

**Course Duration: 8 hours**

**Course Synopsis**

With more application of Internet of Things, there is an increased in interest with regards to how IoT is applied and how it can be utilized to improve the quality of life as well as make work more efficient.

**Course Objectives**

Participants of this course will be introduced to the IoT technology. Learners will understand the concept of IoT as well as learn about the different components of the technology. During the workshop, learners will also understand the trends of IoT and learn about the ethical considerations of implementing IoT as well as awareness of the security risks.

**Target Audience**

Professionals, Managers, Executives, Technicians

**Assumed Skills (Minimum Entry Requirement)**

Learners must possess WPL level 5 and WPN level 5.

Learners must be able to operate computers at intermediate level.

**Instructional Method**

- Interactive presentation and sharing
- Videos
- Group Discussion

**Course Content**

**1. Understand what is Internet of Things (IoT)**

- Define the term Internet of Things
- Understand the common structure of an IoT system
- Identify physical components of an IoT system
- Understand the difference between embedded system and IoT
- Identify processing requirements in an IoT system

- Recognise the origins and development of IoT

**2. Identify the common usage of IoT in consumer and commercial applications**

- Recognise common examples of consumer and commercial IoT applications.
- Recognise common examples of Industrial IoT applications
- Recognise common examples of infrastructural IoT applications.

**3. Appreciate the trends of IoT and its evolution**

- Recognise physical trends in the evolution of IoT like miniaturisation, ubiquity and scale.
- Recognise the increasing role of governance in the design of IoT systems.

**4. Understand the key ethical considerations for implementing IoT**

- Understand key ethical considerations that must inform adoption of IoT systems like: decision making, privacy.
- Understand security risks associated with adopting IoT systems.
- Be aware of common interoperability challenges that may impact adoption of IoT systems.
- Consider the possible structure of an IoT system that could be implemented in each scenario.