CHAKSHU

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

BI-ANNUAL NEWSLETTER

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DIRECTOR MESSAGE

Dear Readers,

It gives me immense happiness to release the newsletter "**CHAKSHU**". It was quite inspiring to watch and witness the potential of our student's achievements at various stages. We always believe that "**Hard Work has no shortcuts**". Here, in ABESEC, we continuously strive for excellence. We develop an ecosystem where every human being is motivated to align towards their goal. I must say that a student must be focused and alert to achieve his target. He/ She must know the "More from less" strategy to bring the most out of available resources. All the geniuses have one thing in common that they are always in "Learning Mode", the same is applicable to students as well. Once the students develop an attitude of this level then even failure becomes learning to them and they fall under the category of "bound to succeed". Best wishes and blessings to ECE Team. Congratulations to the editorial team for their determined efforts in bringing out this newsletter.

Prof.(Dr.) Shailesh Tiwari
Director, ABESEC

HOD MESSAGE

Dear Readers,

It gives me great pleasure to congratulate students, teachers and staff of the Electronics and Communication Engineering Department for the first publication of the newsletter "**CHAKSHU**". The newsletter is believed to be a focus of the inside activities i.e. academics, students and faculty achievement as well as innovation occurring in the department. In the era of engineering and technology, this newsletter will motivate the teachers and students for sharing their creativity and new ideas with the world and will help in their overall development. I wish the best of luck to all the team members for the publication of the newsletter.

Prof. (Dr.) Sanjay. Kr. Singh
HOD-ECE

EDITOR'S NOTE

Hello Readers!

It is with great pride and pleasure that we present to you the new edition of the Newsletter "**CHAKSHU"** on behalf of the department of ECE. The newsletter Is an impressive culmination of facts, achievements, opinions and information surrounding our ECE department.

It particularly highlights the experiences of students, staff and alumni in curricular, co-curricular and extra-curricular walks of collegiate life. For your viewing, we have put together an array of articles spanning from interviews of our best and most successful to write-ups about the latest buzz in the tech world. We encourage our readers to scour through these pages because we truly believe there is something here for everyone! As Editors, we would be remiss if we fail to touch upon our gratitude to the faculty coordinators and the faculty in charge, whose help and care greatly contributed to the creation of this newsletter. In the same breath, we would also like to dearly thank our team including incredible writers, designers and editors who poured in their hours to make this newsletter possible. The teamwork displayed this edition, despite difficulties faced in light of the pandemic situation, truly made us believe in perseverance. There is a saying, "**If you want to go fast, work alone. If you want to go far, work together**" So if there is one message we wish to leave to our readers is that, it is to never underestimate the power of unity in the face of adversity.

Sincerely,
Ranjeeta Yadav
Assistant Professor-ECE

VISION

To contribute to India and the world through excellence in education and research in the field of Electronics & Communication Engineering and serve as a valuable resource for the industry and the society at large.

MISSION

To create an environment, which shall encourage the development of innovative professionals and researchers in the cutting-edge technologies of Electronics & Communication Engineering, in line with industry requirements and to impart professional ethics with a positive attitude.

PROGRAM OUTCOMES

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 analyze 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 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 reasoning 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.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse exams, 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 in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSO'S)

PSO1: An ability to design and analyze the concepts and applications in the field of communication/ networking, signal processing, embedded systems and semiconductor technology.

PSO2: An ability to comprehend the technological advancements in the usage of modern design tools to analyze and design subsystems/processes for a variety of applications.

PSO3: An ability to learn the courses related to Microelectronics; Signal processing, Microcomputers, Embedded and Communication Systems to develop solutions to real world problems.

PSO4: An ability to communicate in both oral and written forms, the work already done and the future plans with necessary road maps, demonstrating the practice of professional ethics and the concerns for social and environmental impact.

PROGRAM EDUCATIONAL OBJECTIVE (PEO'S)

PEO1: To impart the students sound technical knowledge and skills in the core & related science & mathematics subjects of Electronics & Communication Engineering so that they graduate as professionally competent engineers, capable of applying & implementing the acquired skills.
PEO2: To inculcate in students a desire to be innovative and passionate about excelling in the field of Electronics & Communication Engineering.
PEO3: To develop managerial and soft skills so that they become confident and competent enough to take challenging responsibilities & leadership roles in the industry & corporate.
PEO4: To equip them with solid foundation in ECE engineering so that they can pursue higher studies in the subject.
PEO5: To groom the students to acquire professional ethics, moral values and devotion to duty so that they prove to be worthy citizen of India with international outlook.

ABOUT THE DEPARTMENT

The Department of Electronics & Communication Engineering at ABES Engineering College Ghaziabad was established in the year 2000. The department runs four-year full-time B.Tech program and two-year full-time M.Tech program in Electronics & Communication Engineering with total intake of 180 students in B.Tech and 6 students in M.Tech. The B.Tech program is accredited by National Board of Accreditation (NBA). The department has well qualified, experienced and dynamic faculty members.

The Department has well equipped labs with necessary hardware and software to meet the curriculum and industry requirements. We have state of art Project Lab, Advanced Lab and CoE's to harness the creative and innovative aspiring minds to put their imagination into reality.

The Department has Employability Enhancement Cell (EEC) to develop high quality, technically compliant students who become confident in the Electronics and Communication engineering field with focus on research and socially responsible. The main objective is to enhance the student employability skills through in-house training, workshops, guest lectures from industry & projects based on student interest.

The Department also has Industry Academia Relationship Cell (IARC) to provide a platform for our students to develop relevant skill-set and know-how for better placement related to skill set industries.

The Department has Electronic Design and Consultancy (EDAC), the purpose is design & development of products based on ideas received from industries and creating an in-house ecosystem encouraging industrial exposure to student's product development at college level to make them industry ready and globally competent.

Students in the Department undergo In-house industrial trainings to bridge the gap between Industry and Academia. Department of ECE has recently signed MoUs with Solar Power, Systems Infra Solution Pvt. Ltd, Associated Electronics Research Foundation, The TAG Factory etc. for industry-based consultancy and projects.

ECE Department runs the research and consultancy projects funded by various government and non-government funding agencies with an aim to offer our students, the opportunity to work on real time problems & projects.

WHY ECE IN ABESEC?

ACADEMIC GROOMING

Our B.Tech. Program is accredited by NBA (National Board Accreditation), result-wise ,we are at top position among the leading Engineering colleges in AKTU.

We offer 360° nurturing for overall grooming of our students and to develop global competency through: One-to-One mapping, domain allocation, direct academic monitoring by Overall Class Coordinators, Mentor-Mentee Program, buddy program Concept Booster Classes, Training Trackers and In-house trainings.

Placement Statistics for the last completed Academic Year exhibits Highest Salary Package of INR 12.4 LPA, Average Salary of INR 4.19 LPA and Placement Percentage of 87.84.

Students are motivated to publish their project research work in UGC/ SCOPUS and journals of high repute, potential projects are stimulated for patent filling resulting in high number of publications and patents. Good number of Startups has been initiated by our students.

INDUSTRIAL EXPOSURE

We have 11 State-Of-The-Art Labs, 6 Govt. funded Centres of Excellence(COE) and 4 Advanced-Labs for R&D work. All COEs and Advanced Labs are tied up with reputed industries.

