

Program Curriculum

Data Analytics

2025 Spiced Program Curriculum Data Analytics



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I felt stagnant and wanted something new. That's when I found SPICED.

Christelle

Now working as a Data Analyst in Hamburg

Hallo!

Everyone has to start somewhere.

For us, it started in Berlin with a simple idea. To propel highly motivated people into the careers they want, through expert-led and meticulously curated tech courses.

We don't just teach the latest technologies, though.

Spiced is an attitude. It's a community and a melting pot. It's a place where you can meet and connect with people that could change the trajectory of your life. Those who help you develop professionally and personally. From your cohort and beyond.

It takes guts to do what you're doing. No-one's born a genius - it's going to take hard work and dedication to get where you're going.





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Your fast track to Data Analytics.

With more jobs than ever requiring data skills, our Data Analytics course will get you career-ready in a way that you're ready for.

For novices that want to go to the next level, you'll go from writing a single line up to telling compelling stories with your data. You'll get to grips with Python, pandas, data visualization and dashboards, databases and SQL, and more.

The program is built around a real-world projects, meaning you'll be getting hands-on from day one.

On top of all that, you'll get career coaching - including CV advice, job search techniques, technical interview coaching and much more.





My time at SPICED was amazing! And I'm a person with no IT background. I can't believe the things I can do with different softwares since the day I started the bootcamp!

George SkendrasFrom Nurse to Data Analyst



There's no online course that compares with the experience and knowledge you'll gain at SPICED! I have a deeper understanding of the Data Analytics world, and the possibilities for my career.

Diana Pérez de Castro From Product Owner to Data Analyst



If you have passion for data, finding trends and telling stories, then this is the perfect course for you!

Christelle Peig-Dettmann
From Finance to Business Improvement

Before the Course

(40 Hours)

Before the course you'll be required to pass a short assessment. Nothing to sweat about, we just want to see how you are with basic concepts that will be important for your success in the course.

Upon successful completion of the assessment, you'll be sent some Python-based prep work to get you ready for the on-site portion of the program.



(12 Weeks)



Phase 1

Kick off your data analytics journey by meeting your cohort and building connections in a supportive and collaborative environment. Explore the role and responsibilities of a data analyst, get an inside look at the key tools of the trade, and gain a clear understanding of what's ahead in the bootcamp. This is where your transformation begins.



Important Topics

Skills

Tools

Roles



Dive into the world of descriptive statistics and discover why they're a cornerstone for any data analyst, helping you make sense of large datasets with clarity. Learn to harness the power of Google Sheets, pick up expert tips for creating impactful presentations, and master problemsolving techniques guided by our experienced coaches.

Phase 3

Get your system ready to dive into coding! Together, we'll set up your environment, including Python in a conda environment, and get hands-on with the command line. You'll explore Python syntax, work with variables, data types, loops, conditional statements, and functions—all while coding in an Integrated Development Environment (IDE). By the end, you'll not only understand pseudocode but also write your first simple program.

Phase 4

Step into the world of exploratory data analysis (EDA) and learn how to collect, clean, and expand datasets with confidence. You'll combine datasets, handle missing values, and uncover valuable insights. Discover the power of Key Performance Indicators (KPIs) while visualizing data like a pro using Matplotlib and Seaborn.

Important Topics

- Spreadsheets
- Statistics
- Problem Solving
- Presentations

Important Topics

- Unix
- Python
- Coding

Important Topics

- Pandas
- KPIs
- Visualization
- matplolib





You'll explore database basics and structures with your peers. You'll learn to connect to a PostgreSQL database using DBeaver, understand SQL syntax, and construct SQL queries. Through code-along scripts and hands-on tasks, you'll gain practical experience with SQL execution.

Additionally, you'll dive into data infrastructure elements and learn how to design a star schema.

Phase 6

Use API keys to connect to APIs, automate multiple calls with different parameters, and execute SQL queries from Python. You'll also practice reading documentation to understand limits and formats. We'll teach you to access and extract data from JSON files. Finally, you'll apply your skills in a project, using agile tools to organize and manage your work—just like you will in the job.

Phase 7

In this final phase, you'll learn how to connect to data and explore it using Tableau. You'll master filtering, grouping, calculating fields, and using parameters. By the end of the bootcamp, LODs, table calculations, and creating interactive dashboards will be essential skills in your toolkit.

Important Topics

- SQL
- Databases
- DBeaver

Important Topics

- API
- SQL
- Datapipeline

Important Topics

- Visualization
- Tableau
- Dashboards





Phase 8

We believe the best way to solidify your learning is through hands-on application. In this phase, you'll bring all your knowledge together in your digital graduation project.

Important Topics

- Graduation project
- Stakeholders
- Data



The curricula presented here are intended as a guide to the course content. We expressly reserve the right to make adjustments to the content and structure for didactic and organisational reasons, and to adapt the course to reflect the state of the art and current labour market requirements, without affecting the character of the course and the overall quality of the content.

