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on

"Analog and Digital VLSI Design using Modified Open Source EDA and InOhmic Tech Methodologies" 30/07/2020 To 03/08/2020

Organized By IRIS – Techno Cultural Forum Dept. of ECE, NMIT



In Association with Inohmic Technologies Pvt. Ltd, Bangalore





About the Institute

Nitte Meenakshi Institute of Technology (NMIT) is one of the institutions run by the Nitte Education Trust, Mangalore which is dedicated to offering quality education, starting from primary to higher and professional levels, in the state of Karnataka. NMIT with its founding vision and mission of imparting state- of-the art technical education that would enable the youth to compete and deliver in the global world and market scenarios has built high reputation and attained autonomous status within a very short time of its inception. The institute with equal focus on academics and research is offering UG and PG courses in engineering under VTU, has research centers recognized by various universities & research organizations and has established close working relationship with government research establishments such as **IISc, ISRO and DRDO as well as industry**.

NMIT has been accredited by the National Assessment and Accreditation Council (NAAC) with A+ Grade with a CGPA of 3.33 (out of 4). It indicates that NMIT meets the standards of quality set by NAAC & ensures a high quality of education. NMIT is ranked 128 among the Engineering Institutions in the country which includes IITs/NITs/IIITs etc., by the National Institutional Ranking Framework (NIRF) - MHRD for the Year 2020. **NMIT** is awarded 'GOLD' rating from QS iGauge for the period 2018-2021. Also happy to announce that the college is awarded "platinum" which is the highest Grade in the AICTE-CII 2018 Survey of Industry linked technical institutions. NMIT is happy to share with you all that Mahatma Gandhi National Council Of Rural Education (MGNCRE)-MHRD, Government Of India has recognized NMIT as One of the "Exemplary Performers" in campus water and sanitation management. It is also designated as "Mentor Institution for Swachchta Action Plan".

NMIT has centers of excellence in "lot", "Robotics", Space Research" and "Smart things". The institution is committed towards continuous improvement by updating the syllabus with the needs of the industry and also including research components in the curriculum.

About Electronics and Communication Department

The Department of Electronics and Communication Engineering was established in the year 2001, with an intake of 60 students and now the intake has been increased to 180 in the year 2012-13. The Department has a well equipped research center approved by VTU and University of Mysore. The Department has high end lab with industry standard tools like Cadence, HFSS, MATLAB, Xilinx Vivado. The Department is associated with the IoT Center of Excellence which is a multidisciplinary center set up in NMIT to carry out research activities across the circuit branches. IRIS is a techno-cultural departmental forum which organizes tech talks, workshops, trainings etc for the benefit of students and faculty.

About Inohmic Technologies Pvt. Ltd

Inohmic technologies creates intellectual properties & leverages to its ecosystem creating wing Inohmic training platform. www.inohmictrainingplatform.com is a platform which is trying to partner & improve analytical work in the domain of VLSI. Inohmic Technologies have their own innovative methods to stitch already available independent open source CAD tools by modifying the source code to mimic the industry behaviour. This is called Inohmictech Multiple EDA Supportive Silicon Analytical Methodologies (IMESSAM) ecosystem which is uploaded in the cloud. This content in the cloud, which will be updated regularly will contribute to higher standards of learning. It can truly connect Industry & Academic institutions to take up lot of semiconductor development objectives in terms of software/methodology development or in terms of design development. IMESSAM ecosystems in Inohmic cloud have the capability to achieve more things down the line. Licensing the ecosystem is in progress. www.inohmictrainingplatform.com would like to facilitate a platform for the faculty/students/professionals in terms of developments and skill enhancements. IMESSAM ecosystem has lot of objectives which are aimed at bench marking. Inohmic Technologies is trying to bring in many partners including academic bodies. In this regard, NMIT has signed a MoU with Inohmic Technologies for training in the field of VLSI. The company also offers paid internships and other programs from industry experts. It also plans to develop its own EDA tools in the future.

About the Workshop

This Course provides participants an insight into the processes involved in taking a VLSI circuit concept to realization. Inohmictech Multiple EDA Supportive Silicon Analytical Methodologies (IMESSAM) eco system is covered in detail in this FDP. This ecosystem which is centralized provides an analytical sense of understanding of the design & required design variations/validations on top of existing methodologies. The participants will be basically trained to use open source EDA tools at industry requirements. For example, there is an exclusive inohmic PD flow for the back end design. All the methodologies followed correlates with the mathematical equation. Very basic open source CAD tools will be utilized for achieving industry standard specifications in this FDP.

Target Audience:

The workshop can be attended by Research scholars, Faculty members, U.G/ P.G students from ECE/EEE/TCE and Industry Professionals.

Registration Fee: 100 per Participant (Gpay To 09739308665)

Content

- Analog Circuit Design
- Layout Design Overview
- IMESSAM Ecosystem capabilities for drawing schematics.
- Command Line Automation.
- IMESSAM Ecosystem capabilities for drawing layout.
- IMESSAM Ecosystem capabilities for DRC/LVS.
- Stick Diagram Overview
- FSM Functional Check
- SRAM Functional Check
- RTL Synthesis
- Static Timing Analysis
- Inohmic Tech Methodology overview for PDK Behaviour with Mathematical Model
- Complex Memory Complier Demonstration.



Registration Details: Use the following Link for Registration

https://forms.gle/nc6rMXZm6txtk1z76

Technology Partner: Inohmic Technologies Pvt. Ltd. #49, GMR Layout, SanjayNagar Bangalore-560094 www.inohmictrainingplatform.com

Contact Details: **G S Krishna** Inohmic Technologies +91 9066320002 gsk@inohmic.com



e- Certificate will be provided on filling the Feedback Form.

NOTE: Only First 40 Participants will have access to Open Source CAD Tools from Inohmic Platform.