

## **Microsoft Cloud Workshop: Internet of Things (MS-40505)**

**Modality:** Virtual Classroom

**Duration:** 1 Day

**SATV Value:** 1

### **About this course:**

Introduce an end-to-end system that simulates high-speed data from smart meters and is evaluated in Azure. Build a lambda model, filter a subset of tracking data for real-time viewing on the hot path, and store all the data for the cold path in long-term storage.

The Solution Developers having MS Azure expertise can earn an approximate salary of \$104,300 per annum.

### **Course Objective:**

Candidates will be able to more effectively implement user registration with the Internet of things Platform database and simulate hot data with Power BI. Additionally:

- Process and Capture cold and hot data with Spark, utilizing HDInsight and Stream Analytics
- Execute a simulator transmitting smart meter telemetry
- Using Power BI to visualize hot data

### **Audience:**

This online training program is designed for IT professionals and Cloud Architects who have solutions design and infrastructure architecture experience in cloud technology and want to know more about Azure and its services as defined in the ' At Course Completion ' and ' About this Course ' areas.

Anyone taking this training should also be trained in other cloud technologies other than MS, fulfill the preconditions of the program, and want to cross-train on Azure.

### **Prerequisite:**

- Training content presumes 300-level architectural experience in developing solutions design and infrastructure.

### **Suggested Prerequisite:**

- Azure-Fundamentals

### **Course Outline:**

## **Module 1: Whiteboard Design Session - Internet of Things**

### **Lessons**

- Review the customer case study
- Call to action: Design a proof of concept solution
- Call to action: Present the solution

## **Module 2: Hackathon - Internet of Things**

### **Lessons**

- Before the hackathon
- Environment setup
- IoT Hub provisioning
- Completing the Smart Meter Simulator
- Hot path data processing with Stream Analytics
- Cold path data processing with HDInsight Spark
- Reporting device outages with IoT Hub Operations Monitoring
- Cleanup