

Certified Internet of Things (IoT) Practitioner (Exam ITP-110) 3 Days

1. PROGRAMME OVERVIEW

The **Internet of Things (IoT)** is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

But putting IoT systems into place can be a complicated proposition, and fraught with hazards.

IT professionals often have little or no experience working with embedded systems, sensor networks, actuators, real-time systems, and other components that are common to IoT, so this course provides a foundation for understanding how these components work with other systems that IT professionals typically have more experience working with—such as networks, cloud computing, and applications running on servers, desktop computers, and mobile devices

2. PREREQUISITES

Delegate needs to be an experienced computer user who is comfortable setting up and configuring computers and electronic devices.

Delegates can obtain this level of skills and knowledge by taking either of the following course offerings available;

IT Fundamentals® (Exam FC0-U51)

IT Fundamentals® (Exam FC0-U61)

3. PROGRAMME OUTLINES

Module 1: Planning an IoT Implementation

Select a General Architecture for an IoT Project
Identify Benefits and Challenges of IoT

Module 2: Constructing and Programming an IoT Device

Select and Configure a Processing Unit
Select a Microcontroller Power Source
Use a Software Development Kit to Program an IoT Device

Module 3: Communicating with an IoT Device

Communicate Using Wired Connections
Communicate Using Wireless Connections
Communicate Using Internet Protocols

Module 4: Processing IoT Data

Process IoT Device Input and Output
Process Data in the Cloud
Provide M2M Communication

Module 5: Managing Risks on IoT Projects

Identify IoT Security and Privacy Risks
Manage IoT Security and Privacy Risks
Manage IoT Safety Risks

Module 6: Undertaking an IoT Project

Identify Real World Applications for IoT
Follow the IoT Development Lifecycle

4. PROGRAMME METHODOLOGY

The programme is instructor led by an industry specialist. The programme is practical in nature and delegates will learn by given scenarios/case studies.