

## **BASIC PYTHON**

**(Batch 1)**

**2023-2024**

### **Learning Objectives:**

1. The basics of Python and the programming environment will be introduced.
2. Variables, data types, and operators will be explained for performing basic tasks.
3. Input, output, and type conversion methods will be taught.
4. Conditional statements and loops will be introduced for logical and repeated operations.
5. Basic string handling and common data structures will be explained.
6. Functions, file handling, and simple error-handling will be introduced to prepare students for small projects.

### **Learning Outcomes:**

1. Simple Python programs will be written and run using correct syntax.
2. Variables, operators, and data types will be used properly for basic calculations.
3. User input will be taken correctly and outputs will be displayed as required.
4. Conditions and loops will be applied to create logical and repetitive program tasks.
5. Strings and data structures (lists, tuples, sets, dictionaries) will be used to store and process data.
6. Small modular programs and a basic project will be completed using functions, file handling, and error control.

**Module:**

<b><i>Topic</i></b>	<b><i>Objective</i></b>
Introduction to Python	Python basics, features, and the programming environment will be introduced, and simple Python programs will be written and executed.
Variables, Data Types & Operators	Variables, data types, and operators will be explained, and basic calculations will be performed using the correct types and operators.
Input, Output & Type Casting	Input methods, output display, and data type conversion will be taught, and programs will correctly take input and show output.
Conditional Statements	If, elif, and else statements will be introduced, and decision-based programs will be written using conditional logic.
Loops (For & While)	Looping concepts will be explained, and repetitive tasks will be completed using for and while loops.
Strings & String Operations	Basic string handling and common string methods will be introduced, and text will be processed using different string functions.
Lists, Tuples & Sets	The use of lists, tuples, and sets will be explained, and data will be organised and processed using these collection types.
Dictionaries	Dictionary structure and key-value operations will be taught, and data will be stored and accessed using dictionaries.
Functions	Function creation, parameters, and return values will be introduced, and programs will be modularised using user-defined functions.
File Handling (Basic)	Basic file opening, reading, and writing will be explained, and simple text files will be handled using Python.
Basic Error Handling	Try-except blocks will be introduced, and common runtime errors will be managed safely.
Mini Project	All learned concepts will be applied, and a complete mini project will be prepared using Python basics.

## Attendance

Number of Classes: 15 Classes

Duration per Class: 2 hours

Number of Students enrolled: 23

Sl. No.	Name	Classes Attended
1	Adrija Saha	12
2	Anurita Guha	14
3	Deboshi Mukhopadhyay	14
4	Jayita Bhowmik	13
5	Parama Ghosh	12
6	Perviza Ahammad	9
7	Srija Saha	11
8	Ankita Ghosh	12
9	Utsha Datta	12
10	Oyitrika Dutta	11
11	Amreen Hyder	11
12	Atrija Dutta	9
13	Alifiya Johar Tasira	11
14	Jerina Roy	6
15	Sheetal Julitha Tirkey	9
16	Sreya Bhattacharya	14

17	Uditi Mahapatra	13
18	Namrata Karia	12
19	Shreya Janet Guha	7
20	Bhavya Pancholi	11
21	Rose Minj	9
22	Farha Sultana	9
23	Anuska Mukherjee	14

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**BASIC PYTHON**  
**(Batch 2 for Sem 3 )**  
**2024-2025**

**Learning Objectives:**

1. The basics of Python and the programming environment will be introduced.
2. Variables, data types, and operators will be explained for performing basic tasks.
3. Input, output, and type conversion methods will be taught.
4. Conditional statements and loops will be introduced for logical and repeated operations.
5. Basic string handling and common data structures will be explained.
6. Functions, file handling, and simple error-handling will be introduced to prepare students for small projects.

**Learning Outcomes:**

1. Simple Python programs will be written and run using correct syntax.
2. Variables, operators, and data types will be used properly for basic calculations.
3. User input will be taken correctly, and outputs will be displayed as required.
4. Conditions and loops will be applied to create logical and repetitive program tasks.
5. Strings and data structures (lists, tuples, sets, dictionaries) will be used to store and process data.
6. Small modular programs and a basic project will be completed using functions, file handling, and error control.

**Module:**

<b><i>Topic</i></b>	<b><i>Objective</i></b>
Introduction to Python	Python basics, features, and the programming environment will be introduced, and simple Python programs will be written and executed.
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Dictionaries	Dictionary structure and key-value operations will be taught, and data will be stored and accessed using dictionaries.
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Basic Error Handling	Try-except blocks will be introduced, and common runtime errors will be managed safely.
Mini Project	All learned concepts will be applied, and a complete mini project will be prepared using Python basics.

## Attendance

Number of Classes: 15 Classes

Duration per Class: 2 hours

Number of Students enrolled: 11

Sl. No.	Name	Classes Attended
1	Ashmita Mukherjee	11
2	Meenakshi Kanungo	12
3	Arushi Bajpai	11
4	Subhomita Majhi	11
5	Shubhangee Dey	12
6	Ashmita Bandopadhyay	11
7	Aritree Debnath	12
8	Banira Chetri	12
9	Anushka Mandal	12
10	Krishi Jiya	11
11	Omisha Debnath	6

**BASIC PYTHON**  
**(Batch 3 for Sem 5)**  
**2024-2025**

**Learning Objectives:**

1. The basics of Python and the programming environment will be introduced.
2. Variables, data types, and operators will be explained for performing basic tasks.
3. Input, output, and type conversion methods will be taught.
4. Conditional statements and loops will be introduced for logical and repeated operations.
5. Basic string handling and common data structures will be explained.
6. Functions, file handling, and simple error-handling will be introduced to prepare students for small projects.

**Learning Outcomes:**

1. Simple Python programs will be written and run using correct syntax.
2. Variables, operators, and data types will be used properly for basic calculations.
3. User input will be taken correctly and outputs will be displayed as required.
4. Conditions and loops will be applied to create logical and repetitive program tasks.
5. Strings and data structures (lists, tuples, sets, dictionaries) will be used to store and process data.
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**Module:**

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Functions	Function creation, parameters, and return values will be introduced, and programs will be modularised using user-defined functions.
File Handling (Basic)	Basic file opening, reading, and writing will be explained, and simple text files will be handled using Python.
Basic Error Handling	Try-except blocks will be introduced, and common runtime errors will be managed safely.
Mini Project	All learned concepts will be applied, and a complete mini project will be prepared using Python basics.

## **Attendance**

Number of Classes: 15 Classes

Duration per Class: 2 hours

Number of Students enrolled: 8

<b>Sl.No.</b>	<b>Name</b>	<b>Classes Attended</b>
1	Hritoja Karmakar	11
2	Saachi Goyal	10
3	Suhani Sinha	13
4	Prerana Chattopadhyay	12
5	Nairanjana Dutta	12
6	Rifa Tamanna Mondal	11
7	Shruti Prasad	11
8	Priya Nathvani	12

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