



The Data Science Genius

Learn. Code. Evolve.



PYTHON PROGRAMMING COURSE

Professional Certification Program

**3 Months | Weekend Program
Beginner to Advanced**

**Learn the Skill That Powers Data
Science, Automation & AI**

- **Live Classes**
- **Practical Learning**
- **Industry-Oriented Curriculum**



WHY LEARN PYTHON?

- Python is one of the **most in-demand programming languages** worldwide.
- Widely used in **Data Analytics, Data Science, Automation, AI, and Software Development.**
- **Strong career opportunities** across IT and technology-driven industries.
- In India, entry-level Python professionals earn **₹3–6 LPA**, with higher growth as skills improve.
- **50,000+ active Python job openings in India** across major job portals.
- Python is **easy to learn and beginner-friendly**, even with no prior coding experience.
- A future-proof skill that helps you **stay relevant in the evolving tech industry.**

This course helps you start from zero and grow with confidence.

Course Objective

This program is designed to provide strong Python fundamentals along with advanced concepts, database integration, numerical computing, data analysis, and visualization.

After completing this course, students will be able to:

- ✓ Write clean and efficient Python code
- ✓ Understand real-world programming logic
- ✓ Work with databases and data files
- ✓ Analyze and visualize data
- ✓ Build a strong foundation for Data Analytics & AI
- ✓ Explain projects confidently in interviews
- ✓ Apply for entry-level Python / Data Analytics roles



Who Can Join This Course?

- ✓ College Students (IT / CS / Any Stream)
- ✓ Beginners with no coding background
- ✓ Working Professionals
- ✓ Aspiring Data Analysts & Python Developers
- ✓ Anyone interested in technology & career growth
- ! No prior programming experience required



COURSE CURRICULUM

Module 1: Python Fundamentals

- Introduction to Python
- Python Installation & Environment Setup
- Python Syntax & Indentation
- Variables & Data Types
- Numbers & Mathematical Operations
- Operators
- Strings & String Operations
- Regular Expressions (Regex)
- Date & Time Module



Module 2: Python Sequences & Data Structures

- Sequences Overview
- Lists
- Tuples
- Ranges
- Dictionaries
- Sets
- Working with Nested Data Structures
- Practical Examples

Module 3: Control Flow Statements

- If, Else, Elif Statements
- For Loop
- While Loop
- break, continue, pass
- Logical problem solving using loops

Module 4: Functions & Advanced Functions

- Defining Functions
- Function Arguments & Return Values
- Return Multiple Values
- Yield vs Return
- First-Class Functions
- Partial Functions
- Python Closures
- *args and **kwargs
- Precision Handling

Module 5: Modules, Packages & File Handling

- Python Modules
- Python Packages
- Reading Files
- Writing into Files
- Working with Text Files
- Exception Handling
- Python Exceptions

Module 6: Object-Oriented Programming (OOP)

- Class & Objects
- Class Members & Instance Members
- Constructors & Destructors
- Inheritance
- Polymorphism
- Data Hiding
- Class Method vs Static Method
- Changing Class Members
- Class and Instance Attributes
- str() vs repr()
- Reflection
- Metaprogramming with Metaclasses

Module 7: Advanced Python Concepts

- **Decorators**
- **Decorators with Parameters**
- **Memoization using Decorators**
- **Generator Functions**
- **Garbage Collection**
- **Timer Objects**
- **Barrier Objects**
- **Python Bit Functions on Integers**
- **(bit_length, to_bytes, from_bytes)**

Module 8: Python with MySQL (Database Integration)

- **MySQL Environment Setup**
- **Database Connection using Python**
- **Creating Database**
- **Creating Tables**
- **Insert Operation**
- **Read Operation**
- **Update Operation**
- **Join Operations**
- **Performing Transactions**

Module 9: NumPy for Numerical Computing

- Introduction to NumPy
- ndarray Object
- Array Creation
- Data Type Objects (dtype)
- Indexing & Slicing
- Advanced Indexing
- Iterating over Arrays
- Binary Operations
- Mathematical Functions
- Linear Algebra
- Sorting, Searching & Counting
- Matrix Multiplication using NumPy (Single-Line Code)

