

Updated 04/30/2025

Sign up

CompTIA DataX training: Certification (DY0-001)

ALL-IN-ONE: EXAMINATION INCLUDED IN PRICE

5 days (35 hours)

Presentation

Our CompTIA DataX© training course will prepare you effectively for certification. An essential credential to prove your expertise in data science. DataX is part of CompTIA's Xpert series, the top "class" of certifications, and validates a range of skills - governance, advanced modeling, MLOps or AI ethics.

Our training covers the 5 assessment areas of the exam: Mathematics & Statistics, Modeling & Analysis, Machine Learning, Operations & Processes, and Specialized Applications. After completing this program, you'll be fully prepared to take the exam.

Created in 2024, DataX is a high-level exam that validates your skills in data governance, advanced modeling, machine learning and MLOps. This certification is reserved for seasoned professionals. Like all our training courses, it includes practical exercises to ensure that your skills are validated.

Training content

- 5-day training with a certified expert
- 1 year self-study access to the Labs
- 1 pass for certification

Objectives

- Pass the DataX exam

- Master the concepts of Mathematics & Statistics, Modeling & Analysis, Machine Learning, Operations & Processes, and Data Applications

Target audience

- Senior Data Scientist
- Machine-Learning Engineer / MLOps Engineer
- Data Engineer

Prerequisites

- 5 years' experience in data science or similar field recommended
- Solid knowledge of:
 - Applied mathematics & statistics
 - Advanced Python or R
 - MLOps & DevOps
- Comptia data+™ certification is recommended

Note: Ambient IT is not the owner of CompTIA Certifications®, this certification belongs to CompTIA, Inc.

Comptia DataX™ Certification Preparation Program

Data Strategy & Governance

- Origin and positioning of DataX certification
- Governance: roles, responsibilities and operating model
- Regulatory frameworks (RGPD, HIPAA, PCI-DSS)
- Catalogs and lineage (Microsoft Purview, AWS Glue)
- Data Ops & CI/CD pipeline architecture principles
- Value measurement: level 1 ? 4 of the Kirkpatrick model

Fundamentals of mathematics & statistics

- Linear algebra: vectors, matrices, SVD decomposition
- Probability: discrete & continuous laws, Bayes' theorem
- Inference: estimators, confidence intervals, t & χ^2 tests
- Experimental design: A/B testing, randomization, power
- Advanced statistical visualization (matplotlib, seaborn, Bokeh)
- Best practices for reproducibility (notebooks, Docker)

Modeling, Analysis & MLOps

- Feature engineering: encoding, selection, scaling, pipelines
- Supervised models: regression, trees, forests, boosting
- Unsupervised models: clustering, dimension reduction
- Hyper-parameterization: random search, Bayesian, Optuna
- Tracking & versioning with MLflow / DVC
- Continuous deployment: CI/CD, integration testing, monitoring

Advanced Machine Learning & Interpretability

- Neural networks: CNN, RNN, Transformers
- AutoML vs. customized models: use cases and limitations
- Interpretability: SHAP, LIME, partial dependence
- MLOps GPU: NVIDIA containers, Kubernetes orchestration
- AI safety & ethics (fairness, privacy, bias)
- Industrialization: model servers, A/B online, rollback

Communication, Ethics & Exam Preparation

- Visual storytelling: executive dashboards, data journalism
- Data ethics: principles, frameworks and case studies
- CompTIA DataX exam strategy (165 min, 90 questions)
- Mock exams and gap analysis
- Capstone project & post-certification action plan
- 30-day impact (Kirkpatrick level 4)

FAQ - QUESTIONS / ANSWERS

In what language are you taught CompTIA DataX training?

The course is in French.

Is the exam included in the course price?

Yes, the price of the certification is included in the cost of the course (\$509 for information only). You can take the exam at the end of the session.

How does the CompTIA Security+ certification exam work?

The exam consists of a performance-based MCQ of up to **90 questions**. It is taken online at an approved Pearson Vue test center.

The exam lasts **165 minutes** and is available in English and French.

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.