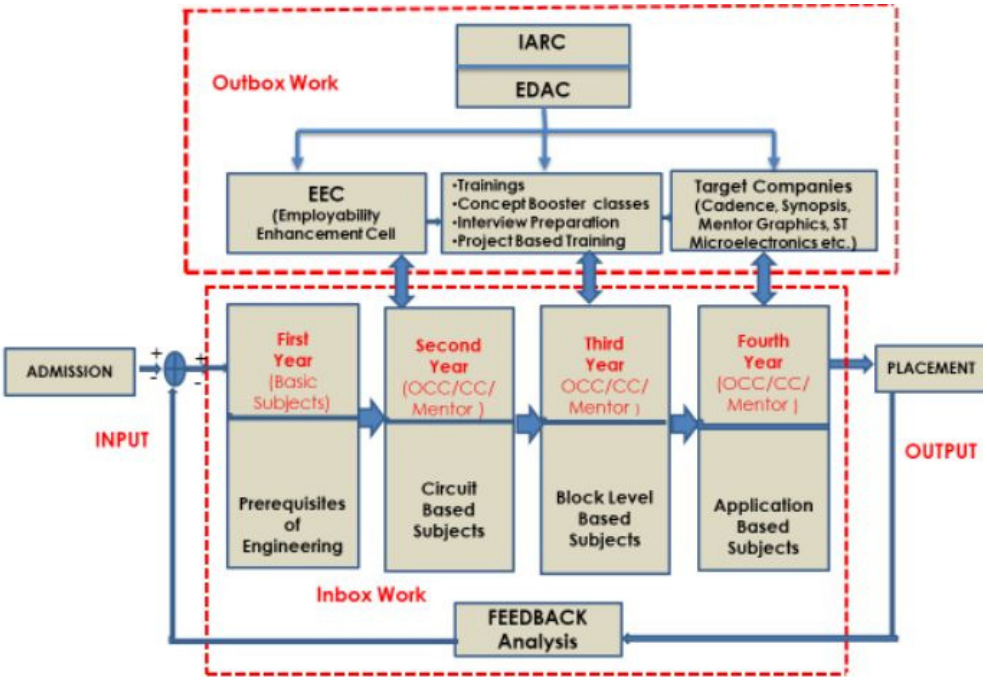
Our COEs are Corporate training centres for renowned Electronics industries like Truechip, Elbrus Labs, Optimum Viking , System Infra Solutions and AEAB Automation Pvt Ltd.

We have 10 industrial MOUs with leading electronics companies to bridge the gap between industry and academia.

On the basis of inputs from Industries, we are running 6 In-house training programs to provide complete exposure of the Industries in the field of Microelectronics (SOC), Signal Processing, IOT & Robotics(Embedded Systems), Automation(PLC & SCADA) and Communication (Satcom,SMT,MATLAB, Antenna &Microwave design)

We are presently working on 12 Consultancy Projects providing a platform for students to work on live industry projects.

ECE DEPARTMENT WORKING PROCESS



Step1:- Employability Enhancement Cell (EEC) has been formulated in the Dept. with the following objectives:

- To segregate the students, domain wise depending upon their skills and interest.
- To provide training and guidance to students on the various aspects of building successful a career by meeting the demand of the industries.
- To assist them in exploring new opportunities and new technologies.
- Guide the students in developing skills and job search strategies required to achieve their career objectives.
- To organize various types and levels of in-house training programs and extension programs to achieve the goals.

Step2:- Employability Enhancement Cell (EEC) follows the following procedure to fulfil the above objectives.

- The students get promoted to the Second Year of ECE.
- The EEC gives a presentation to introduce the objectives and procedure of EEC.
- The students fill up an EEC data form in which they write about their interest and the skill set acquired (if any).
- It is followed by counseling and interview session of students by HOD and EEC Members.
- As per their interest, the students are segregated into **IT Domain & EC Domain.**
- After the required training is complete up to 3rd year, the students are allocated major projects depending upon their selected domain and it is mandatory for them to do at least one publication.

A. IT DOMAIN

1. After the segregation, the students under "IT Domain" are trained in different fields (Ex- C, C++, Python etc.) during Second year.
2. Students are promoted to Third Year and again counseling session is conducted by HOD and EEC Member to ask whether the students want to pursue the same field or want to change.
3. If the students continue to "IT domain", they are trained in Advance Languages (Ex- JAVA, AI, ML etc.) during Third year.
4. At the end of 3rd year, the students are required to develop a project based on acquired skills.
5. Following are the target companies like TCS, Infosys, Wipro, Capgemini, Cognizant, IBM etc. for IT domain.

B. EC DOMAIN

If the student falls under **"EC Domain"**, then they are further classified into the following subdomains :

1. **Microelectronics Domain (SOC based software field)**
2. **Devices Domain**
3. **Communication Domain**
4. **Applications Domain(Embedded and IoT)**
5. **Sales & Service Domain**
6. **Operation & Maintenance Domain**
7. **Public sector and higher education Domain**

1.) Microelectronics Domain (SOC based software domain):-

- After the segregation, the students under **"Microelectronics Domain (SOC based software domain)"** are trained in different Software (Ex- Multisim, PSpice, Porteous, etc.) during the Second year.
- Students are promoted to Third Year and again counseling session is conducted by HOD and EEC Member to ask the students to pursue the same field or want to change.
- If the students continue in the same field, they are trained in Advanced Software (Ex- VHDL / Verilog, Virtuoso, NI LabVIEW, etc.) during the third year.
- At the end of 3rd year, the students are required to develop a project based on the acquired skills.
- Following are the target companies: Cadence, Aricent, Mentor Graphics, ST Microelectronics, Nvidia etc.

2.) Devices Domain:-

- After the segregation, the students under "Devices Domain" are trained in different fields (Ex-Analog and Digital Circuits etc.)
- Following are the target companies: Dixon technology, Intel, Samsung, LG, HP, DELL etc.

3.) Communication Domain:-

- After the segregation, the students under the **"Communication domain"** are trained in different fields (Ex- MATLAB etc.) during the Second year.
- Students are promoted to Third Year and again counseling session is conducted by HOD and EEC Member to ask the students to pursue the same field or want to change.
- If the students continue in the same field, so they are engaged in the Advanced Trainings (Ex- HFSS, Satellite Communication etc.) during the third year.
- At the end of 3rd year, the students are required to develop a project based on acquired skills.
- Following are the target companies: ST Microelectronics, Ericson, Nokia, Airtel, BSNL etc.

4.) Applications Domain (Embedded Systems & IoT):-

- After the segregation, the students under **"Embedded Systems & IoT domain"** are trained in different fields (Ex- Basic microprocessor, basic microcontroller, Digital Circuits, etc.) during the Second year.
- Students are promoted to Third Year and again counseling session is conducted by HOD and EEC Member to ask the students to pursue the same field or want to change.
- If the students continue in the same field, so they are engaged in the Advanced Trainings (Ex- Advanced microprocessor, Advanced Microcontroller, IoT, etc.) during the third year.
- At the end of 3rd year, the students are required to develop a project based on acquired skills.
- Following are the target companies: Cisco Systems India Pvt Ltd, Texas Instruments, British Telecom, etc.

5.) Sales & Service domain:-

- After this segregation, the students under the "**Sales & Service domain**" are trained in different fields (Ex-Digital Circuits, Sensors, microcontrollers, etc.) during the Second year.
- Students are promoted to Third Year and again counseling session is conducted by HOD and EEC Member to ask the students to pursue the same field or want to change.
- If the students continue in the same field, so they are engaged in the Advanced Trainings (Ex- Advanced Microcontroller, IoT, etc.) during the third year.
- At the end of 3rd year, the students are required to develop a project based on acquired skills.
- Following are the target companies: GE Healthcare, Siemens, Philips, Abbott, Medtronic, etc.

6.) Operation & Maintenance domain:-

- After this segregation, students under the **"Operation & Maintenance domain"** are trained in different fields (Ex-Digital Circuits, Sensors, etc.) during the Second year.
- Students are promoted to Third Year and again counseling session is conducted by HOD and EEC Member to ask the students to pursue the same field or want to change.
- If the students continue in the same field, so they are engaged in the Advanced Trainings (Ex- BTS Installation, DTH Installation, Optical Fiber Networking, etc.) during the third year.
- At the end of 3rd year, the students are required to develop a project based on acquired skills.
- Following are the target companies: Bharti Airtel, Jio, MTNL, BSNL, TataSky, DishTV, etc.

7.) Public sector and higher education domain:-

- After this segregation, students under the "**Public sector and higher education domain**" prepare for the public sector and higher studies. Assistance is offered by the department towards the same.
- For this purpose, Gate preparation is carried out through tie-up companies.

1. INBOX WORKING PROCESS

1.1 ACADEMICS

1.1.1 Department Academic Activities

The Initiatives are taken by the Department to improve Academic Statistics are:

- **Overall Class Coordinator (OCC):** The concept of this initiative was to have double-checked the working of class coordinators and students. The OCC keeps close coordination between all the class coordinators of a particular year and removes any gap between them. He also works as a bridge between class coordinators and students so that any grievance or problem related to administration or academics can be sorted out. He also handles discipline issues of that year for which he/she is designated. Overall class coordinators, class coordinators and mentors take care of various aspects of co-curricular activities (Academic, Counseling, and Discipline) so as to maintain complete decorum.
- **Mentor-Mentee Program** was introduced in order to counsel, motivate and guide the mentees & encourage them to achieve their potential in terms of growth & development. To make mentees aware of the resources & opportunities available for professional development.

