

BETTER THE FUTURE



**LPCPS**  
LUCKNOW PUBLIC COLLEGE  
OF PROFESSIONAL STUDIES



**FIVE DAYS**  
**WORKSHOP**  
**ON**  
**BASICS OF**  
**ELECTRONICS & IoT**

**ORGANISED BY:**

**LUCKNOW PUBLIC COLLEGE  
OF PROFESSIONAL STUDIES**  
(Affiliated to University of Lucknow)  
Vinamra Khand, (Near Kathauta Lake)  
Gomti Nagar, Lucknow

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3/7

*Asmita*  
Principal  
Lucknow Public College of Professional Studies  
Vinamra Khand, Gomtinagar, Lucknow

**Date: JULY 07 - 12, 2023**  
**Time: 11:00 AM onwards**

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Dean Academics, LPCPS

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Dr. Anand Kumar Rai  
Associate Professor & HOD  
(Department of Computer Science)  
Mob: 9453302061

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## REPORT ON

### Basics of Electronics and IoT

Organised by: Internal Quality Assurance Cell (IQAC) & RPDC

#### LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

Date: 7/7/23 to 12/7/23

Venue: Computer Lab & Conference Hall, LPCPS

#### 1. Introduction:

The Basics of Electronics and IoT (Internet of Things) workshop was a comprehensive Five-days event organized with the aim of providing participants with fundamental knowledge and hands-on experience in the field of electronics and the Internet of Things. The workshop took place over three consecutive days, and it targeted students, enthusiasts, and professionals interested in understanding the core concepts of electronics and how they relate to IoT applications.

Speakers of the Workshop were:

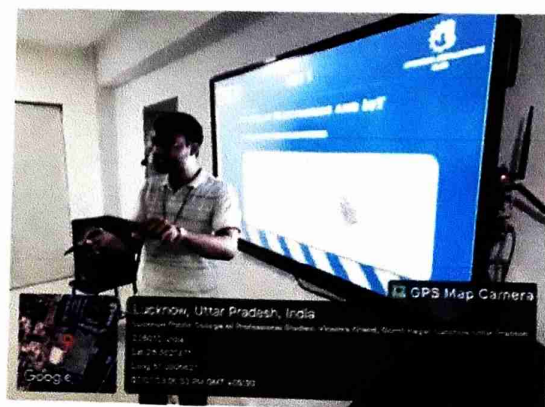
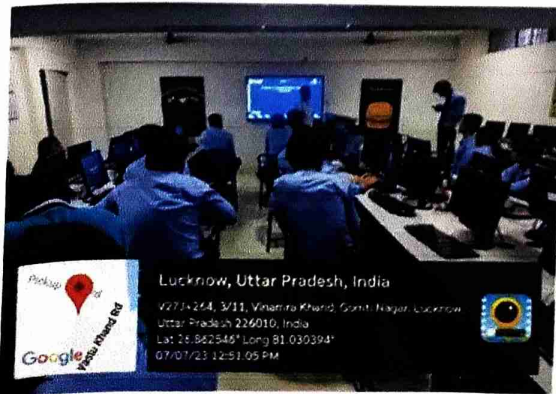
- Mr. Ravi Tiwari
- Mohd. Zuhaib Khan

#### 2. Day 1: Introduction to Electronics

The first day of the workshop focused on introducing participants to the fundamental principles of electronics. The agenda for the day included the following topics:

- ✓ Basics of electronic components: Participants learned about essential electronic components like resistors, capacitors, transistors, and integrated circuits.
- ✓ Circuit analysis: Participants gained knowledge about circuit analysis techniques, Ohm's law, and voltage/current division.
- ✓ Hands-on session: A practical session allowed participants to build simple circuits and measure voltage, current, and resistance using multimeters.

#### Pictures from day 1



#### 4. Day 2: Digital Electronics and Microcontrollers

The second day delved into digital electronics and microcontrollers, laying the groundwork for IoT applications.

