

# Data AI: Azure Databricks Essentials

## WorkshopPLUS

**Duration:** 3 Days | **Focus Area:** Business/IT Alignment | **Level:** 300

Azure Databricks is an Apache Spark-based analytics platform optimized for the Microsoft Azure cloud services platform. This course will help you understand Azure Databricks, manage Azure Databricks cluster, develop in Azure Databricks and go through use cases like Streaming, Machine Learning and Data Exploration. Use your existing skills in Python, Scala, R, and SQL, as

well as deep learning frameworks. Accelerate big data analytics and artificial intelligence (AI) solutions with Azure Databricks in your organization.

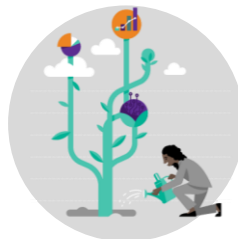
This workshop is targeted at Database Administrators, Developers, Data scientists, Data Engineers, and Business Analysts who can collaborate on shared projects in an interactive workspace.

### OUTCOMES



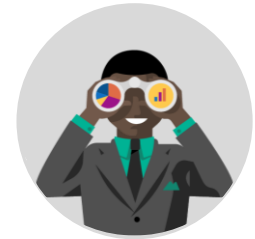
#### Skills

Learn how to use Azure Databricks to transform Big Data architectures and execute powerful Machine Learning models



#### Best Practices

Learn how to manage your workspace and clusters to ensure you get the most performant and cost-effective experience



#### Way Forward

Take what you learn to help your organization rethink and modernize their approach to Big Data and Machine Learning

### PREREQUISITES

Participants that have existing experience performing Python, SQL, and Big Data development will receive the most value from this course.



#### Recommended Qualifications

- Familiarity with Python, SQL, Machine Learning, Big Data on Azure

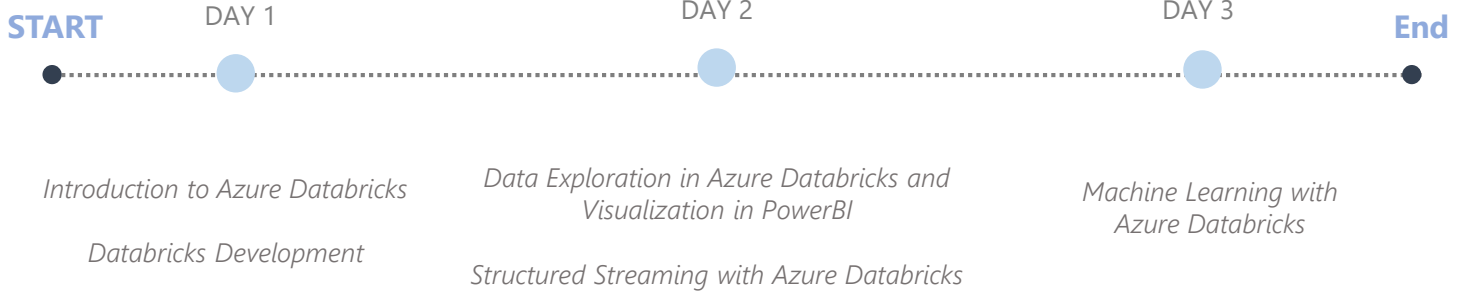


#### Hardware Requirements

- An Intel Core-i5-based PC
- 4 GB RAM
- 128 GB HDD
- Windows 7 SP1 or later
- Office 2013 Professional Plus
- Internet access with at least 1 Mbps bandwidth per student

## AGENDA

Duration: 3 days



## SYLLABUS

### Module 1: Introduction to Azure Databricks

- Introduction to Databricks
- Azure Databricks and Capabilities
- HDInsight Vs Azure Databricks
- Pricing in Azure Databricks
- Azure Databricks Artifacts
- Azure Databricks Clusters
- Azure Databricks Workspace

### Module 2: Databricks Development

- Azure Databricks Notebooks and Jobs
- Working with Azure Databricks CLI
- Working with Storage Options
- Security with Azure Databricks

### Module 3: Data Exploration in Azure Databricks and Visualization in PowerBI

- Data Exploration with Azure Databricks
- Visualization in PowerBI

### Module 4: Structured Streaming with Azure Databricks

- Introduction to Structured Streaming
- Developing Structured Streaming Pipelines
- Advanced Pipeline Development
- Real-Time Structured Streaming Jobs

### Module 5: Machine Learning with Azure Databricks

- Machine Learning (ML) Capabilities
- Azure Databricks ML Use Case
- Preprocessing Data for the Use Case
- Fit and Evaluate Models in ML Use Case
- Model Export in Azure Databricks

**NEXT STEPS:** If you are interested in Azure Databricks for your organization, contact your Microsoft Account Representative.