

# Python Programming

## From Basic to Advanced

Teaching  
5 days a week

6 weeks job oriented training  
Approved on regional positive list

### Gain skills in Python programming and development so you can strengthen your competences and work professionally in the industry

Python is a high-level object-oriented programming language that continues to gain greater and greater acceptance around the world. In this course you will be taught Python and Python's development. You will learn how to develop and write codes that conform to the Pythonic style.

During the course, you will learn data types, data structures, complex datatypes and how to use them in different programming styles and patterns.

You will learn, among other skills, object-oriented programming, basic testing, data development, analysis and advanced features.

With this course you will gain knowledge of python modules and Python skills to move into specific branches like Machine Learning, Data Science and web development.

In addition, you will be taught advanced operations with Pandas, NumPy Arrays, data visualization.

You will receive training corresponding to the Python certification Python Coding Apprentice (PCA). The certification can be taken after completing the course. Contact Itucation for more information. Note that certification is at an additional cost.

### Course content



#### Python - Basic

- Introduction
- Variables and Data Types
- Lists, Tuple, Dict and Sets
- Conditional Statements & Loops
- Python Features & Lambda



#### Object Oriented Programming

- Introduction to Object Oriented Programming
- Python Classes / Objects & Inheritance
- Implementation of Data Structures & Algorithms
- Working with Data
- Multithreading, Parallel & Asynchronous Programming



#### Modules & Unit Testing

- File handling
- Troubleshooting
- Python Modules
- Python Unit testing
- Console input & output operations



#### Python - Advanced

- HTTP requests with Python
- NumPy, Matplotlib, Pandas and SciPy Modules
- Excel and Data Visualizations with Python
- Socket Programming
- Introduction to Web Development with Python
- Introduction to Machine Learning

## The course is for you who ...

- » Have experience in using a PC, Windows and possibly experience in development
- » Is motivated and has ambitions to work with Python programming

## Course types

### Classroom teaching

All weekdays from 09:00 to 15:00. The weekly tuition is a total of 30 lessons, and alternates between theory and practical exercises. A PC will be available for you in the classroom.

### Online

As an online participant, you follow the classroom lessons, but attend from home on your own computer. The schedule, the teacher and the teaching material are the same whether you participate as an attendance or online student.

### Career Coach

No matter how you attend the course, you get opportunity to spar with Itucation's career coach regarding CV, application and job strategy. More information follows at course start.

### Certification

You can complete the course with the Python certification Python Coding Apprentice (PCA). Note that certifications are an addition. Please contact us for more information.

## Upcoming courses

Ongoing start-up - please see our website.

## Practical information

**Course type** Classroom teaching or online

**Duration** 6 weeks

**Language** English

**Price** Free, if you fulfill the criteria for 6-week job-oriented training programs

**Application** [www.itucation.dk](http://www.itucation.dk) or contact us if you need help with your application

**Contact** **Itucation**  
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2400 Copenhagen NV

Tel. 7027 2784

[kurser@itucation.dk](mailto:kurser@itucation.dk) (*secure mail*)  
[www.itucation.dk](http://www.itucation.dk)

## Information to your job center

### Regional positivist

The course is approved  
- please find list title and number on  
our website

### Certification

1.000 DKK (*ex. VAT*)

### Price for course

27.240,30 DKK (*ex. VAT*) - 2024 rate  
Cost per week: 4.540,05 DKK (*ex. VAT*)

### Payment commitment (betalingstilsagn)

Itucation  
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CVR-no.: 33248016

P-no.: 1016378247