DP-3011 Implement a Data Analytics Solution with 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: Implement a data analytics solution with Azure Databricks
Related Exam:	DP-3011

Course Overview

This course explores how to use Databricks and Apache Spark on Azure to take data projects from exploration to production. You'll learn how to ingest, transform, and analyze large-scale datasets with Spark DataFrames, Spark SQL, and PySpark, while also building confidence in managing distributed data processing. Along the way, you'll get hands-on with the Databricks workspace—navigating clusters and creating and optimizing Delta tables. You'll also dive into data engineering practices, including designing ETL pipelines, handling schema evolution, and enforcing data quality. The course then moves into orchestration, showing you how to automate and manage workloads with Lakeflow Jobs and pipelines. To round things out, you'll explore governance and security capabilities such as Unity Catalog and Purview integration, ensuring you can work with data in a secure, well-managed, and production-ready environment.

About This Course

This course explores how to use Databricks and Apache Spark on Azure to take data projects from exploration to production. You'll learn how to ingest, transform, and analyze large-scale datasets with Spark DataFrames, Spark SQL, and PySpark, while also building confidence in managing distributed data processing. Along the way, you'll get hands-on with the Databricks workspace—navigating clusters and creating and optimizing Delta tables. You'll also dive into data engineering practices, including designing ETL pipelines, handling schema evolution, and enforcing data quality. The course then moves into orchestration, showing you how to automate and manage workloads with Lakeflow Jobs and pipelines. To round things out, you'll explore governance and security capabilities such as Unity Catalog and Purview integration, ensuring you can work with data in a secure, well-managed, and production-ready environment.

Who Should Attend

Before taking this course, learners should already be comfortable with the fundamentals of Python and SQL. This includes being able to write simple Python scripts and work with common data structures, as well as writing SQL queries to filter, join, and aggregate data. A basic understanding of common file formats such as CSV, JSON, or Parquet will also help when working with datasets. In addition, familiarity with the Azure portal and core services like Azure Storage is important, along with a general awareness of data concepts such as batch versus streaming processing and structured versus unstructured data. While not mandatory, prior exposure to big data frameworks like Spark, and experience working with Jupyter notebooks, can make the transition to Databricks smoother.

Prerequisites & Entry Requirements

General Prerequisites:

- Familiarity with SQL and basic Python
- Working knowledge of Azure fundamentals
- Basic understanding of data engineering or analytics workflows

Learning Outcomes

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

Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance, Course ObjectivesIntroduction to Azure DatabricksSetting Up Azure Databricks WorkspacesData Ingestion and ProcessingDeveloping Data PipelinesData Exploration and AnalysisMachine Learning and AI IntegrationOptimizing and Tuning PerformanceSecurity and Compliance

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 - Perform data analysis with Azure Databricks

- Ingest data with Azure Databricks
- Data exploration tools in Azure Databricks
- Data analysis using DataFrame APIs
- Module assessment

3 - 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

4 - Manage data with Delta Lake

- Get started with Delta Lake
- Create Delta tables
- Implement schema enforcement
- Data versioning and time travel in Delta Lake
- Data integrity with Delta Lake
- Module assessment

5 - Build Lakeflow Declarative Pipelines

- Explore Lakeflow Declarative Pipelines
- Data ingestion and integration
- Real-time processing
- Module assessment

6 - Deploy workloads with Lakeflow Jobs

- What are Lakeflow Jobs?
- Understand key components of Lakeflow Jobs
- Explore the benefits of Lakeflow Jobs
- Deploy workloads using Lakeflow Jobs
- Module assessment

, Explore Azure Databricks, Use Apache Spark in Azure Databricks, Use Delta Lake in Azure Databricks, Use SQL Warehouses in Azure Databricks, Run Azure Databricks Notebooks with Azure Data Factory

Certification Path

Microsoft Applied Skills: Implement a data analytics solution with Azure Databricks

Exam: DP-3011

Upcoming Schedule

Available training dates for DP-3011 Implement a Data Analytics Solution with Azure Databricks:

Start Date	End Date	Location	Delivery	Price
17 Dec 2026	17 Dec 2026	Online	Virtual	€695.00

Frequently Asked Questions

Q: What delivery options are available for DP-3011 Implement a Data Analytics Solution with 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-3011 Implement a Data Analytics Solution with Azure Databricks course helps prepare you for the Microsoft Applied Skills: Implement a data analytics solution with Azure Databricks certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the DP-3011 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-3011 Implement a Data Analytics Solution with 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-3011 Implement a Data Analytics Solution with 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-3011 Implement a Data Analytics Solution with Azure Databricks?

Yes, we provide corporate training, dedicated training, and closed classes for DP-3011 Implement a Data Analytics Solution with 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-3011: Implementing a Data Analytics Solution with Azure Databricks, Microsoft, vILT, DP-3011

Q: Why choose Nexus Human for DP-3011 Implement a Data Analytics Solution with 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-3011 Implement a Data Analytics Solution with Azure Databricks training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

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