Module 10: Pandas for Data Analysis

- Pandas DataFrame Introduction
- Creating DataFrames
- Working with Rows & Columns
- Indexing & Selecting Data
- Boolean Indexing
- Conversion Functions
- Iterating Rows & Columns
- Handling Missing Data
- Working with Text Data
- Working with Date & Time Data
- Merging, Joining & Concatenation

Module 11: Data Analysis & Visualization

- **Introduction to Data Analysis**
- **Exploratory Data Analysis (EDA)**
- **Mathematical Operations for Data Analysis**
- **Data Visualization Concepts**
- **Charts & Graphs in Python**
- **Data Visualization using Bokeh**
- **Data Analysis & Visualization with Python**

Module 12: Capstone Project

- **Problem Statement Selection**
- **Data Handling & Analysis**
- **Python Implementation**
- **Visualization**
- **Final Project Submission**

CERTIFICATION & CAREERS

Certification

- A performance-based Python Programming Certification issued by **The Data Science Genius**.

Career Opportunities

- **Python Programmer**
- **Data Analyst (Entry Level)**
- **Automation Developer**
- **Strong base for Data Science & AI**



TOOLS YOU WILL LEARN



**“Practical,
career-focused
training
designed for
real-world
success.”**



Why Choose THE DATA SCIENCE GENIUS?

- ✓ Beginner-friendly teaching approach
- ✓ Practical & career-oriented syllabus
- ✓ Live mentor support
- ✓ Focus on logic & real-world skills
- ✓ Learn from fundamentals — not shortcuts



FOUNDER & LEAD TRAINER

Sail R. Mayekar.

MSc.IT | Certified Data Science Professional

Founder & Lead Trainer – The Data Science Genius



Sail Rajendra Mayekar is the Founder and Lead Trainer of The Data Science Genius, with 5+ years of experience in teaching across Data Science, Artificial Intelligence, Python Programming, and Web Development.

He has guided students through conceptual learning and hands-on practical training, helping them understand how modern technologies are applied in real-world scenarios. His expertise lies in simplifying complex topics and building strong technical foundations through live coding, projects, and interactive sessions.

With a learner-centric teaching approach, he focuses on industry-relevant skills, logical thinking, and problem-solving, preparing students for careers in IT, analytics, and software development. Through The Data Science Genius, his vision is to deliver quality professional education within the local region, making advanced technical skills accessible to aspiring learners.

ENROLLMENT DETAILS

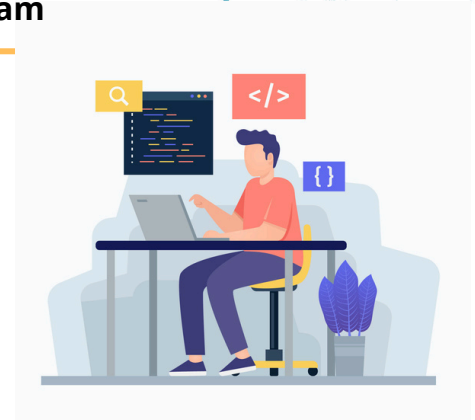
PYTHON PROGRAMMING COURSE

Master Python in 3 Months | Weekend Interactive Program

Program Overview

- **Duration:** 3 Months (Weekend Only)
- **Mode:** 100% Online Live Interactive Sessions

COURSE FEE: ₹18,000



What's Included?

- Complete Python Programming curriculum
- Live interactive weekend sessions
- Hands-on practice & assignments
- Professional course completion certificate



Limited-Time Early Enrollment Bonus

Career Support & Interview Preparation


 **Worth ₹3,000**

 **Included FREE for initial batches**

Bonus includes:

- Python interview question preparation
- Resume & project guidance
- Mock interview discussions
- Interview confidence building support

Interested? Contact Us!

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