FACULTY DEVELOPMENT PROGRAMME (FDP)
ON
ASIC Design Flow: Low Power Perspective

(1st –10th July 2021)

(Virtual Mode)

Organized by

E & ICT Academy, NIT Warangal

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy role is to offer faculty development programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

This faculty development programme (FDP) is devoted to addressing the need to enhance the knowledge about the latest technologies pertaining to **ASIC Design Flow: Low Power Perspective** is being conducted at **National Institute of Technology, Warangal**. The whole course is handled by academicians and industry experts.

Major Course Contents:

- **ASIC Design Flow**
- **ASIC Implementation Routes**
- **Sources of Power Dissipation**
- **Low Power Design Techniques**
- **Data Path Elements: Low power Adder Architectures**
- **Low Power Multiplier Architectures**
- **Low Power Logic Styles**
- **DSP Systems: Representation of DSP Algorithms**
- **Loop bound and iteration bound**
- **Pipelining and parallel processing for low power consumption**
- **Retiming, Unfolding, Folding**
- **Memory Design: Low power SRAM**
- **ASIC Synthesis: Basics, Timing Analysis and Constraints, Static Timing Analysis,**
- **Clock Tree Synthesis: Clocks, Clock distributed Networks**
- **Routing: Deep sub-micron issues, Crosstalk, Signal Integrity**
- **Physical Design Flow: A Case Study**
- **Programmable ASIC Design Flow: A Case Study**

Faculty conducting this programme:

The programme will be conducted by the faculty member from NIT Warangal. Academicians from IITs are invited to deliver lectures in the programme. **Experts from Xilinx, Intel, Samsung, ARM, AMD and QUALCOMM industries will be delivering lectures in this workshop**. The scientists from RCI, Hyderabad also deliver a few expert lectures.

Eligibility:

The program is open to the Faculty of Engineering Colleges and other allied disciplines in India. Industry personnel working in the concerned /allied discipline can also attend.

Registration Fee Particulars:

Faculty and Research Scholars	Rs.750/-
Industry Participants	Rs.2250/-

Participants need to pay the Registration Fee Online using the following details.

Online Transfer Details
Account Name: Electronics & ICT Academy NITW **Account No: 62423775910** **IFSC: SBIN0020149**

How to apply:

Participants are required to fill the online registration form by clicking on the following link:
https://forms.gle/JYGCEhgmMhV1QuNF7

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important dates:

Last date for submission of Application	28/06/2021
Selection List by E- mail	29/06/2021
Duration	01/07/2021 to 10/07/2021

About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech, and Ph.D programs in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

The Department of **Electronics and Communication Engineering (ECE)** offers B.Tech course in ECE, M.Tech courses in VLSI-System Design (VLSI-SD), Electronic Instrumentation (EI), and Advanced Communication Systems (ACS). The Department has experienced faculty with good publications and well-established laboratories. The Department has liaison with reputed industries and R&D organizations like AMD, ITI, RCI, DLRL and DRDO. The Department conducts various sponsored programmes throughout the year.

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1. Name :
2. Designation :
3. Institution :
4. Email :
5. Reference No: Bank: Date:

Amount:

6. Address for Correspondence:
7. Educational Qualification:
8. Subjects taught so far:
9. No. of refresher courses/workshops attended:
10. Experience (in years):

    Teaching: Research: Industry:

11. Do you belong to SC/ST : YES / NO

Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Signature of the Applicant

SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. …….. is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on **"ASIC Design Flow: Low Power Perspective"**, sponsored by Electronics & ICT Academy during 1st –10th July 2021 at NIT Warangal.

Signature of Head of Institution
(with seal)

Interested faculty members, please fill the following Google form:

https://forms.gle/JYGCEhgmMhV1QuNF7

Address for correspondence

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For more details about Electronics & ICT Academy, NIT, Warangal, please visit: *https://nitw.ac.in/eict*

For more enquiries please contact:
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Coordinator

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