Message From The Chair

TO FACULTY AND STUDENTS

I am overwhelmed to yet again present a new issue of our ECE departmental newsletter COMMUNIQUE, which covers all our departmental accomplishments, events, achievements, headline news and new milestones our department has so far.

Our department is fully equipped with all the labs mandatory for the curriculum and industrial demands. The prominent asset of our department is the intellectual capital which comprises of highly motivated, technically skilled and well qualified faculty members.

Our association with industries have grown stronger with every passing time and this has facilitated us with our teaching process a lot, at IPEC we target equally on classroom teaching as well as practical expertise in subject. To enhance overall technical understanding of student’s theoretical knowledge is amalgamated with its plant level actual implementation and that is achieved through industrial visits.

I am confident that as IPEC ECE continues in its strategic direction as a field leader, even bigger success will be realized in every coming day. I thank all our alumni, friends and industry partners who provide the support that is essential to our efforts for excellence in education and research, and as always, do feel free to contact me at vijayk.gupta@ipec.org.in with your ideas and feedback.

Dr. V.K. Gupta
Professor and Chair
Department of Electronics and Communication Engineering

MERITIOUS STUDENTS ECE 2016-17

2nd Year
1. Ashish Kumar Gupta
2. Achint Rastogi
3. Akash Shukla

3rd Year
1. Yash Agrahari
2. Tripti Sharma
3. Chesta Gambhir

4th Year
1. Anshul Gupta
2. Anas Khan
3. Anshi Singh
DEPARTMENT VISION

To be recognized as a center of excellence in Electronics and Communication Engineering by providing valuable resources to the students for the purpose of nurturing their knowledge and skills to serve the nation by solving the technological problems of modern society in the field of Electronics and Communication.

DEPARTMENT MISSION

To provide a conducive environment for budding electronics and communication engineers by providing them quality and value based education in the field of electronics and communication.

To enable students to achieve industry centric targets and goals for electronic and communication engineering undergraduates.

To create a novel learning environment and providing valuable resources to the students to carryout meaningful research and development activities; which will help our students to get quality placements.

FDP/ Research Papers


Mr. Kamal Raj Singh and Ms. Nutan Raghav pursued FDP program on Analog & Embedded Systems organized by ABEST, Ghaziabad from 17-22 July 2017. The six day long Program was sponsored by Dr. A.P.J. Abdul Kalam Technical University, Lucknow. The program was targeted to update the faculty skills and knowledge which will mammoth task of training our current generation for today’s scenario. The program was enriched with latest tools and techniques used in Analog and Digital VLSI domain, IOT, Embedded systems and their future Scope, MSP 430 etc.

- **On STC/CEP on HDL for Signal, Image and Video Processing (HSIVP-2017)**

Dr. V. K. Gupta pursued a Short Term Faculty Development Course on “HDL for signal , Image and Video Processing (HSIVP)” from 21st to 26th August 2017 at IIT BHU. Few of the course highlights includes : introduction and usage of HDL languages in signal, Image and video processing. Combinational and Sequential logic circuits, their construction, DCT, FPGA, FFT architecture, introduction to JPEG 2000 EBCOT algorithm, static time analysis etc.


One Day National Seminar on “Recent Trends in Electronics and Communication Engineering”

Electronics & Communication Engineering Department of Inderprastha Engineering College, Ghaziabad organized a one day National Seminar on “Recent Trends in Electronics and Communication Engineering” on 12th August 2017. The goal of the seminar was to fill the gap between industry and academia. The event welcomed various dignitaries of renowned institutions and industries to make students aware of latest trends and research in the field of Electronics & Communication Engineering.

The guest speakers for the event were experienced researcher having respective field expertise. The event included four sessions. The speakers of the sessions were:

Session 1: **Dr. Dinesh Prasad**, (Associate Professor, ECE Department, JamiaMilliaIslamia University)

Session 2: **Mr. Yashjit Kumar Teotia**, (Sr. Principal Consultant, NTT Data, Noida)

- First session was delivered by **Professor (Dr) Dinesh Prasad**, who has a strong academic and research background. He is an Associate Professor from the Department of Electronics and Communication (Jamia Millia Islamia). It was privilege for the audience to attend his lecture. His topic of discussion was “**Transconductance Based Building Blocks**”

- Second session was delivered by Prof. Yashjit Teotia from NTT Noida. His talk was based on Recent Trends in **“Open Source Technologies”**. He focused on opportunities in open source trends, I.O.T using Raspberry Pi.

