# **Python Backend Programming**

10 months + 2 months internship English (min. B1) courses start every 3 month

Berlin. Düsseldorf. Hamburg. Leipzig. Frankfurt. Munich. Online.

### Aim of the course

Our Python Backend Programming course is developed for people from diverse backgrounds who pursue a career in the digital industry. The course is designed to meet the needs of career changers and qualifies people to start their careers in backend development on a permanent or freelance basis.

# **General requirements**

No programming knowledge required, good analytical thinking skills, at least a intermediate secondary school diploma, high school diploma or general university entrance qualification, successful completion of an orientation measure or assessment in the IT field.

## Curriculum

Our curriculum is split into 6 different modules. Each module is taught by a different teacher whose subject area is that particular module. At the end of each module, participants put their knowledge into practice through a small project.

### **Basic Digital Literacy**

Learning how to create, view and manipulate files & folders, be able to use tools such as git and GitHub. Getting to know the fundamentals of information and communication technology, web development and learning tools and understanding the concept of programming.

### Python

Learning what Python is and how it functions as a programming language. Introducing fundamental programming building blocks and programming language agnostic concepts. Learning about general programming standards enabling a common language between developers.

### Databases

Introducing the concept of a database and contrasting it to other means of data organization. Learning how to query for data, change existing data and use the learned database concepts within the context of Python.

#### 3 Weeks

12 Weeks

4.5 Weeks



#### **Django Framework**

Learning how web applications can be created using the Django framework for Python. Introducing differences between various components of the Django landscape as well as the administration and deployment of Django applications with e.g. separate middleware.

#### **APIs & Cloud Services**

Learning the basics of APIs and how third parties can access a web application without having access to the source code, via the use of APIs. Introducing the concept of cloud computing and comparing various cloud computing providers (AWS, GCP).

#### **Final Project**

Planning and developing a larger project with a real life use case in teams using one of the agile methodologies to manage it. Including ideation, project planning, project management, software development, testing and finally presenting the project with a slide deck in front of a crowd.

2 Weeks

5 Weeks

7 Weeks

MO - THU / 9 AM - 4:15 PM Backend Development Class



#### **Soft Skills**

Aim: Introducing the fundamentals of communication within teams and conflict communication, basic concepts of intercultural competence and team dynamics as well as the fundamentals of good presentations. Developing a growth mindset and strengthening participant's selfmarketing abilities.

### Language Courses German / English

**Aim:** Enabling participants to improve their language competence in workplace-oriented situations according to the Common European Framework of Reference for Languages (CEFR). Improving listening and understanding skills, writing and reading skills as well as their conversational skills.

#### Mentoring

Aim: Practically deepening the contents learned in the course and expanding skills and competences through practical projects and exercises under the supervision of a teacher. Independently developing and implementing solutions to problems.

#### **64 Lessons**

20 Lessons

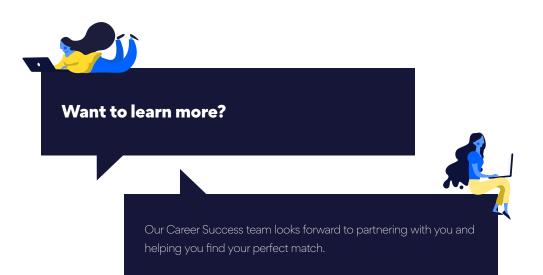
96 Lessons

## In what positions do graduates work?

Graduates work in positions such as (Junior) Python backend or fullstack developer, software developer, IT consultant and many more.

# What else do we offer?

Besides teaching coding skills, we focus on the entire package. Therefore, our courses include working on practical projects, Git-Hub education, mentoring, language courses (English & German), soft skills training and job coaching.





### Interested or got any questions?

Just contact us under: career.success@digitalcareerinstitute.org

