WBS CODING SCHOOL

Data Science

Full-Time

100% online | Full-time | 17 weeks of live lessons | English

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Why choose Data Science?

Data Science is all about uncovering insights and solving complex problems with data. Think of it as digital detective work: using statistics, programming, and domain knowledge to spot patterns, predict trends, and make smart, data-driven decisions.

The key to innovation

From healthcare to finance to e-commerce, valuable insights are hidden within massive datasets. Data Science helps unlock this potential, powering intelligent systems, personalized recommendations, and predictive models that shape industries and everyday life.

Turning numbers into insights

Data alone isn't enough! Through analysis, modeling, and machine learning, raw numbers transform into real-world solutions. Data Scientists blend math with programming skills to turn data into actionable insights, creating smarter tools, better forecasts, and stronger decision-making.

A future-proof field

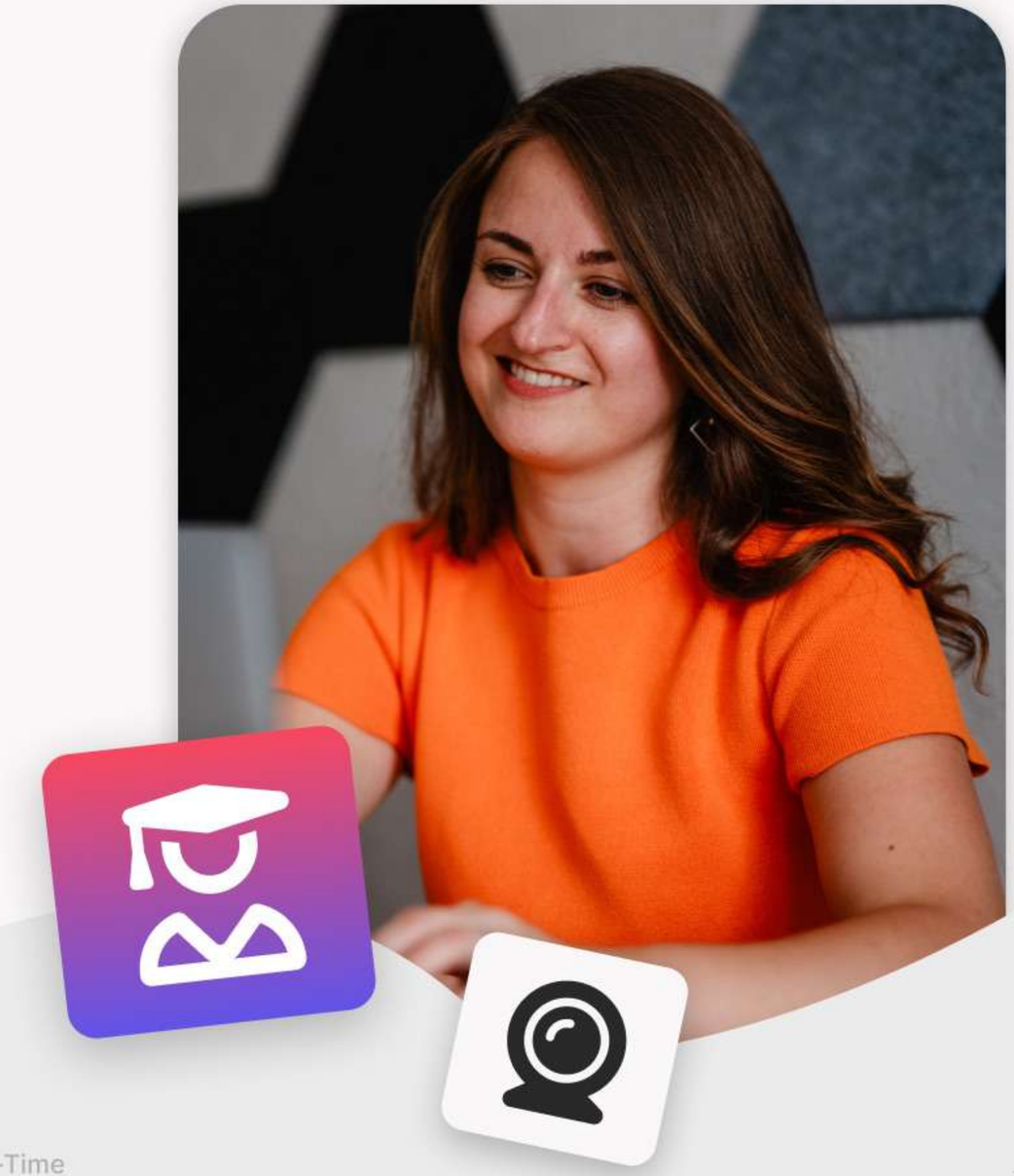
Data-driven strategies are no longer just for tech companies. Businesses across all industries rely on Data Science to optimize processes and discover new opportunities. Whether as a Data Scientist, Data Analyst or Data Engineer – understanding data means shaping the future.

