



## 40505: Microsoft Cloud Workshop: Internet of Things

Microsoft - Cloud

- **Nível:** Avançado
  - **Duração:** 6h
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### Sobre o curso

Implement an end-to-end solution simulating high velocity data emitted from smart meters and analyzed in Azure. Create a lambda architecture, filtering a subset of the telemetry data for real-time visualization on the hot path, and storing all of the data in long-term storage for the cold path.

Students will be better able to implement device registration with the IoT Hub registry and visualize hot data with Power BI. In addition,

- Implement a simulator sending telemetry from smart meters
  - Capture and process both hot and cold data using Stream Analytics and HDInsight with Spark
  - Visualize hot data with Power BI
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### Destinatários

Cloud Architects and IT professionals who have architectural expertise of infrastructure and solutions design in cloud technologies and want to learn more about Azure and Azure services. Those attending this workshop should also be experienced in other non-Microsoft cloud technologies, meet the course prerequisites, and want to cross-train on Azure.

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### Pré-requisitos

Workshop content presumes 300-level of architectural expertise of infrastructure and solutions design.

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### Programa

- Whiteboard Design Session – Internet of Things

- Hackathon – Internet of Things

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

- 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**

- 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