## ONE WEEK ONLINE FACULTY DEVELOPMENT PROGRAM

On

# TECHNOLOGY COMPUTER AIDED DESIGN: SIMULATION FOR VLSI DEVICES, CIRCUITS AND SYSTEMS

July 20-25, 2020



### Department of Electronics and Communication Engineering

Jaypee Institute of Information Technology A-10, Sector-62, Noida, UP-201309, INDIA

#### PROGRAM COORDINATORS

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# JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY AND DEPARTMENT OF ELECTRONICS AND COMMUNICATION

Jaypee Institute of Information Technology (JIIT), Noida, an AICTE approved, NIRF (MHRD) ranked and NAAC accredited institute which has been constantly ranked amongst the top engineering institutes in north India.

( http://www.jiit.ac.in). To keep pace with the rapidly evolving electronics industry requires unwavering passion and urge to innovate. This precisely is what Electronics and Communication Engineering (ECE) Department at JIIT is about. Started in the year 2002, the department of ECE runs full time 4-year BTech degree program at UG level. The department also offers 5-year Integrated degree program in ECE and two PG degree programs with specialization in ECE and microelectronics & embedded systems. The department is having a team of highly motivated 72 faculty members having extensive experience in industry, research as well as teaching. Our strength is a reflection of their skills, innovation and drive. At present, there are around 40 Research scholars involved in thrust areas of research such as VLSI Design, 4G and 5G Technologies, channel modeling, VLSI DSP architectures and many more.

#### FACULTY DEVELOPMENT PROGRAM

In the past three decades, CMOS Technology has rapidly embraced the field of Digital/Analog/Mixed-Signal/RF Integrated Circuits, providing low cost, high performance, life-enhancing solutions and turned the world into Digital Nomads. CMOS processes have emerged as a viable choice for the integration of today's complex mixed-signal and SoC systems. This FDP will introduce innovative teaching practices in IC design both front-end and back-end design methodologies to the faculty members and researchers to get firsthand experience in this area. The faculty development program "Technology Computer Aided Design: Simulation for VLSI Devices, Circuits and Systems" aims in developing faculty skills in various aspects of microelectronics and VLSI, encompassing materials research, device development and building complex digital and analog blocks. The program also aims in establishing strong research links with industry in India and abroad. The main focus of the FDP will be on physics and technology of devices, circuit design, and system architecture used in CAD tools.

#### THE OBJECTIVE OF FDP IS TO:

- 1.Perceive the gaps in attaining learning outcomes as per bloom's taxonomy.
- 2.To build up research activities in order to bridge the Gap between Academics and Industries through project-based learning in VLSI domain.
- 3.To analyze teaching contents, teaching methods and experimental modes for core VLSI courses effectively.

#### AFTER THE COMPLETION OF FDP:

- 1. The faculty members would be able to conduct research-based activities to build up the VLSI domain of their respective institutes
- 2. The faculty members can relook Experiments, Assignments, projects in VLSI domain to recognize the gaps in attainting learning outcomes as per Bloom's Taxonomy.
- 3. The faculty members can design project-based learning activities to strengthen the courses in VLSI domain.

#### WHO CAN PARTICIPATE?

- 1. The program is open to all the faculty members/scientists/engineers working in educational institutes/industries/R&D organizations.
- 2. Single registration to attend all lectures
- 3. Registration fee can be paid online.
- 4. E-certificate will be issued to the participants on successful participation of the course.
- 5. Google meet link and other instructions will be shared via e-mail to all registered participants.

#### **REGISTRATION FEE**

Registration Fee: Rs. 500/-

Registration Fee (Members of JIIT): NIL

#### BANK DETAILS FOR NEFT

Bank and Branch: IDBI Bank, Sector 18, Noida

Beneficiary Name: Jaypee Institute of Information Technology

Account Number: 109102000007436

IFSC Code: IBKL0000109

#### **HOW TO REGISTER**

To complete the registration, the applicants are requested to fill the Google form provided in the link below. https://forms.gle/hyc7sUTpdA8zUBcZ8

Last Date of Registration: July 19th, 2020.

### **DISTINGUISHED SPEAKERS**



Prof. Yogesh Chauhan Professor Department of Electrical Engineering, IIT Kanpur



Dr. Rishu Chaujar Associate Professor, Department of Applied Physics, DTU



Dr. Shubham Sahay Assistant Professor Department of Electrical Engineering, IIT Kanpur



Dr. Garima Kapur Assistant Professor Department of ECE JIIT Noida



Dr. Amit Kumar Goyal Assistant Professor Department of ECE JIIT Noida



Mr. Ritabrata Bhattacharyya Principle Engineer Cadence Design Systems



Dr. Udit Kumar Lead Member Consulting Staff Mentor Graphics



Mr. Ankur Sangal Sr. Application Engineer Corel Technologies



Mr. Ankit Gohel Senior Design Engineer STMicroelectronics



Dr. Ekta Goel Assistant Professor NIT Warangal