

GO

IT

# CERTIFICATE

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Has successfully completed

**PHYTON DEVELOPER**

course at GoIT

12/11/2024

Unique ID 33655

PHYTON

[goit.global](https://goit.global)

CEO of GoIT

Anton Chorny



# Supplement to Python Developer course certificate

## General information

### Soft Skills

2 classes, 4 hours

### Python Core

24 classes, 48 hours

12 assignments on Tech Skills

1 team project

### Python Web

28 classes, 56 hours

14 assignments on Tech Skills

1 team project

### Data Science

24 classes, 48 hours

12 assignments on Tech Skills

1 class, 2 hours

3 assignments on Career Skills

1 team project

## 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

**Unit 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. BeautifulSoup. 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