To motivate the mentees to work in emerging areas & identify their areas of strength & concern. To encourage them to take active participation in research activities and get it published. To provide observation & feedback of mentees to the next higher level.

- **Extra classes** for short attendance and academically needy students had started from the starting of the semester.
- **Daily Attendance Monitoring:** The list of students having attendance < 75% will be posted every Friday on the departmental boards. Short Attendance letters are posted fortnightly.
- **Buddy Classes:** In the class, there are slow learners and fast learners, to handhold the slow learners this initiative is undertaken. The fast learners of the class handhold some of the slow learners in academics through notes, explaining the topics, solving numerical, etc. This initiative will help slow learners to come to the same platforms as others.
- **Concept Booster Classes (CBC)** for in-depth study for core companies/PSUs/ IES. The classes are taken by senior faculty members of the department.
- **Student Research papers,** it has been made suggest for project groups to publish two Research Paper in a Scopus / UGC indexed Journal and in an International Conference.
- **Placement Tracker** was introduced to monitor the record of the interview process held that the data may be analyzed further and effective steps may be taken to enhance the skills of the students for the upcoming interviews.
- **Training Tracker:** The 3rd year students go for industrial training for 4 to 6 weeks in some industry of their choice. The student brings a certificate after completion of training. To understand what he /she has learnt day-wise a tracker was introduced. This training tracker consists of day-wise monitoring of training like in which department and under whose guidance he/she is doing training etc. After completion of training, the student will bring the tracker for evaluation.
- **Project Tracker:** Project Tracker tracks the interaction details of the project supervisor & the team.
- **Electronics ICU:** Under this initiative, the department offers maintenance and repairs of various electronic equipment at the college level.
- **Department Level Placements:** Under this initiative, the department has developed linkages with several renowned industries for MoUs which will help in internships & placements.
- **Tie-ups with Reputed Academic Universities & Institutions** for Start-ups, Intellect Transfer & Faculty Development.
- **GATE Classes + Content Preparation for Core Field Companies**

1.2 RESEARCH & INNOVATION

Research & Innovation activity of ECE department integrates Publications, Patents, Incubation and Startup. The purpose behind this is to improve upon quality as well as number of publications. Every project group in final year is advised to have at least two publications (Review & Implementation) out of their project in an academic session. Apart from this every faculty member is required to have maximum number of publications in reputed Nationals/Internationals journals/Conference.

- Any innovative and novel ideas from projects are further encouraged for patent.
- Department provides support to the students who are interested in their own startups/ business opportunities. It provides expert/ resource person and helps in registration of startup etc.
- Department has initiated to setup an incubation center to develop new ideas into products.

1.2.1 Publications

1.2.1.1 JOURNALS/CONFERENCES

- **Priyanka Bhardwaj** et. al published a paper titled "Integrated electro-optic tunable power splitter based on microring resonators having interleaved PN junctions," Proc. SPIE 11364, Integrated Photonics Platforms: Fundamental Research, Manufacturing and Applications, July 2020.(SCI)
- **Priyanka Bhardwaj** et. al published a paper titled “FDTD modeling of integrated electro-optic modulators based on mode-gap shifting in photonic crystal slab waveguides containing a phase change material,” published in Journal of the Optical Society of America B, June 2020 (SCI)
- **Priyanka Bhardwaj** et.al. paper entitled “An Intelligent Scheme for Slot Reservation in Vehicular Ad Hoc Networks”, accepted in China Communications. (SCI)
- **Pallavie Tyagi, Khushbu Bansal, Sanjay Kr. Singh and Pushkar Praveen**: Presented and published a paper titled “Differential Amplifier analysis on different technology nodes using Cadence Virtuoso” in International Conference on Smart Machine Intelligence and Real-Time Computing Smart Com, June 2020. (SCOPUS).

- **Ranjeeta Yadav, Sanjay Kr. Singh, Pranavi Yadav, and Nimish Nigam**: Presented and published a paper titled "IOT based Advanced Weather Monitoring" in International Conference on Smart Machine Intelligence and Real-Time Computing, June 2020. (SCOPUS)
- **Shailendra Bisariya, Sanjay Kr. Singh, Rishabh Aggarwal, Preeti Anand, Shaurya Garg**: Presented and published a paper titled "Multifunction filter using Current Conveyor" in International Conference on Smart Machine Intelligence and Real-Time Computing SMART COM 2020, June 2020. (SCOPUS)
- **Shailendra Bisariya, Preeti Anand, Rishabh Aggarwa**l: Presented a paper titled "Multifunction filter using Current Conveyor: a review" in International Conference on Futuristic Innovations in Technology and Engineering (FITE)-2020, November 2020. (SCOPUS)
- **Shailendra Bisariya, Neelofer Afzal**: published a paper titled "Design and Implementation of CDTA: a review" in SCI indexed Journal Sādhanā (Published by the Indian Academy of Sciences)/ Springer India, September 2020, volume-45, issue-1, pp. 1-24.
- **Shilpa Srivastava, Sanjay Kr Singh, Pushkar and Ashish Khare**: Presented and published a paper titled "Social Distance Monitoring and Alarm System" International Conference on Smart Machine Intelligence and Real-Time Computing Smart Com, 2020. (SCOPUS)
- **Himani Garg, Navneet Sharma, Manidipa Roy**: Presented and published a paper titled "Interactive pH measurement system" in International Conference on Smart Machine Intelligence and Real-Time Computing Smart Com, 2020. (SCOPUS)
- **Tania Gupta, Richa Bhatia**: Presented and published a paper titled "Communication Technologies in Smart Grid at Different Network Layer: An Overview" in IEEE International Conference on Intelligent Systems, August 2020. (SCOPUS)
- **Ranjeeta Yadav, Divya Mishra, Deepti Rawat, Himanshu Sharma, Tripti Mishra**, Presented and published a paper titled "Microcontroller based Monitoring and alert System" in International Conference on Smart Machine Intelligence and Real-Time Computing SMART COM 2020, 2020. (SCOPUS)
- **Ajay Suri, Dr. Sanjay Kumar Singh, Rashi Sharma, Pragati Sharma, Naman Garg, Riya Upadhyaya**: Presented and published a paper titled "Development of Sign Language using Flex Sensors" in ICOSEC Sep-2020. (IEEE)
- **Prachi Kataria, Anuwarti Rai, Aanchal Singh, Ashwin Anand, Raman Kapoor and Sanjay Kr. Singh**: Presented and published a paper titled "Low Power VLSI Design of Arithmetic and Logic Circuits using Multiple Threshold CMOS Technique" in International Conference on Smart Machine Intelligence and Real-Time Computing, 2020. (SCOPUS)
- **Priyanka Tyagi, Sanjay Singh and Piyush Dua**: Presented and published a paper titled "Design & Simulation of CNTFET based folded Cascade Op-Amp for Instrumentation Amplifier"in International Conference on Smart Machine Intelligence and Real-Time Computing, June 2020. (SCOPUS)
- **Priti Kumari and Sanjay Singh**: Presented and published a paper titled "Smart Irrigation System Using IoT" in International Conference on Smart Machine Intelligence and Real-Time Computing,2020 (SCOPUS)
- **Vijay Kumar, Sanjay Kumar Singh, Raman Kapoor**: Presented and published a paper titled "Static Noise Margin Analysis of 6T SRAM" in 2020 IEEE International Conference for Innovation in Technology (INOCON) Bengaluru, India. Nov 6-8, 2020. (IEEE)
- **Pragati Gupta, Akanksha Raj, Akshita Katiyar, Raman Kapoor and Sanjay Kumar Singh**: Presented and published a paper titled"Arduino Based Smart Dustbin for Efficient Waste Segregation and Disposal" in Futuristic Innovations in Technology and Engineering (FITE-2020), 11-12 December 2020.
- **Abhishek Jaiswal, Animesh Mishra, Raman Kapoor and Sanjay Kumar Singh**: Presented and published a paper titled "FPGA based air quality monitoring system" in Futuristic Innovations in Technology and Engineering (FITE-2020), 11-12 December 2020.
- **Shailendra Bisariya, Raman Kapoor, Sanjay Kr. Singh, Pushkar Praveen**: Presented and published a paper titled "Design of Current Conveyor Trans-Conductance Amplifier for low power applications: A Review" in International Conference on Smart Machine Intelligence and Real-Time Computing SMART COM 2020.
- **Shikhar Swarup Saxena, Shubham Sisodia, Vasu Singh, Hemant Vashistha, Arpita Johri**: Published a paper titled "Smart Prepaid Energy Meter System with Home Security Alert Features" in Journal of Energy, Environment & Carbon Credits, STM Journals, ISSN: 2249-8621, Volume-10, Issue -1, 2020.
- **Manish**: Published a paper titled "Blooming of 3D to 5D printing technology in biomedical engineering" in International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN(P): 2249–6890; ISSN(E): 2249–8001, Vol. 10, Issue 3, 2020, 5897–6000.

