

Dell Data Science Foundations

Certification Description



[Proven Professional Website](#)

Engage with your peers in our [Proven Professional Community](#)

Certification Overview

This certification enables the learner to immediately participate in big data and other analytics projects. The certification validates the practical foundation skills required by a Data Scientist.

Certification Requirements

To complete the requirements for this certification you must:

Pass Dell Data Science Foundations 2023

Note: These details reflect certification requirements as of February 3, 2024.

The Proven Professional Program periodically updates certification requirements. *Please check the [Proven Professional CertTracker](#) website regularly for the latest information and for other options to meet the Associate level requirement.

Dell Inc.
Hopkinton
Massachusetts
01748-9103
1-508-435-1000
In North America
1-866-464-7381

Dell Data Science Foundations 2023

Exam Description



Duration

90 Minutes
(60 Questions)

Pass Score: 60

Practice Test

[D-DS-FN-23](#)

Dell Inc.
Hopkinton
Massachusetts
01748-9103
1-508-435-1000
In North America

Overview

This exam is a qualifying exam for **Data Science Foundations 2023**.

This exam focuses on the practice of data analytics, the role of the Data Scientist, the main phases of the Data Analytics Lifecycle, analyzing and exploring data with R, statistics for model building and evaluation, the theory and methods of advanced analytics and statistical modeling, the technology and tools that can be used for advanced analytics, operationalizing an analytics project, and data visualization techniques. Successful candidates will achieve the Dell EMC Proven Professional – Data Science Associate credential.

Dell Technologies provides free practice tests to assess your knowledge in preparation for the exam. Practice tests allow you to become familiar with the topics and question types you will find on the proctored exam. Your results on a practice test offer one indication of how prepared you are for the proctored exam and can highlight topics on which you need to study and train further. A passing score on the practice test does not guarantee a passing score on the certification exam.

Exam Topics

Topics likely to be covered on this exam include:

Big Data, Analytics, and the Data Scientist Role (5%)

- Define and describe the characteristics of Big Data
- Describe the business drivers for Big Data analytics and data science
- Describe the Data Scientist role and related skills

Data Analytics Lifecycle (8%)

- Describe the data analytics lifecycle purpose and sequence of phases
- Discovery - Describe details of this phase, including activities and associated roles
- Data preparation - Describe details of this phase, including activities and associated roles
- Model planning - Describe details of this phase, including activities and associated roles
- Model building - Describe details of this phase, including activities and associated roles

Initial Analysis of the Data (15%)

- Explain how basic R commands are used to initially explore and analyze the data
- Describe and provide examples of the most important statistical measures and effective visualizations of data
- Describe the theory, process, and analysis of results for hypothesis

Advanced Analytics - Theory, Application, and Interpretation of Results for Eight Methods (40%)

Describe theory, application, and interpretation of results for the following methods:

- K-means clustering
- Association rules
- Linear regression
- Logistic Regression
- Naïve Bayesian classifiers
- Decision trees
- Time Series Analysis
- Text Analytics

Advanced Analytics for Big Data - Technology and Tools (22%)

- Describe the technological challenges posed by Big Data
- Describe the nature and use of MapReduce and Apache Hadoop
- Describe the Hadoop ecosystem and related product use cases
- Describe in-database analytics and SQL essentials
- Describe advanced SQL methods: window functions, ordered aggregates, and MADlib

Operationalizing an Analytics Project and Data Visualization Techniques (10%)

- Describe best practices for communicating findings and operationalizing an analytics project
- Describe best practices for building project presentations for specific audiences
- Describe best practices for planning and creating effective data visualizations

The percentages after each topic above reflects the approximate distribution of the total question set across the exam.

Recommended Training

The following curriculum is recommended for candidates preparing to take this exam.

Please complete one of the following courses

Course Title	Course Number	Mode	Available
Data Science and Big Data Analytics v2 - Classroom	ES712OCMDSBDA	Instructor-Led	7/16/18
Data Science and Big Data Analytics v2 - Virtual Classroom	ES722OCMDSBDA	Virtual Instructor-Led	7/16/18
Data Science and Big Data Analytics v2 - On-Demand Course	ES732OCMDSBDA	On-Demand	9/12/18

Please complete one of the following courses

Course Title	Course Number	Mode	Available
Data Science and Big Data Analytics v2 - Classroom	ES742OCMDSALN	On-Demand Lab	9/12/18
Data Science and Big Data Analytics v2 - Virtual Classroom	ES742OCMDSALE	On-Demand Lab	9/12/18

The course material is supplemented by the textbook. Text book is optional.

Course Title	Mode	Available
Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data Purchasing Options available at: http://www.wiley.com/WileyCDA/WileyTitle/productCd-111887613X.html	Book	1/27/15

Note: These exam description details reflect contents as of **February 3, 2024**.

The Proven Professional Program periodically updates exams to reflect technical currency and relevance. Please check the Proven Professional website regularly for the latest information.

Copyright © 2024 Dell Inc. or its subsidiaries. All Rights Reserved. Dell Technologies, Dell, EMC, Dell EMC and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners. Published in the USA [02/24] [Exam Description]

Dell Technologies believes the information in this document is accurate as of its publication date. The information is subject to change without notice.