



Course Outline

CO:Internet Of Things Developer

Duration: 12 Months



SDP080126141758





Programme Title

Occupational Certificate:
Internet Of Things Developoer

SAQA ID

119262

NQF Level

4

Minimum Credits

141

Entry Requirements

Grade11



COURSE OVERVIEW

The purpose of this qualification is to prepare a learner to function as an Internet-of-Things Developer.

An Internet-of-Things Developer coordinates all components of an Internet-of-Things (IoT) solution that includes sensors, devices, actuators, networks, and other infrastructure to aggregate and disseminate data, store the data on the cloud and make it available to the data scientist for decision making, thus being responsible for the full cycle from data collection to data delivery.

COURSE OUTCOMES

- Deploy an IoT solution by connecting sensors, devices, and things to a wired or wireless network.
- Collect, aggregate, disseminate and store large amounts of unstructured and structured data generated by these devices.
- Integrate collected data with the existing systems such as enterprise resource planning (ERP) of an organisation for consumption and use.

It's All Possible



MODULES

Knowledge Modules

Module ID	Title
KM-01	Introduction to Internet of Things
KM-02	Computers, Devices and Computing Systems
KM-03	Building Blocks of Internet of Things
KM-04	Internet of Things Design and Development Considerations
KM-05	Data, Databases and Visualisation
KM-06	4IR and Future Skills
KM-07	Design Thinking Principles for Innovation
KM-08	Basic Electronic Principles





MODULES

Practical Skills Modules

Module ID	Title
PM-01	Apply Basic Scriptwriting for Internet of Things Toolsets
PM-02	Access, Analyse and Visualise Structured Data using Spreadsheets
PM-03	Implement the Internet of Things Solution Infrastructure and Deploy Edge Devices
PM-04	Provision and Manage Devices
PM-05	Process and Manage Data in an Internet of Things Solution
PM-06	Monitor, Troubleshoot and Optimise Internet of Things Solutions
PM-07	Implement Security Measures for Internet of Things Solutions
PM-08	Participate in a Design Thinking for Innovation Workshop
PM-09	Function Ethically and Effectively in the Workplace





MODULES

Workplace Modules

Module ID	Title
WM-01	Internet of Things Solution Deployment Processes
WM-02	Data Collecting, Aggregating, Disseminating and Storing Processes
WM-03	Data Integration Systems and Processes



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