Date: 25-07-2023

Report on Student Development Programme on "Hands-on Session on Raspberry Pi"

Name of the Program:	Hands-on Session on Raspberry Pi.	Program Dates & Timings:	**22-07-2023& 9.00 AM to 4.30 PM**		
Name & Details of the Resource Person:		**GK Bhat Kakunje** CEO & Managing Director Kakunje Software Private Limited			
Organized by (Clubs/ Dept.)	**IOT Club & Dept. of CSE**	In Association with		**CSI**	
Number of Participants	66	Students	66	Faculty	1
Program Outcome (PO) Mapping	PO1, PO2,PO3,PO4,PO5,PO6,PO9,PO10,PO11,PO12				
Coordinators	Mrs. Snitha Shetty, IoT Club & CSI Coordinator, Assistant Professor, Department of CSE				

About the Program:

The IoT Club in association with CSI organized a student development Programme on "**Hands-on Session on IOT-ESP32and Raspberry Pi"** .The event was scheduled on 22-07-2023 from 9:00 am to 4:30 pm at Computing lab 6, third floor.

The Resource person of the program was **GK Bhat Kakunje,** CEO & Managing Director, Kakunje Software Private Limited and **Ravishankara We**b Developer , Kakunje Software PrivateLimited

The students were given a brief introduction on the following topics

- Introduction to Arduino IDE
- Creating a Simple ESP32 Web Server in Arduino IDE
- Introduction to Rasbperry pi.

The following courses were discussed by the participants

- Installing OS in Rasbperry pi.
- Creating python IDE in Rasbperry pi.

After the course the following quests were discussed

- Arduino IDE – intended for those who are familiar with Arduino
- Espruino – JavaScript SDK and firmware closely emulating Node.js
- Mongoose OS – An operating system for IoT devices that is recommended by Espressif Systems and Google Cloud IoT
- MicroPython – Implementation of Python 3 for microcontrollers
- Rasbperry pi-Introduction and installing operating System

Objectives

- Creating a simple ESP32 web server in the Arduino IDE
- Accessing the Web Server in AP Mode
- Accessing the Web Server in STA Mode
- Installing OS in Rasbperry pi

Outcomes:

- Installed OS in Raspberry pi and implemented python IDE.
- Developed a live application project on LED bulb.

Articulation Matrix:

Course Outcomes	Program Outcomes											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1	**2**				**3**	**2**						
2		**3**							**3**	**2**	**2**	**1**
3	**3**	**1**	**2**	**2**					**3**		**2**	**1**
4					**2**	**1**			**2**	**3**	**2**	
Average	**2.5**	**2**	**2**	**2**	**2.5**	**1.5**			**2.7**	**2.5**	**2**	**1**

Photos:

Mrs. Snitha Shetty	Dr. Antony P J	Dr.Shantharama Rai C
IOT Club & CSI Coordinator	**Vice-Principal**	**Principal**