

Document Generated: 04/24/2026

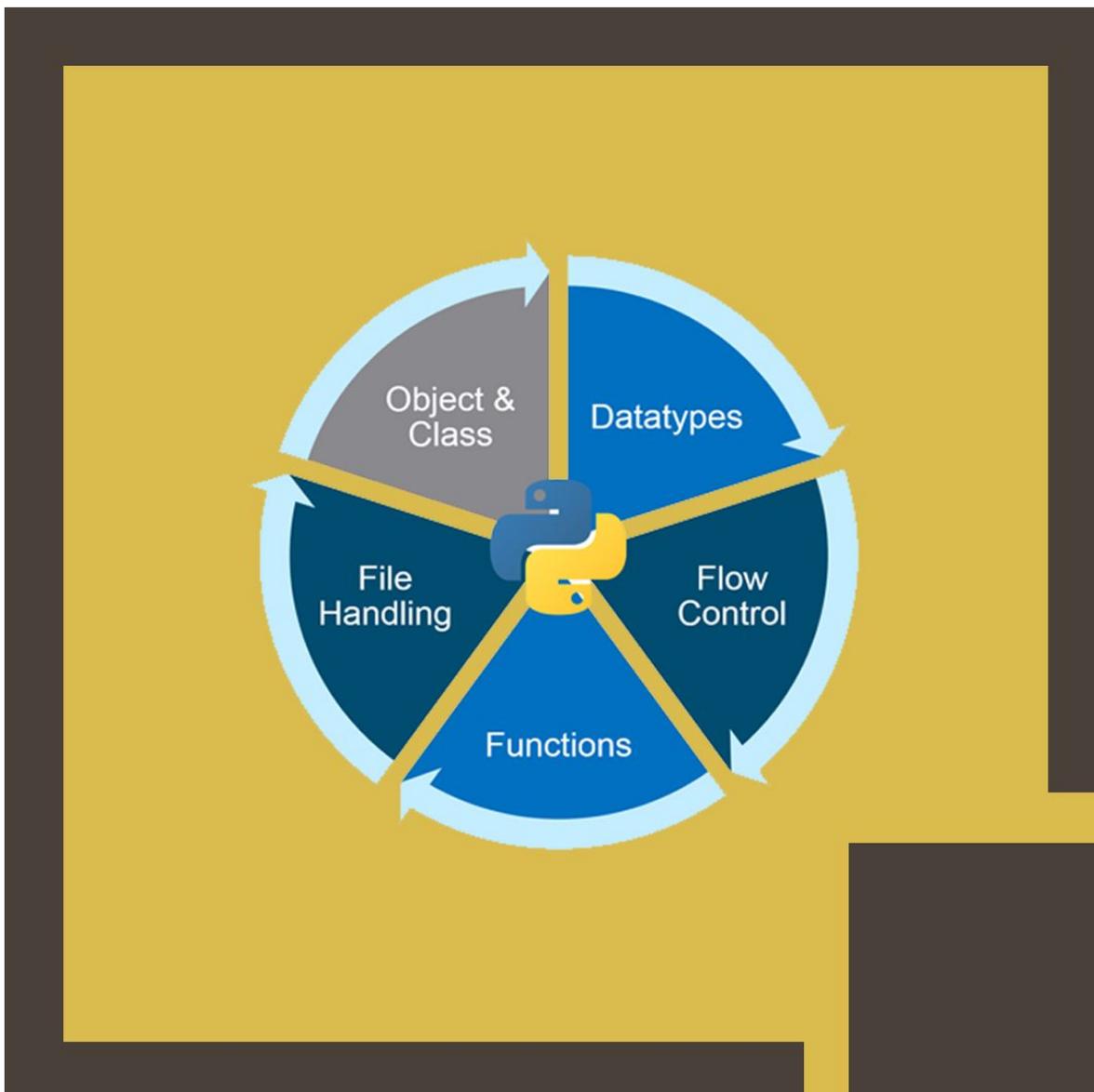
Learning Style: On Demand

Technology: Microsoft

Difficulty: Beginner

Course Duration: 20 Hours

Introduction to Python: Fundamentals



About this course:

Prepared for more involved, step-by-step detailed Python fundamentals course? Get bunches of work on working with test code in Jupyter Notebooks on Azure, that only requires just a program and connectivity to internet.

Python Fundamentals kicks you off with Python, a unique language famous for web development, data science, big data, and scripting as well. What's so extraordinary about Python? Python is amazing, everything about Python is amazing. The Python language is expressive and gainful, it accompanies an extraordinary standard library, and it's the focal point of a colossal universe of magnificent third-party libraries. With Python you can construct everything from straightforward contents to complex applications, you can do it rapidly, and you can do it with less lines of code than you may might suspect conceivable.

Concentrate on Python data structures, explore range sequences, and work with strings and lists. Explore the effects of list iteration, and find out about string and list strategies. When you will finish this course, you will have the expertise to cut strings into substrings, make records, traverse through them, import documents and files, and use file append mode, alongside a great deal of other practical Python exercises, as you begin coding.

Turning into a great software engineer is somewhat similar to building an enormous pinnacle of information in the strong foundations that contributes to your prosperity. Finishing this course will grant you with authority over these foundations.

Course Objective:

After finishing this course, the candidates will:

- Have strong and clear core concepts of Python
- Learn core Python 3 fundamentals
- Make a program that encrypts messages
- Make a program that decrypts encrypted messages
- Explore Strings and List control
- Learn how to interact with users through text terminals
- Techniques to traverse through strings, lists and ranges

Audience:

This course is intended for:

- Individuals keen on programming who have no prior programming experience
- Python software engineers who need to advance in Python
- Any other individual who is keen on learning Python
- This course isn't for experienced Python developers

Prerequisites:

- Candidates must have basic understanding of Python.
- Basic knowledge of maths and statistics

Course Outline:

Module 1 Sequence Index

- Using Jupyter
- String Sequences
- Index Slicing
- Iterating Strings
- String Methods
- Module 1 Practice
- end of Mod coding assignment

Module 2 Sequence Manipulation

- List Sequences
- List Append
- List Insert
- List Delete
- Module 2 Practice
- end of Mod coding assignment

Module 3 Sequence Iteration

- Power of List Iteration
- Range Iteration
- extend, reverse, sort methods
- between strings & lists
- Module 3 Practice
- end of Mod coding assignment

Module 4 Files

- Files import, open & read
- File .readlines() and .close() methods
- File .readline() & .strip() methods
- File .write() & .seek() methods
- Module 4 Practice
- end of Mod coding assignment

Module 5 Final Evaluation

- Final Coding Assignment

Credly Badge:



Display your Completion Badge And Get The Recognition You Deserve.

Add a completion and readiness badge to your LinkedIn profile, Facebook page, or Twitter account to validate your professional and technical expertise. With badges issued and validated by Credly, you can:

- Let anyone verify your completion and achievement by clicking on the badge
- Display your hard work and validate your expertise
- Display each badge's details about specific skills you developed.

Badges are issued by QuickStart and verified through Credly.

[Find Out More](#) or [See List Of Badges](#)