

One Week Online Self-Sponsored
Short Term Course
On
**EMERGING TRENDS IN SIGNAL PROCESSING,
COMMUNICATION AND VLSI**
(ETSPCV-2022)
(6th – 11th June, 2022)



Organized by
Department of Electronics and Communication Engineering
National Institute of Technology Delhi

About National Institute of Technology Delhi (NITD):

NITD is one of the thirty one NIT (s) established in the year 2010 by an act of parliament and has been declared as an Institute of National importance. NIT Delhi is an autonomous Institute which functions under the aegis of Ministry of Education, Government of India. It aims to provide instructions and research facilities in various disciplines of Engineering, Science and Technology, Management, Social Sciences and Humanities for advance learning and dissemination of knowledge. Currently, the institute offers B.Tech. programs in Computer Science and Engineering, Electronics and Communication Engineering, and Electrical and Electronics Engineering. The institute also offers M.Tech. and Ph.D. programs. The institute is currently running at IAMR Campus, Narela, Delhi.

About the Department:

The department of Electronics and Communication Engineering was established in 2010, immediate with the beginning of the Institute under the ages of Ministry of Human Resource and Development (MHRD), Govt. of India. Currently it is offering one Undergraduate (B. Tech) course and two Post Graduate (M. Tech)

courses in ECE and in VLSI Design. The Department offers PhD programme in areas like signal Processing, communication, VLSI design, electronic devices and circuits, electronic measurement and instrumentation, microprocessor and microcontroller, microwave and antenna design, optical fibre communication and optical device.

About the course:

The course is designed to provide exposure to the fundamentals and advancements in signal processing, communication and VLSI design. During this course, the scientists, academicians, and industry experts will discuss the current and future scope in the aforementioned field. This course provides cutting edge research ideas to the participants.

Tentative course contents:

- Advancements in signal processing.
- Application of signal processing in image, audio and speech processing.
- Biomedical signal processing using machine learning for brain-computer interfaces.
- Advances in digital/analog communication
- Advanced communication techniques for 5G and beyond
- Challenges and security issues for the communication networks
- Optical communication and networks application and emerging trends
- Applications of optical communication in biomedical applications.
- Emerging trends in VLSI design
- Modelling and design of low power digital devices
- VLSI architecture level optimization techniques
- Mixed analog/digital IC design

Eligibility:

Faculties of various Universities/Institutions, Industry Personals, Scientists and Engineers from research and development organizations, UG, PG, and PhD scholars can apply for this course. The interested persons need to apply online through Google forms.

How to apply:

For the registration please fill the Google form. The link for the Google form is given below-

Google Form Link- <https://forms.gle/zKF4vBhWVNHkz8ou8>

Note: E-certificate will be issued to participants after completion of the course.

The registration fee for the course is as follows:

UG/PG/PhD: INR 200

Faculties: INR 300

Industry personals: INR 400

The candidates can deposit the registration fee online in the account details given below-

Account Holder's Name- NIT Delhi STC/Conference

Account Number- 2983101006538

IFSC Code- CNRB0002983

Bank Name & Branch- Canara Bank

Accommodation:

This workshop will be conducted in an online mode. The participants need not be physically present at NIT Delhi during the workshop.

List of experts:

Prof. Rashmi Gupta , Professor, NSUT Delhi, India

Dr. Shyam Lal, Assistant Professor, NIT Surathkal, India

Dr. Ranjay Hazara, Assistant Professor, NIT Silchar

Dr. Tanu Wadhwa, Assistant Professor, IIIT Una, India

Dr. Santosh Kumar, Associate Professor, Liaocheng University, China

Prof. Manav Bhatnagar, Professor, IIT Delhi, India

Dr. Amit Kumar, Assistant Professor, IIIT Kota, India

Dr. Deepti Kakkar, Assistant Professor, NIT Jalandhar, India

Prof. Brijesh Dixit, Professor, IIT Roorkee, India

Prof. Jawar Singh, Professor, IIT Patna, India

Dr. Bhawna Aggarwal, Associate Professor, NSUT Delhi, India

Dr. Ashish Ranjan, Assistant Professor NIT Manipur, India

Organizing committee:

Chief patron:

Prof. Ajay Kumar Sharma

Director

National Institute of Technology, Delhi

Patron:

Dr. Manisha Bharti

Head, Deptt. of ECE

National Institute of Technology, Delhi

Coordinators:

Dr. Sandeep Kumar

Assistant Professor, Deptt. of ECE, NIT Delhi

Dr. Manisha Bharti

Assistant Professor, Dept. of ECE, NIT Delhi

Members:

Dr. Rikmantra Basu, Assistant Professor, Deptt. of ECE, NIT Delhi

Dr. D. Vaithyanathan, Assistant Professor, Deptt. of ECE, NIT Delhi

Dr. Baljit Kaur, Assistant Professor, Deptt. of ECE, NIT Delhi

Dr. Sachin Agarwal, Assistant Professor, Deptt. of ECE, NIT Delhi

Dr. Mahesh Kumar Singh, Assistant Professor, Deptt. of ECE, NIT Delhi

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