- **Khushbu Bansal, Pallavie , S.K Singh, Kriti mandal, Priyanka Saini and Sonia Sharma**: Presented and published a paper titled "Autonomous Car and Driver Drowsiness Detection using Face and eyes Detection Technique " in International Conference on Smart Machine Intelligence and Real-Time Computing Smart Com, 2020.
- **Khushbu Bansal, Surbhi Singh, Spurti Shukla, Pallavie and S.K Singh**: Presented and published a paper titled "Design of 6T-sram on different technology nodes" in International Conference on Smart Machine Intelligence and Real-Time Computing Smart Com, 2020.
- **Aditi Srivastava, Niharika Agarwal, Nishtha Ghai, Rashmi Jain, Tania Gupta, Dheeraj Singh**: Published a paper titled "Home Air Quality Monitoring System" in the international journal of analytical and experimental modal analysis, Volume XII, Issue VII, July/2020, Page No:651.
- **Geetanjali Raj, Sumit Gupta, Mohit, Shubham Singh**: Presented and published a paper titled "Smart Shoes for Blind" in International Conference on Smart Machine Intelligence and Real-Time Computing Smart Com, 2020.

1.2.1.2 BOOK CHAPTERS

- **Dr. Priyanka Bhardwaj** published a book chapter having the title "An Overview of ADAS on the Internet of Vehicles" in the book, title "Internet of Vehicles and its Applications in Autonomous Driving" published by Springer Nature, Switzerland, ISSN 2523-3734, https://doi.org/10.1007/978-3-030-46335-9.
- **Dr. Priyanka Bhardwaj** published a book chapter having the title "Implementation and Computational Level Challenges for IoT in healthcare Applications" in the book, the title "IoT and ICT for Healthcare Applications" published by Springer Nature, Switzerland, ISSN 2522-8595, https://doi.org/10.1007/978-3-030-42934-8.
- **Dr. Priyanka Bhardwaj** published a book chapter having the title "Augmented intelligence and EDGE Computing: Introduction and Trending Features" in the book, the title "Augmented intelligence Towards Smart Vehicle Applications" published by Taylor & Francis, ISBN 9781003006817, https://doi.org/10.1201/9781003006817.

1.2.2 PATENTS

- **Dr. Sanjay Kumar Singh, Dr. Himani, Ms. Rakhi Kumari, Ms. Shilpa Srivastava, Mr. Rajnesh Kumar**: Published a patent titled "SMART DIGITAL COLORIMETER".
- **Dr. Priyanka Bhardwaj, Mr. Teggina Math Kotresh, Mr. Rajib Ratan Ghosh, Mr. Anuj Dhawan**: Published and granted US Patent titled " BROADBAND OPTICAL MODULATORS".
- **Dr. Himani Garg, Ms. Arpita Johri, Dr. Manidipa Roy, Ms. Rakhi Kumari, Dr. Sanjay Kumar Singh**: Published a patent titled "SYSTEM AND METHOD FOR POLLUTION LEVEL BASED ACTION DETERMINATION".
- **Ms. Ranjeeta Yadav, Ms. Geetanjali Raj, Ms. Anjana Bhardwaj, Dr. Sanjay Kumar Singh, Ms. Akansha, Mr. Devesh Sonker**: Published a patent titled "SYSTEM AND METHOD FOR ROBOT ASSISTING PATIENT".
- **Mr. Rajneesh Kumar Singh**: Published a patent titled "METHOD FOR RESTRICTION OF DOOR OPENING IN MOTOR VEHICLE".
- **Dr. Manidipa Roy, Ms. Rakhi Kumari, Dr. Sanjay Kumar Singh, Mohd. Imran Khan**: Published a patent titled "SIGN LANGUAGE RECOGNITION INTO MULTIPLE LANGUAGES AND TEXT TO IMAGE OUTPUT FOR SIGNS".
- **Mr. Rajneesh Kumar Singh**: Published a patent titled "DEVICE FOR LIFTING AND POSITIONING WHEEL IN AUTOMATIVE VEHICLE".

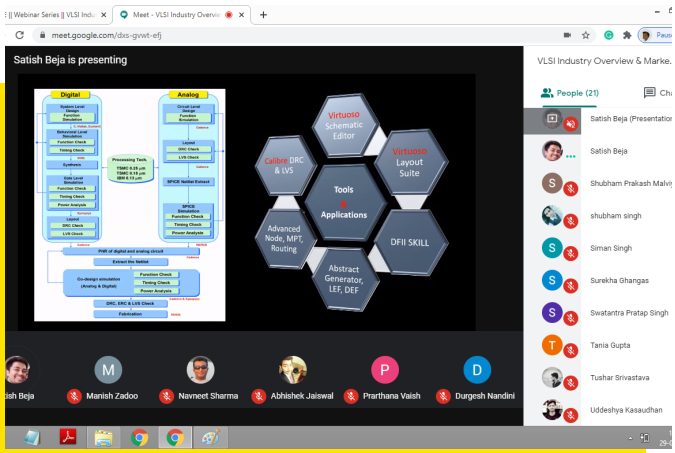
1.2.3 STARTUPS

1.	ClinchHub.Com	Mr. Sahil Gupta, Mr. Prateek Gupta, Mr. Gaurav Patel
2.	RIO Rentals Pvt. Ltd.	Mr. Ankit Yadav, Mr. Shivam Kumar Singh
3.	Mevan Technology	Mr. Mathurendra Singh, Ms. Manshi Singh
4.	Owl Cap	Mr. Mohit Hada, Mr. Anupam Singh, Mr. Sumit Gupta
5.	Novigado Electromix	Mr. Parchit Malhotra, Mr. Rupen Jain, Mr. Piyush Khanna, Mr. Raj Singh

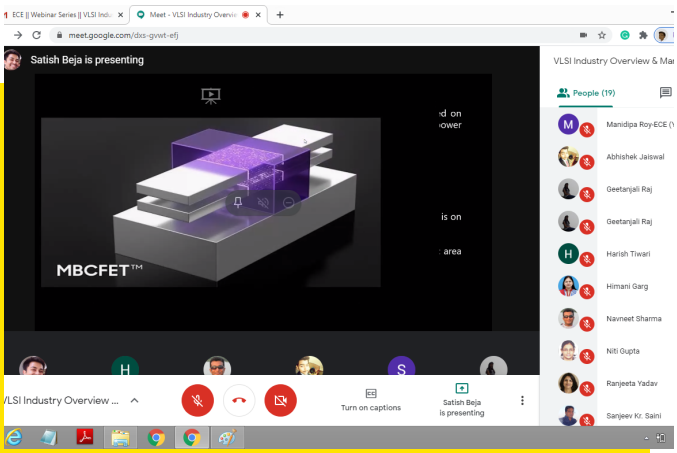
1.3 FACULTY & STAFF DEVELOPMENT ACTIVITIES