Tech Stack

Programming & Database

Python

- Intro to Python
- Pandas
- Scikit-Learn

Visualization

- Best visualization practices
- Matplotlib
- Seaborn
- Plotly

Web Application

• Dash

SQL

- Postgres
- · Data Modelling
- Import/Export
- CRUD
- Advanced SQL (Window Functions, CTE)

Git(Github)

Google Cloud Platform

Exploratory Data Analysis (EDA) & Statistics

Data Cleansing

Data Wrangling

Descriptive Statistics

Explanatory Data Analysis

Inferential Statistics (Normal Distribution, Probability Distributions, CI)

AB Testing

Data Ethics

Machine Learning Algorithms

Supervised Machine Learning

• Linear Regression

Unsupervised Machine Learning

Clustering

Analytical Engineering

APIs

Dbt

- Stages
- Datamarts

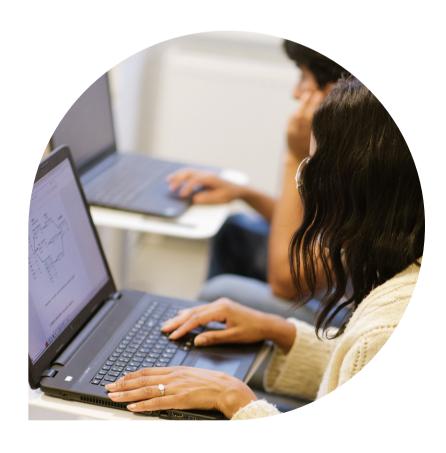
Business Intelligence

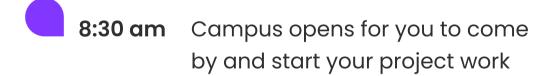
Tableau

- Visualization Types
- Dashboards & Stories
- Table Calculations
- Parameters & Calculated Fields
- Level of Detailed Expressions
- Sets & Multiple Data sources



Your day at SPICED





10:00 am Morning encounter followed by supervised project work

12:00 pm Lunch

1:30 pm Afternoon encounter followed by supervised project work

6:30 pm Campus closes for the day.
Time to go home and get some well deserved rest!



Payment options

Full-Paying

Ready to invest in your future? Pay the full tuition fee (€9,800) 14 days before the course starts.

Installments

Pay in 3 handy instalments (including a €300 surcharge):

€3,900 - 14 days prior to program €3,100 - 4 weeks into the program €3,100 - 8 weeks into the program

Deferred Payment

If you don't have the means to pay the total compensation upfront or in instalments but still want to participate, we offer a deferred payment option to highly motivated candidates. Those accepted will have a clear vision of what they want to do after SPICED. Applicants will be interviewed and answer a questionnaire.



Payment options (ctd.)

Bildungsgutschein

If you're registered as unemployed (or soon to be) in Germany, you could be eligible to have all your costs covered with a Bildungsgutschein (training voucher).

Heads up, the more motivated you are, the higher the chances are to get one!

For more information on this option, check our page dedicated to financing your bootcamp with a Bildungsgutschein right here.









"Most importantly, Spiced feels like a family. When you're working 8-10 hours a day surrounded by the same people, it's good to have a supportive work environment and atmosphere."

Olof Reimegard now working @ Zaplox



Where practical meets personal

Our Career Services

Through our Learning Management System (LMS), you'll receive career tips and support from the preparation of application documents to job search strategy and personal branding - all from a single source!

Our expert Career Coaches help you excel at real-world interviews, and build your communication skills, critical thinking, teamwork and empathy.

- Job interview workshops
- Strategies for changing jobs and career paths
- Salary negotiations
- Career Cupid: networking event with companies,
- Alumni "Ask me anything" sessions
- Recruiter "Ask me anything" sessions
- Expert panels and Q&A
- Career roadmap for international students



Phase 1

Identifying your skills



Phase 2

Understanding the Job Market



Phase 3

Tips for starting your new job



Phase 4

Networking

Career Opportunities

Marketing Analyst

Business Analyst

Reporting Analyst

Data Consultant



Community

Community rules at SPICED - after all, there's more to life than studying! For those in Berlin, we hold regular get-togethers with pizza and drinks in our beautiful campus so you can share ideas, grab a coffee, and generally unwind among fellow hungry minds.

We pride ourselves on our international culture and provide a supportive environment to both students and staff. If you need help with your code or a chat, we try to make sure there's always someone on hand for a quick Zoom, or a sit down.

Oh, and Friday drinks can be the stuff of legend.





Our Campus

Welcome to Kreuzberg. Home to SO36 punks, döners and the loveable rogues of Spiced-World. Just at our doorstep you'll find a world of cuisine, upscale cocktail joints, downtrodden kneipes, and cafes ranging from artisanal to hole-in-the-wall.

We love hosting tech events and bringing our ever-growing network to campus and online for workshops and talks. Even after you've graduated, there's an open invite to our events - once a Spicedling, always a Spicedling.





Thank you

For more information, please get in touch info@spiced-academy.com







