



# ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON

## Designing chips with low power artificial intelligence

(22nd April – 3rd May 2024)

Organised by

Electronics & ICT Academy, NIT Warangal

in association with

Department of Electronics and Communication Engineering

Dr. M. G. R. Educational and Research Institute, Maduravoyal, Chennai



### Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, Govt. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

### About the FDP:

The Faculty Development Program (FDP) on IoT fundamentals of emerging applications aims to equip educators with the essential knowledge and skills to impart cutting-edge insights to students. This program delves into the core principles of the Internet of Things (IoT), emphasizing its transformative role in emerging applications. Educators participating in the FDP gain a comprehensive understanding of how IoT influences diverse sectors such as smart cities, healthcare, agriculture, and industry. The curriculum covers practical aspects, including real-world case studies and hands-on exercises, enabling educators to effectively convey the relevance and impact of IoT in the rapidly evolving technological landscape. By fostering a deeper understanding of IoT fundamentals, this FDP empowers educators to guide students towards embracing innovative solutions in the dynamic realm of emerging IoT applications.

### Course Contents:

- Energy-Efficient Transistors
- Advanced Power Management Systems
- Neural Network Pruning
- Hardware Acceleration Techniques
- Low-Power Memory Solutions
- Approximate Computing
- On-Chip Sensor Integration
- Energy-Efficient Interconnects
- Adaptive Voltage Scaling
- Low-Power Operating Systems

### Faculty conducting this programme:

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

### Registration Fee Particulars:

Industry Participants : Rs. 3000  
Academic (Faculty) : Rs. 1000  
Research Scholars : Rs. 1000

Participants need to pay the Registration Fee Online using the following details

Online Transfer Details
Account Name: <b>Electronics &amp; ICT Academy NITW</b>
Account No: <b>62423775910</b>
IFSC: <b>SBIN0020149</b>
Bank and Branch: <b>State Bank of India, NIT(REC) Warangal</b>

### How to apply:

Participants are required to fill the online registration form by clicking on the following link:

<https://forms.gle/JX8ahVcBcWWho5q3P9>

### 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(Application & DD)	20-04-24
Selection List by E-mail	21-04-24
Duration	22-04-24 to 3-05-24

### About NIT Warangal:

Established in 1959, NIT Warangal is a renowned technical institute with 13 departments and advanced research centers. Spanning 248 acres, its self-contained residential campus offers diverse undergraduate and postgraduate programs. The institute is recognized for its dedicated faculty, state-of-the-art infrastructure, and successful alumni network. According to the NIRF 2023 rankings, NITW holds the 21st position among engineering institutes in India, reflecting its commitment to academic excellence and innovation.

### About Dr. M. G. R. Educational and Research Institute

Aiming to bring about change and progress through education, the Tmt.Kannammal Educational Trust was constituted in 1985 and started Thai Moogambigai Polytechnic College. Within three years of its inception, Dr. M.G.R. Engineering College was founded in 1988, and the Thai Moogambigai Dental College was started in the year 1991. Both the colleges acquired Deemed University status in 2003 as Dr. M.G.R. Educational and Research Institute as per the orders of the University Grants Commission, New Delhi and the Union Ministry of Human Resources and Development, Government of India, New Delhi.