Key topics covered were as follows:

- ✓ Binary system and logic gates: Participants were introduced to the binary numbering system and the concept of logic gates (AND, OR, NOT, etc.).
- ✓ Introduction to microcontrollers: An overview of microcontrollers and their importance in IoT was provided.
- ✓ Arduino programming: Participants were introduced how to write simple programs to control LEDs and read input from sensors.
- ✓ Hands-on session: Attendees had hands-on experience to perform basic tasks, such as controlling LEDs and interfacing with sensors.

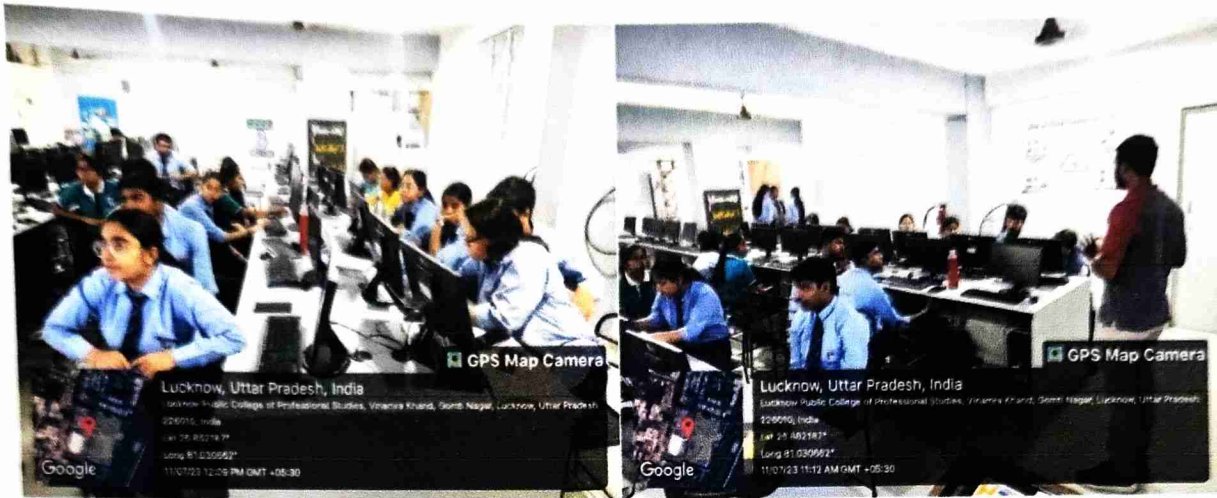
#### Pictures from day 2



#### 5. Pictures from day Day 3:



## 6. Pictures from day 4

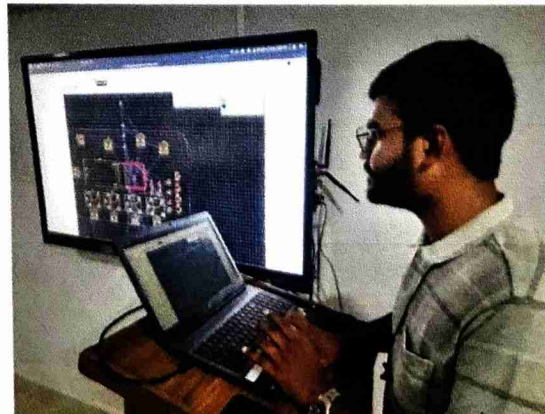


## 7. Day 5 & Valedictory session

On the final day, the focus shifted towards IoT applications and how electronic components and microcontrollers come together in real-world projects. Topics covered included:

