

Python with Django framework:

In this course, you will learn about the syntax of the Python programming language, strings and console output, how to create and use functions in python. You will learn how to use conditionals and control flow to create programs that generate different outcomes with live example. You'll gain the skills and knowledge to install and use an integrated Python and Django environment. By the end of this Python course you can create web applications and technologies using Python and Django framework.

Syllabus:

Module 1: Basic Concepts

1. What is Python?
2. Your First Program
3. Simple Operations
4. Floats
5. Other Numerical Operations
6. Strings
7. Simple Input & Output
8. String Operations
9. Type Conversion
10. Variables
11. In-Place Operators
12. Using an Editor

Module 2: Control Structures

13. Booleans & Comparisons
14. if Statements
15. else Statements
16. Boolean Logic
17. Operator Precedence
18. while Loops
19. Lists
20. List Operations
21. List Functions
22. Range
23. for Loops
24. A Simple Calculator

Module 3: Functions & Modules

25. Code Reuse
26. Functions
27. Function Arguments
28. Returning from Functions
29. Comments & Docstrings
30. Functions as Objects
31. Modules
32. The Standard Library & pip

Module 4: Exceptions & Files

33. Exceptions
34. Exception Handling
35. finally
36. Raising Exceptions
37. Assertions
38. Opening Files
39. Reading Files
40. Writing Files
41. Working with Files

Module 5: More Types

- 42. Dictionaries
- 43. Dictionary Functions
- 44. Tuples
- 45. List Slices

- 46. List Comprehensions
- 47. String Formatting
- 48. Useful Functions
- 49. Text Analyzer

Module 6: Functional Programming

- 50. Functional Programming
- 51. Lambdas
- 52. map & filter
- 53. Generators

- 54. Decorators
- 55. Recursion
- 56. Sets
- 57. itertools

Module 7: Object-Oriented Programming

- 58. Classes
- 59. Inheritance
- 60. Magic Methods & Operator Overloading

- 61. Object Lifecycle
- 62. Data Hiding
- 63. Class & Static Methods
- 64. Properties

Module 8: Regular Expressions

- 65. Regular Expressions
- 66. Simple Metacharacters
- 67. Character Classes
- 68. More Metacharacters

- 69. Groups
- 70. Special Sequences
- 71. Email Extraction

Module 9: Django framework

- 72. Django Introduction
- 73. MVC Pattern
- 74. Create an Application
- 75. Django – Admin Interface
- 76. Views Layer
- 77. Django – URL Mapping
- 78. Django Template Language (DTL)

- 79. Django – Models
- 80. Django – Sending E-mails
- 81. Django – Form Processing
- 82. Django – File Uploading
- 83. Django – Cookies Handling
- 84. Django Project