

SYLLABUS

100 DAYS OF CODE
COMPLETE
PYTHON BOOTCAMP



Learn Earn & Fun

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BEGINNER PYTHON

Local Development Environment Setup

PyCharm Tips and Tricks

Print, Input, Len Function

Variables

String Manipulation

Variable Naming Rules

Mathematical Operations

Data Types

Converting types

Conditionals IF/ELIF/ELSE

Logical Operators

Randomization

Error Handling

Functions

For Loops

Code blocks and Indentation

While Loops

Flowchart Programming

Positional and Keyword Arguments

Python Dictionaries and Lists

Nested Collections

Returning Functions

Return vs. Print

Doc Strings vs. Comments

Scope and Local/Global Variables

Debugging Techniques

INTERMEDIATE PYTHON

Python Object Oriented Programming

Creating Classes in Python

Using External Python Modules/Import

Getting / Setting Attributes

Python Methods

Class Initialisers

Module Aliasing

Optional, Required and Default Parameters

Event Listeners

Python Instances and State

Python Turtle

Game Development with Python and OOP

Python Inheritance

Python Slice Function

File I/O Reading and Writing to Local Files

File Directories

Reading and Writing to CSV

Introduction to the Pandas Framework

List Comprehensions

Dictionary Comprehensions

Packing and Unpacking Functions

Creating Desktop GUI Apps with Tkinter

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Strongly Dynamic Typing
Error Handling and Exceptions
Try / Except/ Raise
Working with JSONs
Local Persistence
Sending Email with Python and SMTP
Working with date and time
Hosting Python Code Online with PythonAnywhere

INTERMEDIATE +

PyGame

APIs
Making HTTP Requests with the Requests module
Sending Parameters with the Request
APIs with Authentication
Sending SMS with Python
Web Scraping with Beautiful Soup
Browser Automation with Selenium Web Driver
Automating Twitter
Automating LinkedIn
Automating Instagram
Web Development with Flask
Python Decorators
Templating with Jinja 2
WTFForms

ADVANCED PYTHON

Build Your Own REST API with Python
Build Your Own Blog
Databases with SQLite
Dataframe Inspection
Data Cleaning
Sorting Values in Dataframes
Arithmetic Operations with Pandas
Creating Pivot Tables
Chaining Functions
Smoothing Time Series Data
Creating Line Charts with Matplotlib
Using Jupyter Notebook
HTML Markdown
Testing with PyTest, unittest
Creating Scatterplots with Matplotlib
Relational Database Schemas
Descriptive Statistics
Creating Bar Charts, Pie Charts, Donut Charts, Box Plots with Plotly
Matplotlib
Deep into NumPy
Seaborn, Scikit-Learn, SciPy

SYLLABUS

100 DAYS OF CODE
COMPLETE
PROFESSIONAL
PYTHON BOOTCAMP

PROFESSIONAL PORTFOLIO BUILDING INDEPENDENT ASSIGNMENTS

Text to Morse Code Converter
Image Watermarking App

Todo List Website
Image Color Palette Generator
Custom API Driven Website
Library Management System
Quiz Application

BONUS: MACHINE LEARNING

Machine Learning with Tensorflow Python: Crash Course



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