

Microsoft Certified: Azure Data Scientist Associate Certification - Complete Guide

In this topic we are going to guide you to the complete process of Microsoft Certified: Azure Data Scientist Associate Certification starting from where you can opt for the courses, the topics that are going to be covered in this examination and preparation strategy for this certification.





Azure Data Scientist Associate Certification

Microsoft certified: Azure data science associate is the certification provided by the Microsoft Azure in the field of machine learning. Before taking this certification, they recommend you to have a different certification name as designing and implementing a data science solution on Azure which is the easier version or low level version of the data science.

This exam measures the ability to accomplish the tasks such as setting up an Azure Machine Learning workspace; run experiments; train, optimize, manage, deploy, and consume models.

Read more on Which Machine Learning Certification is Best for You?

Career in Azure Data Scientist Associate

The widespread acceptance of Microsoft Azure is one of the reasons for its incomprehensible popularity. Therefore, the demand for jobs in Azure data science projects is slowly growing. Data is the lifeblood of every business today and the demand for data-driven experts is unlikely to die anytime soon!

Most importantly, data scientists can play an important role in making critical business decisions easily. IT professionals have a wide range of career opportunities in the Microsoft Azure landscape, especially in data science. Long-term opportunities in the activities of Azure data scientists work out an important suggestion to follow.

In today's world, some 2.5 Quintilian bytes of data are processed daily. A data scientist can organize and analyse this huge amount of data to make it possible to lead a profitable business. For example, an organization may use data science to remind its customer of standard purchases. Suppose you order a shampoo every month, you can get a contract that is set at the same time each month, which makes you buy more.



Data scientists not only play an important role in business analysis but are also responsible for building data products and software forums. Frankly, data science is a combination of computer science, mathematics, and math.

Jobs available

- Business Intelligence Analyst
- Data Mining Engineer
- Data Architect
- Data Scientist etc.

Companies using Azure ML

- 365mc
- Aggreko
- Apollo
- Subscribe

Skills Measured In This Certification

- 1. Setting up of an Azure Machine Learning Workspace (30-35%)
- a. Creation of an Azure Machine Learning workspace
- 1. creation of an Azure Machine Learning workspace
- 2. configuration workspace settings
- 3. managing workspaces by using Azure Machine Learning studio
- b. Managing data objects in an Azure Machine Learning workspace
- 1. registering and maintaining datastores
- 2. creating and managing of datasets
- c. Managing experiment compute contexts
- 1. creating compute instance
- 2. determining an appropriate compute specifications for a training workload
- 3. creating compute targets for experiments and training
- 2. Running Experiments and Training Models (25-30%)
- a. Creating models by using Azure Machine Learning Designer
- 1. creating training pipelines by using Azure Machine Learning designer



- 2. ingesting data in a designer pipeline
- 3. using designer modules to define pipeline data flow
- 4. using custom code modules in designer
- b. Running training scripts in Azure Machine Learning workspace
- 1. creation and run experiments by using the Azure Machine Learning SDK
- 2. configuring run settings for a script
- 3. consuming data from dataset in the experiments by using the Azure Machine Learning SDK
- c. Generating metrics from an experiment run
- 1. logging metrics from an experiment run
- 2. retrieving and view experiment outputs
- 3. use logs to troubleshoot experiment run errors
- d. Automating the model training process
- 1. creating a pipeline by using the SDK
- 2. passing data between steps in a pipeline
- 3. running a pipeline
- 4. monitoring pipeline runs
- 3. Optimize and Manage Models (20-25%)
- a. Using Automated ML to create optimal models
- 1. using an automated ML interface in Azure Machine Learning studio
- 2. using an automated ML from the Azure Machine Learning SDK
- 3. selecting pre-processing options
- 4. determining algorithms to be searched
- 5. defining a primary metric
- 6. getting data for an Automated ML run
- 7. retrieving the best model
- b. Using Hyperdrive to tune hyperparameters
- 1. selecting a sampling method
- 2. defining the search space
- 3. defining the primary metric
- 4. defining early termination options
- 5. finding the model that has optimal hyperparameter values