That's why you belong here!

Personal guidance and interactive learning formats

Our teaching approach combines personalized support with dynamic **live group sessions**. An instructor is available every day to assist you, and most days include live lessons to keep you actively engaged.

Regular one-on-one meetings give you the opportunity to clarify individual questions directly with your instructors and receive tailored guidance. Additionally, **live workshops** ensure you deepen your understanding and stay connected to the course content.



What can I expect in the course?

In this course, you'll learn how data professionals work: from SQL and database design to Python, statistics, and data visualization with Tableau. You'll clean, analyze, and present data, and even build your first machine learning models. Beyond technical skills like web scraping and APIs, you'll also strengthen your analytical and communication abilities – essential for presenting data-driven insights effectively. Whether you're just starting out or looking to deepen your knowledge, this course gives you the skills to launch your career in data.

What makes this course special?

This program offers in-depth content in Data Science, daily contact with instructors, personalized support, and a focus on hands-on teamwork.

Our students especially benefit from:

- **17-week course:** Plenty of time to dive deep into the world of data and cover all the key topics thoroughly.
- **8 hands-on projects:** A focus on practical projects rather than just theoretical knowledge.
- **Focus on teamwork:** Learning in groups to simulate real-world work environments.

How do I learn in the course?

Our course is all about **learning by doing**: You won't just code, you'll also learn to communicate your ideas clearly, work in a team, and find creative solutions. Project-based learning is at the core of what we do. You'll tackle real-world challenges and solve problems just like in a real company. **This includes:**

- **Group work** to strengthen teamwork skills
- **Regular lessons and 1:1 support** for individual guidance
- **Quizzes and presentations** to reinforce what's been learned
- Varied tasks to help you build an **impressive portfolio**

A typical day in the course

Whether it's live workshops, interactive projects, or one-on-one support – we aim to prepare you in the best possible way for your entry into the tech industry.
That's why we combine hands-on learning with close personal support. Want to see for yourself? Take a look at what a typical day in the course looks like.

09:00 - 09:20	Stand up
09:20 - 10:00	Today's readings
10:00 - 11:00	Code along with an instructor
11:00 - 13:00	Coding Exercises
13:00 - 14:00	Lunch
14:00 - 14:30	Coding Exercises Solutions
14:30 - 17:30	Project work

Learning and collaboration: our digital tools

Learning Management System (LMS)

Our intuitive LMS is your go-to platform for all learning materials, assignments, and projects. It keeps you on track and makes managing your studies a breeze. Whether you're working independently or collaborating with your team, our LMS supports your every step.

Slack – your team messenger

Slack is where all the magic happens! It's our central tool for communication and collaboration. Connect with your instructors, ask questions, and get the support you need. Plus, Slack lets you network with fellow participants, share ideas, and work together on exciting projects.

Google Meet – for your video calls

Google Meet is our go-to tool for virtual meetings and video calls. With high-quality video, clear audio, and screen-sharing capabilities, Google Meet makes collaboration easy and keeps you connected with us.

