

PYTHON BASICS

COURSE HIGHLIGHTS

- 24 hrs of instructor-led training
- Basics of Security and good programming practices
- Practical learning with logical problem solving
- Code exercise in Python





Overview

The course provides training on securing your development process, where we make sure that your concept of security is comprehensible at the starting stage of the programming career. This training induces security to the application in application development, across all Software Development Life Cycle phases. Using the python concepts, you can develop GUI-based desktop applications, games, web applications, and be open to opt for the Data Science and Machine learning field. Python is the preferred language because of its simplicity, flexibility, and reliability where you can create the latest software. The purpose of this course is to introduce you to the Python programming language. The course aims to provide participants with an overview of programming, I/O, and visualization by using Python programming language.



Target Audience

- Starting a career in programming
- Beginners with Python

Pre-Requisite

There are no specific prerequisites for enrolling in a Python course, a skilled programmer in any programming language (whatever that programming language may be) can easily learn Python because it's also simple to use and understand for beginners.



Why Infosec Train?



Certified & Experienced Instructor



Flexible Schedule



Access to the recorded sessions



Post Training Support



Tailor Made Training



4 hrs/day in Weekend/ Weekday



COURSE OBJECTIVE

- Introduction Python and Installation
- Install the Python interpreter and execute it
- Create and run Python programs
- Capable of reading data from a text file by using Python
- Introduction to Security
- Importance of Security in Software Development Life Cycle
- Programming Fundamentals
- Control Flow and Conditional Statements
- Functions
- Classes and OOPs Concept
- Exception handling
- File handling

Course Content



Introduction and Installation

- Introduction to Security
- Importance of Security
- Development Model- SDLC and how we Implement Security in each stage of the Development Model
- Overview and history of Python
- Python installation
- Introduction to Python editor and IDEs
- Understanding Jupyter Notebook and customize setting
- Concept of Packages Libraries
 - Numpy
 - Pandas
 - Matplotlib
 - SciPy
 - Scikit-learn

Programming Fundamentals, Control Flow, and Conditional Statements

- Data type and Data object
 - String
 - Tuple
 - List
 - Dictionaries
 - Set
 - For-loop
 - Dictionary comprehension
 - Operators
 - Variable and values label: Date and Time
 - Values basic operation: Mathematical
 - String: data reading and writing data
- Control flow and Condition statements



Basics of Function, Classes, OOPs, Exception handling and File Handling

- Function
- Class
- Object-Oriented Programming
- Exception handling
- File handling
 - Reading file
 - Writing file and Organising
- Pattern Matching with Regular expressions
- Working with CSV files and JSON Data
- Python Securing Coding



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