



**BONAM VENKATA CHALAMAYYA
INSTITUTE OF TECHNOLOGY & SCIENCE**
AUTONOMOUS



Department of ECE



**ONLINE FACULTY DEVELOPMENT PROGRAM (FDP)
ON
LATEST TRENDS IN SEMICONDUCTOR
NANO SCALE DEVICES AND CIRCUITS BY AI & ML**

22nd June - 3rd July 2026

Organized by

**BONAM VENKATA CHALAMAYYA
INSTITUTE OF TECHNOLOGY & SCIENCE [A], BATLAPALEM**

In association with

E & ICT ACADEMY, NIT WARANGAL



Conveners:

Prof. Ravi Kumar Jatoth
HOD & Professor, ECE, NIT Warangal

Dr. T S S S Phani
HOD & Professor, ECE BVCITS

Coordinators:

Prof. Prakash Kodali
Associate Professor, ECE, NIT Warangal

Dr. BH V V S R K K Pavan
Professor, ECE, BVCITS



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ON
LATEST TRENDS IN SEMICONDUCTOR
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BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE, BATLAPALEM

Department of Electronics & Communication Engineering,
 In association with

E&ICT Academy, NIT Warangal

PREAMBLE

The Electronics & ICT Academy – Phase II, established at National Institute of Technology Warangal with financial support from the MeitY, Government of India, focuses on enhancing technical education and industry readiness. It conducts Faculty Development Programmes (FDPs) in both core and emerging areas of Electronics and Information & Communication Technologies (ICT), while also delivering training and consultancy services to industries. The Academy offers CEP for working professionals, and provides guidance and support for technical incubation as well as entrepreneurial initiatives.

ABOUT FDP

This FDP workshop explores the cutting-edge synergy between Machine Learning and Nanotechnology. It focuses on accelerating semiconductor design and optimizing Power-Performance-Area (PPA) at sub-7nm scales. Participants will examine how AI-driven CAD tools solve complex thermal, reliability, and manufacturing challenges in next-generation VLSI circuits and FinFET architectures. By integrating predictive modeling, the session highlights the transition from traditional physics-based simulations to data-driven breakthroughs.

MAJOR COURSE CONTENTS

- Chiplet architectures
- 3nm/2nm process nodes
- Automotive and 5G/6G ICs
- Security-focused hardware
- AI/ML for VLSI
- Nano-Scale Modeling
- Smart EDA Tools
- PPA Optimization
- Reliability Analysis
- Smart Manufacturing
- Neuromorphic Hardware
- Next-Gen Memory
- Simulation Lab

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/IITs 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

Registration fee 500/-



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

Online Transfer Details

Bhavaraju V V S R K KIRAN PAVAN
 Account No: 028001521457 IFSC: ICIC0000441
 Bank and Branch: ICICI AMALAPURAM BRANCH

HOW TO APPLY

Participants are required to fill the online registration form by

<https://forms.gle/nQPq23ZNtZTEaSgo9>



SELECTION CRITERIA

Selection will be done based on first-come-first-serve basis to a maximum number of 100. 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	19 th June
Selection List by E- mail	20 th June
Duration	22 nd June to 3 rd July

About NIT Warangal:

NIT Warangal, the pioneering RECs, offers top-notch technical education with B.Tech, M.Tech, and Ph.D. programs. All its B.Tech and M.Tech programs are NBA accredited. The Computer Science and Engineering department provides B.Tech in CSE, M.Tech in CSE and CSIS, and MCA. With experienced faculty, robust labs, and industry ties with Microsoft, IBM, Oracle, and others, it conducts sponsored programs regularly.

About BVCITS Batlapalem:

The BVC Institute of Technology and science was established in the year 2002, and sponsored by Sri BVC Educational Society to promote technological education to meet the requirements of a developing nation in the context of global concern at the threshold of the twenty first century. A team of educated, enlightened, experienced technocrats with vision, firmly determined to promote high quality education is striving to provide every facility for achieving excellence. The college is one of the best colleges in Andhra Pradesh. The Standards of teaching are very high. The college is approved by AICTE, New Delhi and permanently affiliated to the Jawaharlal Nehru Technological University, Kakinada. The BVC Institute of technology and science is one among the pioneer Technical Institutes in the state of Andhra Pradesh. The college is certified with ISO 9001-2008. Quality certification of QUEST. BVCITS is accredited by the National Assessment and Accreditation Council (NAAC) With "A" grade.

Conveners:

Prof. Ravi Kumar Jatoth HOD & Professor Dept. of ECE, NIT Warangal	Dr. T S S S Phani HOD & Professor Dept. of ECE, BVCITS Batlapalem
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Coordinators:

Prof. Prakash Kodali Associate Professor Ph no.: +91 8702462426 Mail ID: kprakash@nitw.ac.in Dept. of ECE, NIT Warangal	Dr. BH V V S R K K Pavan Professor Ph no.: +91 9948265657 Mail ID: drpavanece.bvts@bvcgroup.in Dept. of ECE, BVCITS Batlapalem
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