



ONLINE FACULTY DEVELOPMENT PROGRAM (FDP)

ON

Research Trends and Applications of Nanoscale Devices and Circuits

3rd July - 13th July 2024

Organized by

Department of ECE, NIT Warangal

in association with

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 (FDPs) in standardized courses and emerging areas of Electronics, Information Communication Technologies, training and consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

ABOUT FDP

This FDP is devoted to address the need to enhance the knowledge about the latest development pertaining to recent research trends and applications of nanoscale devices and circuits and is being conducted at National Institute of Technology, Warangal. The course will offer learning relevant to nanoscale device and circuit design and development including modelling, simulation, device fabrication and their application in real time. The topics will focus on basics, advancements and applications to benefit people from academic and research communities associated with Science and Engineering. The whole course is handled by academicians and industry experts.

MAJOR COURSE CONTENTS

- Basics of MOS Devices
- Advanced Nanoscale Devices
- Metal Oxide Nanostructures for Sensing Applications
- TCAD based Investigations of Some Nonconventional Nanoscale Transistors
- Device Simulation on TCAD Tool
- Nanosheet FET
- Circuit Implementation using Nanoscale devices
- Vertical GAA FET
- Biomedical Applications of Nanoscale Devices
- Energy Harvesting Circuits using novel semiconductor devices

FACULTY CONDUCTING THIS PROGRAM

The program will be conducted by the faculty members from NIT Warangal and Academicians in the concerned field from IITs/NITs/IIITs have been invited to deliver lectures in the program. Speakers from industries are also expected to deliver as part of the course.

REGISTRATION FEE PARTICULARS

Faculty and Research Scholars	Rs.1000/-
Industry Participants	Rs.3000/-

Participants need to pay the registration fees online using the following details

Online Transfer Details

Account Name: **Electronics & ICT Academy NITW**
Account No: **62423775910**
IFSC: **SBIN0020149**
Bank and Branch: **State Bank of India, NIT(REC) Warangal**

HOW TO APPLY

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

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 Registration	30 th June, 2024
Selection List by E- mail	2 nd July, 2024
Duration	03/07/2024 to 13/07/2024

ABOUT NIT WARANGAL

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 31 post-graduate programs besides doctoral programs. About 5000 students across the country and about 500 international students' study on the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure in the form of state-of-the-art library, seminar halls, guest houses and research laboratories.

COORDINATOR

Dr. Ekta Goel

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NIT Warangal

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For more details, please visit: <https://nitw.ac.in/eict>