1.3.1 GUEST LECTURES

- Rahul Pathak [Expert, Artificial Intelligence & Deep Learning] delivered a lecture to faculty and staff in a faculty seminar on "**Artificial Intelligence**" on 1st July 2020.
- Mr. Shashank Joshi [Technical Architect, Technical Excellence Group] delivered a lecture to faculty and staff in a faculty seminar on "**Prediction using Graph Modellin**g" on 2nd July 2020.
- Mr. Ravi Kumar Mathur [Assistant Director-General, National Telecommunication Institute for Policy Research Innovation & Training (NTIPRIT), Ministry of Communications, Ghaziabad] delivered a lecture to faculty and staff in a faculty seminar on "**Introduction to Blockchain**" on 3rd July 2020.
- Ms. Niyoti Saxena [Data Engineer, Bizmetric] delivered a lecture to faculty and staff in a faculty seminar on "J**ourney from College to Corporate**" on 4th July 2020.
- Mr. Rajat Bansal [Design Engineer, KeenHeads Technologies, Pvt. Ltd] delivered a lecture to faculty and staff in a faculty seminar on "**Design to Manufacturing in VLSI**" on 5th July 2020.
- Mr. Piyush Ranjan [Research Scholar, Indian Institute of Science, Bangalore] delivered a lecture to faculty and staff in a faculty seminar on "**Research Opportunities after GATE in India's Premiere Institutions**" on 6th July 2020.
- Ms. Aayushi Jain [Senior Consultant, Adobe Systems India] delivered a lecture to faculty and staff in a faculty seminar on "**Business Intelligence and Analytics**" on 7th July 2020.
- Mr. Sharad Maurya [Director, Career Voyage Consulting], Mr. Ankur Sharan [Director, 4Track Learning], Ms. Golda Malhotra [Country Manager, FRENCH EMBASSY IN INDIA, NPLUSI Engineering Consortium] delivered a lecture to faculty and staff in a faculty seminar on "**Study Abroad- Global Opportunities after Engineering**" on 8th July 2020.
- Ms. Geetika Singh [A & MS Layout Engineer, Synopsys] delivered a lecture to faculty and staff in a faculty seminar on "**CMOS Standard Cell Design and PPA Concept**" on 10th July 2020.
- Mr. Sunil Pandey [Senior Analog Design Engineer, Intel, Bangalore] delivered a lecture to faculty and staff in a faculty seminar on "**Design & Analysis of Low noise Amplifier (LNA) for Ultra-Wideband Applications**" on 11th July 2020.
- Dr. Anju Khandelwal [SRMS College of Engineering & Technology, Bareilly], Dr. Vikrmaditya Dave [Deptt. Of Electrical Engineering, CTAE, MPUT, University, Udaipur], Dr. Vishal Kaushik [Deptt. of Computer Engineering, Petroleum & Energy Studies University, Dehradun], Dr. Yogesh V. Hote [Associate Professor, Deptt. Of Electrical Engineering, IIT Roorkee], Dr. Madhu Jain [Associate Professor, Deptt. Of Mathematics, IIT Roorkee] delivered a lecture in National Seminar on "**Use of Scientific Terminology in Higher Education**" in association with Commission for Scientific and Technical Terminology, Ministry of Human Resource Development, Government of India, New Delhi on 21st and 22nd July 2020.
- Mr. Shivam Rai [Analyst, GlobalLogic Tech. India Pvt. Ltd., Gurgaon] delivered a lecture to faculty and staff in Online Alumni Interaction Program on "I**ndustry Insights & Career Opportunities**" on 24th December 2020.



Lecture on Design to Manufacturing in VLSI



Lecture on CMOS Standard Cell Design and PPA Concept

1.3.2 WORKSHOPS

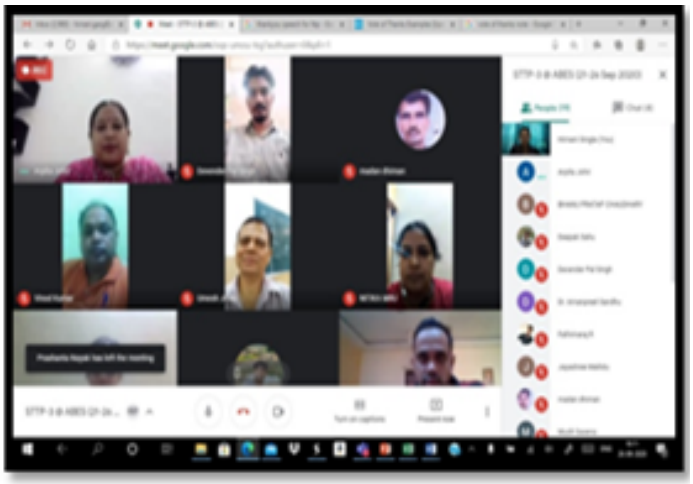
- Workshop on "**Vector Network Analyzer (VNA)**" on 2nd Dec 2020.
- Workshop on "**Computational Simulation tool (RF & Microwave)**" on 4th Dec 2020
- Workshop on "**PCB machine**" on 7th Dec, 2020.

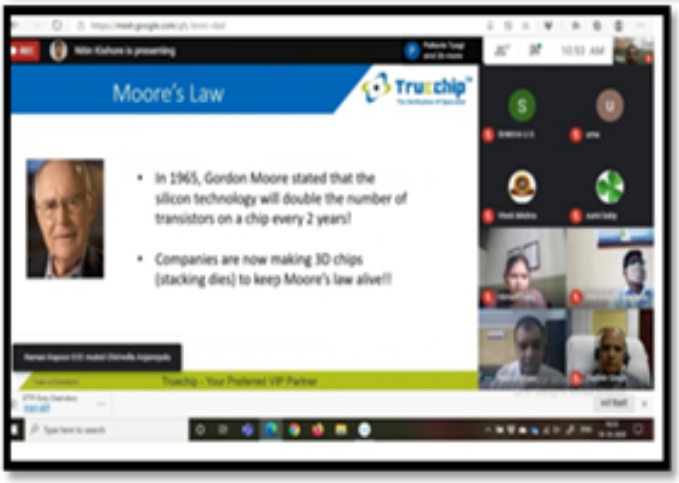
Workshop on PCB machine

Workshop on Vector Network Analyzer (VNA)

1.3.3 Faculty Development Program (FDPs)

- FDP on "**Analog IC Design using CADENCE EDA tools**".
- FDP on "**Digital ASIC Design using CADENCE EDA tools**".
- FDP on "**FPGA Design and Implementation on Xilinx tools**".
- FDP on "**Design and simulation of semiconductor devices**".





2. OUTBOX WORKING PROCESS

2.1 Employability Enhancement Cell (EEC)

The purpose of EEC is to minimize the gap between academia and industry. Provide training & guidance to students on the various aspects of building a career in the domain of ECE. Assist the students in exploring new opportunities & new technologies. Guide them in developing skills & job search strategies required to achieve their career objectives. Organize various types & levels of in-house training programs & extension programs to achieve the goals. Help the students to get placed in the core companies.

2.1.1 In-House Trainings

S. No.	Name of the Training	Duration	Domain	Industrial Partner
1	VLSI (FronEnd & BackEnd)	100 hours	Microelectronics	Truechip, Elbrus Labs
2	NI Innovation	80 hours	Signal Processing	National Instruments
3	PLC & SCADA	80 hours	Automation	Automation Engineers A.B Pvt. Ltd.
4	Embedded Systems & IoT	80 hours	IoT & Robotics	MindTask
5	Antenna Design & Microwave	80 hours	Communication	Optimum Viking Satcom (India) Pvt. Ltd.
6	Analog and Digital Electronics for 1st year students	80 hours	Analog and Digital Electronics	Truechip, System Infra Pvt. Ltd

2.1.2 Center of Excellence (CoE)

Sr. No.	Name of the CoE	Associated Company
1.	VLSI	Cadence Design Systems India Ltd.
2.	Wireless Sensor Network	National Instruments
3.	NI Innovation Centre	National Instruments
4.	IARTC & SMC Pneumatics	Rockwell Automation SMC (I) Ltd.
5.	Embedded System & IOT	Texas Instruments
6.	Optical, Microwave and Antenna design	Optimum Vikings Satcom Pvt. Ltd., Marvel Innovate Systems

Training @ Embeded System Lab

Training @ National Instruments Lab

Training @ VLSI Lab

Training @ IARTC Lab

Training @ SMC Pneumatics Lab

Training @ CADEC Lab

2.1.3 Industry Associated Lab

S.No.	Name of the Lab	Associated Company
1	Digital Electronics & Microprocessor Lab	Texas Instruments (TI)
2	Electronics Workshop PCB & Measurement Lab	1). Apron Innov. Pvt. Ltd. 2). NRR Power Pvt. Ltd.
3	Electronics Design & Control Lab	1). Aim Electronics and Scientific Co. 2). Mind Task
4	CADEC Lab	Elbrus Lab Pvt. Ltd.
5	Analog & Digital Electronics Lab	Automation Engineers A.B Pvt. Ltd.
6	Communication Lab	Optimum Vikia Solution & Tech.
7	Electronics Simulation Lab	Entuple Technologies Pvt. Ltd.
8	VLSI Design Lab	1). Entuple Technologies Pvt.Ltd. 2). TrueChip Solutions Pvt. Ltd.

