

**Report on Offline Workshop on Arduino Programming
and IOT using Node MCU ESP8266 Held on 26.10.2021 –
27.10.2021**

Date of Event	26.10.2021 – 27.10.2021
Name and Type of Event	Workshop on Arduino Programming and IOT using Node MCU ESP8266
Conducted by	Mr. Akash Kumar Bhagat, Mr. Arvind Kumar Pandey
No. Of Participant	201

Workshop on Arduino Programming and IOT using Node MCU ESP8266

There was a workshop conducted by the Department of Computer Science & IT. The Workshop was coordinated by Asst.Prof Mr. Akash Kumar Bhagat & Mr Arvind Pandey .The brief of the event is as follows.

On dated 26th October& 27th October 2021, Two days offline Workshop on Arduino Programming and IOT using Node MCU ESP8266” was conducted. It was based on the study of present scenario of Internet of Things, various outcomes of Internet of Things and its importance to build the career of our students and our society. For this event the Resource Person was Mr. Akash Kumar Bhagat (Asst Professor, ARKA JAIN University, Jamshedpur). Mr. Akash Kumar Bhagat has over 8 years of work experience in teaching BCA, MCA & B.Tech student’s different Engineering Colleges of Jain Group of Institutions. He is also having experience in Training & Placement of UG & PG students of various engineering Colleges.

The Workshop was started by 12PM and continued till 3:30PM on both days 26.10.2021 and 27.10.2021. On the 1st day of Workshop Introduction to IOT, Various application areas of IOT, Societal benefits of using IOT were discussed by Resource Person Mr. Akash Kumar Bhagat. Students were also familiarized with the Installation of Arduino IDE and Arduino Programming. In the 2nd day i.e. 27.10.2021 of Workshop Students were introduced to Node MCU Development Board and Programming was done on Arduino IDE using ESP 8266 module. In this workshop more than 200 participants joined. They were from PG & UG background.

It was a very successful workshop appreciated by the participants. The participants got various inputs regarding the importance of Arduino Programming and IOT using Node MCU ESP8266.On the last day of Workshop student’s feedback was also collected for further improvements of this kind of workshop.

Poster of the Event:

JGI
ARKA JAIN
University
Jharkhand (Jamshedpur)

Dept of Cs&IT
Presents

◆————◆

"Two days
workshop on
Arduino
Programming and
IOT using Node
MCU - ESP 8266"

Speaker & Coordinator
Mr. Akash Kumar Bhagat

Convenor
Mr. Arvind Kumar Pandey

Date - 26.10.2021 & 27.10.2021

Time - 10:00AM

Venue: B Block Computer Lab

Link <https://forms.gle/tLTtjPqkucy5rQgR6>

Photos of the Event:



Registration Link of the Workshop:

<https://forms.gle/84vDQmetufvBKspW8>

Workshop Brochure



CONVENOR:

Mr. Arvind Kumar Pandey
HOD
Dept. Of CS & IT
AJU, Jharkhand

COORDINATOR AND SPEAKER:



Mr. Akash Kumar Bhagat
Asst. Prof.
Dept of CS & IT
AJU, Jharkhand

ABOUT ARKA JAIN UNIVERSITY

In Feb'2017, ARKA JAIN University was established by the JHARKHAND State Legislature under "The ARKA JAIN University Act". The University is a government-recognized university with the right to confer degrees as per the Sections 2(f) and 22(1) of the UGC Act, 1956. The sprawling campus of the University is situated at Gamharia, Dist: Seraikela – Kharsawan, 13 km from steel city Jamshedpur. The University offers multi-disciplinary programs, all of which are designed to be industry-relevant ARKA JAIN University, Jharkhand is on its way to become one of the top universities in eastern India. The university, which is spread across 25 acres, has left no stone unturned in providing state-of-the-art facilities in various sectors including education, sports, entrepreneurship, research, and its other ventures.



TWO DAYS OFFLINE WORKSHOP ON

ARDUINO PROGRAMMING AND INTERNET OF THINGS USING NODE MCU-ESP8266

26TH TO 27TH OCT 2021

TIME: 10am
Venue- Computer lab

Organized by

DEPARTMENT OF COMPUTER SCIENCE & IT



ARKA JAIN UNIVERSITY
JHARKHAND

Estd under jharkhand state private university Act



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REGISTRATION FORM

Please register through link below

<https://forms.gle/tLTtjPqkucy5rQgR6>

Name:
Designation:
Institution:
Address for communication:
Tel/Mobile:
E-mail:

Signature of the Participant

Signature of the Sponsoring authority

The following topics will be covered:

- WHAT IS IOT?
- HOW DID WE GET THERE?
- IOT EXAMPLE
- IOT DEVICES
- IOT DEVICES VS. COMPUTERS
- TRENDS IN THE ADOPTION OF IOT
- IOT IS POWERFUL AND PERSVASIVE
- SOCIETAL BENEFITS OF IOT
- IOT IN THE FIELD OF INDUSTRY (LIVE PROJECT)
- RISKS, PRIVACY, AND SECURITY

C PROGRAMMING

- SETTING UP YOUR ENVIRONMENT
- HELLO WORLD
- VARIABLES
- BASIC OPERATORS
- CONDITIONALS
- LOOPS
- FUNCTIONS
- GLOBAL VARIABLES



IOT USING ARDUINO

- ESP FAMILY (ESP8266)
- NODE MCU
- DATA COMMUNICATION BETWEEN DIFFERENT - NODES USING ESP8266 AND NODE MCU
- OTHER WIRELESS DEVICE INTRODUCTION (BT, GSM, GPRS & XBEE)

ARDUINO PLATFORM

- ARDUINO PLATFORM
- ARDUINO BOARD
- SENSORS (LDR, UL TRASONIC)
- ARDUINO SCHEMATICS
- ARDUINO IDE
- COMPILING CODE
- ARDUINO SHIELDS AND LIBRARIES
- ARDUINO BASIC SETUP
- BASIC PROGRAM
- MOTOR, DRIVER & RELAY

PROJECT

- CALCULATOR PROGRAM AND OTHER BASIC PROGRAM
- PROJECT: SIMULATION BASED DIFFERENT PROJECTS
- HOME AUTOMATION USING ESP8266
- WI-FI CONTROLLED CAR USING NODE MCU