

Course Contents- Python for Beginners

Module 1: An Introduction to Python

What can Python do? Why Python? Good to know Python? Syntax compared to other programming languages • Python Install

Module 2 : Beginning Python Basics

The print statement • Comments • Python Data Structures & Data Types • String Operations in Python • Simple Input & Output • Simple Output Formatting • Operators in python

Module 3: Python Program Flow

Indentation • The If statement and its' related statement • An example with if and it's related statement • The while loop • The for loop • The range statement • Break & Continue • Assert • Examples for looping

Module 4: Functions& Modules

Create your own functions • Functions Parameters • Variable Arguments • Scope of a Function • Function Documentations • Lambda Functions& map • n Exercise with functions • Create a Module • Standard Modules

Module 5: Exceptions Handling

Errors • Exception handling with try • handling Multiple Exceptions • Writing your own Exception

Module 6: File Handling

File handling Modes • Reading Files • Writing& Appending to Files • Handling File Exceptions • The with statement

Module 7: Classes In Python

New Style Classes • Creating Classes • Instance Methods • Inheritance • Polymorphism • Exception Classes & Custom Exceptions

Module 8: Generators and iterators

Iterators • Generators • The Functions any and all • With Statement • Data Compression

Module 9: Data Structures

List Comprehensions • Nested List Comprehensions • Dictionary Comprehensions • Functions • Default Parameters • Variable Arguments •

Module 10: Writing GUIs in Python

Introduction • Components and Events • An Example GUI • The root Component • Adding a Button • Entry Widgets • Text Widgets • Check