



Datascience Bootcamp

—
Your first steps into the world of data science.

Bootcamp | B01
Level: Intermediate
Study load: 144 hours
Certificate of Completion



AMSTERDAM
DATA ACADEMY

WHAT YOU'LL LEARN

- Understand the core concepts of data science, AI and ethics
- Program in Python with pandas, NumPy and matplotlib
- Visualise and interpret data with confidence
- Build and evaluate machine learning models in Python
- Train deep learning models for image and text tasks
- Complete an end-to-end data science project



TARGET AUDIENCE

Who is this for

Anyone who wants to take their first steps in data science — without needing to code beforehand.

Prerequisites

No prior experience needed. Open to everyone.

Roles after

Junior Data Scientist · Data Analyst · Data-savvy professional

CURRICULUM

A03 — Fundamentals of Data & AI

Explain the core concepts of data science and AI and interpret basic analyses. Identify where data-driven methods create value in your work.

A24 — AI Literacy

Critically evaluate AI systems on their ethical and societal implications. Recognise bias and apply GDPR and the EU AI Act to real projects.

A06 — Programming with Python

Write reproducible Python with pandas, NumPy and matplotlib. Perform a complete data analysis and communicate insights in a Jupyter Notebook.

A05 — Machine Learning with Python

Build, evaluate and tune machine learning models with scikit-learn. Solve a real-world classification or regression problem end-to-end.

A16 — Deep Learning with Python

Build, train and optimise deep learning models for image and text tasks with PyTorch. Apply transfer learning for strong results on smaller datasets.

A52 — Final Assignment (Data Science)

Capstone: design and deliver a complete data science project from data to model and evaluation.



ASSESSMENT FRAMEWORK

- Assessment is competency-driven and rubric-based (NLQF level 6), with an independent examiner for every module.
- What you'll be assessed on: Final assignment — A52 Data Science: a complete project from data preparation to a working model and insight.
- Full method, rubrics and resit procedure:
amsterdamdataacademy.com/examination-regulations





AMSTERDAM
DATA ACADEMY



AFTER THIS BOOTCAMP

You'll have built and evaluated machine learning and deep learning models in Python and completed a full data science project — a confident foundation to take your next step in data.

OFFICIAL CERTIFICATE

After completing the Datascience Bootcamp you receive an official ADA Certificate of Completion. This bootcamp is part of ADA's NLQF level 6 accredited programme — the nationally recognised qualification framework equivalent to a bachelor's degree — recognised by employers across the Netherlands.

Ready for your next step?

Book a free study-advice call

amsterdamdataacademy.com/study-advice

+31 85 004 9642