



PYTHON SYLLABUS

- **Introduction to Programming Languages** : What is program and programming paradigms, Programming languages-their classification and characteristics, language translators and language translation activities, Use of Algorithms/Flow Charts for problem solving Building Blocks of Program: Data, Data Types, Data Binding, Variables, Constants, Declaration, Operations on Data such as assignment, arithmetic, relational, logical operations, dry run, Evaluating efficiency of algorithms in terms of number of operations and variables used
- **Introduction to Python Programming:** Features, basic syntax, Writing and executing simple program, Using power shell and IDLE, Basic Data Types such as numbers, strings, etc Declaring variables, Performing assignments, arithmetic operations, Simple input-output
 - **Sequence Control** – Precedence of operators, Type conversion Conditional Statements: if, if-else, nested if –else Looping: for, while, nested loops
 - **Control statements:** Terminating loops, skipping specific conditions String Manipulation: declaring strings, string functions Manipulating Collections Lists, Tuples
 - **List, Tuple, Dictionaries, Set** – Concept of dictionary, techniques to create, update & delete **List, Tuple, Dictionaries, Set** items.

- **Functions:** Defining a function, calling a function, Advantages of functions, types of functions, function parameters, recursion, Formal parameters, ufuncs, Category of ufuncs. Actual parameters, lambda function, anonymous functions, global and local variables
- **Modules:** Importing module, Creating & exploring modules, Math module, Random module, Time module.
- **PROJECT**
- **Fees:- 8000/- + GST**