



# DEPARTMENT OF ELECTRONICS AND COMMUNICATION

## Newsletter

### VISION

*To create a centre for imparting technical education of international standards and conduct research at the cutting edge of electronics & communication technology to meet the current and future challenges of technological development.*

### MISSION

*To create technical manpower for meeting the current and future demands of industry and academia; to recognize education and research in close interaction with electronics & communication & related industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the institute with sensitivity to social development and eye for opportunities for growth in the international perspective.*

### Top Technology Trends for 2021

#### Artificial Intelligence



The AI market will grow to \$190 billion industry by 2025.

#### Virtual Reality

The global AR and VR market is expected to grow to \$209 billion by 2022



#### Internet of things (IoT)



The global spending in the IoT is forecast to reach \$1.1 trillion in 2022.



Faculty Name	Award Name	Activity	Given By	Year
Prof. Ghanshyam Singh	Chair (Elect)	OSA Technical Group on Optics in Digital Systems	Optical Society of America	2021

Sr. No.	Project Director	Title of the Project	Funding Agency	Amount (Lacs)	Duration
1	Dr. D. Boolchandani	Charge pump PLL frequency synthesizer design	ISRO	21.35	2021-2023
2	Prof. Ghanshyam Singh	Development of a Satellite Quantum Communication Network (SQCN)	BRICS MULTILATERAL PROJECTS	15.82	2020-2023



The best research you can do is talk to people.

----- Terry Pratchett

(An award-winning British science fiction and fantasy author.)

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Vipin Prakash Yadav, K.K. Sharma, "Variational mode decomposition-based seizure classification using Bayesian regularized shallow neural network", Biocybernetics and Biomedical Engineering Volume :00 / 1-5 / 2021



## WORKSHOPS

National Workshop on Two Week Online Global Summer Faculty Development Program on "Advanced Optimization Techniques and Hands on with MATLAB/SCILAB" at Electronics and ICT Academy, MNIT Jaipur, Jaipur, India from 06-09-2021 to 17-09-2021

National Workshop on Digital Tools for writing, authoring and reviewing manuscripts at MNIT Jaipur, Jaipur, India from 12-07-2021 to 23-07-2021



### PLACEMENT DATA

- Highest Package Offered to UG student: 43 LPA
- Highest Package Offered to PG students: 30 LPA

### Top Companies:

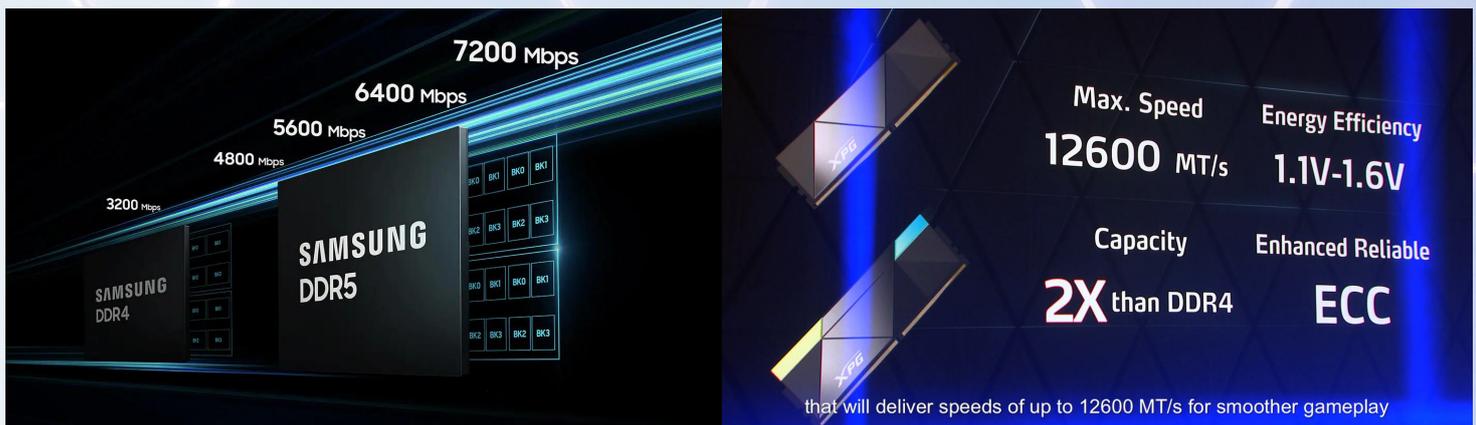
- Qualcomm
- L&T
- Analog Devices
- Apple
- ECE Students are placed in giants like APPLE and GOOGLE.
- ECE students placed till now: 70
- Highest package is also offered to an ECE student.
- Minimum Package Offered: 9 LPA
- Average Package Offered: 13.6 LPA



## DDR5: The Computer's next gen Memory

### Double Data Rate 5 Synchronous Dynamic Random Access Memory (SDRAM)

DDR5 is a type of synchronous dynamic memory random access memory which is primarily focused on increasing the density and almost doubling the speed and bandwidth of RAM while lowering the power consumption. As a refresher, CPU core counts are increasing DDR5 with a new feature called Decision Feedback Equalization enables higher IO speed scalability for higher bandwidth and performance improvement to address the increasing complexity of data centre workloads!. Memory voltage reduces to 1.1V as compared to DDR4, thus reducing power consumption.



A major change in power architecture with DDR5 DIMMs (dual-inline memory modules), power management moves from the motherboard to the DIMM itself. DDR5 supports Higher capacity DRAM upto 64Gb in a single-die package while DDR4 maxes out at 16Gb DRAM.

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