Python Programming For Beginners

Overview

This course is an introduction to the Python programming language for students without prior programming experience. We cover python basic syntax, variables, data types, control flow, functions, object-oriented programming, and graphical user interface-driven applications

The course is designed to provide an introduction to the Python programming language. The focus of the course is to provide students with an introduction to programming, I/O, and prepare them for advanced courses in python.

Objective

- Get started with python programming.
- Understand the syntax of python code.
- Get to know the components and the structure of a Python Program

Requirements

- Some programming experience would be beneficial.

Course Outline

- Introduction to python
- Setting up the environment
- First python program
- Executing python scripts
- Python syntax
- Variables
- Comments
- Data Types
- Operators
- String manipulation
- Working with numbers
- Conditional statements
- Using Loops
- Functions
- Collection data types
- Dates and time
- Using Modules
- User input
- Files handling
- OOP

Advanced Python Programming

Overview

This course is intended for those who have foundational course in python. The Advanced Python Programming training course will give you a detailed overview of advance python programming topics like handling exceptions, working with python json, Leveraging OS services, Code graphical interfaces for applications, create modules, Create and run unit tests, define classes, Interact with network services, and Query databases. This is an extensive hands-on training involving labs and exercises to you a practical and real-time exposure.

It is a continuation of the *python programming for beginners course.*

Objectives

- GUI in Python programming.
- Learn about the Python frameworks (Django).
- Learn how to store Python Projects in Github.

Requirements

- Must have done Python Programming for beginners course
- Some programming experience would be beneficial.

Course Outline

- Exception Handling
- Reg Expressions
- Python JSON
- UnitTest
- Database Access
- Networking
- System programming
- CGI Programming
- GUI Programming
- Introduction to python frameworks
- Working with Git
- After completing python, students can proceed to specific specialization e.g. web development with python and Data Science.