J.B. INSTITUTE OF ENGINEERING AND TECHNOLOGY

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BhaskarNagar,Yenkapally(V),Moinabad(M),P.O.Himayathnagar,R.R.District,Hyderabad-5000075.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report On Skill Development Programme

Internet of Things with Cloud Integration & Applications

In Collaboration with Physitech Electronics

On 19th -- 24TH January 2026 for III-A

On 27th – 2nd January 2026 for III-B

This report summarizes the key activities and learning's from an intensive Six-Day Skill Development Program on the Internet of Things (IoT) , Arduino, Raspberry Pi, and Cloud Integration.

The training provided participants with a clear understanding of:

- IoT system architecture
- Sensor interfacing
- Embedded programming
- Edge devices (Arduino & Raspberry Pi)
- Cloud-based data monitoring and visualization

The sessions included both theoretical concepts and hands-on practical exercises.

Resource Person: G. Aashey Reddy Managing Director

Mohd Nabi Shareef Manager Physitech

Co-ordinator
Dr.B.Shravan kumar , Assistant Professor

Convener
Dr. Chayadevi Professor & HOD,ECE

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19-01-2026

Department of Electronics & Communication Engineering

The Principal
JBIET , Moinabad

Respected Sir/Madam,

Subject: Permission to Conduct Skill Development Program regarding

I hope this letter finds you in good health and spirits.

I would like to request your permission to conduct a Skill Development Program on **"Internet of Things (IoT) with Cloud Integration and Applications"** for the students of ECE Department III Year both A & B . The proposed workshop aims to enhance students' practical knowledge and exposure to emerging technologies such as IoT applications, sensors, microcontrollers, and real-time data communication, which are highly relevant to current industry requirements.

The workshop is planned to be conducted for a duration of 6 days on 19th – 24th January 2026 for Section A Students and 27th- 2nd February 2026 for Section B in A-113 & A-115

The sessions will include both theoretical concepts and hands-on practical demonstrations, which will greatly benefit the students academically and professionally.

I request you to grant permission for the same. I shall be highly grateful to you for your support and encouragement.

Thanking you.

Yours sincerely,

Co-ordinator

Permitted

19/1/26
HOD-ECE

About the Event:

The six-day training program provided an intensive and practical exploration of IoT system design, embedded development, and cloud integration. It covered IoT fundamentals, Arduino-based sensor and actuator interfacing, Raspberry Pi with Python programming, communication protocols such as HTTP and MQTT, and the use of cloud platforms for dashboards and real-time monitoring. The program effectively blended conceptual lectures, live demonstrations, and hands-on exercises to ensure comprehensive learning.

.Software and Tools Used:

