



## CourseContents:

### 1.Python

- Knowing Python
- Installing the Environment
- Getting familiar to Python IDE
- Why prefer python over others!

### 2. BeforeStartoff: Expressions & Operators

- Python Syntax
- Including Comments , Indentation
- Python Variables
- Operators &python Keywords

### 3.Python Data Types

- Data : Numeric - int, float, long, complex
- Strings types(raw, Unicode), properties, methods, indexing, sequencing slicing, finding string in strings, finding string in string with numbers . . .
- Lists, Tuples, Sets, Range, Xrange& List
- Dictionary and Maps

### 3.Strings,Lists,Dictionary

- Structured Data: List & its properties
- List properties, indexing, slicing
- Strings are special kinds of lists
- Nested Lists
- Mutation (of strings and lists)
- Aliasing
- List Operations (append, plus, len, extent)
- Union procedure for list
- List.pop()
- Dictionary Operations
- Using Dictionary in Index

### 4.Data Flow Control

- Introduction to control flow
- *Conditional statements:* if-elif-else
- *Loops:* FOR and WHILE loop



- Factorial using while loop
- In operator, index operator
- *Statements*: Break, continue and pass

## 5. Function & Packages

- Def Function
- Logical, Boolean Expressions
- Function recipe and docstring
- Function with and without parameters
- Functions reusability and recursive functions
- Creating modules and packages
- Importing Modules

## 6. File Handling: Working with files

- Begin with python file I/O
- File handling permission
- read(), write() and Append Operation
- Readline(), seek() and tell()
- Lambda function , Generator Expression

## 8. Beginners' End: Error & Exception Handling

- Introduction to errors and exceptions
- Exception hierarchy
- try-except block
- finally and else
- Debugging - assert and raise

## 9. Python: The Developers Way

- Data Structure
- Building index using list and performing lookup
- Network, latency, bandwidth, traceroute and bit
- Efficient Algorithms
- Recursive Definitions
- Base Case and recursive case
- Palindromes
- Fibonacci Numbers
- Introduction to Ranking Web Pages (Page Rank)



## 10. OOP Programming

- Introduction to OOPS concepts
- Programming with Classes & Object
- Inheritance: Programming using Python
- Overriding and overloading
- Information hiding
- `__init__()`, `self` and other class methods

## 11. Python in Interactive way: The WEB

- HTML Tags
- Developing web pages using Python

## 12. Command Line Arguments with Python

## 14. Python with Django



## Projects:

- Build up Python Tasks : Palindrome, Fibonacci Series
- Extracting Links from a webpage
- Printing Pattern arrangements on stars, numbers
- Basic Blog Page using Python & Django ... with lots of other coding to do!

## ToolKitContent:

- SoftwareTool Kit.

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**ThankYou!!!**

We ensure that you will find our initiative extremely beneficial for your students, if you have any query kindly get back to us. We are looking forward to a quick and positive response from you and a long-term association with your organization.

**For any further Detail Please Contact..!!!**

**Nitesh Pratap**  
**Business Head**  
**Technospecies Global Solution**  
**E-Mail:**  
[stp@technospecies.com](mailto:stp@technospecies.com)  
[info@technospecies.com](mailto:info@technospecies.com)  
**Mobile: +91-9990730607**