

CompTIA Data+ (Exam DA0-001)

Duration: 5 Days

Prerequisites:

To ensure your success in this course, you should have 18–24 months of hands-on experience working in a business intelligence, report/data analyst job role. You should have a working knowledge of Microsoft Excel or a spreadsheet program. You should understand how to build basic math calculations, like add, subtract, divide, and multiply (basic arithmetic). You should know how to build basic functions like Sums, Average, and Count. You should understand the basics of sorting and filtering data sets in Excel or a similar spreadsheet program. You should have a working knowledge of how to build very basic pivot tables. You should have some understanding of databases and all knowledge toward understanding how databases designed will be helpful. You should have a basic understanding of how to build simple charts in using data.

Course Objectives:

This course can benefit you in two ways. If you intend to pass the CompTIA Data+ (Exam DA0-001) certification examination, this course can be a significant part of your preparation. But certification is not the only key to professional success in the field of data analysis. Today's job market demands individuals with demonstrable skills, and the information and activities in this course can help you build your data skill set so that you can confidently perform your duties in any entry-level data analysis role.

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
- Apply descriptive statistical methods
- Describe key analysis techniques
- Understand the use of different statistical methods
- Use the appropriate type of visualization
- Express business requirements in a report format
- Design components for reports and dashboards
- Distinguish different report types
- Summarize the importance of data governance
- Apply quality control to data
- Explain master data management concepts
- Identify common data analytics tools

Target Audience:

The Official CompTIAData+ (Exam DAO-001) Guide is the primary course you will need to take if your job responsibilities include gathering and collecting data for use in reporting, research of visualization, and analysis within your organization. You can take this course to prepare for the CompTIA Data+ (Exam DAO-001) certification examination.

Course Outlines:

Lesson 1: Identifying Basic Concepts of Data Schemas

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

Lesson 2: Understanding Different Data Systems

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

Lesson 3: Understanding Types and Characteristics of Data

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

Lesson 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

Lesson 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

Lesson 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

Lesson 7: Executing Different Data Manipulation Techniques

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

Lesson 8: Explaining Common Techniques for Data Manipulation and Optimization

- Use Functions to Manipulate Data
- Use Common Techniques for Query Optimization
- Applying Descriptive Statistical Methods
- Use Measures of Central TendencyUse Measures of Dispersion
- Use Frequency and Percentages

Lesson 10: Describing Key Analysis Techniques

- Get Started with Analysis
- Recognize Types of Analysis

Lesson 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

Lesson 12: Using the Appropriate Type of Visualization

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

Lesson 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

Lesson 14: Designing Components for Reports and Dashboards

- Utilize Standard Elements for Reports/Dashboards
- Create a Narrative and Other Written Elements
- Understand Deployment Considerations
- Distinguishing Different Report Types
- Understand How Updates and Timing Affect Reporting
 Differentiate Between Types of Reports

Lesson 16: Summarizing the Importance of Data Governance

- Define Data Governance
- Understand Access Requirements and Policies
- Understand Security Requirements
- Understand Entity Relationship Requirements

Lesson 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
- Explaining Master Data Management Concepts
- Explain the Basics of Master Data Management
- Describe Master Data Management Processes