DP-3014 Build machine learning solutions using Azure Databricks

Category: AI, Data & Analytics | **Vendor:** Microsoft Technical

Duration: 8.00 hours (1 days) **6.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	Microsoft Applied Skills: Build machine learning solutions using Azure Databricks
Related Exam:	DP-3014

Course Overview

Azure Databricks is a fully managed, cloud-based data analytics platform, which empowers developers to accelerate AI and innovation by simplifying the process of building enterprise-grade data applications. Built as a joint effort by Microsoft and the team that started Apache Spark, Azure Databricks provides data science, engineering, and analytical teams with a single platform for big data processing and machine learning. In this course, you'll learn how to use Azure Databricks to train and deploy machine learning models.

About This Course

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Who Should Attend

This course is designed for aspiring data scientists and AI engineers who need to train and manage machine learning models by using Azure Databricks.

Prerequisites & Entry Requirements

General Prerequisites:

This learning path assumes that you have experience of using Python to explore data and train machine learning models with common open source frameworks, like Scikit-Learn, PyTorch, and TensorFlow.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and Tuning ML ModelsDeploying ML ModelsCollaborative ML DevelopmentBest Practices and Performance Optimization, Course ObjectivesUnderstanding Azure Databricks for Machine LearningSetting Up Azure DatabricksData Processing and ExplorationMachine Learning with DatabricksBuilding and

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Detailed Course Outline

1 - Explore Azure Databricks

- Get started with Azure Databricks
- Identify Azure Databricks workloads
- Understand key concepts
- Data governance using Unity Catalog and Microsoft Purview
- Module assessment

2 - Use Apache Spark in Azure Databricks

- Get to know Spark
- Create a Spark cluster
- Use Spark in notebooks
- Use Spark to work with data files
- Visualize data
- Module assessment

3 - Train a machine learning model in Azure Databricks

- Understand principles of machine learning
- Machine learning in Azure Databricks
- Prepare data for machine learning
- Train a machine learning model
- Evaluate a machine learning model
- Module assessment

4 - Use MLflow in Azure Databricks

- Capabilities of MLflow
- Run experiments with MLflow
- Register and serve models with MLflow
- Module assessment

5 - Tune hyperparameters in Azure Databricks

- Optimize hyperparameters with Optuna
- Review trials
- Scale hyperparameter optimization
- Module assessment

6 - Use AutoML in Azure Databricks

- What is AutoML?
- Use AutoML in the Azure Databricks user interface
- Use code to run an AutoML experiment
- Module assessment

7 - Train deep learning models in Azure Databricks

- Understand deep learning concepts
- Train models with PyTorch
- Distribute PyTorch training with TorchDistributor
- Module assessment

8 - Manage machine learning in production with Azure Databricks

- Automate your data transformations
- Explore model development
- Explore model deployment strategies
- Explore model versioning and lifecycle management
- Module assessment

, Explore Azure Databricks, Use Apache Spark in Azure Databricks, Train a machine learning model in Azure Databricks, Use MLflow in Azure Databricks, Tune hyperparameters in Azure Databricks, Use AutoML in Azure Databricks, Train deep learning models in Azure Databricks

□□ Certification Path

Microsoft Applied Skills: Build machine learning solutions using Azure Databricks

Exam: DP-3014

Upcoming Schedule

Available training dates for DP-3014 Build machine learning solutions using Azure Databricks:

Start Date	End Date	Location	Delivery	Price
24 Nov 2026	24 Nov 2026	Online	Virtual	€695.00

Frequently Asked Questions

Q: What delivery options are available for DP-3014 Build machine learning solutions using Azure Databricks?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The DP-3014 Build machine learning solutions using Azure Databricks course helps prepare you for the Microsoft Applied Skills: Build machine learning solutions using Azure Databricks certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the DP-3014 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 1-day DP-3014 Build machine learning solutions using Azure Databricks course provides up to 6.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the DP-3014 Build machine learning solutions using Azure Databricks training?

The training takes place over 1 day(s), with each day lasting approximately 8.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for DP-3014 Build machine learning solutions using Azure Databricks?

Yes, we provide corporate training, dedicated training, and closed classes for DP-3014 Build machine learning solutions using Azure Databricks. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: DP-3014: Build machine learning solutions using Azure Databricks, Microsoft, vILT, DP-3014

Q: Why choose Nexus Human for DP-3014 Build machine learning solutions using Azure Databricks?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your DP-3014 Build machine learning solutions using Azure Databricks training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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