- Third session was delivered by Dr. Vineet Khandelwal from IIIT, Noida who is having specialization on Wireless Communication and Image Processing. His topic of discussion was **“Free Space Optical Communication”**. He explained about various factors which affects the line of sight communication. He explained about scattering, absorption and attenuation phenomena which influence the link and deteriote its performance. He also explains about different channel performance like gamma-gamma, Rayleigh on the basis of their distribution.
Workshop on MSP-430 and IOT

TI Centre of excellence organised a workshop on MSP-430 and Internet of things for students and faculty of Department of ECE. It was held from 7th to 9th September 2017. The workshop was organised in collaboration with “Edgate Technologies” Bengaluru. Mr. Asif from Edgate technologies delivered training to participants. Workshop was attended by 47 students and 16 faculty members. Workshop was divided into 6 sessions in which theoretical concepts of MSP-430 F-series, G-series, CC3200 and along with programming of these modules using CCS (Code Composer Studio) in Embedded C were covered during workshop. Participants performed various experiments on

- On the first day of workshop, Mr. Asif gave an overview of MSP-EXP430G2, functional block diagram of MSP430G2533. He has done various experiments on the kit namely interfacing potentiometer, controlling intensity of LED using potentiometer. He explained about GPIO configurations i.e. experimenting with on board red and green LEDs

- On the second day, he explained to switch LED using on board push button switch, UART communication. He explained further about launch pad i.e. MSP430F5529. He has give detail on how to use master slave communication between two MSP430F5529 launch pads.

- On the third day, he explained about GPIO configurations i.e. experimenting with on board red and green LEDs. and gave detail about how to read analog inputs and also how to manipulate I/O using Energia APIs. He also explained about basic Wi-Fi applications that are basically communication between two MSP430 nodes. He explained that how to interface accelerometer with MSP430F5529. He also explained how to setup CC3100 as a HTTP server.
PROJECT EXHIBITION & COMPETITION

Project competition and exhibition a mega event was held in ECE department under the aegis of Gentronix on 8th September, 2017. The competition took place in the ECE seminar hall and students took part with great enthusiasm.

Majority of the projects were based on embedded system and robotics. Students were helped by various faculties in completing their respective projects.

Temperature controlled DC fan using microcontroller, Water level indicator, Digital alarm clock implemented on Spartan 3E using Verilog, Fire Fighting Robot, Learn Bot, Advanced Voting Machine, Traffic Light Controller, Automatic Railway Control System, Mini CNC Plotter are the various projects displayed.

Following teams were winner in that exhibition & competition:

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<th>PROJECT NAME</th>
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<td>MACHINE</td>
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Our Director sir appreciated the initiative taken by the gentronix team. He advised to conduct such exhibitions every year so that students could get a chance to represent projects, improve their presentation skills and also enhance their knowledge about electronics. They were also felicitated with participation certificates by HoD ECE Dr V. K.
Tech Talk on Oracle

A tech talk on Oracle was conducted for the 3rd yr students of the ECE department on 14th September, 2017.

The event was organized under the banner of Gentronix (The ECE Forum). Mr. Sukumar Palanisamy addressed the students and made them aware about the latest trends and technologies in the market. He was warmly welcomed by the HOD of ECE department Prof.(Dr) V. K. Gupta and convener Gentronix Ms. Meenakshi Sharma with a bouquet.

Mr. Sukumar Palanisamy is presently working in Oracle Cloud University-Oracle India Pvt. Ltd. and presently holding the position of Strategic Manager.

He is an experienced person of the industry who had great knowledge about different opportunities in electronics.

He cleared the doubts of the students about interviews and selection rounds of the companies. Also he made the students aware of Oracle as a database company. He cleared all the misconceptions of the students about the company. Students asked him questions related to technology and new techniques.

