Introduction to Python

* What is Python?
* Why Python?
* Setting Up for Python Development
* Writing Your First Python Script – "Hello World"
* Displaying Output
* Reading User Input
* Debugging

Basic Python Syntax

* Introduction
* Code Blocks, Comments, and Whitespaces
* Literals and Variables
* Data Types
* Type Conversion
* Arithmetic Operators
* Conditional and Logical Operators
* Operator Precedence

Control Flow Structures

* Decision Control
* Repetition Control

Collections

* Lists
* Tuples
* Dictionaries

Strings

* Introducing Strings
* Determining String Length
* Getting a Character within a String
* Looking for a String within a String
* Getting a Portion of a String
* Splitting a String
* Joining Strings
* Removing Whitespaces from a String
* Combining Strings
* Formatting Numbers
* Replacing a Part of a String
* Converting to Uppercase or Lowercase
* Comparing Strings

Functions

* Introducing Functions
* Creating and Calling Functions
* Defining Function Parameters
* Passing Arguments to Functions
* Specifying Optional Parameters and Default Values
* Using Named Arguments
* Returning a Value from a Function
* Understanding Local and
* Global Variable Scope

Modules

* Introducing Modules
* Importing Modules
* Renaming a Module
* Setting the PYTHONPATH Variable

Standard Libraries

* Working with Dates using datetime Library
* Interacting with the OS using os Library
* Performing Mathematical Operations using math Library
* Generating Random Values using random Library

## Courses Benefits

Python is a widely used, open-source programming language that is especially suited for a wide range of applications including web development, machine learning, and data science.

This Python training course provides the foundations for you to start writing Python applications.

## You Will Learn How To

* Write effective, efficient Python scripts

## Who Should Attend

This Python training course is valuable for those wanting to develop applications using Python. Prior programming experience is not required.