

Python Programming

Course Duration: 60 Hours

Module 1: Introduction to Python

- Introduction to python
- Why Python
- Python Syntax
- Advantages of Python
- Python Installation

Module 3: Operators in python

- Arithmetic Operators
- Logical Operators
- Conditional operators
- If conditional constructs
- Nested and multiple If Constructs
- If Else if constructs

Module 5: Functions in Python

- Introduction to functions
- Definition, declaration, and calling the functions
- Passing parameters in functions
- Return value of functions
- Lambda functions
- Scope of functions
- Use of global variable

Module 7: Inheritance

- Introduction to Inheritance
- Types of Inheritance
- Inheritance implementation in Python
- Overriding the functions
- Virtual functions and classes using pass keyword

Module 9: File Handling in Python

- Introduction to types of files
- Python file handling library
- Reading the file
- Writing into the file
- OS library of Python
- Creating, removing the directory
- Listing out the files from directory
- Binary file handling using opencv

Module 2: Python Basics

- First Hello World Program in python
- Comments
- Indentations
- Python Data types and variables declaration
- Simple Input / output

Module 4: Looping constructs in Python

- While Loop
- For Loop
- Range functions
- Break and continue

Module 6: OOPS in Python

- Introduction to OOPs
- Classes and objects
- Features of OOPS
- Creating classes and objects in Python
- Overloading of functions
- Self keyword
- def init() function & its use
- Polymorphism

Module 8: Data Structure in Python

- Introduction to Data Structure
- Need of Data Structure
- Types of Data Structure
- Python Data Structures
 - List
 - Tuple
 - Set
 - Dictionary

