

IIMT
COLLEGE OF ENGINEERING
KP-III, Greater Noida
— Aim For Excellence —



Electroma

A Quarterly Publication of
Department of Electronics and Communication Engineering

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Latest Trends in Technology, 2021

A substantial digital revolution is taking place all over the world. Innovation, agility, and market development are all accelerated by technological advancements.

The Covid-19 pandemic accelerated digitization and automation, allowing companies to remain resilient even in adversity. Many businesses adopted disruptive technologies and modified their business models.

The pandemic's effect will be felt for a long time, and the digital transition will continue. If businesses do not keep up with technological trends, it will be challenging to overcome the error. Advanced technology will continue to change our lives and the way we operate, opening up enormous opportunities for businesses worldwide.

Let's look at some technology developments so that everyone knows what to look for, adopt, and take with them.

1. Artificial Intelligence (AI)
2. 5G and enhanced connectivity
3. Edge computing
4. Internet of Behaviors (IoB)
5. Quantum computing
6. Block-chain
7. Cyber security
8. Human augmentation
9. Distributed cloud
10. Augmented reality and virtual reality

In the year 2021, these will be the top technology developments we should all be aware of. We have already figured out that all of these tech trends connect in some way.

The arrival of the 5G tech trend, for example, would have a positive effect on IoT, AR, and VR, among other things.

As a result, we won't have to think about which tech trend is right for you because learning about these advancements would broaden our awareness and give us an advantage over the competition.

Understanding these technological developments would undoubtedly provide us with more excellent career and business prospects!

From Editor's Desk



Dear readers,

It is my pleasure and great privilege to present you the Newsletter of the Department of ECE. This is an attempt to update the faculty and students with the current happenings in the department. I am glad to see that the faculty-student community of the department is striving for greater heights and achievements.

The Department of Electronics & Communication Engineering, established in 2005 having an intake of 120 seats, offers B. Tech course. The department emphasizes a deep understanding of fundamental principles and knowledge of electronic devices and circuits, computer architecture and microprocessors, VLSI and Embedded Systems, Analog & Digital communication, Digital Signal Processing, microwave and mobile communication.

Finally, I wish all the best to all students, staff and faculty members of the department, and hope that this issue of the departmental newsletter will encourage them to keep doing the good work.

Sincerely,

Prof. (Dr) Seema Nayak

Chief Editor & HOD Dept. of ECE

"QUOTE FOR THE QUARTERLY"

For 50 million years our biggest problems were too few calories, too little information. For about 50 years our biggest problem has been too many calories, too much information. We have to adjust, and I believe we will really fast. I also believe it will be wicked ugly while we are adjusting.

-Penn Jillette

F a c u l t y C o r n e r

S t u d e n t C o r n e r

It took less than an hour to make the atoms stars and planets, but five billion years to make man. **George Gamow, Physicist and Cosmologist**

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InSc Awards 2020



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and Cosmologis



but

“InSc Best Teacher Award” for teaching professionals for excellence in teaching, Award for the HOD of various Academic Departments of Educational Institutes for their excellence in leadership and management. This time our respected **HoD, Prof. (Dr) Seema Nayak** was recognized for this prestigious award

Our student “Anshrah Neyaz” from the ECE 4th year was awarded participation certificate in Inter-College Technical Fest ELECTROMANIA'21 held in of January 2021.

Alumni Achievement (Batch 2016-20)

Project Name : 'Smart Solar Panel Energy Management System'



