

# Introduction to Python for Business and Finance

### Overview

**Python** is a high-level, object-oriented programming language that is <u>used in a variety of projects</u> ranging from data science and machine learning to backend web development. In fact, it is one of the most <u>in-demand</u> programming languages today.

Learning Python is a <u>great entry point into the technical world</u> as the **syntax is much easier to learn** compared to other programming languages. Because of its syntax simplicity, Python is a common **first programming language** for business and finance individuals.

But, do not be misinformed though! Just because Python has easier syntax does not make it any less powerful compared to other languages. <u>Many of the world's tech majors</u> use Python as part of their technical ecosystems.

This one-day, hands-on introductory course teaches students **foundational Python concepts** and how to use Python's popular libraries to complete various technical tasks. Students are presented with Python coding challenges throughout the day to test their understanding of the material. The course culminates with a challenging **in-class coding project** where students apply concepts taught in the course to <u>create a game</u>.

This is Cognitir's standard one-day *Intro to Python* course (7 hours of instruction) and may be broken up into several days.

## What This Course Offers

- A solid Python foundation
- Hands-on Python programming experience
- Overview of different development environments
- Overview of popular Python libraries
- Course notes, certificate of completion, and post-seminar email support for 1 year
- An engaging and practical training approach with a qualified instructor with relevant technical, business, and educational experiences

### Who Is This For

This course is relevant for any professionals who want to gain a hands-on introduction to Python.



## **Course and Contact Information**

Level: Beginner Prerequisite: None

Duration: 1 Day (or 1 day course broken up into multiple days)

info@cognitir.com +1 908 505 5991 (US) www.cognitir.com

## Course Curriculum

- Introduction
  - o What is Python?
  - Use cases
  - o Python vs. other popular languages
- Python Development Environments
  - o Brief tour of Jupyter Notebook, Sublime Text Editor, and other IDEs
- Data Structure Fundamentals
  - Numbers
  - Variables
  - Strings
  - Print formatting
  - Lists
  - Tuples
  - Dictionaries
  - Sets
  - Booleans
- Comparison Operators and Conditionals
  - o If, elif, and else statements
- Loops
  - For loopsWhile loops
- Other Useful Operators
  - Range
  - o Zip
  - o In
  - o Min & max
  - o Input
- Importing Libraries
  - Overview of common libraries
- Built-in Methods
  - o List methods



- String methods
- Dictionary methods
- Debugging Code
  - Printing variables
  - o Pylint
  - Unittest
- In-class Project
- Wrap-Up and Summary

## **Course Content Developers**

#### **David Haber**

David has led programming workshops at the undergraduate and graduate levels, at blue chip companies, and world renowned management consulting firms.

David has experience working with both startups and large corporations. He has filled several leading roles in technology startups. David also worked on optimizing large-scale payment processing systems at Deutsche Bank in Singapore.

David holds an MEng (First-Class Honours) in Computer Science from Imperial College London (UK) where he focused on statistical machine learning. He presented his work at international conferences and won several awards for his work. During his studies, he also served as a teaching assistant at Imperial College where he helped undergraduate students master fundamental computer science concepts.

#### Neal Kumar, CFA

At Cognitir, Neal leads strategy & business development initiatives as well as product management.

Outside of Cognitir, Neal consults C-level teams and senior business managers on a variety of strategic topics ranging from M&A to marketing. He also leads training seminars (financial modeling) for Wall Street Prep and has consistently received top reviews from attendees and created two training courses that were used in seminars worldwide. Before his consulting and training careers, Neal taught secondary mathematics in St. Louis Public Schools (USA) as a Teach for America Corps Member. Prior to joining Teach For America, Neal worked in investment banking at Lazard, JPMorgan, and Houlihan Lokey.

Neal received his MBA from London Business School (UK) and BBA in Finance from the University of Notre Dame (USA). He is also a CFA Charterholder and a Member of the CFA Institute Education Advisory Committee (EAC) Working Body where he helps shape CFA Program Content.