DELLTechnologies

Announcing DES-7DE1 Specialist - Data Scientist, Data Engineering Exam [Retirement](#)

The Specialist - Data Scientist, Data Engineering certification DES-7DE1 will be retired on February 2, 2024 and will be replaced by a new certification offering will launch on February 3, 2024. The new certification is **Dell Data Scientist and Data Engineering Optimize 2023 (D-DS-OP-23)**

This certification is focused on skill and outcome-based solutions certifications.

How will this impact you?

If you have already taken the aligned training or previously attempted the exam for the **Specialist - Data Scientist, Data Engineering** certification, plan to take the DES-7DE1 exam by **January 31, 2024.**

- [View the DES-7DE1 exam description and practice test »](#) Once achieved,

your credential, Specialist - Data Scientist, Data Engineering will not expire.

If you're just beginning your credential journey after February 3, 2024, please choose this Assessment that aligns closest with the knowledge you're looking to develop.

- **Dell Data Scientist and Data Engineering Optimize 2023 (D-DS-OP-23)**

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Specialist - Data Scientist, Data Engineering Version 1.0

Certification Description

Certification Overview
This certification will benefit practicing or aspiring data engineers, data scientists, data stewards, or anyone who is responsible for managing or processing data sets.

Certification Requirements
To complete the requirements for this certification you must:

1. Achieve the following Associate level certification:
   - Associate - Data Science Version 1.0
   - Associate - Data Science Version 2.0

2. Pass the following Specialist exam on or after April 10, 2020:
   - DES-7DE1 Data Scientist, Data Engineering Specialist Exam

Note: These details reflect certification requirements as of **April 10, 2020.**

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.

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DES-7DE1 Data Scientist, Data Engineering Specialist Exam

Exam Description

Duration
90 Minutes
 (60 Questions)

Pass Score: 63

Practice Test
Exam – DES-7DE1

Overview

This exam is a qualifying exam for the **Specialist - Data Scientist, Data Engineering (DCS-DS)** track.

This exam focuses on the role of a data engineer in successful analytic projects and the various tools and techniques including SQL, NoSQL, the Hadoop ecosystem, Apache Spark, data governance, streaming and IoT data processing, Python, and building data pipelines.

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:

The Role of the Data Engineer (5%)
- Describe the skills of a data engineer
- Describe the role of a data engineer in a data analytics project

Data Warehousing with SQL and NoSQL (17%)
- Describe characteristics and performance considerations of a relational database
- Describe relational database schemas and normalization techniques
- Describe use cases and features of various NoSQL tools

Extract-Transform-Load (ETL) Offload with Hadoop and Spark (18%)
- Describe ETL, ELT, and related schedulers
- Describe the Hadoop ecosystem, HDFS, and data ingestion tools
- Describe Apache Spark and its architecture

Data Governance, Security and Privacy for Big Data (20%)
- Describe data governance, key roles, and related models
- Describe metadata and Master Data Management
- Describe security considerations with Hadoop and the Cloud
- Describe the uses of Apache Atlas, Ranger, and Knox
- Describe privacy regulations and ethics

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Processing Streaming and IoT Data (20%)
- Describe uses and application of IoT tools
- Describe the Apache Storm system and topology
- Describe the Apache Kafka queueing system and architecture
- Describe Apache Spark - Streaming processing and architecture
- Describe Apache Flink and its architecture
- Describe Pravega and its storage architecture
- Describe EdgeX Foundry and its architecture

Building Data Pipelines with Python (20%)
- Describe Python, reasons to use, and its libraries
- Describe the use of lists, dictionaries, tuples, sets, and strings
- Describe the use of Apache Airflow
- Describe data pipeline best practices

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 choose one of the options below.

Option 1: **Please complete the following courses**

Course Title	Course Number	Mode	Available
Introduction to Data Engineering	ES731OCMIDENG	On-demand	3/25/20
Data Warehousing with SQL and NoSQL - On-Demand Course	ES732OCMDATAW	On-demand	3/25/20
ETL Offload with Hadoop and Spark - On-Demand Course	ES732OCMETLHS	On-demand	3/25/20
Data Governance, Security and Privacy for Big Data - On-Demand Course	ES732OCMDGSPR	On-demand	3/25/20
Processing Streaming and IoT Data - On-Demand Course	ES732OCMPSIOT	On-demand	3/25/20
Building Data Pipelines with Python - On-Demand Course	ES732OCMBDPPY	On-demand	3/25/20

Option 2: **Please complete the following courses**

Course Title	Course Number	Mode	Available
Introduction to Data Engineering	ES731OCMIDENG	On-demand	3/25/20
Data Engineering Workshop	ES722OCMDEWRK	Virtual Classroom	8/17/20

Note: These exam description details reflect contents as of **April 10, 2020.**

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