# 40531G: Microsoft Cloud Workshop: IoT and the Smart City

### **Course Outline**

## Module 1: Whiteboard Design Session - IoT and the Smart City

### Lessons

- Review the customer case study
- Design a proof of concept solution
- Present the solution

## Module 2: Hands-on Lab - IoT and the Smart City

#### Lessons

- Set up IoT Remote Monitoring solution environment
- Provision additional Azure services
- Create bus and traffic light simulated devices, and add alerts and filters
- Create IoT Edge device and custom modules
- Create an Azure Function to add critical engine alerts to the Service Bus Queue
- Run a console app to view critical engine alerts from the Service Bus Queue
- Create an Azure Function to ingest critical engine alerts and store them in Cosmos DB
- View critical engine alerts in the IoT Remote Monitoring web interface
- Add a tag to IoT Edge Device Twin
- View all data in Azure Time Series Insights