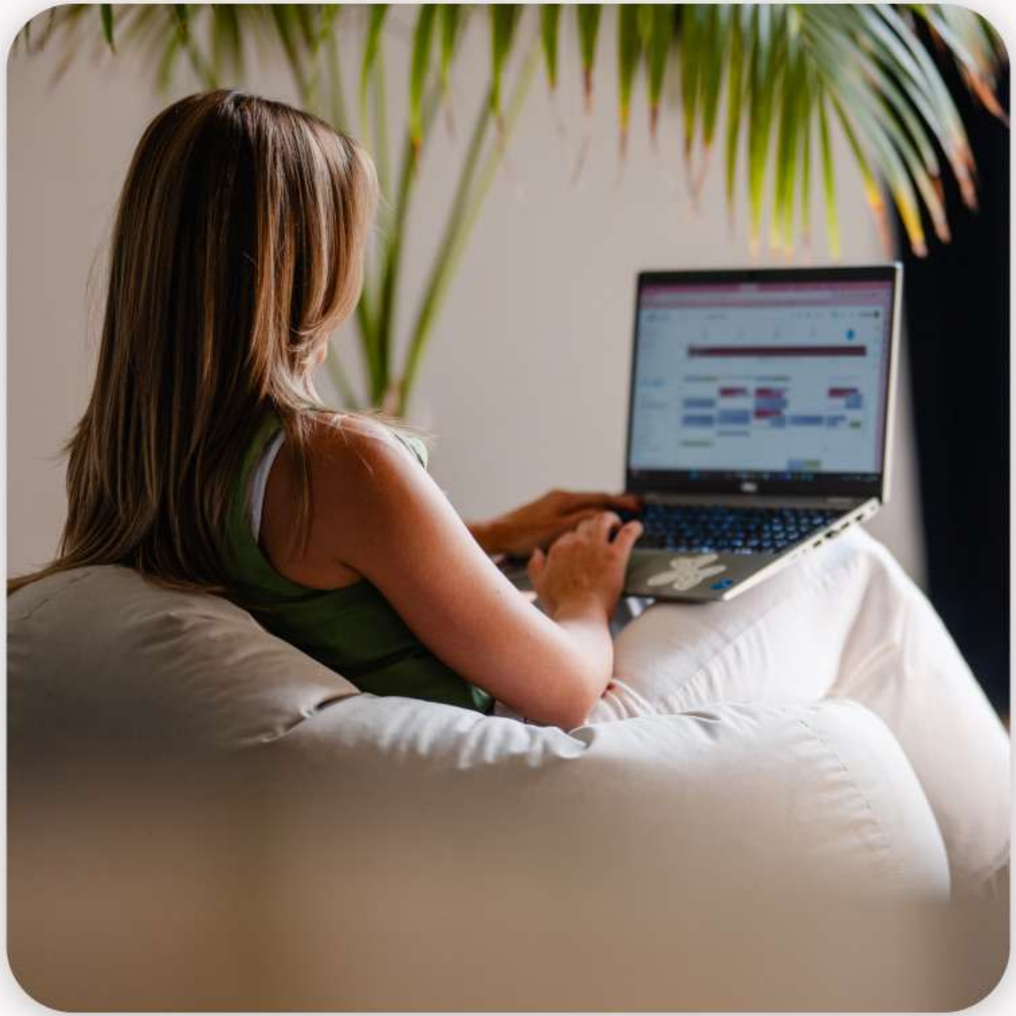
Syllabus

Introductory course (2 Weeks)

2 Weeks

Primer

In this introductory course, you'll learn the basics of SQL, Python, and descriptive statistics. You'll work with data, summarize it using key statistical measures, and develop the necessary understanding to analyze and interpret data with confidence.



Business analytics (4 Weeks)

1 Week

Data-driven business with SQL & Tableau

Put your SQL skills to work in a real-world business project. Using SQL and Tableau, you'll analyze data to determine whether a company should expand or not. In the end, you'll present your findings and provide solid, data-driven recommendations.

2 Weeks

Data cleaning & storytelling with Pandas & Seaborn

Clean data is essential for accurate analysis. In this module, you'll learn how to clean, visualize, and effectively communicate data. Visualizations help uncover complex patterns, and with strong storytelling techniques, you'll transform raw data into meaningful insights.