• Arduino Raspberry Pi development IDE – Microcontroller programming

• ThingSpeak – Cloud data visualization

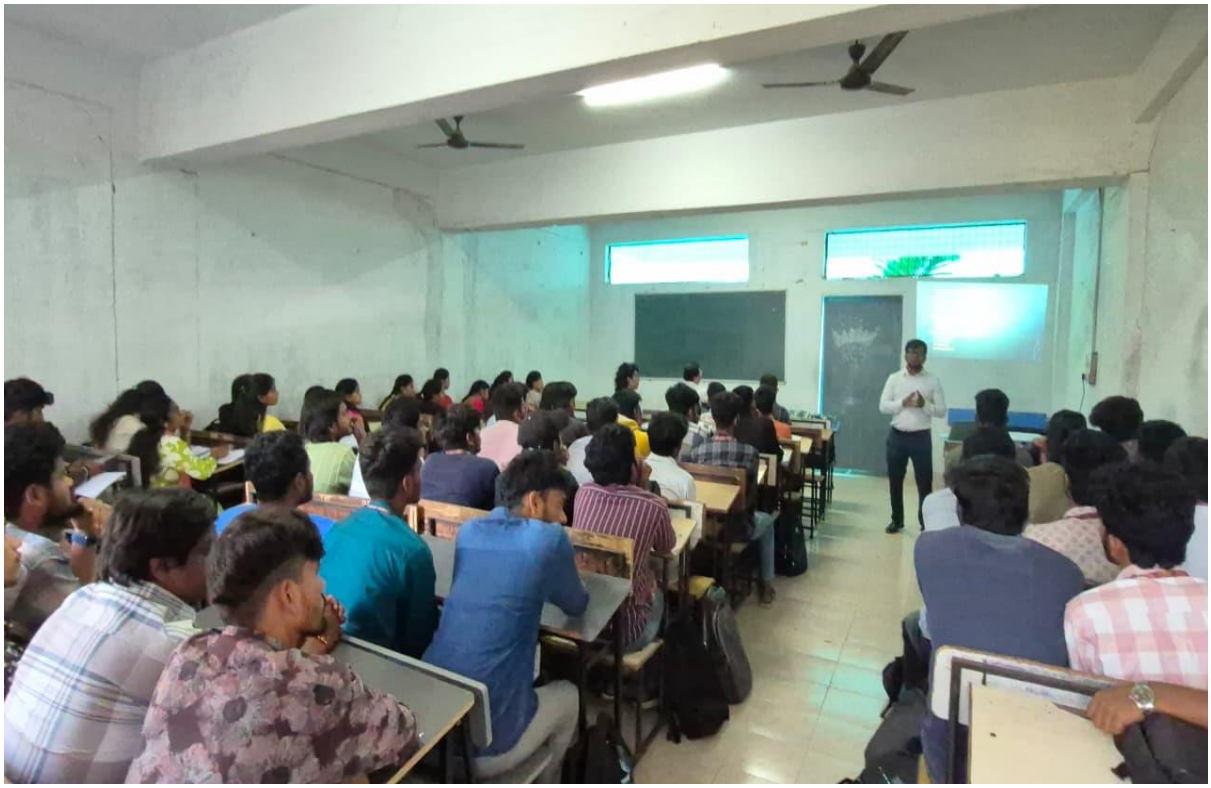
• Firebase – Real-time database

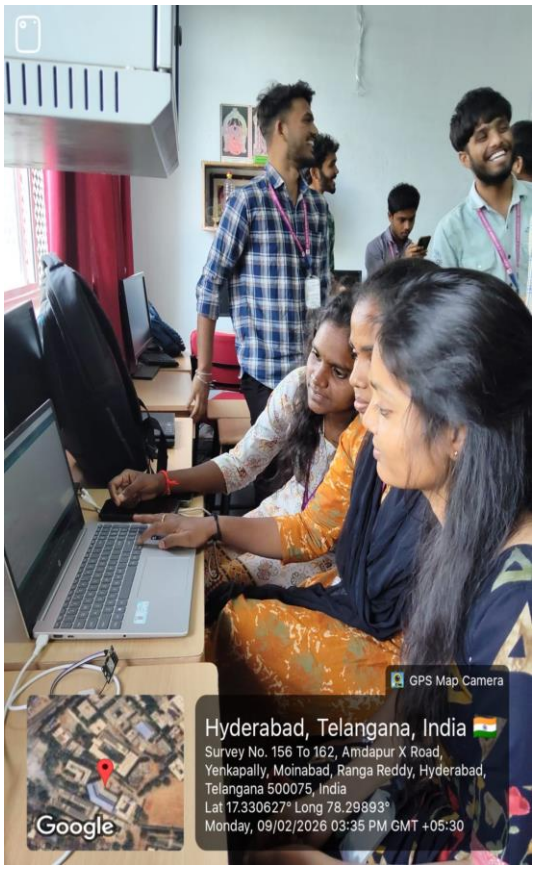
• Blynk IoT – Mobile dashboard

• Serial Monitor / Terminal Tools – Debugging

Day 1	• Hands-on experience with Arduino & Raspberry Pi • Sensor & actuator interfacing • IoT communication protocols
Day 2	Technical Skill Development • Hands-on experience with Arduino & Raspberry Pi • Sensor & actuator interfacing • IoT communication protocols
Day 3	Practical Application of Concepts • Developed working IoT mini-projects • Implemented device-to-cloud systems • Learned debugging & troubleshooting
Day 4	Improved Problem-Solving & Design Thinking • Enhanced analytical and development skills • Applied embedded & Python programming
Day 5	Industry-Relevant Exposure • Familiarity with IoT tools & cloud platforms • Understanding of real-world IoT applications
Day 6	Career & Academic Enhancement • Prepared for IoT-based projects • Strengthened foundation in IoT & embedded systems

PHOTOGRAPHS:

