



## PRODUCT PROFILE

# CompTIA DataAI

## OVERVIEW

The **CompTIA DataAI** exam was developed to meet an industry need, and bridge gaps in training and knowledge for data science professionals. The exam objectives include real-world scenarios where learners apply their knowledge, ensuring they are prepared for various challenges they may face in their careers as data scientists. Based on extensive input from experienced data scientists, DataAI validates successful candidates can properly utilize and analyze vast amounts of data, extract meaning and generate actionable insights.

## LEARNER BENEFITS

**Successful DataAI candidates gain the skills and knowledge required to:**

- Understand and implement data science operations and processes.
- Apply mathematical and statistical methods appropriately and understand the importance of data processing and cleaning, statistical modeling, linear algebra and calculus concepts.
- Apply machine learning models and understand deep learning concepts.
- Utilize appropriate analysis and modeling methods and make justified model recommendations.
- Demonstrate understanding of industry trends and specialized data science applications.

## RECOMMENDED EXPERIENCE

Having a minimum of five years of hands-on experience as a data scientist or the equivalent knowledge is strongly recommended.

## ORGANIZATIONAL BENEFITS

Organizations are rapidly enabling their workforces with AI assistants. However many are finding that simply giving employees access to these tools does not mean that employees have the ability to use these tools to their fullest potential. This "AI Fluency Gap" is preventing organizations from achieving the desired return on their AI investments.

## KEY FEATURES

### Key features

- Training delivery options
- Private cohort
- Self-paced
- Mentored learning
- Instructor-led training

### Training duration options

- 5 days
- 8 weeks
- 13 weeks
- Custom Options

### Available product options

- CertMaster Perform

### Target audiences

- This course is designed for data science professionals who are seeking to validate and expand their skillsets.

### Primary job roles

- Data Scientist

## LEARNER OUTCOMES

CompTIA DataAI (DY0-001) can broaden your knowledge for a diverse range of career paths, creating opportunities for advancement and specialization in the rapidly evolving data science industry. With CompTIA DataAI, possible career paths include data scientist, quantitative analyst, machine learning engineer/specialist, predictive analyst, and artificial intelligence (AI) engineer.

## EXAM DETAILS

**Launch date** – August 2024

**Number of questions** – Maximum of 90 questions per exam

**Type of questions** – Multiple choice

**Length of test** – 165 minutes

**Passing score** – Pass/Fail Only (No scaled score)

# CompTIA DataAI



## COURSE OUTLINE

- 1.0 Illustrating the Data Science Lifecycle
- 2.0 Analyzing Business Problems
- 3.0 Collecting Data
- 4.0 Cleaning and Preparing Data
- 5.0 Describing Data Features
- 6.0 Exploring Data
- 7.0 Navigating the Model Selection Process
- 8.0 Employing Machine Learning Methods
- 9.0 Experimenting with Deep Learning
- 10.0 Evaluating and Refining Data Models
- 11.0 Communicating for Business Impact
- 12.0 Deploying Data Models
- 13.0 Discovering Specialized Data Science Applications
- A.0 CompTIA DataAI DY0-001 Practice Test

## DID YOU KNOW?

- Data scientist jobs have a projected employment of 120,000 through 2030.
- 53,000+ jobs were posted by U.S. employers over a 12-month period.<sup>1</sup>
- Over the next 10 years, data scientist roles are projected to grow 24%, much higher than the national average.<sup>2</sup>

Sources:

1. CompTIA analysis of Lightcast & U.S. Bureau of Labor Statistics data.
2. CompTIA State of the Tech Workforce 2024

## CERTMASTER PERFORM FOR DATAAI

CertMaster Perform for DataAI DY0-001 brings together narrative instructional content, videos, performance-based questions (PBQs), skills assessments, live labs, and more to offer a comprehensive learning experience to prepare candidates for their CompTIA certification exam and validate their expertise in the field of data science. For data scientists with five or more years of experience, this course recognizes that it's not necessary to start from the beginning; instead, it's designed to identify knowledge gaps and provide learning content to get candidates up to speed on expert-level topics.

The course starts with a pre-assessment to help the learner identify areas of strengths and weaknesses. Instruction is centered around a learning progression model to help students learn concepts and actively build skills related to the course objectives. This learning methodology uses a series of steps to contextualize the material, elaborate on areas where additional instruction is needed, and provide relevance through practice and customized feedback.

The course is broken into modules and lessons, and different activities throughout the course take learning to the next level by providing hands-on skills practice and personalized instruction including:

- Lab activities in live environments for hands-on practice
- Technologies such as Jupyter notebooks, SQL, R, and Python
- Videos are integrated into the text to provide instruction and illustration at the point where it's the most relevant
- A variety of assessments are included throughout the course, including pre-assessments, module quizzes, and a certification practice test