

Program Curriculum

# Data Analytics

2023 Spiced Program Curriculum Data Analytics



# GG

# The teachers guide the students with passion and patience. I feel well prepared for a career in Data Analytics.

Angelika, Data Analytics Graduate

# 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.

We're here with you, every step of the way 🚀





# Contents

- Introduction
- Detailed Curriculum
  - Before the course
  - What you'll learn
- Payment options
- Life at Spiced
- Contact











# 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 beginners but not the fainthearted, 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.

Every week of the program is built around a real-world project related to the week's content, meaning you'll be getting hands-on from day one.

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





I couldn't be happier with the experience. Nine intense weeks have equipped me with the tools I need to start my career as Data Analyst: Python, SQL and Tableau, plus career coaching that increases the chances to find a job after the Bootcamp.

One of the best learning experiences of my life.

**Daniel, Berlin**Now Business Analyst @ Herl

#### **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.



(9 Weeks)



#### Phase 1

In the first week of the course you will focus on the basics of programming in Python. We will start by repeating the Python basics from the prep course. At the end of this phase you will design and program your first text adventure game.



#### **Important Topics**

- GitHub
- Python programming
- Data types
- Functions





In the next phase you'll move onto more advanced topics. You'll learn about pandas, data cleaning and exploratory data analysis, data visualization techniques using Matplotlib and Seaborn, and working with tabular data. These skills will enable you to manipulate, analyze, and visualize data to gain insights and make informed decisions.

#### **Important Topics**

- pandas
- Data cleaning & EDA
- Tabular data
- Matplotlib
- Seaborn

#### Phase 3

With the descriptive statistics you'll be able to provide more insights about a dataset. You'll be able to draw conclusions about the information of the datasets and use them to analyze data. With the A/B testing you'll discover the impact of changes or interventions when comparing versions of a feature or product products. By the end of the phase, you'll be able to apply these techniques to real-world problems and draw meaningful conclusions from data.

#### **Important Topics**

- Descriptive statistics
- Linear regression
- Inferential statistics
- A/B testing
- Distribution functions



The fourth phase is about Analytical engineering using databases. You'll learn about relational databases and their components, and how to create a logical data model to organize data efficiently. You'll learn how to interact with a relational database using and execute SQL statements from Python.

#### Phase 5

You'll learn about good practices in visualization and how to create effective graphs that tell a story. We'll introduce you to Tableau, a powerful data visualization tool that helps you to create interactive and engaging dashboards. By the end of the week, you'll have a good understanding of how to create attractive visualizations and communicate insights in a compelling manner.

#### Phase 6

In the final part of the program you'll learn to deploy machine learning systems with a web interface. You'll apply professional engineering techniques to a maintainable software product. In the final two weeks of the course you'll combine everything you've learnt in your self-defined final project.

#### **Important Topics**

- Data modelling
- Relational databases
- PostgreSQL
- SQL from Python
- Google Cloud Platform

#### **Important Topics**

- Data Modeling
- Queries
- SQL from Python
- Dash
- Tableau

#### **Important Topics**

- Programming in Python
- Data Visualisation
- Data Wranling
- Descriptive and inferential statistics
- SQL & PostgreSQL



# Your day at SPICED



8:30 am Campus opens for you to come by and start your project work

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 (€6,500) 14 days before the course starts.

Installments

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

€2,800 - 14 days prior to program €2,000 - 4 weeks into the program €2,000 - 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.)

#### **CHANCEN E.G.**

CHANCEN eG is our external loan provider. Upon starting your new job, income-based repayments are made to CHANCEN eG over a 5 year period. Should your annual income be less than €21,000, repayments are not required. Your repayment is then shifted to a period when you earn above the minimum income threshold. You can apply for this payment method using this link.

#### 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 <u>right here</u>.









"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 Full Stack Web Developer @ Zaplox



#### **Careers Service**

Where practical meets personal, our Careers Service helps turn the dream job into *your* job.

Through group workshops, we help you excel at real-world interviews, and build your communication skills, critical thinking, teamwork and empathy.

And it doesn't stop there - you'll also have access to one-to-one coaching until you're sat at the desk of your very first job. After all, learning new skills isn't just a technical undertaking, it's an emotional one, too.



### Community

Community rules at Spiced - after all, there's more to life than studying! For those in Berlin, we hold regular gettogethers 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.

## **Online**

Can't make it to campus? No worries. We make sure to keep the Spiced community alive for our remote students with dedicated breakout rooms, regular online catch ups and, of course, the opportunity to come to any of our Germany-wide meetups throughout the year.





# Thank you

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







