

Introductory Python Programming Using Anaconda

Course Summary

Description

This three-day course introduces students to the Python programming language and the standard Python library along with most commonly used Python tools for data analysis and scientific computing. Students will learn how to design and develop efficient and effective Python apps using the Anaconda platform. This course does not require any prior experience with Python.

Objectives

At the end of this course, students will be able to:

- Manage Python environments and packages
- Create basic and intermediate Python programs
- Work with a wide variety of data sources

Topics

- Introduction to Python
- Python Language Basics
- Data Types and Data Structures
- Functions, Iterators, Scoping
- Exceptions, Imports, Classes, Modules and Scripts
- Data Formats and Storage
- Fast Numeric Arrays in Python Introduction
- Labeled, Tabular Data
- Visualization
- Advanced Python Introduction

Audience

This course is for both professional programmers and business experts who need to write scripts and explore data sets. In both cases, students will quickly get up to speed in getting their work done using Python.

This course has a limit of 20 participants.

Prerequisites

Programming experience – This is not a programming course for beginning programmers. Students must have programming experience with at least one other programming language (e.g., C/C++, Java, Matlab, Perl, etc.). Students must be familiar with basic concepts such as variables, loops, conditionals, functions, and data structures. Additionally, participants should have an acquaintance with working with files, directories (folders), text editors, command-line shells, environment settings, internet connections, and other essential aspects of using a computer for software development.

Lab work – Labs are completed using Anaconda, the leading modern open source analytics platform powered by Python. Free downloads for Anaconda are available for Apple OS X, Microsoft Windows, and most Linux distributions.

Duration

Three days