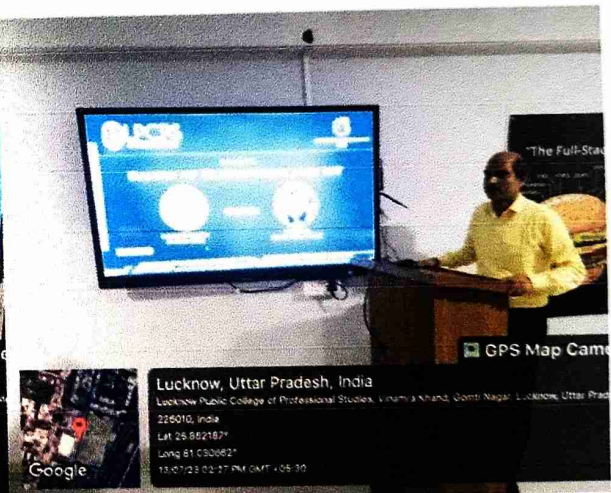
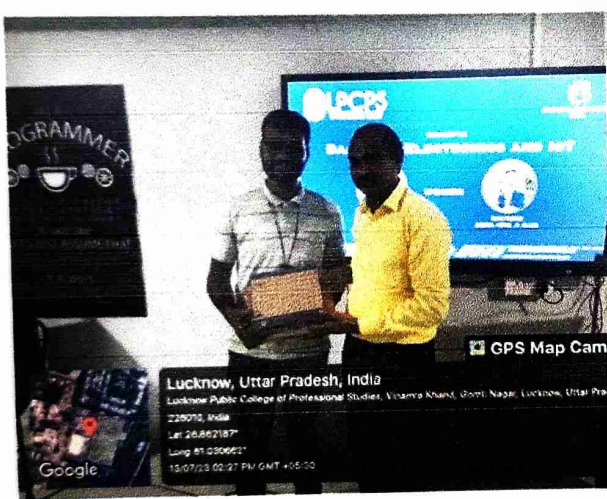
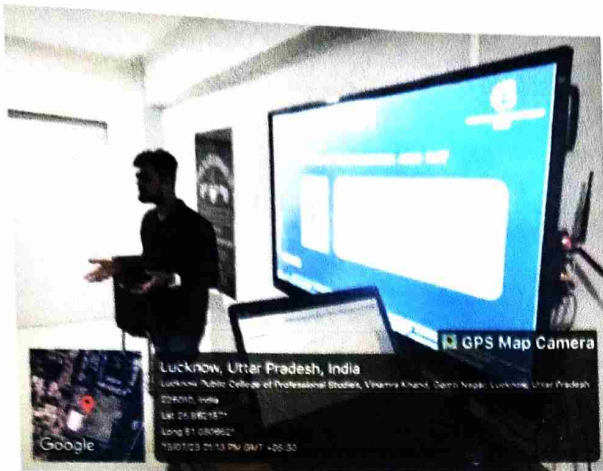
- ✓ Introduction to IoT: An explanation of the IoT concept, its applications, and its impact on various industries.
- ✓ Communication protocols: Participants learned about common communication protocols used in IoT, such as Wi-Fi, Bluetooth, and MQTT.
- ✓ IoT project development: A step-by-step guide to developing an IoT project, from concept to implementation.
- ✓ Hands-on session: The last day featured an exciting hands-on session where participants worked in teams to create their IoT projects using Arduino and various sensors. They were able to monitor data and control devices remotely through a web-based interface.

## Pictures from day 5



Report Basics of Electronics and IoT

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The workshop came to its conclusion with Valedictory Session with Valedictory speech & Vote of Thanks by Dr. L.S. Awasthi (Dean Academics, LPCPS) & thanking notes by Dr. Richa Mishra (Assistant Professor, LPCPS)

### 8. Conclusion:

The Basics of Electronics and IoT workshop was a resounding success, attracting enthusiastic participants from diverse backgrounds. The three-day event provided attendees with a strong foundation in electronics and IoT concepts, combining theory with practical, hands-on experience. Participants left the workshop with a deeper understanding of electronics, microcontrollers, and the endless possibilities that IoT offers.

Report Basics of Electronic and IoT

*Awasthi*  
Principal  
Lucknow Public College of Professional Studies  
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The event would not have been possible without the dedicated efforts of the organizers, speakers, and volunteers who made it a seamless experience for all participants. As the workshop came to a close, participants expressed their satisfaction with the content, delivery, and interactive nature of the sessions. Many attendees indicated their interest in further advanced workshops and events in related fields.