The session was quite interactive for the students and they actively participated in the talk. At the end of the session the HOD of ECE Department Prof.(Dr) V K Gupta presented him with a memento as a token of thanks.
An alumni interaction was conducted for the 2nd year students of the ECE department on 13th September, 2017. It was organized under the aegis of Gentronix (The ECE Forum). The alumni members Ms. Parul Sharma (Batch 2011-15) and Mr. Chirag Gupta (Batch 2012-16) addressed the students about how to utilize the opportunities provided in the college for building up career in the core.

Ms. Parul Sharma is currently working as an Application Engineer in Cadence Design Systems and Mr. Chirag Gupta is working in the Product Validation Department of the Cadence Design Systems. Both of the alumni members are placed in renowned company which recruits students only from ECE branch.

They gave students a great insight to the activities conducted by the college for promoting the character and the personal wellbeing. They focused on giving an idea to student regarding how to make use of opportunities like market session, group discussion, aptitude training etc. conducted in the college as a part of study group activities. Students clarified there queries with the alumni members which they had about the industry. Towards the end of the session there was an interactive session, where students gained information about how to face an interview, what companies focus on and how to prepare themselves as a competent engineering graduate.

After the session the HOD of ECE dept. Prof(Dr) V K Gupta presented both the alumni members with a memento as a token of blessings. The convener of Gentronix Ms Meenakshi Sharma also showered her blessings upon the alumni.
"The life of the dead is placed in the memory of the living"—famous word by Marcus Tullius Cicero. People say that we can’t go back in time but there is this one thing giving us glimpses of those moments which make us what we are today and those are the memories that we have with us forever. Whatever happens in our lives it happens to give us some unforgettable moments which then become memories turn out to be greatest chapters of our life. As said by Haruki Murakami "No matter how much suffering you went through, you never wanted to let go of those memories". Its said that we should forget those stories which make us feel sad and act as a scar but the irony is that those scars make us who we are. They turn out to be the best motivation for us and for others too. Our good memories will always be with us to give us pleasure. One fine day all these faint recollections suddenly jam your brain, making your brain go haywire and then you realize they all are memories, memories of normal days that still make you go thinking. And then each day you go on trying to unravel these mysteries and indeed these memories help us to live every moment. They get stored in our mind which acts as our secret novel and every stage giving us unique chapters which we share with our loved ones we love.... The greatest thing about this novel is that it’s been created by us and it is based on our life. It depends on us; which chapter we want to write down in our novel and which chapter we want to share. This novel stays with us and no one can steal this from us until our last breath. As said by Joseph B. Within that "Some memories are unforgettable, remaining even vivid and heartwarming......"

- Kshitij Raj, ECE 3rd year Sec B

I see that fire, a vision of nobility,
Peace of struggling hearts, crying cruelty,
I gulp the promises of brightened future,
But wonder, if they’ll be stronger or creep-
er?
The greatest of minds revolt around,
The brightest one with the darkest life,
All the pretty smiles, cry there in pain,
Is that the nation a painter paints?
That holy weapon whenever got proudly,
All teachings were shat-
tered of the radiant almighty,
Under those edges, innocent eyes whenev-
er got tears,
It left humanity to live in fear!
Proud three birds whenever fly high,
I feel ashamed of my own twinkling eye,
Just one thought crosses my mind
“This is the world we have built to rely”
- Anamika Shukla  ECE 3rd yr Sec A
All of us are more addicted to Facebook, Snapchat, Whatsapp, Instagram and many more than other fun loving activities. We share each and everything on social media. In this case, Twitter is the best option to comment about something. YouTube is the most popular video channel, we can use it to watch a video, to upload a video, etc.

But, HANG ON, keeping the social media’s hypothetical life aside, what about our real life???

Is social media overpowering our actual life?? With heavy heart, I want to say 'Yes', it’s true.

We do friendship on Facebook with new people and somehow become close with few of them by chatting and start to share each and everything of our daily routine, from happy to sad mood, good news to bad news, etc. etc. But friends, it sound awkward, how a person living at a far distance from you, the one whom you have never met in your entire life could solve your problems and issues better than your family, who are just sitting next to you. Somehow, it would work, but in most cases, it creates ambiguity.

We are humans, the most superior creature living on this planet earth. Our hands are for building our future and I know all the stuffs are really too much attractive, but when attraction becomes addiction, then it’s an alarm to wake up.

Some of you are thinking that this article is against social media or i am against it .But, that’s not the real truth.

