Microsoft Azure Big Data Analytics Solutions (MS-55224-1)

Modality: Virtual Classroom

Duration: 2 Days

About this course:

This Azure training course is designed to equip the students with the knowledge need to process, store and analyze data for making informed business decisions. Through this Azure course, the student will understand what big data is along with the importance of big data analytics, which will improve the students mathematical and programming skills. Students will learn the most effective method of using essential analytical tools such as R, and Apache Spark.

These Azure classes are held over two days, and led by the instructor for data professionals with a desire to expand their understanding and knowledge regarding development of big data analytic solutions on Microsoft Azure. By enrolling in this two day azure training, students will gain the ability to create solutions for real time and batch data processing. Various methods of utilizing Microsoft Azure are taught and practiced in lab exercises including Azure PowerShell, Azure CLI, and Azure Portal. 55224A-1 labs and exercises are focused on addressing the first two objectives of exam Microsoft 70-475 Designing Big Data batch, interactive & real-time solutions. The following two objectives, namely; cloud analytics solutions and designing machine learning, are covered in MS-55224A-2.

On average, a Big Data Analytic having Microsoft Azure skills is **$135,000/-** annually.

Course Objective:

Once the course is complete, students will gain the capabilities to:

- Develop interactive solutions and big data batch processing (55224A-1)

- Develop real-time processing solutions for big data (55224A-1)

- Develop Machine Learning solutions (55224A-2)

- Operationalize end-to-end cloud analytics solutions (55224A-2)

Audience:

All those individuals having experience in designing big data analytics solution for Azure can enroll in this course.

Prerequisite:

Students should have the following experience before enrolling in this course.

- Querying and processing bulk data

- Historical and real-time data analysis

- Using SQL, visualization, and data analysis tools (e.g. Power BI)

- PowerShell (Note: A basic PowerShell tutorial is part of the course.)

Suggested prerequisites courses:

- Analyzing Data with Microsoft Power BI (MS-20778)

- Introduction to Big Data

Course Outline:

Module 1: Design big data batch processing and interactive solutions (Covered in 55224A-1)

This module explains how to load data into Microsoft Azure for batch processing.

Lessons

- Ingest data for batch processing
- Design for batch processing
- Design interactive queries
- Review

Lab : Design big data batch processing and interactive solutions

- Load data into Microsoft Azure
- Prepare data for batch processing
- Query the data

After completing this module, students will be able to:

- Load data into Microsoft Azure
- Prepare data for batch processing
- Query the data

Module 2: Design big data real-time processing solutions (Covered in 55224A-1)

This module explains how to load data into Microsoft Azure for real-time processing.

Lessons

- Ingest data for real-time processing
- Design for real-time processing
- Design interactive queries for big data
- Review

Lab : Design big data real-time processing solutions

- Load data into Microsoft Azure
- Prepare data for real-time event processing
- Visualize the data

After completing this module, students will be able to:

- Load data into Microsoft Azure
- Prepare data for real-time event processing
- Visualize the data

Module 3: Design Machine Learning solutions (Covered in 55224A-2)

This module explains how to use machine learning models to automate data analysis.

Lessons

- Create workspaces
- Select models and query parameters
- Publish web services
- Review

Lab : Design Machine Learning solutions

- Create workspaces
- Select models and query parameters
- Publish web services

After completing this module, students will be able to:

- Create and share workspaces
- Select models and query parameters
- Access the machine learning models

Module 4: Operationalize end-to-end cloud analytics solutions (Covered in 55224A-2)

This module explains how to Azure Data Factory to centrally manage data from different sources.

Lessons

- Create a data factory
- Manage and Monitor the data factory
- Deploy end-to-end solutions using PowerShell
- Review

Lab : Operationalize end-to-end cloud analytics solutions

- Create a data factory
- Manage and Monitor the data factory
- Deploy end-to-end solutions using PowerShell

After completing this module, students will be able to:

- Create a data factory
- Manage and Monitor the data factory
- Deploy a data factory using PowerShell