2.1.4 Advanced Lab

S.No.	Name of the Facility	Purpose of Lab
1.	Electronic ICU	The purpose of this facility is for the consultancy projects, provided by different companies and for R&D purpose. The facility has all basic software and simulation tools used by a communication engineer for designing and testing communication circuits and networks. The lab is associated with Companies like Scientific Pvt. Ltd., Excel Technologies Pvt. Ltd., HiLight Co.
2.	Project Lab	The purpose of the lab is to focus on design, innovation and creativity for self, which builds the foundation and provides the edge for competitive success required in today's dynamic environment for engineers. To improve the quality of projects, department has state of art Project lab that harnesses the creative and innovative aspiring minds to put their imagination into reality. The lab provides all necessary facilities so as our students can work efficiently towards gaining a good hands-on experience on latest technologies and build an attitude for developing new technologies. The lab is associated with number of Companies like 1). Strolar Mounting Pvt. Ltd. 2). System Infra Solutions Pvt. Ltd. 3). Intex 4). Havells 5). The tag Factory

2.2 Industry Academia Relationship Cell (IARC)/Industrial Collaboration Cell

To build the gap between Industry and academia with the help of following fields:-

- To prepare projects that are as per recent trends and technology
- To meet the requirements of industry (Placement Support)
- MoUs with core companies
- Consultancy Projects
- To encourage towards new Start-ups and Entrepreneurships

In 2020-21, 26 students have been offered confirmed placement in Truechip.
In 2018-19, two companies viz. System Infra & Strolar PV Mounting Solutions recruited 2 students from ECE, 1 from ME & 1 from IT.

INDUSTRY CONNECT

2.2.1 MOUs

- True Chip
- Automation Engineers. A.B.PVT.Ltd
- Marvel Innovative systems & Technology
- Aim Electronics
- Optimum Viking Satcom (India) Pvt Ltd
- RSA power Pvt. Ltd.
- Strolar Pv Mounting Solutions
- System Infra Pvt Ltd. New Delhi
- The Tag Factory, Noida
- Intex Tech. Ltd., Gurugram

2.2.2 INDUSTRIAL VISIT

- Deki Electronics Pvt Ltd, Noida on 07/02/2020

2.3 Electronics Design & Consultancy(E-DAC)

- EDAC is a budding Electronic consultancy group providing customized solutions to innovative thought process obtained from Industry. We offer consultancy in the field of Electronic designing, electromechanical system design & Industrial automation & Robotics.
- Objectives:
- Design and development of products based on ideas received from Industries.
- Offering commercially viable solutions best suited for Industries in terms of cost, optimization and Technological edge keeping in view various quality parameters.

Dr Himani Garg, Ms. Rakhi Kumari, Ms Manidipa Roy, Mr. Navneet Sharma, Ms Shilpa Srivastava, Mr. Rajneesh, Mr. Rajkumar & Mr. Sanjay Sharma has successfully completed and delivered two consultancy projects namely "Systems and methods for calibration of PH meter" and "Smart Colorimeter" to AIM Electronics & Scientific Co. AIM Electronics & Scientific Co. was established in the year 1980, located at Ambala Cantt and is a top player in the field of Scientific Instrument Manufacturers.

2.4 FUNDING

The purpose of funding cell is to fetch projects from Industries, MSME, DST, AKTU and Government funded projects. With the help of funding different curriculum labs are modernize like communication lab, VLSI lab etc. and new advanced lab are developed like WSN, Wireless sensor network, RF and Microwave etc.

Recently Applied Projects

- Smart home automation control by eye blinking signals and steady state visually evoked potential
- Monitoring and Mitigation of hazardous waste in biosphere
- Recent trends in communication and networking with hands on NS 3 and Netlist
- Vigyan mela for under privileged/ EWS children
- Constitution of children's forum for scientific research and innovation

3. STUDENT ACHIEVEMENTS

3.1 Results

- Final year student, **Nandini Mittal** (Session 2019 – 2020), secured 1st rank having 9.05 YGPA in B-Tech(ECE) at the college level.
- Final year student, **Rashika Shukla** (Session 2019-2020), secured 2nd rank having 9.03 YGPA in B.Tech(ECE) at the college level.
- Third-year student, **Nandini Tandon** (Session 2019-2020), secured 1st rank having 9.25 YGPA in B.Tech(ECE) at the college level.
- Third-year student, **Nandini Chaudhary** (Session 2019-2020), secured 2nd rank having 9.15 YGPA in B.Tech(ECE) at the college level.
- Second-year student, **Shivani Singh** (Session 2019-2020), secured 1st rank having 8.9 YGPA in B.Tech(ECE) at the college level.
- Second-year student, **Pratibha Singh** (Session 2019-2020), secured 2nd rank having 8.88 YGPA in B.Tech(ECE) at the college level.

3.2 ACHIEVERS

- **Govind Sharma, Akshay Mishra, Sumit Agrahari & Rishabh Panday** qualified GATE examination (2019-2020).
- **Aiman Rehman** qualified IELET examination (2019-2020).

3.3 EXTRA-CURRICULAR ACTIVITIES

- **Team of Shadaj Tiwari** got 1st position in Battle of Bands & Band Wars in Dr. A.P.J. Abdul Kalam Arts and Cultural Fest 2020 (Zonal and State) for Cultural activities at the university level.
- **Team of Swati Khantwal** got 1st position in Poster making in Dr. A.P.J. Abdul Kalam Arts and Cultural Fest 2020 (Zonal and State) for Cultural activities at the university level.
- **Team of Swati Kushwaha** got 1st position in Poster making in Dr. A.P.J. Abdul Kalam Arts and Cultural Fest 2020 (Zonal and State) for Cultural activities at the university level.
- **Team of Shailendra Kumar** got 3rd Position in 4X100m Relay Inter-College Sports Fest in KIET 1 for sports activities at University level.

- **Team of Anushka Yadav** got 1st position in 4X100m Relay in VIT, Gautam Budh Nagar, Dr. A.P.J. Abdul Kalam Sports Fest 2020 (Zonal and State) for sports activities at University level.
- **Team of Keyuri Gupta** got 3rd position in College League in Jaipuria Institute of Management for cultural activities at the College level.
- **Team of Anirudh** got 1st Position in Football in All India Sports Fest in IMS College for sports activities at University level.
- **Team of Anushka Yadav** got 3rd position in 4X400m Relay in Dr. A.P.J. Abdul Kalam Sports Fest 2020 (Zonal and State) for sports activities at University level.

- **Team of Anushka Yadav** got 1st position in 4X100m Relay in BBNIT, Lucknow, Dr. A.P.J. Abdul Kalam Sports Fest 2020 (Zonal and State) for sports activities at University level.
- **Team of Anushka Yadav** got 1st position in 4X100m Girls Relay Race in RANN,2020 in KIET Ghaziabad for sports activities at University level.
- **Team of Anushka Yadav** got 1st position in 4X100m Girls Relay Race in Harcourt Butler University for sports activities at University level.
- **Anushka Yadav** got 2nd position in 200m Athletics in Dr. A.P.J. Abdul Kalam Arts and Cultural Fest 2020 (Zonal and State) for sports activities at the university level.
- Shailendra Kumar got 1st Position in Long Jump in Inter College Sports Fest in KIET for sports activities at the university level.
- **Anushka Yadav** got 3rd position in 100m Race in RANN,2020 in KIET Ghaziabad for sports activities at the university level.
- **Anushka Yadav** got 1st position in 200m Race in RANN,2020 in KIET Ghaziabad for sports activities at the university level.
- **Anushka Yadav** got 2nd (Runner Up) position in 100m Race in Harcourt Butler University for sports activities at University level.
- **Shailendra Kumar** got 1st Position in 100m Race in Sports Sub Council in Harcourt Butler University for sports activities at University level.
- **Shailendra Kumar** got 1st Position in Long Jump in Sports Sub Council in Harcourt Butler University for sports activities at University level.

4. FACULTY ACHIEVEMENTS

4.1 AWARDS

- **Dr. Priyanka Bhardwaj,** has been felicitated with "Maulana Abdul Kalam Azad, Excellence award of Education 2020" by Honorable Chairman AICTE Prof. Anil D. Sahasrabudhe at NCERT, New Delhi and she is one among the 33 faculty members from all over India receiving this award in 2020.

AICTE-Maulana Abdul Kalam Azad, Excellence award

- **Dr. Himani Garg**, Professor, Department of Electronics & Communication Engineering, ABESEC received "Best Teacher Award 2020" by AKTU Lucknow.

