



# Dr. Bhimrao Ambedkar University, Agra

An Institution of 97 Years of Glorious History & Contributions in Teaching and Research (Accredited Grade B++ by NAAC)  
Called at the place of Agra University

## Value Added Course

Course Name	Basic Python Programming
Course Code	DCS003
Duration	30 Hrs
Resource Person	Mrs. Pratibha Rashmi, Assistant Professor
Organized by	Department of Computer Science, IET, Dr. Bhimrao Ambedkar University, Agra

### About the Course:

The course teaches you the essential concepts of Python programming, and gives you an in-depth knowledge of python, data types, operators, control statements, loops, functions, Module, packages and different data types i.e., list and tuple.

### Course Objective:

The main objective of this course is to equip the students in current technologies and also to reduce the gap between academic and industry.

### Course Content:

#### Module 1: An Introduction to Python

- What can Python do?
- Why Python?
- Characteristics of Python.
- Python Syntax compared to other programming languages
- Python Install
- Python IDE

#### Module 2: Beginning Python Basics

- The print statement Comments
- Python Data Structures & Data Types
- String Operations in Python
- Simple Input & Output
- Simple Output Formatting
- Operators in python

#### Module 3: Python Program Flow

- Indentation
- The If statement and its' related statement

*Pratibha Rashmi*  
Head  
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The while loop

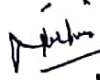
- The for loop
- The range statement

#### **Module 4: Functions & Modules**

- Create your own functions
- Functions Parameters
- Variable Arguments
- Scope of a Function
- Function Documentations
- Lambda Functions
- Module and packages

#### **Module 5: Data Structures**

- List Comprehensions
- Nested List Comprehensions
- Tuple Comprehensions
- List and Tuple Functions and Methods

  
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