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Electronics & ICT Academy
MNIT Jaipur
<http://www.mnit.ac.in/eict>



SVNIT Surat, Gujarat

Faculty Development Programme
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Department of Electronics
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Digital VLSI Systems Design & Implementation

15th – 19th May 2018

Venue: SVNIT Surat

<http://www.svnit.ac.in>

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Preamble (Electronics & ICT Academy)

Government of India had announced a National Policy on Skill Development, which has set a target of skilling 500 million people by 2022 in the domain of Electronics & IT. Under the plan scheme of "Digital India Manpower Development". Deity has set up seven (07) Electronics and ICT Academies as a unit in 03 IITs, 03 NITs and 01 IIIT with an objective of faculty/mentor development/up gradation in the areas related to Electronics & ICT leading ultimately to improved employability of graduates/diploma holders. MNIT Jaipur has set up such an academy for providing specialized training to faculty and industry persons in the states/UTs of Rajasthan, Gujarat, Daman & Diu, Dadra Nagar Haveli.

(A) Issues-

- IT Hardware and Electronics Manufacturing industry- availability of properly trained, skilled and qualified manpower
- Number of quality PhDs generated in IT / Computer Science is very low
- In E & ICT domain- there is a very high degree of obsolescence of existing technologies and faster emergence of newer technologies

(B) Approach-

- A focused faculty training/up gradation programme for IT, Electronics and related sectors
- Spreading up and continuous up gradation regarding Emerging Technology
- Training and consultancy services for Industry
- Design, Develop and Deliver specialized modules for specific research areas and Industry
- Providing advice and support for technical incubation and entrepreneurial activities

An intensive one-week training programme is being organized for faculty of engineering and technological institutions. It is also open to persons from industry and doctoral students of Indian organizations. The objective is to provide an exposure to the participants to the state-of-the-art in **Digital VLSI Systems Design & implementation** through interaction with experts from CFTI institutions including host institutions. The technical program will include state-of-the-art lectures, hands-on lab sessions, tool demonstrations, and discussion/presentation sessions **from 9 AM to 5:30 PM**.

Course modules

- VLSI system design issues
- RTL implementation using VHDL/Verilog
- Architecture optimization using Pipelining, Retiming, Unfolding and Folding
- Design and implementation of Digital Filter, DCT, FFT, DWT, Cordic blocks
- Timing issues and Interconnects
- Low power design techniques
- Design margin, Reliability, Verification
- Implementation using FPGA
- Introduction to Physical design automation (RTL-GDS flow) for ASIC design

Invited Experts – Prof. Virendra Singh, IIT Bombay, Powai,

Programme coordinators

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|----------------------------------|--------------------------------------------------------------------|----------------|
| Dr. Anand D. Darji, SVNIT, Surat | add@eced.svnit.ac.in | 9426886446 (M) |
| Dr. Amit M. Joshi, MNIT, Jaipur | amjoshi.ece@mnit.ac.in | 9549654239 (M) |

Registration

Registration is open to faculty, industry persons, doctoral and postgraduate students of programmes related to Electronics/ Electronics and Communication/ Computer Engineering. **Last date of registration is 9th May, 2018**. The seats are limited to 30 participants, so participants will be admitted on first cum first served basis. Register on-line at http://www.mnit.ac.in/eict/apply_now.php

Fee

- The one-time registration fee of Rs. 500/- is to be paid by each participant attending first time, irrespective of affiliation. This fee is not applicable for those participants, who have attended any Academy training programme earlier.
- (i) The participants from academia and research scholars are required to pay a further fee of Rs. 2000/- (faculty/research-scholars). Rest expenditure is sponsored by Deity through Electronics & ICT Academy at MNIT Jaipur.
- (ii) However, the participants from industries, UG/PG students would pay a further fee of Rs. 5000/-.
- (iii) Relaxation/rebate of 50% of course fee in (B)(i) and (ii) is applicable for SC/ST candidates.
- The fee covers the participation in the programme, registration material including tutorial notes, boarding (breakfast/lunch) on all the days of the workshop. The travel and other expenses would have to be borne by the participants or their parent-organizations.
- Lodging for very limited number of outside participants is also available in Guest-House, SVNIT Surat on *first-come first-served basis*.
- The organizers should receive the registration amount through online payment/NEFT/IMPS/DD.
- Please pre-intimate your desire to participate through e-mail, before registration form reaches us.

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| Account Name- 'Electronics and ICT Academy MNIT Jaipur' | Account Number- 676801700483 |
| Bank address- ICICI Bank, MNIT Campus Branch, Jaipur | IFSC Code- ICIC0006768 |

Further query:

- Please visit us at: <http://www.mnit.ac.in/eict>,
<http://academymnit.wordpress.com>
- Email us: academy@mnit.ac.in