Best Teacher Award by AKTU

Certificate of Appreciation from TI

- **Ms. Ranjeeta Yadav** received a Certificate of Appreciation from Texas Instruments for the successful completion of NPTEL MOOC course on "TI Embedded System Design using MSP430 MCU 2020".

4.2 YOUTUBE SERIES FOR AKTU

- **Mr. Dheeraj Singh** completed lecture series on "Network Analysis & Synthesis" for AKTU Digital Education Channel on YouTube.
- **Ms. Rakhi Kumari** completed lecture series on "Optical Communication" for AKTU Digital Education Channel on YouTube.

4.3 CERTIFICATIONS (NPTEL, COURSERA etc.)

- **Mr. Deepak Garg:** Completed NPTEL course on Effective Engineering Teaching in Practice and Patent Drafting for Beginners.
- **Dr. Raman Kapoor**: Completed NPTEL course on Semiconductor Devices and Circuits.
- **Ms. Ranjeeta Yadav:** Completed COURSERA course on the Arduino Platform and C Programming.

4.4 Staff Development Program (SDPs)

- SDP conducted by **Ms. Ranjeeta Yadav, Mr. Rajnesh Kr. Singh, Mr. Shailendra Bisariya and Mr. Sanjai Sharma** as a resource person on "Embedded Systems and O&M" from 2nd to 23rd Nov 2020.
  - The objective of this training is to improve the performance of lab staff and make them compatible to work for consultancy & funded project work in the department.

- SDP conducted by **Mr. Shailendra Bisariya, Mr. Hitesh Tomar and Mr. Parmender Singh** as a resource person on "Basics of Computer" conducted from 1st to 10th October 2020.
  - This program will be beneficial to those who are lacking in the computer domain and not comfortable to operate the same.

SDP on Embedded Systems and O&M

SDP on Basics of Computer

4.5 FDPS ATTENDED OUTSIDE ABES

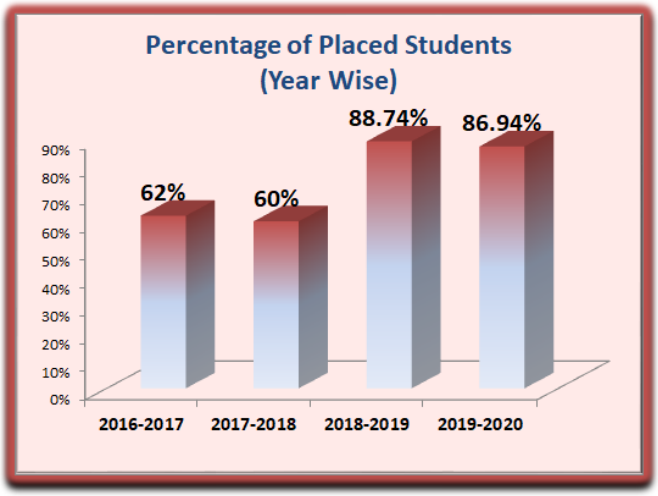
- **Mr. Deepak Gar**g: Attended one-week FDP on WSN and IOT at Sharda University, Greater Noida from 26th November to 1st December 2020.
- **Mr. Deepak Garg**: Attended one-week FDP on Internet of Things and Data Analytics at JSSATE NOIDA, U.P, INDIA from 17th to 23rd November 2020.
- **Dr. Priyanka Bhardwaj**: Attended six days FDP on Technological Advancement in Environment-friendly materials and processing sponsored by TEQIP at Kaithyaar College of Engineering, Bihar from 20th July to 25th July 2020.
- **Dr. Priyanka Bhardwaj**: Attended six days AICTE-ISTE Sponsored online induction program on Machine learning and pattern recognition from 21st Dec to 26th Dec 2020.
- **Dr. Raman Kapoor**: Attended five days FDP on Modeling, Simulation and Fabrication of Future Nano-electronic Devices and Sensors (MSFNS'20) at NIT Calicut from 24th to 28th August 2020.
- **Dr. Raman Kapoor**: Attended four days FDP on Solar Cell Simulation using Open-Source TCAD Software (SCAPS) at Chitkara University, Punjab from 22nd to 25th July 2020.
- **Ms. Ranjeeta Yadav**: Attended five days of AICTE Training and Learning (ATAL) Academy Online FDPs on Internet of Things (IoT) at Inderprastha Engineering College from 14th to 18th December 2020.
- **Ms. Ranjeeta Yadav**: Attended five days of AICTE Training and Learning (ATAL) Academy Online FDPs on Internet of Things (IoT) at SRM Institute of Science and Technology from 7th to 11th December 2020.
- **Ms. Upasana Sharma**: Attended two six days FDPs on Artificial Intelligence & 5G Communication Technology at Poornima College of Engineering, ISI-6, RIICO Institutional Area, Sitapura, Jaipur (Rajasthan) from5th to 10th October 2020 and 26th to 31st October 2020.
- **Ms. Ranjeeta Yadav**: Attended one-week FDP on Internet of Things and Data Analytics at JSSATE NOIDA, U.P, INDIA from 17th to 23rd November 2020.
- **Ms. Upasana Sharma**: Attended one-week FDP on Internet of Things and Data Analytics at JSSATE NOIDA, U.P, INDIA from 17th to 23rd November 2020.
- **Ms. Anjana Bhardwaj**: Attended one-week FDP on Internet of Things and Data Analytics at JSSATE NOIDA, U.P, INDIA from 17th to 23rd November 2020.
- **Ms. Geetanjali Raj**: Attended one-week FDP on Internet of Things and Data Analytics at JSSATE NOIDA, U.P, INDIA from 17th to 23rd November 2020.
- **Mr. Dheeraj Singh**: Attended one-week FDP on Nascent Methodologies, Challenges and Realms of Research at Delhi Technological University, Delhi from 3rd to 7th October 2020.
- **Mr. Dheeraj Singh**: Attended one-week FDP on Nanoelectronics Devices and Circuits Design at NITTTR, Chandigarh from 6th to 10th July, 2020.

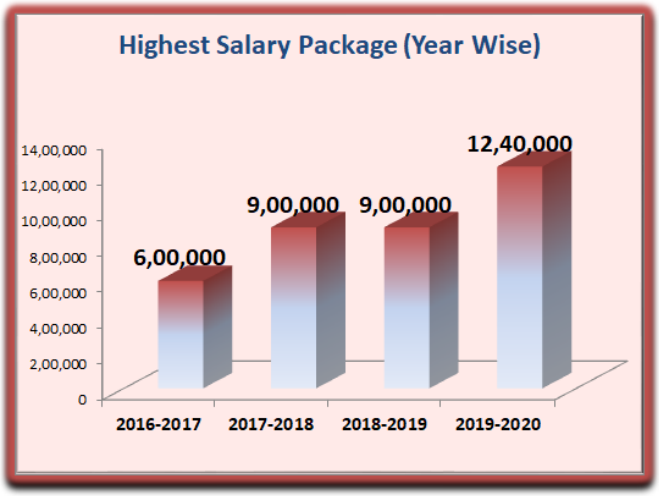
- **Ms. Geetanjali Raj**: Attended one-week FDP on Nanoelectronics Devices and Circuits Design at NITTTR, Chandigarh from 6th to 10th July 2020.
- **Ms. Shilpa Srivastava:** Attended eight days FDP on Antenna Design and Simulation at KIET, Ghaziabad from 14th to 22nd December 2020.
- **Mr. Shailendra Bisariya**: Attended one-week online FDP on Nanoelectronics Devices and Circuits Design at NITTR Chandigarh from 6th to 10th July 2020.
- **Dr. Manish Zadoo**: Attended one-week FDP on Nanoelectronics Devices and Circuits Design at NITTR Chandigarh from 6th to 10th July 2020.
- **Dr. Manish Zadoo**: Attended five days FDP on Internet of Things at IPEC Ghaziabad from 14th to 18th December 2020.
- **Ms. Tania Gupta**: Attended one-week FDP on Machine Learning Through Python at SCRS, India from 24th to 28th August 2020.
- **Mr. Ajay Suri**: Attended four days FDP on Mobile Robotics and Internet of things at Poornima College of Engineering, Jaipur from 16th to 19th September 2020.
- **Mr. Sanjeev Kumar Saini**: Attended six days FDP on Data Science with Python at AKGEC, GHAZIABAD from 2nd to 7th November 2020.
- **Mr. Sanjeev Kumar Saini**: Attended two weeks of FDP on Machine Learning at E & ICT Academy, IIT Kanpur from 8th to 19th August 2020.
- **Dr. Devvrat Tyagi**: Attended ten days FDP on Wireless Communication Technology for IoT at IIT Guwahati & IIT Patna from 27th July to 7th August 2020.
- **Dr. Ashish Gupta**: Attended ten days FDP on Wireless Communication Technology for IoT at IIT Guwahati & IIT Patna from 27th July to 7th August 2020.
- **Dr. Ashish Gupta**: Attended five days FDP on Internet of Things (IoT) at ATAL-academy: AICTE, National Institute of Electronics and Information Technology (NIELIT)-Gangtok from 21st to 25th December 2020.

