

BASIC PYTHON syllabus:-

- **Python Intro**
- **Python Syntax**
- **Python Comments**
- **Python Variables**
- **Python Data Types**
- **Python Numbers**
- **Python Casting**
- **Python Strings**
- **Python Booleans**
- **Python Operators**
- **Python Lists**
- **Python Tuples**
- **Python Sets**
- **Python Dictionaries**
- **Python If...Else**
- **Python While Loops**
- **Python For Loops**
- **Python Functions**
- **Python Arrays**
- **Python Lambda**

ADVANCE PYTHON Syllabus :-

- **Python Classes/Objects**
- **Python Inheritance**
- **Python Iterators**
- **Python Polymorphism**
- **Python Scope**
- **Python Modules**
- **Python Dates**
- **Python Math**
- **Python JSON**
- **Python RegEx**
- **Python PIP**
- **Python Try...Except**
- **Python User Input**
- **Python String Formatting**
- **Python File Handling**
- **Python Data Analysis (Numpy,Pandas,Matplotlib).**

DJANGO :-

- ❖ **Django Intro**
- ❖ **Django Get Started**
- ❖ **Create Virtual Environment**
- ❖ **Install Django**
- ❖ **Django Create Project**
- ❖ **Django Create App**
- ❖ **Django Views**
- ❖ **Django URLs**
- ❖ **Django Templates**

MYSQL SYLLABUS

1. Introduction to MySQL

- What is DBMS and RDBMS
- What is MySQL
- Installation and setup
- MySQL Workbench basics

2. Database Operations

- CREATE DATABASE
- SHOW DATABASES
- USE database_name
- DROP DATABASE

3. Table Operations

- CREATE TABLE
- Data types: INT, VARCHAR, DATE, FLOAT, BOOLEAN
- Constraints: PRIMARY KEY, NOT NULL, UNIQUE, DEFAULT, AUTO_INCREMENT
- SHOW TABLES
- DESCRIBE table_name
- ALTER TABLE - add, modify, drop column
- RENAME TABLE
- DROP TABLE

4. CRUD Operations

- INSERT - insert data
- SELECT - fetch data
- UPDATE - update data
- DELETE - delete data

5. Clauses

- WHERE
- ORDER BY
- LIMIT
- DISTINCT
- BETWEEN
- IN
- LIKE

6. Functions

- Aggregate functions: COUNT, SUM, AVG, MIN, MAX
- String functions: LENGTH, UPPER, LOWER, CONCAT, SUBSTRING
- Date functions: NOW, CURDATE, YEAR, MONTH

7. Keys

- Primary Key
- Foreign Key
- Composite Key

8. Joins

- INNER JOIN
- LEFT JOIN
- RIGHT JOIN

9. Grouping

- GROUP BY
- HAVING