CO-DAT+
COMPTIA DATA+

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 Days	Intermediate	Data	Instructor-led	NA

INTRODUCTION

CompTIA Data+ is designed for those who contribute to an organization's ability to make data-driven decisions. People who earn CompTIA Data+ have the knowledge and skills required to transform business requirements in support of data-driven decisions.

AUDIENCE PROFILE

Beyond those who have data-specific careers, other career paths can benefit from analytics processes and data analytics knowledge. Jobs like marketing specialists, financial analysts, human resource analysts or clinical health care analysts can optimize performance and make well-informed decisions when they use and evaluate data correctly.

PREREQUISITES

Before attending this course, delegates must:

- 18–24 months of experience in a report/business analyst job role
- Exposure to databases and analytical tools
- Basic understanding of statistics
- Data visualization experience

COURSE OBJECTIVES

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
- Analyzing complex datasets while adhering to governance and quality standards throughout the entire data life cycle

COURSE CONTENT

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
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- 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

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

Lesson 8: Explaining Common Techniques for Data Manipulation and Optimization
- Topic 8A: Use Functions to Manipulate Data

Lesson 9: Applying Descriptive Statistical Methods
- Topic 9A: Use Measures of Central Tendency

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

Lesson 14: Designing Components for Reports and Dashboards
− Topic 14A: Design Elements for Reports and Dashboards
− Topic 14B: Utilize Standard Elements
− Topic 14C: Creating 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

Lesson 17: Applying Quality Control to Data
− Topic 17A: Describe Characteristics, Rules, and Metrics of Data Quality
− Topic 17B: Identify Reasons to Quality Check Data and Methods of Data Validation

Lesson 18: Explaining Master Data Management Concepts
− Topic 18A: Explain the Basics of Master Data Management
− Topic 18B: Describe Master Data Management Processes

ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the CompTIA Data+ (DA0-001) exam. The CompTIA Data+ exam will certify that 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 analysing complex datasets while adhering to governance and quality standards throughout the entire data life cycle.