

TEMARIO: Course DP-900T00-A: Microsoft Azure Data Fundamentals







# Course 1 day

#### Overwiew

In this course, students will learn the fundamentals of database concepts in a cloud environment, get basic skilling in cloud data services, and build their foundational knowledge of cloud data services within Microsoft Azure. Students will identify and describe core data concepts such as relational, non-relational, big data, and analytics, and explore how this technology is implemented with Microsoft Azure. They will explore the roles, tasks, and responsibilities in the world of data. The students will explore relational data offerings, provisioning and deploying relational databases, and querying relational data through cloud data solutions with Microsoft Azure. They will explore non-relational data offerings, provisioning and deploying non-relational databases, and non-relational data stores with Microsoft Azure. Students will explore the processing options available for building data analytics solutions in Azure. They will explore Azure Synapse Analytics, Azure Databricks, and Azure HDInsight. Students will learn what Power BI is, including its building blocks and how they work together.

## . Audience profile

The audience for this course is individuals who want to learn the fundamentals of database concepts in a cloud environment, get basic skilling in cloud data services, and build their foundational knowledge of cloud data services within Microsoft Azure.

Job role: Data Engineer, Database Administrator

Preparation for exam: DP-900

Features: none





### Skills gained

Describe core data concepts in Azure Explain concepts of relational data in Azure Explain concepts of non-relational data in Azure Identify components of a modern data warehouse in Azure

## **Prerequisites**

Prerequisite certification is not required before taking this course. Successful Azure Data Fundamentals students start with some basic awareness of computing and Internet concepts, and an interest in extracting insights from data.

Specifically:

Experience using a web browser, such as Microsoft Edge.

Familiarity with basic data-related concepts, such as working with tables of data in a spreadsheet and visualizing data using charts.

A willingness to learn through hands-on exploration.





### Module 1: Explore core data concepts

Students will learn the fundamentals of database concepts in a cloud environment, get basic skilling in cloud data services, and build their foundational knowledge of cloud data services within Microsoft Azure. Students will identify and describe core data concepts such as relational, non-relational, big data, and analytics, and explore how this technology is implemented with Azure. Students will explore the roles, tasks, and responsibilities in the world of data.

#### Lessons

Explore core data concepts
Explore roles and responsibilities in the world of data

Describe concepts of relational data Explore concepts of non-relational data Explore concepts of data analytics After completing this module, students will be able to:

Show foundational knowledge of cloud data services within Azure Identify and describe core data concepts such as relational, non-relational, big data, and analytics Explain how this technology is implemented with Azure

### Module 2: Explore relational data in Azure

Students will learn the fundamentals of database concepts in a cloud environment, get basic skilling in cloud data services, and build their foundational knowledge of cloud data services within Microsoft Azure. Students will explore relational data offerings, provisioning and deploying relational databases, and querying relational data through cloud data solutions with Azure.

#### Lessons

Explore relational data services in Azure
Explore provisioning and deploying relational
database services in Azure
Query relational data in Azure
After completing this module, students will be able
to:

Describe relational data services on Azure Explain provisioning and deploying relational databases on Azure Query relational data through cloud data solutions in Azure





## Module 3: Explore non-relational data in Azure

Students will learn the fundamentals of database concepts in a cloud environment, get basic skilling in cloud data services, and build their foundational knowledge of cloud data services within Azure. Students will explore non-relational data services, provisioning and deploying non-relational databases, and non-relational data stores with Microsoft Azure.

#### Lessons

Explore non-relational data services in Azure

Explore provisioning and deploying non-relational data services on Azure

Manage non-relational data stores in Azure

After completing this module, students will be able to:

Describe non-relational data services on Azure

Explain provisioning and deploying non-relational databases on Azure

Decribe non-relational data stores on Azure

# Module 4: Explore modern data warehouse analytics in Azure

Students will learn the fundamentals of database concepts in a cloud environment, get basic skilling in cloud data services, and build their foundational knowledge of cloud data services within Azure. Students will explore the processing options available for building data analytics solutions in Azure. Students will explore Azure Synapse Analytics, Azure Databricks, and Azure HDInsight. Students will learn what Power BI is, including its building blocks and how they work together.

#### Lessons

Examine components of a modern data warehouse

Explore data ingestion in Azure

Explore data storage and processing in Azure

Get started building with Power BI

After completing this module, students will be able to:

Describe processing options available for building data analytics solutions in Azure

Describe Azure Synapse Analytics, Azure Databricks, and Azure HDInsight

Explain what Microsoft Power BI is, including its building blocks and how they work together