

# CompTIA Data+ (DA0-001)

Duration 5 Days



## COURSE DESCRIPTION

This course teaches you the knowledge and skills required to transform business requirements in support of data-driven decisions by mining data, manipulating data, applying basic statistical methods, and analyzing complex data sets while adhering to governance and quality standards throughout the entire data lifecycle. In addition, this course will help prepare candidates to take the CompTIA Data+ certification exam.

This course may earn a Credly Badge.

## COURSE OBJECTIVES

CompTIA Data+ validates that you have the skills required to facilitate data-driven business decisions, including:

- Mining data
- Manipulating data
- Visualizing and reporting data
- Applying basic statistical methods
- Analyzing complex datasets while adhering to governance and quality standards throughout the entire data life cycle

## COURSE OUTLINE

### 1 - Identifying Basic Concepts of Data Schemas

- Identify Relational and NonRelational Databases
- Understand the Way We Use Tables ,Primary Keys, and Normalization

### 2 - Understanding Different Data Systems

- Describe Types of Data Processing and Storage Systems
- Explain How Data Changes

### 3 - Understanding Types and Characteristics of Data

- Understand Types of Data
- Break Down the Field Data Types

### 4 - Comparing and Contrasting Different Data Structures, Formats, and Markup Languages

- Differentiate between Structured Data and Unstructured Data
- Recognize Different File Formats
- Understand the Different Code Languages Used for Data

### 5 - Explaining Data Integration and Collection Methods

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

**6 - Identifying Common Reasons for Cleansing and Profiling Data**

- Learn to Profile Data
- Address Redundant, Duplicated, and Unnecessary Data
- Work with Missing Values
- Address Invalid Data
- Convert Data to Meet Specifications

**7 - Executing Different Data Manipulation Techniques**

- Manipulate Field Data and Create Variables
- Transpose and Append Data
- Query Data

**8 - Explaining Common Techniques for Data Manipulation and Optimization**

- Use Functions to Manipulate Data
- Use Common Techniques for Query Optimization

**9 - Applying Descriptive Statistical Methods**

- Use Measures of Central Tendency
- Use Measures of Dispersion
- Use Frequency and Percentages

**10 - Describing Key Analysis Techniques**

- Get Started with Analysis
- Recognize Types of Analysis

**11 - Understanding the Use of Different Statistical Methods**

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

**12 - Using the Appropriate Type of Visualization**

- Use Basic Visuals
- Build Advanced Visuals
- Build Maps with Geographical Data
- Use Visuals to Tell a Story

**13 - Expressing Business Requirements in a Report Format**

- Consider Audience Needs When Developing a Report
- Describe Data Source Considerations For Reporting
- Describe Considerations for Delivering Reports and Dashboards
- Develop Reports or Dashboards
- Understand Ways to Sort and Filter Data

**14 - Designing Components for Reports and Dashboards**

- Design Elements for Reports and Dashboards
- Utilize Standard Elements
- Creating a Narrative and Other Written Elements
- Understand Deployment Considerations

**15 - Distinguishing Different Report Types**

- Understand How Updates and Timing Affect Reporting
- Differentiate Between Types of Reports

**16 - Summarizing the Importance of Data Governance**

- Define Data Governance
- Understand Access Requirements and Policies

- Understand Security Requirements
- Understand Entity Relationship Requirements

#### 17 - Applying Quality Control to Data

- Describe Characteristics, Rules, and Metrics of Data Quality
- Identify Reasons to Quality Check Data and Methods of Data Validation

#### 18 - Explaining Master Data Management Concepts

- Explain the Basics of Master Data Management
- Describe Master Data Management Processes

### WHO SHOULD ATTEND

Data+ is an ideal certification for not only data-specific careers, but other career paths that can benefit from analytics processes and data analytics knowledge, such as marketing specialists, financial analysts, human resource analysts or clinical health care analysts. This course is suited for roles such as:

- Data Analyst
- Business Intelligence Analyst
- Reporting Analyst
- Marketing Analyst
- Clinical Analyst
- Business Data Analyst
- Operations Analyst

### PREREQUISITES

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