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Yenkapally, Moinabad, Ranga Reddy, Hyderabad,
Telangana 500075, India
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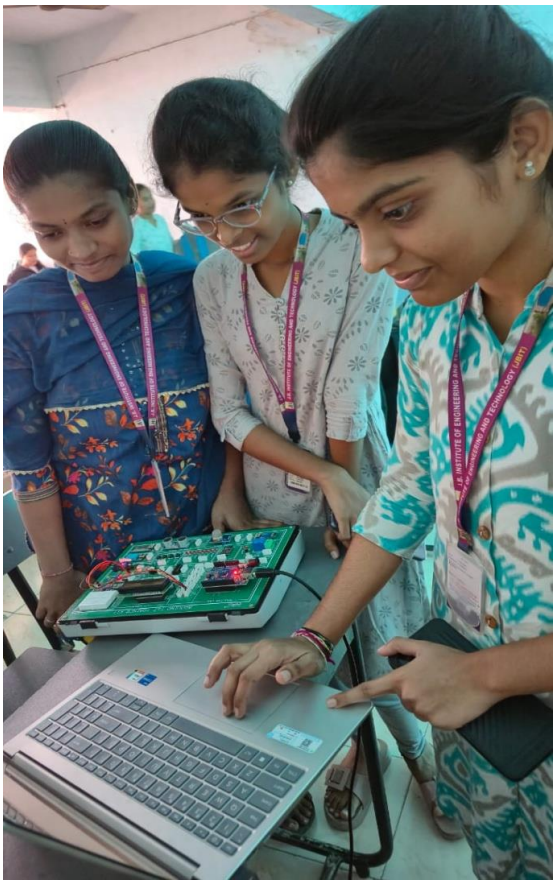
Monday, 09/02/2026 03:35 PM GMT +05:30
Google

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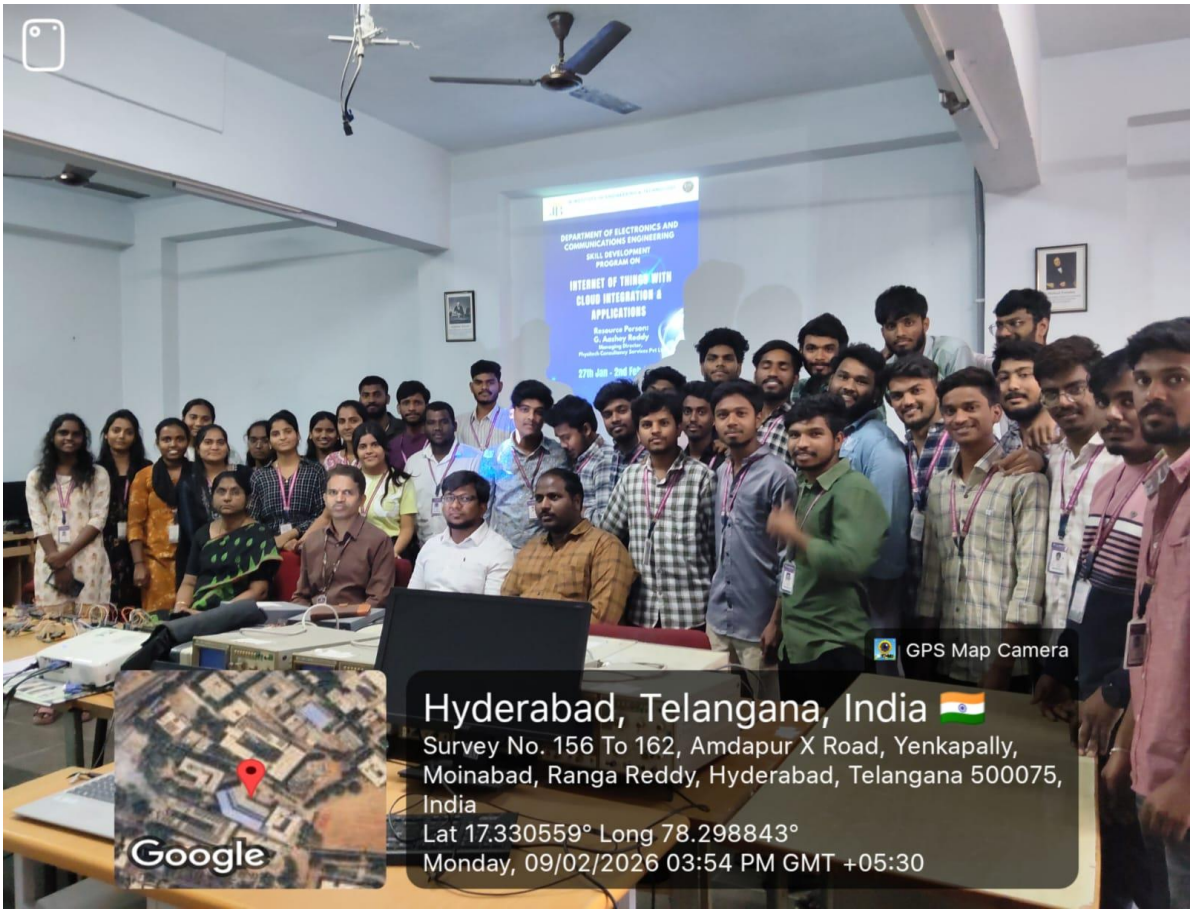

