



Data Engineering Bootcamp

Design, build and maintain the data infrastructure companies run on.

Bootcamp | B04

Level: Advanced

Study load: 144 hours

Certificate of Completion



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WHAT YOU'LL LEARN

- Understand data engineering fundamentals and ethics
- Write complex SQL to extract and analyse data
- Work with core Azure data services (DP-900 ready)
- Build a modern data stack with dbt and a cloud warehouse
- Design and run ELT data pipelines
- Deliver an end-to-end data engineering project



TARGET AUDIENCE

Who is this for

Career switchers and professionals who want to become expert data engineers.

Prerequisites

Basic computer skills. No prior data or programming experience required.

Roles after

Data Engineer · Analytics Engineer · Cloud Data Specialist



CURRICULUM



A03 — Fundamentals of Data & AI

Explain the core concepts of data 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.

A25 — SQL

Write complex SQL with JOINS, aggregations, subqueries, CTEs and window functions to answer real business questions.

A14 — Data Fundamentals (Azure)

Describe core Azure data services and design a basic cloud data architecture. Prepare for the DP-900 Azure Data Fundamentals certification.



A15 — Fundamentals of a Data Stack

Design a complete modern data stack: set up an ELT pipeline and use dbt to transform, test and document data in a cloud warehouse.

A53 — Final Assignment (Data Engineering)

Capstone: design and deliver an end-to-end data engineering project.





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 — A53 Data Engineering: a working end-to-end data pipeline.
- Optional exam — DP-900 Microsoft Azure Data Fundamentals.
- Full method, rubrics and resit procedure:
amsterdamdataacademy.com/examination-regulations





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AFTER THIS BOOTCAMP

You'll design and build modern data pipelines on Azure and a cloud warehouse — ready to step into a data engineering role.

OFFICIAL CERTIFICATE

After completing the Data Engineering 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

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