

# CERTIFICATE

# Kinga Kasperczyk-Groszewska

Has successfully completed

# **PYTHON DEVELOPER**

course at GoIT

12/11/2024

Unique ID 33655

**PYTHON** 

goit.global

**CEO of GoIT** 

**Anton Chornyi** 





# Supplement to Python Developer course certificate

### **General information**

#### **Soft Skills**

2 classes, 4 hours

#### **Python Core**

24 classes, 48 hours12 assignments on Tech Skills

#### **Python Web**

28 classes, 56 hours14 assignments on Tech Skills2 team projects

#### **Data Science**

24 classes, 48 hours
16 assignments on Tech Skills
1 class, 2 hours
3 assignments on Career Skills
3 team projects

### **Python core units**

Unit 1. Data Types in Python

Unit 2. Control structures. Exceptions

**Unit 3.** Functions.

Unit 4. Data structures

Unit 5. Advanced work with strings

Unit 6. Work with files

Unit 7. Creating and installing custom packages, virtual environment

Unit 8. Work with date and time. Collections. Comprehensions

Unit 9. Functions. Decorators. Closure. Carrying

Uni 10. OOP. Basics of working with classes



**Unit 11.** OOP. 'Magic' class methods **Unit 12.** Serialization and copy objects

### **Python Web units**

Unit 1. SOLID and Design Patterns

Unit 2. Python Development tools. Poetry. Docker

Unit 3. Multithreading and Multiprocessing in Python

Unit 4. Web fundamentals

Unit 5. Asynchronous programming in Python

Unit 6. Relational databases. Postgres

Unit 7. ORM SQLAlchemy

Unit 8. NoSQL databases. MongoDB. Redis. RabbitMQ

Unit 9. Web-scraping. Beautiful Soup. Scrapy

Unit 10. Fundamentals of working with Django

Unit 11. Building a REST API with FastAPI

Unit 12. Authorization and Authentication. JWT

Unit 13. Sending emails. Basics of web application security

Unit 14. Testing and deploying web applications. Unittest. Pytest. Sphinx

#### **Data Science units**

Unit 1. Introduction to Data Science

Unit 2. EDA. Basics of statistics

Unit 3. Classical machine learning

Unit 4. Classification. Model evaluation

Unit 5. Other supervised learning algorithms

Unit 6. Unsupervised learning

Unit 7. Recommender systems

Unit 8. Deep learning

Unit 9. NNs Hyperparameters tuning

Unit 10. Convolutional neural networks

Unit 11. Sequence Models

Unit 12. Intro to NLP. State of the art NN