1 Week

Introduction to Pandas

Pandas is one of the most important Python libraries for data analysis. You'll learn to work with DataFrames, clean data, and perform basic analyses—laying a strong foundation for more advanced data science techniques.

Extracting knowledge: Statistics,APIs & GCP (4 Weeks)

1 Week

A/B testing

Learn how to design, conduct, and evaluate A/B tests. Using inferential statistics, you'll make data-driven decisions to improve products, strategies, and services.

2 Weeks

ETL pipelines

Automated data workflows are key in today's data world. You'll learn how to extract, transform, and load data using web scraping, APIs, and SQL databases. Plus, you'll work with Google Cloud Platform (GCP) to build scalable ETL pipelines.

1 Week

SQL interview preparation

Want to ace your next SQL interview? This module prepares you for common interview tasks—from window functions and temporary tables to stored procedures. You'll practice solving problems efficiently and writing clean, structured queries.

Machine learning (3 Weeks)

1 Week

Unsupervised machine learning

Explore clustering and dimensionality reduction—two techniques that help uncover hidden patterns in data. You'll learn how to identify trends and simplify complex datasets.

2 Weeks

Supervised machine learning

Dive into advanced machine learning techniques. You'll build classification and regression models, perform cross-validation, and select the best model for your data.

Generative AI & Large language models (1 Week)

1 Week

Generative AI

Build your own specialized chatbot! You'll work with large language models and learn how to apply conversational AI for customer support, automation, and personalized user interactions.

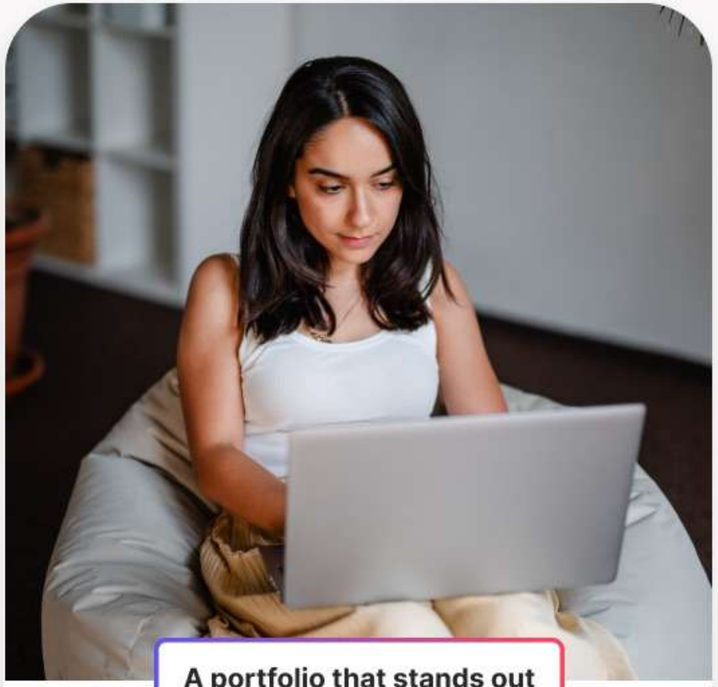
Final projects (3 Weeks)

3 Weeks

Final project

Our Data Science final project is where everything you've learned comes together – and where you prepare for the next steps in your journey. This project not only helps you tackle real-world challenges across fields like e-commerce, music, shared mobility, and UX design but also lay the groundwork for your ongoing job search.
This is your opportunity to take charge of every step: selecting your data, crafting your approach, and presenting a standout solution that showcases your creativity and technical expertise. Whether you focus on a real-world case study or an area you're passionate about, these projects are designed to help you build a portfolio that proves **your skills and sets you apart in the job market**.

These **hands-on challenges** are more than technical exercises – they're a chance to experience how data science drives real-world impact across industries. Along the way, you'll sharpen your skills with tools like Python, SQL, Tableau, Machine Learning, and Data Visualization, while also honing the problem-solving and communication skills essential for your career.



