



Microsoft Azure Data Fundamentals

COURSE OVERVIEW

1 days

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.

TARGET AUDIENCE

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.

COURSE OBJECTIVES

- 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

COURSE CONTENT

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 of Module 1

- 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 module 1 , 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 of Module 2

- Explore relational data offerings in Azure
- Explore provisioning and deploying relational database offerings in Azure
- Query relational data in Azure

After completing module 2, students will be able to:

- Describe relational data offerings 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 offerings, provisioning and deploying non-relational databases, and non-relational data stores with Microsoft Azure.

Lessons of Module 3

- Explore non-relational data offerings in Azure
- Explore provisioning and deploying non-relational data services on Azure
- Manage non-relational data stores in Azure

After completing module 3, students will be able to:

- Describe non-relational data offerings on Azure
- Explain provisioning and deploying non-relational databases on Azure
- Describe 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 of Module 4

- 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 module 4, 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