

Azure Data Scientist Learning Pathway

www.aka.ms/pathways

Getting Started

Zero to hero in 4 weeks with Machine Learning

A guide to achieving Machine Learning expertise on Azure

DOWNLOAD



- [Foundations of data science for machine learning](#)
- [Understand data science for machine learning](#)
- [Create machine learning models](#)
- [Introduction to Python](#)
- [Take your first steps with Python](#)
- [Learn Python basics with Wonder Woman](#)
- [Azure Machine Learning helps customers stay ahead of challenges](#)
- [Get started with artificial intelligence on Azure](#)
- [Microsoft Data Science Azure Blog](#)
- [Explore machine learning through video](#)

Microsoft Beginner Tutorials

- [1: The 5 questions data science answers](#)
- [2: Is your data ready for data science](#)
- [3: Ask a question you can answer with data](#)
- [4: Predict an answer with a simple model](#)
- [5: Copy other people's work to do data science](#)
- [Create your first ML experiment](#)
- [Get Started with Auto ML](#)
- [Use Designer for drag-and-drop ML](#)

Microsoft Learn

Azure Machine Learning workspaces

- [What is an Azure Machine Learning workspace?](#)
- [Manage Azure Machine Learning workspaces](#)
- [Azure Machine Learning tools and interfaces](#)
- [What is Azure Machine Learning studio?](#)
- [Secure data access in Azure Machine Learning](#)
- [Connect to storage services on Azure](#)
- [Create Azure Machine Learning datasets](#)
- [Compute targets in Azure Machine Learning](#)

Experiments/Models

- [What is Azure Machine Learning designer?](#)
- [Deploy a machine learning model with the designer](#)
- [Train models with Azure Machine Learning](#)
- [Tracking capabilities in the ML SDK](#)
- [Monitor and view ML run logs and metrics](#)
- [Train and track ML models with MLflow and Azure Machine Learning](#)
- [Introduction to pipelines](#)
- [Pass data between pipeline steps](#)
- [Moving data into and between ML pipeline steps \(Python\)](#)
- [Reuse pipeline steps](#)

Optimise & Manage

- [What is Automated Machine Learning?](#)
- [Create, review, and deploy automated machine learning models with Azure Machine Learning](#)
- [Tuning parameters](#)
- [Overview: Sampling | Search Spaces | Termination](#)
- [Model interpretability](#)
- [Permutation Feature Importance](#)
- [Assess fairness in machine learning models](#)

Optimise & Manage

- [Mitigate unfairness in machine learning models](#)
- [Monitor Azure Machine Learning](#)
- [Detect data drift](#)

Deploy & Consume

- [Compute targets for inference](#)
- [Enterprise security and governance for Azure Machine Learning](#)
- [Build an Azure Machine Learning pipeline for batch scoring](#)
- [Define an inference configuration](#)
- [Consume an Azure Machine Learning model deployed as a web service](#)
- [Deploy a machine learning model with the designer](#)

Advanced Tutorials

- [Train and deploy ML models with Auto ML](#)
- [MLOps examples \(GitHub\)](#)
- [Designer for Prediction](#)

Microsoft Shows

- [Dev Intro to Data Science \(28 video series\)](#)
- [The AI Show](#)
- [Even More Python for Beginners – Data Tools](#)

Microsoft Fabric

- [Explore data for data science with notebooks in Microsoft Fabric](#)
- [Preprocess data with Data Wrangler in Microsoft Fabric](#)

Copilot for Data Science

Role based Certification

DP-100 Azure Data Scientist

Skills Measured

- Design and prepare a machine learning solution (20–25%)
- Explore data and train models (35–40%)
- Prepare a model for deployment (20–25%)
- Deploy and retrain a model (10–15%)

Self Study:

- [Explore the Azure Machine Learning workspace](#)
- [Work with data in Azure Machine Learning](#)
- [Automate machine learning model selection with Azure Machine Learning](#)
- [Train models with scripts in Azure Machine Learning](#)
- [Optimize model training with pipelines in Azure Machine Learning](#)
- [Deploy and consume models with Azure Machine Learning](#)

Course Page

Exam Page

Practice Assessment

Exam Study Guide

Azure ML Documentation

Video on Demand (soon)

30 days to Learn it Challenge

Design and implement a data science solution on Azure. In almost 27 hours, you'll learn how to build and operationalize machine learning models using Microsoft Azure in a secure, scalable, and responsible way.

Azure Data Scientist