A portfolio that stands out

By the time you complete your project, you'll have a **portfolio-ready piece** that not only demonstrates your expertise but also prepares you to excel in your internship, job search, and beyond.

Course technologies

MySQL

MySQL is an open-source relational database management system used to store, organize, and query structured data using SQL (Structured Query Language).

MySQL Workbench

MySQL Workbench is a visual tool for database design, development, administration, and querying, providing an intuitive interface to interact with MySQL databases.

Tableau

Tableau is a data visualization platform that transforms raw data into interactive and shareable dashboards, providing insights through visual analytics.

Seaborn

Seaborn is a Python data visualization library built on top of Matplotlib, known for its ability to create attractive and informative statistical plots easily.

SciPy

SciPy is a Python library used for scientific computing and technical computing, offering modules for optimization, integration, interpolation, and more.

GitHub

GitHub is a cloud-based platform for hosting and managing Git repositories, allowing for collaboration, code review, and project management for software development projects.

Python

Python is a versatile programming language widely used for data analysis, machine learning, web development, and automation due to its readability and robust libraries.

Pandas

Pandas is a Python library that offers powerful data manipulation and analysis capabilities, especially for working with structured data like DataFrames.

SKLearn (Scikit-learn)

Scikit-learn is a Python library that provides simple and efficient tools for data mining, machine learning, and data analysis, covering tasks like classification and regression.

Google Cloud Platform (GCP)

Google Cloud Platform (GCP) is Google's cloud computing service that provides a wide range of tools and services, including storage, virtual machines, AI and machine learning, big data analytics, and scalable application hosting. It enables businesses to build, deploy, and manage solutions efficiently using Google's infrastructure.

LlamaIndex

LlamaIndex is a toolkit that helps you connect large language models to your own data sources. It simplifies indexing, querying, and retrieving data, making it easier to build AI applications that provide accurate, relevant responses based on your documents.

Your graduation is the ticket to the data world

By the end of our course, you won't just have solid knowledge and hands-on experience – you'll also have an impressive portfolio that showcases your skills. Paired with your graduation certificate, you'll have two powerful assets to to grab the attention of hiring managers.

PCEP: Globally recognised certification

Stand out with a credential that gets you noticed. As an exclusive benefit, graduates of our Data courses can earn the official PCEP certification. It's your industry-recognized credential to validate your expertise and show employers you are ready for the job.

Your WBS CODING SCHOOL certificate

The WBS CODING SCHOOL certificate proves that you've learned through real-world projects and developed valuable data science skills. It's a strong credential that can open doors to top jobs in the tech industry.

Your standout portfolio

All the projects you work on throughout the course, including your final project, will be part of your personal portfolio. It highlights your abilities, proves you can apply your knowledge in practice, and helps you stand out in the job market – paving the way to your dream career.

Team support: we're here for you

At WBS CODING SCHOOL, you're never on your own. Our dedicated team supports you every step of the way.

Operations team

The Operations Team ensures that your course runs smoothly. Whether it's organizational questions, technical challenges, or anything else – our team handles all the details.

Career services

Our Career Services team is here to kickstart your journey into the working world. We'll help you level up your application materials, get you interview-ready, and share valuable tips to ace your job search.

Admissions team

First, you'll meet our Admissions Team. They'll guide you through the entire application process, answer your questions about course content, financing, and entry options, and help you to achieve your goals.

Community team

The Community Team makes sure you feel part of our vibrant community, even online. With regular events, networking opportunities, and an active Slack community, we encourage interaction and connection – both during the course and beyond.

Instructors

Our instructors are not only experts in their fields but also passionate educators. They'll be there for you throughout the course, helping you unlock your full potential.

Career support for your dream job

We support you on your journey into the tech world: from personalized career advice and our exclusive talent pool to exciting events. Your success is our goal – during the course and beyond!

Career service

Our career service helps you present yourself in the best possible way – not only during your studies but also up to 12 months after graduation! From optimizing your resume to targeted interview preparation, we're here to support you.

