

CompTIA Data+

Course Duration:40 Hours

Course code: DA0-001

1. Course Overview

CompTIA Data+ is an early-career data analytics certification for professionals tasked with developing and promoting data-driven business decision-making.

Data+ Certification is an early-career data analytics certification for professionals tasked with developing and promoting data-driven business decision-making.

2. What you'll learn?

The CompTIA Data+ exam will certify the successful candidate has the knowledge and skills required to transform business requirements in support of data-driven decisions through mining and manipulating data, applying basic statistical methods, and analyzing complex datasets while adhering to governance and quality.

On course completion, you will be able to do the following:

- Identify basic concepts of data schemas
- Understand different data systems
- Understand types and characteristics of data
- Compare and contrast different data structures, formats, and markup languages
- Explain data integration and collection methods
- Identify common reasons for cleansing and profiling data
- Execute different data manipulation techniques
- Explain common techniques for data manipulation and optimization

3. Target Audience

The CompTIA Data+ certification is intended for people who work with data or want to transition into data roles. This includes data analysts, business analysts, IT professionals, and others.

Data professionals: To validate skills or advance their careers.

Business analysts: To make data-driven decisions.

IT professionals: To transition into data analytics.

Entry-level data analysts: To learn foundational data analysis skills.

4. Pre-Requisites

CompTIA recommends having 18-24 months of experience in a business analyst or reporting role, exposure to databases and analytical tools, a basic understanding of statistics, and experience with data visualization; essentially, a foundational knowledge of data analysis practices is considered a prerequisite for the exam.

Key points about CompTIA Data+ prerequisites:

- Work experience:** Ideally, some experience in a role where data analysis is a key responsibility, like a business analyst or reporting analyst.
- Database knowledge:** Familiarity with database concepts and how to interact with databases.

5. Course content

Lesson 1: Identifying Basic Concepts of Data Schemas

A: Identify Relational and Non-Relational Databases

B: Understand the Way We Use Tables, Primary Keys, and Normalization

Lesson 2: Understanding Different Data Systems

A: Describe Types of Data Processing and Storage Systems

B: Explain How Data Changes

Lesson 3: Understanding Types and Characteristics of Data

A: Understand Types of Data

B: Break Down the Field Data Types

Lesson 4: Comparing and Contrasting Different Data Structures, Formats, and Markup Languages

- A: Differentiate Between Structured Data and Unstructured Data
- B: Recognize Different File Formats
- C: Understand the Different Code Languages Used for Data

Lesson 5: Explaining Data Integration and Collection Methods

- A: Understand the Processes of Extracting, Transforming, and Loading Data
- B: Explain API/Web Scraping and Other Collection Methods
- C: Collect and Use Public and Publicly Available Data
- D: Use and Collect Survey Data

Lesson 6: Identifying Common Reasons for Cleansing and Profiling Data

- A: Learn to Profile Data
- B: Address Redundant, Duplicated, and Unnecessary Data
- C: Work with Missing Values
- D: Address Invalid Data
- E: Convert Data to Meet Specifications

Lesson 7: Executing Different Data Manipulation Techniques

- A: Manipulate Field Data and Create Variables
- B: Transpose and Append Data
- C: Query Data

Lesson 8: Explaining Common Techniques for Data Manipulation and Optimization

- A: Use Functions to Manipulate Data
- B: Use Common Techniques for Query Optimization

Lesson 9: Applying Descriptive Statistical Methods

- A: Use Measures of Central Tendency
- B: Use Measures of Dispersion
- C: Use Frequency and Percentages

Lesson 10: Describing Key Analysis Techniques

- A: Get Started with Analysis
- B: Recognize Types of Analysis

Lesson 11: Understanding the Use of Different Statistical Methods

- A: Understand the Importance of Statistical Tests
- B: Break Down the Hypothesis Test
- C: Understand Tests and Methods to Determine Relationships Between Variables

Lesson 12: Using the Appropriate Type of Visualization

- A: Use Basic Visuals
- B: Build Advanced Visuals
- C: Build Maps with Geographical Data
- D: Use Visuals to Tell a Story

Lesson 13: Expressing Business Requirements in a Report Format

- A: Consider Audience Needs When Developing a Report
- B: Describe Data Source Considerations for Reporting
- C: Describe Considerations for Delivering Reports and Dashboards
- D: Develop Reports or Dashboards
- E: Understand Ways to Sort and Filter Data

Lesson 14: Designing Components for Reports and Dashboards

- A: Choose Design Elements for Reports/Dashboards
- B: Utilize Standard Elements for Reports/Dashboards
- C: Create a Narrative and Other Written Elements

D: Understand Deployment Considerations

Lesson 15: Distinguishing Different Report Types

A: Understand How Updates and Timing Affect Reporting

B: Differentiate Between Types of Reports

Lesson 16: Summarizing the Importance of Data Governance

A: Define Data Governance

B: Understand Access Requirements and Policies

C: Understand Security Requirements

D: Understand Entity Relationship Requirements

Lesson 17: Applying Quality Control to Data

A: Describe Characteristics, Rules, and Metrics of Data Quality

B: Identify Reasons to Quality Check Data and Methods of Data Validation

Lesson 18: Explaining Master Data Management Concepts

A: Explain the Basics of Master Data Management

B: Describe Master Data Management Processes

6. Exam Preference

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| Exam Code | DA0-001 |
| Number OF Questions | 90 |
| Length Of Test | 90 Minutes Max. |
| Passing Score | 675 (on scale of 100–900) |