Overall, the Basics of Electronics and IoT workshop served as an excellent platform for knowledge-sharing and skill development, contributing to the growth of aspiring electronics and IoT enthusiasts. The organizers look forward to organizing more such events to continue fostering interest and expertise in these rapidly evolving domains.

  
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**Workshop on: Basics of Electronic and IoT**

From: 7th July - 12th July 2023

Date: 11th July 2023


Sr. No	Name of participants	Course/Semester	Phone Number	Signature
1	Pani Anura	BCA-2	8175844234	Anura
2	Rishabh Kumar	BCA-2	9044248049	Rishabh
3	Ashwansh Mishra	BCA-2	9836982569	Ashwansh
4	Anshika Trivedi	BCA-2	6392674416	Anshika T.
5	Shreya Yadav	BCA-2	9026218620	Shreyas Yadav
6	Shreya Yadav	BCA-2	9935221905	Shreya
7	Ampita Singh	BCA-2	9369282865	Ampita
8	Saima Haroon	BCA-2	8545983219	Saima
9	<del>Saima</del>			
10	Chiranjeev Prajapati	BCA-2	9450463695	Chiranjeev
11	Uendra Singh Chakraborty	BCA-4	8707882368	Uendra Singh
12	Rahul Sharma	BCA	8808800414	Rahul Sharma
13	Shweta Mall	BCA	760738555	Shweta Mall
14	Prakhar - T	BCA	425641531	Prakhar
15	Shalini	BCA	994772124	Shalini
16	Sakshi	BCA	994347792	Sakshi
17	Rajwar Singh	BCA-2	7376896845	Rajwar Singh
18	Ayushi Pandey	BCA-A	9919020362	Ayushi
19	Akansha Mishra	BCA-A	9115980866	Akansha
20	Ayush Singh	BCA-A	8115734395	Ayush Singh
21	Anirudh Sharma	BCA-A	9129585685	Anirudh
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Date: 7th July 2023 DAY - 1

Sr. No	Name of participants	Course/Semester	Phone Number	Signature
1	Harsh Mehrotra	BCA / II	9919020362	Harsh
2	Ankita Chaurasia	BCA Sem II	7080447486	Ankita
3	Satakshi Gupta	BCA Sem II	9026100830	Satakshi
4	Rakhi Gupta	BCA Sem II	7991800136	Rakhi Gupta
5	Ayush Yadav	BCA Sem - II	7068052503	Ayushyadav
6	Anushka Sharma	BCA Sem - II	9305410767	Anushka
7	Sakshi Mishra	BCA Sem - II	9418581490	Sakshi
8	Anjali A	BCA Sem - II	8115735439	A Anshari
9	AKSHAY SINGH	"	8867600621	Akshay
10	Memant Anshari	"	9336021740	Memant
11	amanbar bari	"	9450968262	
12	Dhyanjay Pratap Singh	"	9453522244	Dhyanjay
13	Bhawalshankar Sarda	BCA Sem II	8388137278	Bhawalshankar
14	Rajveer Singh	BCA Sem II	7376896845	Rajveer Singh
15	Sumit Ks Dubey	BCA Sem II	9118004535	Sumit
16	ABHILASHA SINGH	"	8418048425	Abhilasha
17	Ambika Bera	"	9919075188	Ambika
18	Angel Singh	"	9455138601	Angel
19	Aradhya Singh	BCA Sem IV	9112564338	Aradhya
20	Upendra Singh Chauhan	BCA sem IV	8707882368	Upendra Singh
21	Kaushli Singh	BBA 4 Sem	6387661406	Kaushli Singh
22	Anshu Shukla	BBA 4 Sem	8429168888	Anshu
23	Abhishek Gupta	BCA 6 Sem	7355591807	Abhishek
24	Vivek Kumar Singh	B.Com Sem	8355098613	Vivek
25	Anshika Tiwari	BCA 6th Sem	9129585685	Anshika
26	Shikha Jainwal	BBA 2 Sem	6306628118	Shikha
27	Priyanshi Mishra	BBA 2 Sem	8369276322	Priyanshi
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