

# DP-100T01: Designing and Implementing a Data Science Solution on Azure

## Course Outline

### Module 1: Doing Data Science on Azure

The student will learn about the data science process and the role of the data scientist. This is then applied to understand how Azure services can support and augment the data science process.

#### Lessons

- Introduce the Data Science Process
- Overview of Azure Data Science Options
- Introduce Azure Notebooks

### Module 2: Doing Data Science with Azure Machine Learning service

The student will learn how to use Azure Machine Learning service to automate the data science process end to end.

#### Lessons

- Introduce Azure Machine Learning (AML) service
- Register and deploy ML models with AML service

### Module 3: Automate Machine Learning with Azure Machine Learning service

In this module, the student will learn about the machine learning pipeline and how the Azure Machine Learning service's AutoML and HyperDrive can automate some of the laborious parts of it.

#### Lessons

- Automate Machine Learning Model Selection
- Automate Hyperparameter Tuning with HyperDrive

### Module 4: Manage and Monitor Machine Learning Models with the Azure Machine Learning service

In this module, the student will learn how to automatically manage and monitor machine learning models in the Azure Machine Learning service.

#### Lessons

- Manage and Monitor Machine Learning Models