Events

Use our events to make valuable connections in the industry. For example, at our Alumni Talk, former students share how their careers have progressed after the course – a perfect opportunity to gain insights and learn from real experiences.

Partners

With strong roots in the Berlin tech scene and close ties to companies and industry experts, we offer you a network that makes it easier to enter the job market. Our partners are always on the lookout for talent and exciting projects – and you can benefit from that!

Job market and prospects

Data Scientists are in higher demand than ever, and with the growing amounts of data and ongoing technological advancements, the industry offers excellent long-term career opportunities and diverse growth potential.

According to a study by the World Economic Forum, the demand for these roles is expected to rise by 30-35% by 2027. As the need grows, so does the importance of ongoing education. Nearly one in four companies are already investing in training to equip their employees for data-driven tasks.
One thing's clear: Data Science is no longer a niche field but a key player in the digital economy. Those who specialize in this area are securing in-demand future skills in a fast-paced, innovation-driven environment.

Sources: Future of Jobs Report 2023

Possible career paths

Data Scientist

Average of €66,000 per year in Germany

That's what you do on the job: developing models, analyzing data, staying on top of trends in the data science world, improving data-driven processes, and evaluating models.

Data Analyst

Average of €56,600 per year in Germany

That's what you do on the job: collecting and cleaning data, analyzing datasets, creating reports and dashboards, providing decision-making support, and collaborating with other departments.

Data Engineer

Average of €65,700 per year in Germany

That's what you do on the job: building data pipelines, managing databases, integrating data, improving systems, and working closely with data scientists and analysts to align on data requirements and find solutions.

Salary range for Data Scientists in Germany

Source: Glassdoor, Kununu

WBS CODING SCHOOL

Your entry into the tech world

Since 2019, we've been dedicated to transforming ambitious learners into tech industry professionals. Our online courses in AI, Data, UX/UI, and Web Development are designed to meet the fast-paced demands of today's job market. Guided by expert instructors, students learn by doing – building the confidence to tackle the challenges of a dynamic tech industry.

But we're more than just tech training. We're a community built on inclusivity, empowering the innovators of tomorrow through personalized support, hands-on projects, and a focus on skills that make a real impact. Together, we're shaping a tech industry that's diverse, accessible, and ready for the future.

WBS GRUPPE – our strong roots

As part of the renowned WBS GRUPPE, one of Europe's leading providers of professional development, we benefit from over four decades of experience and an extensive network.

WBS CODING SCHOOL in numbers

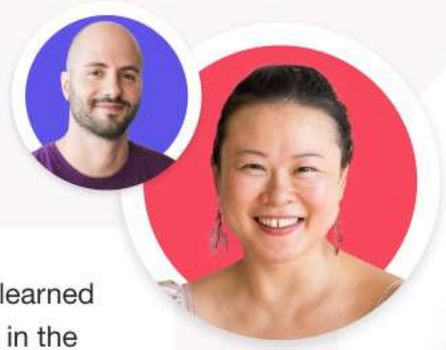
40+ years of experience from the WBS GRUPPE

2019 - founded as part of the WBS GRUPPE

2,000+ graduates

280+ WBS locations

What our alumni say



"I undertook the Data Science Bootcamp and it was **a wonderful experience**. I learned a lot but what is even better for me - I feel now I will be able to learn what I need in the future. Thank you instructors and team!"

★★★★★ **Almuth Hattwich, Data Science Graduate**

"I learned **lots of new things** and met a bunch of amazing people. I not only participated in a course but was also part of a community! Thank you, WBS!"

★★★★★ **Andreea Belu, Data Science Graduate**

Course Report
4.8/5 Stars
★★★★★

Switchup
4.9/5 Stars
★★★★★

Google
4.9/5 Stars
★★★★★

Trustpilot
4.5/5 Stars
★★★★

Where our alumni work:

accenture, aws, BASF, facebook, Lufthansa, Mercedes-Benz, SHARENOW, TESLA, Toyota, DB, SAP, zalando, Klarna, Meta, Lieferando

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