

# Masterclass:

# INTERNET OF THINGS WITH CLOUD COMPUTING

## INTRODUCTION

This Masterclass imparts knowledge on how to the construct IoT systems and use cloud services for processing and storage of the data produced by the IoT devices. Emphasis will be placed on the architecture and design of IoT systems, the different technologies sensors governing system implementation and the migration data to the cloud for processing. This Masterclass aims to develop knowledge and a critical understanding of the underlying principles of cloud computing and IoT systems, and the commercial and business implications of technical advances in this area. Students will gain practical experience in the development of cloud-based IoT systems and exposure to appropriate hardware and software platforms that underpin such development.

## COURSE-LEARNING OUTCOMES (CLO)

- Acquire the knowledge of IoT with cloud architecture
- Determine the right sensors and communication protocols to monitor data remotely
- Develop real-life IoT-based projects

## WHO CAN ATTEND THIS MASTERCLASS?

This is open to all diploma students.

## CERTIFICATION

Certificate of Completion in Masterclass Internet of Things with Cloud Computing.

## COURSE OUTLINE

1. Introduction to Cloud Computing
2. ESP 32 Web Server
3. IoT Controlled LED
4. ESP 32 Web Server
5. ESP 32 and Thing Speak
6. ESP 32 and DHT11 Temperature Sensor
7. ESP 32 Email Notifications