



राष्ट्रीय इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी संस्थान, तिरुपति  
National Institute of Electronics & Information Technology, Tirupati

# Summer Internship Training Prospectus

## Embedded Systems & IoT

11<sup>th</sup> May 2026 – 19<sup>th</sup> June 2026

6 Weeks ( 3-Weeks Online: 11<sup>th</sup> May to 31<sup>st</sup> May & 3-Weeks Offline: 01<sup>st</sup> June to 19<sup>th</sup> June )

### Course Description

This course introduces Python OOPs, exception handling, Pandas, and data visualization techniques. It covers embedded systems architecture, IoT fundamentals, electronics, hardware components, communication protocols, and cloud integration with sensors. Students explore real-world IoT applications including smart transportation, waste management, road safety, pollution monitoring, industrial gas systems, grain distribution, bridge monitoring, and energy management through practical learning.

[Click Here to Register](#)

## Who can attend?

Anyone who is interested in learning Embedded System & IoT design

- Preferably Students pursuing Polytechnic, Engineering, Researchers, Teaching Professionals, etc...

## Course Content in Brief

Sl. No	Topics
1.	<b>Week 1:</b> Introduction to Python Programming Language
2.	<b>Week 2:</b> Object-Oriented Programming (OOP) & Exception Handling
3.	<b>Week 3:</b> Introduction to Micro Python; Embedded Systems Architecture; Embedded Hardware, Sensors, and Actuators; Communication Protocols; Data Processing in Embedded Systems; Interface Simulations using Online Tools
4.	<b>Week 4:</b> Introduction to Internet of Things (IoT)
5.	IoT Communication Technologies & Software Platforms
6.	IoT Hardware Assembly and Configuration
7.	<b>Week 5:</b> Integration of IoT Systems with Cloud Platforms
8.	Peripheral Device Integration
9.	Real-World IoT Application Development
10.	<b>Week 6:</b> Android Application Development using Widgets and Drag-and-Drop Models
11.	Version Control Management using Git and GitHub
12.	Project Work

## Fee and important dates

<b>Fee</b>	Rs. 5000/- ( <i>Including GST</i> )
<b>Last date for registration &amp; payment</b>	5 <sup>th</sup> May 2026 till 9:00 AM
<b>Sharing of Link/passwords &amp; other details</b>	7 <sup>h</sup> May 2026 by 06:00 PM
<b>Course registration Link</b>	<a href="https://forms.gle/SVExpaxMtggq88M79">https://forms.gle/SVExpaxMtggq88M79</a>

## Certificate

e-Certificate of participation will be mailed to the registered email ID after completion of the course.

## Minimum System Requirements

- Attendees must have a computer system with a good internet connection.
- Computer System Configuration – Windows OS 7/8/10, i3/i5, 64bit processor, Minimum 4GB RAM during online sessions.

## Faculty Profile

Qualification and experience of the faculty handling the sessions

1. Akula Sri Rama Pavan -Scientist-C, B.Tech(ECE), 11 Year of Experience
2. Dr. M. Chandrakala, Ph.D. (Electronics) ,2 Years of Experience

## Course Coordinator

Dr. M. Chandrakala,  
Ph.D.(Electronics)  
6302223578(WhatsApp)  
Email: cnksvu@gmail.com

## Terms and Conditions:

1. In case any registered candidate could not attend the online session due to technical issue at their side there will not be any refund of the course fee and the sessions will not be repeated.
2. In case the online course is cancelled /postponed due to some technical issue at NIELIT side and new date is not convenient to the candidate, our liability is limited to the refund of the course fee and NIELIT shall not be responsible for any consequential damages.
3. Passing Exit test is mandatory for awarding 'participation' certificate.

For more details about our institution and facilities visit us

Website: <https://www.nielit.gov.in/tirupati/index.php>

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Autonomous Scientific Society of  
Ministry of Electronics & Information Technology,  
Govt. of India



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