

Microsoft Cloud Workshop: Big Data & Visualization (MS-40502)

Modality: Virtual Classroom

Duration: 1 Day

SATV Value: 1

SUBSCRIPTION: Master, Master Plus

About this course:

Complete a web app using Machine Learning to predict travel delays given flight delay data and weather conditions. Plan the bulk data import operation, followed by preparation, such as cleaning and manipulating the data for testing, and training your Machine Learning model.

The average salary for a Solutions Developer with Microsoft Azure skills is **\$620,244** per year.

Course Objective:

Students will be better able to build a complete Azure Machine Learning (ML) model for predicting if an upcoming flight will experience delays. Students will also learn how to:

- Integrate the Azure ML web service in a Web App for both one at a time and batch predictions
- Analyze batch data with SQL Data Warehouse
- Visualize batch predictions on a map using Power BI

Audience:

This workshop is intended for 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 as described in the 'About this Course' and 'At Course Completion' areas. 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.

Prerequisite:

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

Suggested Prerequisite:

[Azure Fundamentals](#)

Career Path:

[Big Data...](#)

Course Outline:

Module 1: Whiteboard Design Session - Big Data & Visualization

Lessons

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

Module 2: Hands-on lab unguided - Big Data & Visualization

?Lessons

- Before the hands-on lab
- Build a machine learning model
- Set up Azure Data Factory
- Develop data factory pipeline for data movement
- Operationalize ML scoring with Azure ML and Data Factory
- Summarize data using HDInsight Spark
- Visualizing in Power BI Desktop
- Deploy intelligent web app
- After the hands-on lab