



# Python

## Python - Boot Camp (Duration: 5 full days)

### Setting Up the Work Environment

The Course Overview

Downloading and Installing Python

Using the Command Line and the Interactive Shell Hello World in Python

### The Basics

Data Types and Variables

Arithmetic Operations

Understanding the Order of Operators

Comments

Variables Scope

Command Line Arguments

Data Input

### Control Statements

If Statements

Else Statements

Elif Statements



## **Loops**

While Loops

For Loops

Break, Continue and Else

## **Sequences**

Range

String

Tuple

List

Dictionary

Set

Indexing, Sequencing and Slicing

## **Mathematical Function**

Numerics

Generating Random Numbers

## **Datatype Conversions**

## **Functions**

Syntax Overview

More on Parameters

More on Returns



Arbitrary Arguments

### **Exception Handling**

Try, Except, Finally

Raising Exceptions

### **Modules**

Using Modules

Creating Modules

### **Packages**

Creating Packages

### **File Handling**

Opening Files

Reading and Writing Text Files

### **Object Oriented Programming with Python**

Overview of Classes and Objects

Using 'Class'

Using Methods

Use Object Data

Inheritance



## **Database Handling with SQLite**

Installing SQLite browser.

Creating a Database

Insert and Update Records

Retrieve and Delete Records

## **Graphics**

Introduction to Turtles

## **GUI Development**

Introduction to Tkinter

## **Web Framework**

Introduction to Django - web framework

## **Network Programming**

Introduction to Network Programming