5. PLACEMENT

The Initiatives are taken by the Department to improve Placement Statistics are:

- Students are being encouraged as well as monitored by their respective mentors to submit their resumes on the “Career” options on the website of core companies of the ECE domain.
- Final year students are being encouraged to create a LinkedIn account so that they may connect to the people of their domain.
- Motivate the students about Recruiters and educate them about the work culture, domain, and skill set required for such type of company.
- Preparing, updating, and regularly tracking of students with the help of Placement Tracker, formulated and devised in the department to keep the students on track of placement and getting reviews and feedback about every drive.
- Arranging Mentor-Mentee sessions for final year students to improve the resumes and overcome their technical, verbal, and communication skills.
- Arrangement of company-specific technical and aptitude training for shortlisted students in association with SEEP and CBSE.
- Interaction of pre-final year students with already placed students for motivation and briefing.





GLIMPSES OF PLACEMENT 2021 (Batch 2017-21 up to Dec, 2020)

(The Process is still ON for this batch)

Total Final Year Students=189
Total Offers from Company=238
Total No. of placed Students=130
No. of Unplaced Students=59

Percentage of Placed Students - 82.36 %
Average Salary of Students - Rs. 4,19,668 LPA
Highest Package Offered - Rs. 14,95,000 LPA

Sr. No.	Package	No. of Offers (upto Dec.2020)
1	10-15 Lacs	2
2	7.5-10 Lacs	1
3	5-7.5 Lacs	3
4	2.5-5 Lacs	229
5	< 2.5 Lacs	3

No. of students having multiple offers	No. of offers from companies
4	5 offers
9	4 offers
28	3 offers
67	2 offers
130	1 offer

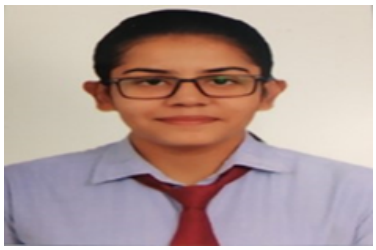
Department Placement Initiative

The Department's target is to have 100% placement but due to some reasons there remain some unplaced students. To cover this unplaced student's gap, the dept. has initiated by its own to place the unplaced students through its own linkages. This step will help the unplaced students to get the Placement. The above list of companies is just the beginning; there are more companies in the pipeline.

Total Unplaced Students	Placement Offers from the Department	Package	Companies
59	10	2.40 Lacs	Truechip Technologies
	5	2.20 Lacs	HCL(Smart Brain)
	10	2.4 Lacs	Elbrus labs
	5	2.00 Lacs	System Infra
	5	In Process	.Net/PHP
	5	2.16 lacs	Optimum Vikings Satcom

6. ALUMNI CONNECT

AAKANKSHA YADAV



(Tata Consultancy Services at 3.97 lacs as a software engineer & Extramarks Education India Pvt. Ltd at 12.4 lacs as a Business Development Executive)
My carrier path was slowly and steadily laid down by department of ECE, my progress was carved under guidance of Employability Enhancement Cell(EEC), Industry Academia Relationship Cell(IARC) and was closely tracked by Placement Tracker, Project Tracker and Training Tracker. I owe my success to my hard work, my parents, My mentors and faculty members.

SHRUTI PARASHAR

(Fiserv India at 2.94 Lacs as a Software Engineer Trainee, Byju's the Learning app at 4.5 Lacs as a Product Specialist, EY GDS at 3.8 Lacs as an Associate Software Engineer, Toppr Technologies Pvt. Ltd. at 12 Lacs as an Academic Consultant,)
When I was in 2nd year, our domain was defined. The training was done accordingly and was closely monitored by "Employability Enhancement cell". We had been taught latest tools for the industry. My progress was consistently tracked by Training Tracker, Project tracker and Placement Tracker. I am very thankful to the efforts of HOD sir, Departmental placement Coordinators and CCPD for my achievements.

SHRUTI SINGH

(Capgemini India at 3.8 lacs as an Analyst,Tata Consultancy Services at 3.96 lacs as a Software Engineer Trainee, Centilytics at 6.0 lacs as a Business Development Executive , Byju's- The Leaning App at 4.75 lacs as a Product Specialist, Ernst & Young- GDS at 3.8 lacs as an Associate Consultant, Infosys at 3.65 lacs as aSoftware Engineer Trainee,Cognizant at 4.0 lacs as a Software Engineer Trainee ,Successive Technologies at3.5 lacs as a Business Analyst)
I am very grateful to my Head of Department, Faculty Members, Mentors and Placement Coordinators for their support in recognizing the best in me.I thank them for guiding through the staircase of success to such an that I got placed in the first month of indebted to my parents for their blessings and constant motivation.

AAKANSHA SINGH

(Certybox Pvt. Ltd. at 5 Lacs as a Business Development Executive , Topper Technologies Pvt. Ltd. at 12 Lacs as a Academic Consultant)

It gives me immense pleasure and satisfaction finding myself to be placed in 7th semester of my Engineering, All this has happened because of my commitment, perseverance and Hard work. But this would not have been possible without handholding of my Mentors, Departmental Placement Coordinators and HoD Sir. Thanks to the CCPD Team.

NISHTHA SHARMA

(Fiserv India at 2.94 Lacs as a Software Engineer Trainee, Tata Consultancy Services at 3.96 lacs as a Software Engineer Trainee,Byju's- The Leaning App at 4.75 lacs as a Product Specialist, Extramarks Education India Pvt. Ltd. at 12.4 Lacs as a Business Development Executive)

I owe these offers to the rigorous placement training that is provided by the college to final year students. I would like to thank my ECE department for providing me with so many opportunities to sharpen myself both academically and via extra curricular activities. I would like to thank CCPD, SEEP, Employability Enhancement Cell and Industry Academia Relationship Cell for molding my future. I would like to thank HOD sir, my mentors, teachers and CCPD DCs for guiding and supporting all my way.

AYUSH DIXIT

(Capgemini India at 3.8 lacs as a Software Engineer Trainee,Shine.com (HT Media) at 5 lacs as a Software Engineer, Tata Consultancy Services at 7.6 lacs as a Software Engineer)

I am very thankful to my Head of Department, Faculty members, Mentors and Placement Coordinators to find the best in me and guiding me to the success. The domain classification done in the 3rd semester by CDC Cell was the key to find the true potential in me. The Placement tracker helped me to remain focused and resolved my issues. I am really thankful to my parents, for their blessings and motivation.

ARPIT DIXIT

(**Cohesive Technologies (P) Ltd at 3.4 lacs as a Technical Sales, Cyfuture India Pvt. Ltd. at 5.5 lacs as a BD Trainee)**

I am thankful to the CCPD, department of ECE, HOD sir and Placement Coordinators for giving valuable guidance when and where required. Department of ECE has specially devised methods like Employability Enhancement Cell (EEC) and Placement Tracker to keep the placements on right track. Departmental Placement Coordinators, My mentors, teachers and above all, my parents and almighty.

ANUJ GUPTA

(Athancare at 4.2 Lacs as a Business Development Executive , Lido Learning at 10 Lacs as a Business Development Executive)

I owe my success to my Parents, Blessings of Almighty and The help and Guidance from Employability Enhancement Cell of the Department of ECE who gave me proper guidance and motivation to achieve what I always wanted. The academic experience with a world class infrastructure and excellent faculty at ABES Engineering College has endured me with a lifelong career excellence.The exceptional programmes and teaching methodologies backed by practical skills and industry interface have given me the confidence to pursue my career ahead. The all-time support and motivation of the faculty members and HOD of my Department has enlightened me throughout the beautiful journey.It's because ofthem I am able to think globally and spread my wings to take off for the land of rising Sun.

Our Patrons

Editorial

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