On my part, I solely like all these stuffs a lot, which I have mentioned above. But, I am against their addictive usage.

Sharing something in a face to face conversation with a friend gives more pleasure than uploading a status about it or texting the same to fifty people.

It’s all a myth; we are searching real happiness on internet.

This search would never end as the real joy and happiness lies somewhere else, that is in our actual life which is much beautiful than the big world in our mobile screens or personal computers.

This search would never ever be completed, instead one would become lazy 'a couch potato', physically less immune, only mind would be trained and rest of the body remains at it was started.
By this, I could conclude that social media is a myth, one would try to focus on real life rather than the big world in our mobile screens.

- Aman Gupta
  ECE 2nd year Sec A

Miles to go...

Today as I went through the newspapers, I was thrilled to learn that the girl students comprise 48% of the total student population in India. This reminded me of the words of our first Prime Minister, spoken at “the mid-night hour”. Although in a different context, the redemption of “our pledge, not wholly or partially, but substantially” seems vindicated.

Who could have imagined in the 1950s that girl students, who comprised a mere 25% of students during that phase, would, one day, make for about 50% of the students of the country! This is indeed a remarkable feast. In the PG courses, the students actually comprise the majority population. As far as higher education is concerned, the share of girl students, which was about 35% in 2000, is a whopping 46% at present.

The above figures are encouraging and give reasons for us to celebrate. However, there are causes of concerns too. The figure of 46% share of girls in higher education comes with the fact that the share is more than 50% in Arts subjects but falls considerably in the science and commerce streams. Actually, in professional courses the ratio of boys to girls stands at 3:1. The reasons for low share of girls in professional courses may be attributed to the lack of accessibility to professional institutions. Professional colleges and institutes are often not found in nearby localities especially when rural India is considered. The safety concerns pull even the merit-holders back and they take admissions in arts subjects. The exact reasons, however, can only be determined after doing the ground level survey as to what percentage of girl students stay in hostels as compared to boys.

Another cause of concern is the fact that the percentage of girls in higher education does not correlate with the percentage of women in work places. Whereas the percentage of girls in higher education is, as pointed out above 46%, the percentage of women in workplace is merely 27%. So where do the remaining educated girls go? It does not require a rocket science to estimate that a huge human resource is wasted. Among the top 500 listed companies, only 17 have women CEOs. At the same
time, unofficial studies have suggested that women fair considerably well in the teaching profession.

Apart from the above figures there have been more reasons in the recent past for women to cherish. The Supreme Court has declared the Triple Talaq illegal thus striking a nail in the coffin of the so-called tradition which actually had neither the legal sanctity nor the moral standing.

Another important milestone is the fact that now India has a female full time defence minister in Smt Nirmala Sitharaman. The country is now defended in the leadership of a woman—really inspiring. Nirmala Sitharaman is the second woman defence minister of India after Indira Gandhi. This is the second important milestones achieved by women parliamentarians of India. External Affairs minister Sushma Swaraj successfully handling the Doklam issue being the other major achievement.

Women, thus, have a strong potential to carry out any task. What is needed is identification of this potential—both by men and women alike. The success of women is applauded not only by women but also by their men counterparts. It may be concluded that the figures related to education do suggest that women have taken initial steps forward but the fact that degrees are not converted into jobs reminds us that we have miles to go before we sleep.

- Pooja Mishra,
  Assistant Professor,
  ECE Department.

We are very privileged to work in this issue of departmental newsletter. This newsletter reflects various student and faculty technical activities and also their achievements. There are various workshop organized for faculty as well as for students. Also our faculties participated outside our college in various FDP. They all get motivated to work further on these topics. Also the newsletter covers our alumni interaction in which our graduated students participated in various events with full enthusiasm. We sincerely hope that this edition makes for an interesting read. Please feel free to offer any suggestion for improvement at pooja.mishra@ipec.org.in, nutan.raghav@ipec.org.in.

Sincerely,

Editorial Board:

Pooja Mishra (AP, ECE Deptt.)
Nutan Raghav (AP, ECE Deptt.)

Data Collection and Content Writing:
1. Divya Agarwal(EC, 4th Year B)
2. Karan Agarwal(EC, 4th Year B)

Designed by:
• Aditya Gupta(EC, 4th Year A)