

Developing Python Programming

Course Outline and Specification



robinson education





Introduction

This course leads on from the Introduction to Python Programming, for those who have developed their skills in Python programming concepts, detailing areas such as using selection, developing subprograms, understanding arrays, Python libraries and file handling.

This is an interactive course and practical in nature. It can be held fully self-paced, or online to suit learner needs.

A practical course throughout, learners should be prepared to program directly from the beginning.

Duration

This is a one day short-course or can be held online and tutor-led over a number of sessions, or alternatively self-paced via purely online learning.



Course Outline

Understanding Subprograms

- Developing the use of subprograms
- Understanding subprogram structure
- Calling a subprogram to use in a main program

Further While Loops

- Looking at While loops
- Using statements
- Understanding For
- Understanding Ranges

Using Functions

- Creating functions
- Understanding parameters
- Introducing recursion

Arrays in Python

- Understanding how to store arrays
- Using elements
- Looping and using methods

Introducing Classes and Objects

- Creating classes
- Creating objects
- Using functions
- Using parameters and properties
- Understanding inheritance
- Using Iterators
- Understanding polymorphism

Modules and Libraries

- Importing a library
- Built in libraries
- Using variables and functions

Mathematic Functions

- Using built in math
- Operating math functions

File Handling

- Understanding syntax
- Using open, read, append, write, create, close, delete and check files



robinson education

