

ADMEC Multimedia Institute

www.admecindia.co.in | www.web-development-institute.com

Phones: +91-9911-7823-50, +91-9811-8181-22

C-7/114, IInd Floor, Sector-7, Rohini, Delhi-85, India

Advanced Python Course

Duration: 2 Months

Python is a world class server side scripting language like PHP and being spread among the programmers and developers rapidly. Python offers a powerful ground, simplicity in use, and complete object oriented model, in result it has become the favorite scripting language for many large organizations such as Google, Yahoo, and IBM.

In *Python our expert establishes* how to use Python to make well-designed scripts and hold up alive projects. This course covers from basics to advanced of Python programming with a rich featured project to show in interviews and to know Python from the ground.



Eligibility:

Although Python can be learned by any one without any specific eligibility yet for the better results one must have good knowledge of web designing.

Contents

Introduction to Python Programming Language

1. Understanding prerequisites for Python
2. How Python is better than other server-side languages
3. What can be developed in Python

Setting Up Python

4. Installing Python 3 and Eclipse for Windows
5. Installing Python 3 and Eclipse for Mac
6. Exploring Python rapidly

General Syntax in Python

7. Creating a main script
8. Understanding white-space and commenting code in Python
9. Selecting code and values with conditionals
10. Creating and using functions and objects in Python

Exploring Variables, Objects, and Values

11. Understanding variables and objects in Python
12. Using numbers, strings, boolean, lists, dictionaries etc
13. Datatypes in Python

Functions

14. Defining functions
15. Using lists of arguments
16. Using named function arguments
17. Returning values from functions
18. Creating a sequence with a generator function

Conditionals and Expressions in Python

19. Selecting code with if and else conditional statements
20. Using the conditional expression in Python

Various Types of Loops in Python

21. Creating loops with while and for
22. Enumerating iterators
23. Loop special statements such as break, continue, and else

Operators

24. What are the Operators?
25. Category of Operators
26. Understanding operator precedence
27. Using Operators

Python Strings and Regular Expressions

28. Accessing Values in String
29. Updating a String
30. Escape Characters
31. String Special Operators
32. String Formatting Operators
33. Triple Quotes
34. Built-in String Methods
35. Using the re module
36. Searching with regular expressions
37. Replacing with regular expressions

Exceptions in Python

- 38.Learning how exceptions work
- 39.Handling exceptions in Python
- 40.Raising exceptions

Classes and Objects in Python

- 41.Understanding classes and objects
- 42.Using methods and object data
- 43.Understanding inheritance
- 44.Applying polymorphism to classes
- 45.Understanding and Using generators and decorators

Containers in Python

- 46.What is the use of Containers
- 47.Creating sequences with tuples and lists
- 48.Operating on sequences with built-in methods
- 49.Organizing data with dictionaries

File I/O or File System

- 50.Opening files
- 51.Reading and writing text files
- 52.Reading and writing binary files
- 53.Reading directories
- 54.Creating an image gallery

Databases Connectivity in Python

- 55.Creating a database with SQLite 3
- 56.Creating, retrieving, updating, and deleting records
- 57.Creating a database object in Python

Modules in Python

- 58.Use of modules
- 59.Using standard library modules
- 60.Finding third-party modules
- 61.Creating a module

Debugging and Error Reporting in Python

- 62.Dealing with syntax errors, logical errors, and runtime errors
- 63.Using unit tests
- 64.Managing error reporting in Python

Building a Database Driven Application in Python

- 65.Planning Database
- 66.Planning a database application
- 67.Creating a data driven application in Python

Career Options:

After completion of the advanced Python course you may get a quick pick from the industry as Python has a great scope and opportunities. You can work as a Python Developer in the web development industry.