

## **Programming in Python**

#### Introduction

Programming in Python is designed for software developers, who have experience in procedural and object-oriented programming.

You will learn the power of programming in Python as well as how to use different Python libraries like Tkinter and NumPy, as well as develop the base understanding to get to developing more complex applications in Python.

### **Pre-Requisites**

Basic understanding of Procedural and Object-Oriented programming

#### **Course Details**

The course is conducted on-line for 25 hours, and delivered by an experienced industry veteran.

The course will involve the development of simple projects that highlight different features of Python.

You will also familiarize yourself with some basic Python libraries

Our self-help groups and other channels will continue to support you after the course

Core Programming in Python – Course Contents

# **Course Contents**

| Hour<br># | Topic   |
|-----------|---|
| 1         | Python Data Types & Operators                 |
| 2         | Setting up the Programming Environment        |
| 3         | Python Statements                             |
| 4         | Simple Programs in Python                     |
| 5         | Lists & Dictionaries                          |
| 6         | Tuples and Sets                               |
| 7         | Methods and Functions in Python               |
| 8         | In-built functions in Python                  |
| 9         | Python Program Examples - Debugging           |
| 10        | Object Oriented Programming - Basic Concepts  |
| 11        | Object Oriented Programming in Python         |
| 12        | Object Oriented Programming in Python - contd |
| 13        | Advanced Object-Oriented Programming concepts |
| 14        | Exceptions Handling in Python                 |

| 15 | Using Python Modules and Packages |
|----|-----------------------------------|
| 16 | File handling in Python           |
| 17 | Data Structures in Python         |
| 18 | Regular Expressions in Python     |
| 19 | The NumPy library                 |
| 20 | Using the NumPy Library           |
| 21 | Project in Python                 |
| 22 |                                   |
| 23 |                                   |
| 24 |                                   |