Feedback and Suggestions:

The feedback for the session was overwhelmingly positive.

Participants appreciated:

• Clear explanation of IoT concepts

• Structured hands-on sessions

• Real-world practical demonstrations

Conclusion

The Six-Day IoT & Cloud training provided participants with a practical, application-oriented understanding of modern IoT technologies. Through hands-on exercises and real-time cloud integration, the program offered comprehensive exposure to IoT system design, data communication, and cloud analytics. By the end of the training, participants were well-equipped with the skills required to develop smart IoT applications and pursue further learning or career opportunities in embedded systems, IoT development, and cloud-based automation. Students Executed Projects 1.

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Department of Electronics and Communication Engineering

Skill Development Course

on

INTERNET OF THINGS WITH CLOUD INTEGRATION AND APPLICATIONs

19th JAN – 24th JANUARY 2026

l.No.	Roll No.	Name of the Student	19	20	21	22	23	24
1	23671A0401	ABHIJEET SOMASHILA					A	
2	23671A0403	AMBADIPUDI PRANAY	A					
3	23671A0404	ANDRU RITHWIKA	A					
4	23671A0405	ANDUGJLA LINGASWAMY		A		A		
5	23671A0406	ASHISH PAWAR	A					
6	23671A0407	BANOTHU GOPI			Gopi			
7	23671A0408	BINGI PRADAMESH	A	A	A	A	A	
8	23671A0409	BOBBALA VASU	A					
9	23671A0410	BODA VENKAT	A	A	A		A	
10	23671A0411	BOINI NAGARAJU						
11	23671A0413	BUGGOJU VIVEK	A					

23671A0414	CH VARUN						
23671A0415	CHATLA ANIL KUMAR						
23671A0416	CHEETI PRAKASH						
23671A0417	DINDI SAROJ KUMAR						
23671A0418	DONETI AVINASH	A	A	A	A	A	
23671A0419	G ANURADHA						
23671A0420	GADDALA MANIKANTA	A	A	A	A		
23671A0421	GORUKASULA YASHWANTH	A					
23671A0422	GOUNIKADI GANGOTHRI	A					
23671A0423	N NIKHIL REDDY						
23671A0424	KAIRAMKONDA PAVAN		A				
23671A0425	KANJARLA MANIDEEP						
23671A0426	KAVALI DINESH		A				
23671A0427	KAYITHI ADITHYA SRINIVASA REDDY						
23671A0428	KESHAGONI UDAYKIRAN GOUD	A					
23671A0429	KODAKANCHI SHIVA SAI GOUD						
23671A0430	KOTHAPALLY GANGOTHRI	A					
23671A0431	KOTHOLLA HARIVARDHAN		A				
23671A0432	KUMMARI MAHESH	A	A	A	A		