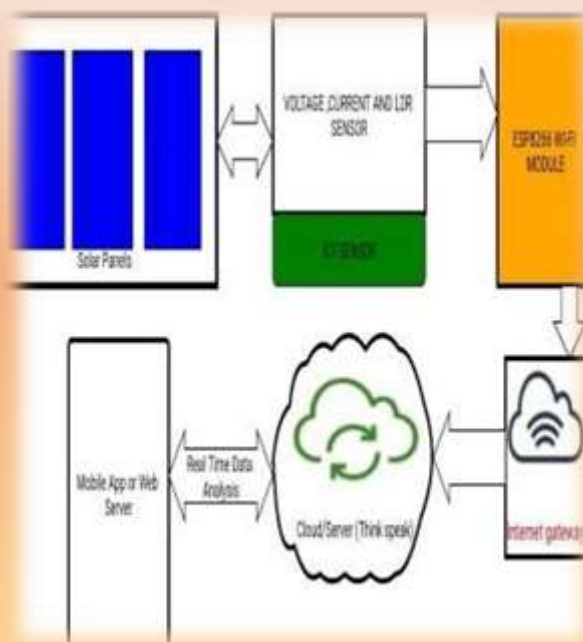
Mr Naveen is an alumnus of the Electronics and Communications Engineering Department (Batch 2016-20) at IIMT College of Engineering, Greater Noida.

He has a keen interest in innovative work and creativity, which is always demonstrated by his innovative work.

His work '*Smart Solar Panel Energy Management System*' came up with new and innovative ideas. The project was greatly appreciated at the institute level as well as at the national level.

In this work, his team had taken a real challenging problem which is faced all over the world.

Our solar power plants are facing the difficulty of big panel shortage, inadequate observation of energy production. Due to this, there is a significant decrease in the production of electricity through the solar power plant.



Naveen and his team addressed the problem, through which solar energy can be increased and used more accurately. Its efficiency and production capacity should also be increased. All this can be done only and only through one section and planned to monitor. They did a technical study, worked on given the problems and came with good results. With this work, the entire team participated in many events. This work was also selected in the Semi-final round of the DST & Texas Instruments India Innovation Challenge Design Contest 2019. It was the best project in B. Tech. final year for session 2019-20.

Texas Instruments (TI) sponsored his work 'Smart Solar Panel Energy management system' by providing electronics kits/modules worth around Rs. 12,000/- to them for completion of the project.

A patent has also been filed and published upon above work by the ECE department.

In this work, he has applied and contributed his true innovativeness. His skills in managing human resource, finances and presentations were commendable.



Faculty FDP & Research Publications

Sr. No	Name of Faculty	FDP	Date	Period	Topic/Title	Venue
1	Dr Abhishek Sharma	FDP	22-26 Jan 2021	5 days	“Machine Learning for natural language processing and Internet of Things”	Department of Computer Science and Engineering, Indian Institute of Technology, Roorkee
2	Dr Gopal Krishan	FDP	19-23 Feb 2021	5 days	“Recent Trends in Circuits and Communication (RTCC)”	Jaipur Engineering College and Research Centre, Jaipur
3	Dr Taslima Ahmed	FDP	19-23 Feb 2021	5 days	“Recent Trends in Circuits and Communication (RTCC)”	Jaipur Engineering College and Research Centre, Jaipur

Sr. No	Name of Faculty	Title	Journal	Session	Volume
1	Dr. Deepak Kourav	Analysis of the effects of leakage conductance of the action potential of the excitable cell using GUI	PALARCH JOURNAL	JAN 2021	PJAE_1007
2	Dr. Taslima Ahmed	Analysis of the effects of leakage conductance of the action potential of the excitable cell using GUI	PALARCH JOURNAL	JAN 2021	PJAE_1007
3	Ms. Arpana	Weiner prediction for environmental monitoring in a wireless sensor network of duster structure	PALARCH JOURNAL	JAN 2021	PJAE_1014
4	Ms Sandhya Bhardwaj	Weiner prediction for environmental monitoring in a wireless sensor network of duster structure	PALARCH JOURNAL	JAN 2021	PJAE_1014
5	Mr Dinesh Kumar Yadav	Analysis of the effects of leakage conductance of the action potential of the excitable cell using GUI	PALARCH JOURNAL	JAN 2021	PJAE_1007
6	Dr Gopal	"A Novel Approach Based on CHIP High-Speed Optical Interconnect using 1cm length in Opti Spice"	PENSEE JOURNAL	MAR 2021	Volume 51, Issue 3, ISSN: 0031-4773
7	Dr Abhishek Sharma	"A Novel Approach Based on CHIP High-Speed Optical Interconnect using 1cm length in Opti Spice"	PENSEE JOURNAL	MAR 2021	Volume 51, Issue 3, ISSN: 0031-4773
8	Mr Anuj Kumar	“Electronically tunable second-order biquad filter using two transconductance Amplifiers”	PENSEE JOURNAL	MAR 2021	Volume 51, Issue 3, ISSN: 0031-4773
9	Mr Deepak Sahu	“Electronically tunable second-order biquad filter using two transconductance Amplifiers”	PENSEE JOURNAL	MAR 2021	Volume 51, Issue 3, ISSN: 0031-4773
10	Ms Zaiba Ishrat	" A review: Security issues of managing Multi-Media Big Data"	PENSEE JOURNAL	MAR 2021	Volume 51, Issue 3, ISSN: 0031-4773
11	Mr Basanta Mahato	“Position tracking using ZigBee Technology”	PENSEE JOURNAL	MAR 2021	Volume 51, Issue 3, ISSN: 0031-4773
12	Mr Surendra Kumar	“Position tracking using ZigBee Technology”	PENSEE JOURNAL	MAR 2021	Volume 51, Issue 3, ISSN: 0031-4773

