

Python has become one of the most popular and versatile programming languages, and learning it offers several key advantages:

Easy to Learn and Use

- **Simple Syntax:** Python has a clean and easy-to-understand syntax, which is similar to plain English. This makes it highly accessible for beginners and reduces the learning curve compared to other languages like C++ or Java.
- **Less Code:** Python typically requires fewer lines of code to achieve the same functionality as languages like Java or C, making it faster to write and easier to maintain.

Module 1: Python Programming – 2 Hours / Day

DAYS	PARTICULARS
Day 1	Python Introduction - Python Code execution flow, Variables, Data types & Operators.
Day 2	Decision making- if, if-else, nested if, else-if
Day 3	Looping - for, while, nested loops
Day 4	Data structures in Python
Day 5-10	Array, Lists, Tuples, sets, Dictionaries
Day 11	Functions in Python
Day 12	OOPS in Python
Day 13	Class & Object & method
Day 14	Inheritance
Day 15	Polymorphism
Day 16	Encapsulation
Day 17	Data abstraction
Day 18-20	Revision
Day 21	Assessment
Day 22	Assessment

Note:

- ❖ Practical Hands-on Assignment will be given every day corresponding to the topics taken
- ❖ Candidates will be provided two Attempts of Evaluation once completed Python Training

- ❖ If the candidates secured above the cut-off marks in first attempt, they can move directly to second module.

Benefits of Learning Python for Beginners and Experienced Programmers

- **Beginner-Friendly:** Python is ideal for beginners due to its simplicity and readability.
- **Boost Productivity:** Python's simplicity and high-level syntax enable rapid development and prototyping.
- **Great for Rapid Prototyping:** Python is frequently used in start-ups and academia for quick testing and prototyping of ideas.

In Summary

Learning Python programming is advantageous due to its simplicity, versatility, and applicability in diverse fields like data science, web development, AI, and automation. Its extensive library support, strong community, and high demand make Python an essential language for both beginners and experienced developers looking to advance their careers.