- c. Using model explainers to interpret models
- 1. selecting a model interpreter
- 2. generating feature importance data
- d. Managing models
- 1. registering a trained model
- 2. monitoring model usage
- 3. monitoring data drift
- 4. Deploying and Consuming Models (20-25%)
- a. Creating production compute targets
- 1. considering security for deployed services
- 2. evaluating compute options for deployment
- b. Deploying a model as a service
- 1. configuring deployment settings
- 2. consuming a deployed service
- 3. troubleshooting deployment container issues
- c. Creating a pipeline for batch inferencing
- 1. publishing a batch inferencing pipeline
- 2. running a batch inferencing pipeline and obtain outputs
- d. Publishing a designer pipeline as a web service
- 1. creating a target compute resource
- 2. configuring an Inference pipeline
- 3. consuming a deployed endpoint

Read more on 40+ Best Performing Free Tests from Whizlabs!

Learning Path for Microsoft Certified: Azure Data Scientist Associate Certification

Microsoft has developed their own learning path for the people who are going for Microsoft certified: Azure data scientist associate certification. This learning path has multiple courses defined by the Microsoft according to the syllabus or portion or the skills required for this certification. You have both the online free courses available for this certification by Microsoft and as well as the paid one. The free courses is having a less detail courses available for learning whereas the paid



courses is having the complete topics covered which is required for this certification.

Check out the certification here – <u>Microsoft Certified: Azure Data</u> <u>Scientist Associate Certification Learning Path:</u>

Courses for Azure Data Scientist Associate Certification

There are various sources from where we can prepare for this course. The only thing is, you need to select a proper course which covers all the sections that are required for this certification. Since I have covered all the topics that is required for this certification I you can either opt for a course with a different service in Azure or it's better to choose a course with a complete Microsoft Certified: Azure Data Scientist Associate Certification Course portion.

Whizlabs covers all the portions required for this certification. In addition to that, it also provides you with the labs on which you can have your hands on experience to make a better learning progress. It also provide a set of paper to solve to get the exam experience.

Check Out Whizlabs <u>Microsoft Certified: Azure Data Scientist</u> Associate Certification Course!

Preparing for Azure Data Scientist Associate Certification

To prepare for exam it's totally based on an individual and their learning process here is just a suggestion that how can you prepare for exam which might help you with much better understanding.

If you are new to Azure or have some experience on it, I would suggest that you understand the services first, that are used for machine learning. It will help you to understand the machine learning process in a simpler way including how the services work since you have some experience with the services.



You can complete the optional course provided by the azure it for the people who are new to the Azure. Designing and Implementing a Data Science Solution on Azure.

Details regarding the exam

Prior Certification: Not Required

Exam Validity: 1 Year / 12 Months

Exam Fee: \$165 USD

Exam Duration: 120 Minutes

No. of questions: 40-60 Questions

Passing Marks/Score: 700

Recommended Experience: Candidates should have knowledge and experience in data science by using Azure Machine Learning and MLflow.

Exam Format : Multiple Choice, Yes/No, Drag & Drop, Case Studies, and Multiple Response

Languages: English, Japanese, Chinese (Simplified), Korean, German, Chinese (Traditional), French, Spanish, Portuguese (Brazil), Russian, Arabic (Saudi Arabia), Italian, Indonesian (Indonesia)

Schedule an exam for Azure Data Scientist Associate Certification here!



FAQs

Q1. How many days will it take to prepare for this exam?

Ans. It depends on the learning and grasping power, but we would suggest to at least have 1-2 months of preparation.

Q2. Where can I find the optional course?

Ans. Yes, https://docs.microsoft.com/en-us/learn/certifications/exams/dp-100

Q3. Do Azure have any criteria for the exam?

Ans. Azure does not have any criteria or requirement for exam.

Q4. Does Whizlabs courses covers all the required topics for this exam?

Ans. Yes, It does cover all the topics.

Q4. How many exam model paper are present for machine learning certification in which lab course?

Ans. There are total of 2 paper to solve.

