



COURSE OUTLINE

Course Name: CompTIA Data+

DURATION	SKILLS LEVEL	DILIVERY METHOD	TRAINING CREDITS	TECHNOLOGY
5 Days	Intermediate	VILT/Instructor-Led	20	Data & Analytics

Course Description:

As the importance for data analytics grows, more job roles are required to set context and better communicate vital business intelligence. Collecting, analysing, and reporting on data can drive priorities and lead business decision-making. CompTIA Data+ validates certified professionals have the skills required to facilitate data-driven business decisions, including:

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

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.

Target Audience:

- The Official CompTIA Data+ (Exam DA0-001) 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 also take this course to prepare for the CompTIA Data+ (Exam DA0-001) certification examination.

Learning Objectives:

On completion of the course, delegates will be able to:

- 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.

Course Outline:

Lesson 1: Identifying Basic Concepts of Data Schemas

- Topic 1A: Identify Relational and Non-Relational Databases
- Topic 1B: Understand the Way We Use Tables, Primary Keys, and Normalization

Lesson 2: Understanding Different Data Systems

- Topic 2A: Describe Types of Data Processing and Storage Systems
- Topic 2B: Explain How Data Changes Lesson 3: Understanding Types and Characteristics of Data
- Topic 3A: Understand Types of Data
- Topic 3B: Break Down the Field Data Types

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

- Topic 4A: Differentiate Between Structured Data and Unstructured Data
 - Topic 4B: Recognize Different File Formats
 - Topic 4C: Understand the Different Code Languages Used for Data
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Lesson 5: Explaining Data Integration and Collection Methods

- Topic 5A: Understand the Processes of Extracting, Transforming, and Loading Data
- Topic 5B: Explain API/Web Scraping and Other Collection Methods
- Topic 5C: Collect and Use Public and Publicly Available Data
- Topic 5D: Use and Collect Survey Data

Lesson 6: Identifying Common Reasons for Cleansing and Profiling Data

- Topic 6A: Learn to Profile Data
- Topic 6B: Address Redundant, Duplicated, and Unnecessary Data
- Topic 6C: Work with Missing Values • Topic 6D: Address Invalid Data
- Topic 6E: Convert Data to Meet Specifications

Lesson 7: Executing Different Data Manipulation Techniques

- Topic 7A: Manipulate Field Data and Create Variables
- Topic 7B: Transpose and Append Data
- Topic 7C: Query Data

Lesson 8: Explaining Common Techniques for Data Manipulation and Optimization

- Topic 8A: Use Functions to Manipulate Data
- Topic 8B: Use Common Techniques for Query Optimization

Lesson 9: Applying Descriptive Statistical Methods

- Topic 9A: Use Measures of Central Tendency
- Topic 9B: Use Measures of Dispersion
- Topic 9C: Use Frequency and Percentages

Lesson 10: Describing Key Analysis Techniques

- Topic 10A: Get Started with Analysis
- Topic 10B: Recognize Types of Analysis

Lesson 11: Understanding the Use of Different Statistical Methods

- Topic 11A: Understand the Importance of Statistical Tests
- Topic 11B: Break Down the Hypothesis Test
- Topic 11C: Understand Tests and Methods to Determine Relationships Between Variables

Lesson 12: Using the Appropriate Type of Visualization

- Topic 12A: Use Basic Visuals
- Topic 12B: Build Advanced Visuals
- Topic 12C: Build Maps with Geographical Data
- Topic 12D: Use Visuals to Tell a Story

Lesson 13: Expressing Business Requirements in a Report Format

- Topic 13A: Consider Audience Needs When Developing a Report
 - Topic 13B: Describe Data Source Considerations for Reporting
 - Topic 13C: Describe Considerations for Delivering Reports and Dashboards
 - Topic 13D: Develop Reports or Dashboards
 - Topic 13E: Understand Ways to Sort and Filter Data
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Lesson 14: Designing Components for Reports and Dashboards

- Topic 14A: Choose Design Elements for Reports/Dashboards
- Topic 14B: Utilize Standard Elements for Reports/Dashboards
- Topic 14C: Create a Narrative and Other Written Elements
- Topic 14D: Understand Deployment Considerations

Lesson 15: Distinguishing Different Report Types

- Topic 15A: Understand How Updates and Timing Affect Reporting
- Topic 15B: Differentiate Between Types of Reports

Lesson 16: Summarizing the Importance of Data Governance

- Topic 16A: Define Data Governance
- Topic 16B: Understand Access Requirements and Policies
- Topic 16C: Understand Security Requirements
- Topic 16D: Understand Entity Relationship Requirements

Associated Exam and Certification:

This course will prepare students to take the CompTIA Data+ exam DAO-001.

Successfully passing this exam will result in the attainment of the CompTIA Data+ Certification.

After completing this course students will receive a Netcampus course attendance certification. Your CompTIA Data+ certification is good for three years from the date of your exam.

The CE program allows you to extend your certification in three-year intervals through activities and training that relate to the content of your certification.

Exams and Certifications

Notes and Annotations

What is Next
