About Electronics & ICT Academy at

PDPM IIITDM Jabalpur

The Ministry of Electronics and Information Technology (MeitY), Government of India has instituted Electronics and ICT Academies in the year 2015. In the second phase, the academy at PDPM IIITDM Jabalpur aims at scalable training programmes in niche areas of Electronics and ICT for the development of the required knowledge base, skills and tools to unleash the talent of the Indian population. The Academy is identified by the MeitY as a hub of activities for capacity building through training, internships, research, and consultancy programmes in fundamental and advanced topics in electronics, information and communication technologies, the Academy conducts customized academic programmes for students, corporate sectors and researchers.

About IIIT Nagpur

Indian Institute of Information Technology, Nagpur (IIITN) is established under the Public-Private Partnership Scheme by the Ministry of Education (erstwhile Ministry of Human Resource Development), Government of India, and is supported by the Department of Higher Education, Government of Maharashtra, and Tata Consultancy Services as Industry Partner. IIITN is recognized as an Institution of National Importance by an Act of Parliament in 2017. IIITN started functioning during the year 2016-17 and shifted to its permanent campus sprawling 100 Acres of land near Butibori, Nagpur.

Faculty Development Programme

On

Think Parallel

The course provides both foundational and advanced knowledge in the field of parallel computing. It equips participants with essential theoretical concepts, practical hands-on experience, and exposure to modern tools and platforms for high-performance computing. Key domains include multicore CPU programming, GPU computing with CUDA, OpenMP, MPI, and emerging paradigms in heterogeneous computing. Participants will gain expertise in parallel algorithm design, performance optimization, and scalable application development, preparing them to effectively address real-world computational challenges in science, engineering, and industry.

Who can attend: Suitable for faculty from colleges, universities, and technical and professional institutes can attend. Students, fresh graduates, researchers, and industry personnel working in allied disciplines can also attend.

Important Dates

FDP Dates: October 6-17, 2025

Last Date of Online Registration: Oct 04, 2025

Timings: 10 AM to 12 Noon & 5 PM to 7 PM

Coordinators

Dr. Ashish S. Parihar, IIITDM Jabalpur
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Faculty Development Programme

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Think Parallel

October 6-17, 2025 (Online Mode)

Jointly Organized by

IIIT Nagpur

and

Electronics and ICT Academy

IIITDM Jabalpur

An Initiative of the Ministry of Electronics and Information Technology, Government of India

Digital India
Power To Empower

Faculty Development Programme

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Resource Persons

- Dr. Nileshchandra Pikle, IIIT Nagpur
- Dr. Tausif Diwan, IIIT Nagpur
- Dr. Jitendra Tembhurne, IIIT Nagpur
- Dr. Dinesh Kulkarni, WCE Sangli

Coordinators

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Course Contents

- Foundations of parallel computing – architecture
- and advancements over decades
- Shared Memory Programming – OpenMP,
- OpenACC & CUDA
- Distributed Memory Programming – MPI
- Nvidia DLI Certifications on CUDA and OpenACC
- Multi-GPU programming

Hands-on Sessions

The hands-on sessions are designed to provide participants with practical exposure to various paradigms of parallel computing. Participants will begin with shared memory programming using OpenMP, OpenACC, and CUDA, where they will write, compile, and optimize parallel programs on multicore CPUs and GPUs. The sessions will also cover distributed memory programming using MPI, enabling participants to implement point-to-point, collective, and reduction-based communication across multiple processes. In addition, the program includes structured laboratories aligned with NVIDIA DLI certification modules on CUDA and OpenACC, allowing participants to gain industry-recognized skills. Advanced topics will include multi-GPU programming, where participants will implement parallel algorithms across multiple GPUs and study scaling performance. Throughout these sessions, emphasis will be placed on problem formulation, performance analysis, and optimization techniques to strengthen the ability to design efficient parallel programs.

Programme Features

- Rigorous training combining theory and handson practice in parallel computing.
- Comprehensive coverage of shared memory (OpenMP, OpenACC, CUDA) and distributed memory (MPI) programming.
- Exposure to multi-GPU programming with performance scaling analysis.
- Instructor-led, guided hands-on sessions with real coding and optimization tasks.
- Focus on performance analysis, benchmarking, and optimization techniques.
- Opportunities to interact with experts from IITs, IIITs, NITs, and industry.
- Integration of NVIDIA DLI certification modules with options to earn globally recognized badges.

Registration Details

- Registration link – Please fill out registration using the following link: https://forms.gle/wSb9C9fv68xRLhzbA
- Registration fee: INR 500/ for online participation
- Last Date for Registration: Oct 04, 2025

Online Payment Details

- **Internet banking**

Beneficiary Name	PDPM IIITDM Jabalpur
Bank Name	Indian Bank
A/C No.	50018692852
IFSC Code	IDIB000M694

- **UPI ID: iiitdmj@indianbk**
- **QR Code:**