LIFE OF ELECTRONICS ENGINEER AT IIMT

Electronics and Communication Engineering is a branch that involves both the hardware and the software aspect of real-time applications, by providing an aptitude to solve complex issues. An engineer dealing in Electronics and Communication can deal with the hardware and the software of any machine.

IIMT College of Engineering, Greater Noida provides excellent opportunities for budding engineers who aspire to pursue Electronics and Communication Engineering. It is one of the best B. tech. college in Greater Noida, a NAAC accredited college and also having NBA to its credit.

Over the last 16 years, IIMT College of Engineering has developed a well-structured culture of innovation, research and development. IIMT, to its credit, has ultra-modern and well-equipped research and development lab where all the modern equipment and tools are available. The Electronics and Communication Engineering department at IIMT has a modern centre of excellence created by Texas Instrumentation.

One of the finest achievements of IIMT is that the Govt. of India, the ministry of micro, small, and medium enterprises (MSME), has supported the creation of an incubation centre under which different projects are being funded by MSME, and students are engaged in completing them.

Alumni of Electronics and Communication Engineering is working at many prestigious organizations. Students undertake their internship during the summer at different industries and institutions, like IIT Kharagpur and CSIR CEERI-Pilani. Many patents have been filed in different forums, both in India and abroad.

The department organizes events like seminars, guest lectures, workshops, quiz, industrial visits, and other activities regularly. The department also arranges events related to cultural, technical and sports for the benefit of its students. The atmosphere of the ECE department is extremely dynamic and lively. Overall, it's a dream destination for every student looking for a quality education.



Dinesh Kumar Yadav

Assistant Professor, Dept. of ECE

MoU with Dept. of Electronics, Shaheed Rajguru College of Applied Sciences for Women for Annual Tech Fest Electromania 2021




Department of Electronics and Communication Engineering, IIMT College of Engineering has signed MoU with Shaheed Rajguru College of Applied Sciences for Women, for Annual Tech Fest Electromania 2021. In future also it will participate in various cultural and technical events and a certificate of appreciation will be provided.

Upcoming Events

- WORKSHOP on Prototype/ Process Design and Development
- WEBINAR SERIES on Skill Development in Electronics Engineering
- GUEST LECTURE on Ethics of Innovation Based Collaboration & Agreements
- Student Development Program on Different Phases of Prototype Development

Important numbers for Student Support

Name	Designation	Contact Detail
Dr Gaurav Sinha	Director	9999071321
Dr S N Mishra	DSW	9971606088
Dr Seema Nayak	HOD	9717856059
Dr Deepak Sharma	Chief Proctor	8218440994
Dr Vandana Saxena	Head Women Grievance cell	7838377315

- **Editorial Board:** 
- **Chief Editor:**
- Prof (Dr) Seema Nayak, (HOD Dept. of ECE)
- **Co-Editor:**
- Mr Deepak Sahu, (AP, ECE Dept)
- **Student Editors:**
- Ms Muskan ECE-4A
- Ms Prachi ECE-4A
- Ms Vaishnavi Gupta ECE-3A