





# National Institute of Electronics & Information Technology (NIELIT) <u>Aurangabad(Chh.Sambhaji Nagar) Maharashtra</u>

# NIELIT Internship-2025 under MeitY-C2S R&D Project NOTIFICATION

NIELIT Aurangabad invites application towards the NIELIT Internship-2025 under Chip to startup program(C2S) of Ministry of Electronics & Information Technology(MeitY), Government of India from passionate and dynamic students from various institutes across India. This programme is created in such a way that the student will gain substantial knowledge, in the opted field, within a specific duration. Each student under this internship has to complete the Sub Project assigned under MeitY-C2S R&D Project within the specified time duration along with publications in SCI/Scopus indexed Research Journals/papers. In the course of their internship at NIELIT Aurangabad, the intern has the chance to carry out novel research and contribute to development initiatives under the supervision of research-oriented mentors, in order to enhance their research experience and exposure to the research and innovative world. The NIELIT Internship Program offers a transformative experience for students, empowering them with the skills, knowledge, and confidence to thrive in today's technology-driven world. By bridging the gap between academia and industry, this program prepares interns for successful careers and contributes to the growth and innovation of the technology sector.

#### **Key Areas of Internship:-**

- ♦ VLSI Design.
- ◆ SoC(System on Chip) Design.
- FPGA Architecture & Programming.
- ◆ Embedded Systems & IoT.

#### **Eligibility:-**

Undergraduate – B.Tech./B.E./B.Sc./BCA etc. undergoing/Completed.

or

Postgraduate – M.Tech./M.E./M.Sc./MCA etc. undergoing/Completed.

### **Internship Registration Fees:-**Nil

#### **Duration:-**

Duration of Internship:

- ➤ 6 months for students of B.Tech./B.E./B.Sc./BCA etc. undergoing/Completed.
- ➤ 1 Year for students of M.Tech./M.E./M.Sc./MCA etc. undergoing/Completed.

# Details of projects for B.Tech/M.Tech students with plan of execution & timelines:-

Sr. No.	Project title	Category of Student (B.Tech/M.Tech)	Plans for execution	Timelines
1.	Design of an AXI Bridge for Edge AI Processor.	M.Tech	Software model compilation	1 Year
2.	An Edge AI SoC based healthcare IoT system prototype.	M.Tech	Software model compilation	1 Year
3.	Development of FPGA Emulation platform	M.Tech	Hardware Design	1 Year
4.	FPGA Emulation of SoC Architecture.	M.Tech	Hardware Design	1 Year
5.	FPGA implementation of DMA controller.	M.Tech	Hardware Design	1 Year
6.	Design and Verification of USB 2.0 Interface Protocol for Edge AI Processor.	M.Tech	Hardware Design	1 Year
7.	Design and Verification of Ethernet IP for Edge AI Processor	M.Tech	Software model compilation	1 Year
8.	Design and Verification of Peripheral Component Interconnect Express (PCIe) 3.0 for Edge AI Processor	M.Tech	Software model compilation	1 Year
9.	Design and Verification of CAN Bus Protocol for Edge AI Processor	M.Tech	Software model compilation	1 Year
10.	Design and implementation of MAC for DNN	B.Tech	Software model compilation	6 months
11.	Design and implementation of Block Memory for IOT applications	B.Tech	Software model compilation	6 months
12.	Design and implementation of DMA Controller and Memory Controller	B.Tech	Software model compilation	6 months

13.	Design and implementation of Clock and Power management unit	B.Tech	Software model compilation	6 months
14.	HW/SW Co-design Approaches for low power edge AI processor	B.Tech	Hardware Design	6 months
15.	An edge AI SoC based IoT system prototype for healthcare monitoring applications	B.Tech	Hardware Design	6 months
16.	Development and integration of communication peripherals with edge AI processor	B.Tech	Hardware Design	6 months
17.	Design of low precision arithmetic for AI Coprocessor	B.Tech	Hardware Design	6 months
18.	Verification of low precision arithmetic for AI Coprocessor using Universal Verification Methodology.	B.Tech	Design Verification	6 months

How to apply:-Interested Students can fill the application form as given below:

a) Online application form can be filled from via Google form Link given below

https://docs.google.com/forms/d/1tlE1h1A4Sr8R6XJSpVmgPtTWco9OOF9jiZ28tpKPUPQ/viewform?edit\_requested=true

- b) Self-attested Scanned copy of updated CV/Resume.
- c) Self-attested Scanned copy of Bonafide Certificate and NoC from the Institute where the student has undergone/is undergoing the current course, in the prescribed format.
- d) Self-attested Scanned copy of Valid Government issued ID proof.

#### Certificates:-

E-certificate is issued only to the Interns on successful completion of the allocated project along with publications in SCI/Scopus indexed Research Journals/papers and upon submission of the Internship Report to their Mentors.

#### **Important Dates:-**

Last Date to Apply online:-17.01.2025 Commencement of Internship: 20.01.2025

## **Contact:-**

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