

COURSE OVERVIEW

Course Name:
(DP-100) Designing and Implementing a Data Science Solution on Azure

COURSE DURATION: 3 Days

Gauteng:

3rd Floor, 34 Whitely Road
Melrose Arch
Johannesburg
2196

Gauteng:

192 on Bram
192 Bram Fischer Drive
Ferndale, Randburg
Johannesburg
2160

Cape Town:

3rd Floor, Thomas Pattullo Building
19 Jan Smuts St
Cape Town
8000

Durban:

9 Mountview Close
Broadlands
Mount Edgecombe
Durban
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INTRODUCTION

Learn how to operate machine learning solutions at cloud scale using Azure Machine Learning. This course teaches you to leverage your existing knowledge of Python and machine learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure.

DELIVERY METHOD

Our courses have flexible delivery options:

- In-person classroom training at the Impactful training facilities
 - Johannesburg, Durban, Cape Town
- Virtual instructor-led training
- Nationally: on-site at the client



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Intended Audience

This course is designed for data scientists with existing knowledge of Python and machine learning frameworks like Scikit-Learn, PyTorch, and Tensorflow, who want to build and operate machine learning solutions in the cloud.

Prerequisites

Successful Azure Data Scientists start this role with a fundamental knowledge of cloud computing concepts, and experience in general data science and machine learning tools and techniques.

Specifically:

- Creating cloud resources in Microsoft Azure.
- Using Python to explore and visualize data.
- Training and validating machine learning models using common frameworks like Scikit-Learn, PyTorch, and TensorFlow.

Course Overview

The various objectives and chapters that will be covered include:

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