

# FASTRACK INDUSTRIAL BASED IOT DEVELOPER ROUTE COURSE

## INTRODUCTION

This **modular course** is designed and developed based on the current needs of the **Internet of Things (IoT) focus area**. The development of this modular course has also taken into account the existing expertise and resources in the Faculty of Computing as well as from the views of the **industry**. Offering modular courses as one of the strategies to improve students' **technical skills** in IoT technology.

## OBJECTIVES

To produce graduates with essentials technical skills in IoT, by :

1. Providing exposure to students related to the **backend to frontend technology** in the IoT environment.
2. Improve the ability of students to find solutions related to **industry problems** using IoT technology.
3. Increase the readiness of students to venture into the field of IoT through the use of **real-world concepts** adopted in the industry.

## WHAT'S IN THIS IOT MODULAR COURSE?

### Three (3) elective courses or module:

Module 1 BCN3343 Integrated System and Sensor Application

Module 2 BC13313 IoT Data Integration

Module 3 BC13323 IoT Application Development

### One (1) Final Project or module:

Module 4 BCC3036 Capstone Project

## **01** Is this modular course open every semester?

This modular course will be offered every semester. However, the minimum enrollment to open this course is 30 students.

## **02** Do we need to buy IoT devices?

No. You will be equipped with a basic IoT board (Arduino / Raspberry Pi), ThingsBoard software, electronic components (jumper, LED, switch, relay), basic sensors (temperature and humidity) and motors.

## **03** What happens if the COVID 19 is still happening, do we need to stay at UMP to do the lab?

These IoT Module Courses involve a lot of specific software and hardware along with the courses, so face to face methods for the teaching and learning activities are required to ensure the expected experiences are able to be delivered to the students. Hence, if the pandemic of covid-19 is still as it is now, students who are registered for these courses are required to stay in the campus and follow this program in face to face methods. It is not possible to execute this program in full online mode.

## **04** If we take this course in a normal semester, can we take any other courses including core program courses?

No. You cannot take any other subject during these courses.

## **05** If I am taking PSM 1 this semester, can I drop it then change to this course?

For this semester (Semester II, Session 2020/2021), you are not allowed to drop PSM 1 since the drop date is already passed. You may get the advice before registering courses in this program from your Academic Advisor.

## **06** Is this course only for students in sem 6 and sem 7?

The complete package (Option 1) is for students in sem 6 and 7 only.

## 07 How can I register for this modular course?

Registration will be done by faculty. Any student who interest in joining this course need to fill in this form.

NEW

[https://docs.google.com/forms/d/1q-iOx5LkpqS7RbyxvdBXR3j5-\\_96W7blz7g6\\_rBYvOs](https://docs.google.com/forms/d/1q-iOx5LkpqS7RbyxvdBXR3j5-_96W7blz7g6_rBYvOs)

## 08 Did we need to take PSM 1 or PSM 2 if we're going to enroll into these courses?

No. Capstone project in Module 4 has covered/equivalent your PSM 1 and PSM 2, which is covered 6 credits.

## 09 Can we take only the Modul 4 Capstone Project?

No. Prerequisite for Capstone project is to complete and pass Module 1, 2 and 3.

