulate and analyze complex Electrical and Electronics engineering problems and interpret data to arrive at substantial conclusions using first principles of mathematics, natural sciences and engineering sciences.
- 3. Design/development of solutions: An Ability to design solutions for complex Electrical and Electronics engineering problems and design system components or processes that meet the specified need with appropriate considerations for public health and safety, and the cultural, societal and environmental considerations.
- 4. Conduct investigations of complex problems: An Ability to 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.
- 5. Modern tool usage: An Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex Electrical and Electronics engineering activities with an understanding of the limitations.
- 6. The engineer and society: An Ability to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practices.
- 7. Environment and sustainability: An Ability to understand the impact of the professional engineering solutions in societal and environmental context, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics: An Ability to apply ethical practices and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work: An Ability to function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
- 10. Communication: An Ability to 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.
- 11. Project management and finance: An Ability to demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in the team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: An Ability to recognize the need for, and have the preparation and ability to engage in independent and life-long learning of broadest context of technological change.

Program Specific Outcomes of Electrical & Electronics Department

- 1. Analyze, design and simulate systems and applications related to electrical & electronics engineering and its allied areas.
- 2. Analyze and develop models related to control & automation sectors by applying the knowledge of electrical and electronics engineering.







# **GLBAJAJ** Educational Institutions

# FIND YOUR SPARK

# Greater Noida, Mathura

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