

Description:

Object-oriented programming is possible with Python, a computer language which is gaining traction and carving a niche for itself in the high-performance computing space.

In 2014, Python was found to be the most popular language for teaching computer science courses to beginners at leading US colleges. Almost eight out of ten Computer Science departments and 27 of the top 39 were found to be teaching Python at the introductory level.

Owing to the fact that it is one of the easiest programming languages to learn, Python has been gaining popularity and has the potential to become the programming language of choice for both individuals and enterprises going forward. Today, a large number of organizations are migrating and transitioning to Python. Google, for instance, has scores of engineers who are using Python and the company is constantly looking for people with skills in the language. Considering its rapid proliferation there is a great need for training that equips students with Python skills, especially in India. Python training courses will acquaint the country's students with this simple language. Such Python training courses will also help India's young people to improve their employability quotient and job worthiness in the market.

Course Outcome:

- Building the logic and write programs using variables, operators, etc.
- Capable to develop a program block using functions to store data to a file, dictionaries etc.
- Capable to solve simple and complex computational problems.
- Ability to develop codes with minimum number of Lines using methods in python.
- Capable to adopt and use the concepts in various domain using packages in python.
- Become proficient at handling files.
- Know how to store and manipulate data using dictionary and tuples.

Session plan:

S.No	TOPICS	CONTENTS
1	Introduction	<ul style="list-style-type: none">• Difference between basic programming Language and Python• Python I/O and Import• Python Operators and Operator Precedence• Keywords & Identifier , Statements & Comments• Python Data types
2	Native Datatypes	<ul style="list-style-type: none">• Python List and Python Tuple• Python Dictionary and Python Numbers• Python Set and Python String
3	Flow Control	<ul style="list-style-type: none">• Python if...else• Python for and while Loop• break , Continue and Pass Statement
4	Functions	<ul style="list-style-type: none">• Python Functions and Function Arguments• Python Modules and Packages• Anonymous Functions
5	Exception Handling	<ul style="list-style-type: none">• Exception Handling• User-defined Exception• Python Exception
6	File Handling	<ul style="list-style-type: none">• Python Directory• File Operation
7	Class & Object	<ul style="list-style-type: none">• Python Classes• Python Objects• Operator Overloading• Inheritance• Multiple Inheritance• Python Namespace
8	Databases	<ul style="list-style-type: none">• Python - My SQL Database• Assignments