23671A0433	KUNTOORI VYSHNAVI	A					
23671A0434	MADISHETTI KEERTHANA	A					
23671A0435	MEGAVATH SRIKANTH	A					
23671A0436	MENCHU SAI RUTHVIK	A	A	A	A	A	
23671A0437	N PADMALATHA	A	A	A	A	A	
23671A0438	NAGARGOJE MOHAN						
23671A0439	NENAVATH HANUMANTHU	A	A	A	A	A	
23671A0440	NIDHI SHERKHANE		A	A	A	A	
23671A0441	PONNAM RISHWANTH						
23671A0442	RAGIRU PRANAYA	A		A	A	A	
23671A0443	RAMAVATH AKHIL RATHOD						
23671A0444	REBBAVARAPU JAYAVARDHAN	A	A			A	
23671A0445	SAMBARAJU DHEERAJ						
23671A0446	SATHUNURI CHANDU ABHISHEK	A	A	A	A	A	
23671A0447	SOMA SNEHA						
23671A0448	STHITIPRAGYAN PRADHAN	A			A	A	
23671A0449	SURYATEJA KODEPAKA	A		A	A	A	
23671A0450	THUNKOJU RAMYA	A					

23671A0452	VALETI BHARATH KUMAR	A					
23671A0453	PASHAM VAISHNAVI						
23671A0454	YALAGANDULA UPENDAR						
23671A0455	K SHASHANK KUMAR	A	A	A	A	A	
24675A0401	KAPU SOUMYA						
24675A0402	GURUJALA SAI TEJA	A				A	
24675A0403	SURYA PRAKASH REDDY DHANRAJ				Suryan		
24675A0404	BAITHI AKSHAYA		A				
24675A0405	DATHURKA AKSHAY KUMAR	A	A			A	
24675A0406	E THEJESHWAR				Teja		
24675A0407	DOBBALA ABHISHEK	A				A	
24675A0408	BOTLA RAMYA	A	A				
24675A0409	BIKKAVOLU SRAVANA LAXMI	A					
24675A0410	AJMERA INDHU	A					
24675A0411	B RAGHAVENDRA	A	A			A	
24675A0412	GADDAM RAVINDER REDDY	A			Ravinder	A	
24675A0413	ARIGE SAI VARDHAN	A					

List of Projects Executed by Students after workshop

1. Smart kitchen parameters and detection

2. Industrial productivity improvement using iot enabled smart monitoring & control using ML

3. Autonomous IoT gas leakage and safety management systems

4. Intelligent IoT-based systems for urban development and smart cities using AI

5. Smart IoT System for Air Quality Monitoring and Server-Based Notifications Using Webpage.

6. AI and ML Enabled Interactive Robot with Gesture-Based Control

7. Exploring Wearable Iot Solutions for Personalized Healthcare System Using Ai

8. IoT Enabled Indoor Monitoring and Control System for Safety

9. AI-Powered Edge Vision Traffic Management Platform for Real-Time Monitoring and Congestion Reduction (ESP32 CAM RS 7000) WITH (RASPBERRY PI 9500)

10.IoT and AI Driven smart parking platform for traffic and space Optimization

11. AI-Powered IoT-Enabled Smart Classroom Assistant for Automated Management System

12. Development of an iot based theft detection and prevention sys using webcam

13. Development of an IOT based smart agricultural monitoring and decision systems using ML

14 .IOT and Cloud integrated Smart bin System for efficient Waste monitoring and Management

15. AI assistant Chabot using Raspberry pi

16. Smart IoT Based Early warning and Monitoring System for Natural Disaster Management using ML

17. Cloud Enabled Predictive Maintained System With Ai Analytics For -Realtime Equipment Monitoring And Failure Prevention

18. Automated Hospital Room System With Senor And Cloud Based Management

19. AI and ML Enabled Interactive Robot with Gesture-Based Control

20. Intelligent LORA Based IOT System for Smart Farming and Remote Data Management

21. Next generation cloud-connected bus tracking and route management platform

22. AI-Driven IOT Robot for automated Waste Segregation and Recycling

23. Next Generation Ai Driven Smart Health Monitoring System For Continuous Welness And Remote Care

24. Cloud Connected IOT and AI Powered Smart Weather

25. IoT and Cloud-Enabled Smart Inventory Tracking System with Web-Based Real-Time Monitoring

26. Autonomous Greenhouse System with Real-Time IoT-Based Environmental Regulation

27.Adavanced AI helmet for rider protection, accident detection and emergency Response

28. Ai-Powered Particulate Matter Monitoring System For Real Time Air Quality Analysis

29. AI & ML based Smart follow me Bot

30 Smart Fire Fighting Robot Leveraging IOT robotics & Cloud Technologies for Autonomous Disaster detection & Rapid response

31 Zig bee Based Vehicle to vehicle communication using Raspberry pi Pico