



VLSI/Embedded Systems & IoT: Smart Systems Design

26th June – 31st July 2020

<http://academymnit.wordpress.com>



**Chairman, Advisory Board, EICT Academy &
Director MNIT Jaipur**
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Head, ECE (Prof. V. Janyani)
Head, CSE

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". MeitY 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-

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

(B) Approach-

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

This online internship/training program is designed keeping in mind the need of UG/PG Students as well as PhD Scholars and faculty members who are working in this area. This training course shall cover both theoretical as well as the practical aspects which will help participants not only in their coming final year B.Tech projects but also in their Campus Interviews by describing these designing parts to Companies and they can show their ability to work on Software & Hardware platforms. The main theme of training program will be oriented around exploring the state of art methods for VLSI and Embedded System Design. This workshop will cover CAD simulations for smart system design, with basics of IoT design, FPGA implementation, Hands on Lab sessions for IoT based applications. Various applications/case study of the state of art methods for smart system design would also be covered. The experts from NIT/IIT/industry would be conducting the sessions.

Experts- Dr. C. P. Ravikumar, Texas Instruments (consent awaited)

Dr. Neeraj Goel, IIT Ropar

Faculty MNIT Jaipur

Programme Modules:

Module 1: Digital System Design using Verilog hands-on

Week-1: 26 – 30 June 2020; Exam on 1 July 2020

Module 2: Mixed Signal IC Design using hands-on learning

Week-2: 2 – 6 July 2020; Exam on 7 July 2020

Module 3: System Verilog for Verification

Week-3: 8 – 12 July 2020; Exam on 13 July 2020

Module 4: Digital Synthesis Algorithms & FPGAs

Week-4: 14 – 18 July 2020; Exam on 19 July 2020

Module 5: Embedded systems, Machine Learning & IoT

Week-5: 20 – 24 July 2020; Exam on 25 July 2020

Module 6: Smart Electronics Systems Design

Week-6: 26 – 30 July 2020; Exam on 31 July 2020

Each module has 10 rigorous contact hours

Programme Coordinator:

Dr. Amit M. Joshi amjoshi.ece@mnit.ac.in 9549654239 (M)

Prof. Vineet Sahula vsahula.ece@mnit.ac.in 954 9654 227

Certification:

Certificate for 6 weeks summer internship will be provided to those who are participating in all the modules, however, participants attending individual modules will be provided one-week module specific certificate.

Registration:

Registration is open to faculty, industry persons, doctoral, postgraduate and graduate students related to Electronic Engineering. Participants will be admitted on first-come first-served basis.

Register on line at - http://www.mnit.ac.in/eict/acad_training_prg.php

Registration Fee:

All Modules	5000/- for whole programme
One or more modules	1000/- per module

(A) Fee once paid will not be refunded back; it would be adjusted in future.

(B) The fee covers online participation in the programme, tutorial notes and examination, certification charges.

(C) The organizers should receive the registration amount through online payment gateway provided at the registration portal.

(D) For modules details, see separate sheet attached.

→ For any other query, email us at academy@mnit.ac.in