

Python Master Program

Course syllabus · Live online · Beginner to Advanced

Our complete Python career program: fundamentals, OOP, automation, databases, REST APIs, Git, a capstone project and career mentorship.

Live training	150 hours in total
Weekday batch	15 weeks · Monday to Friday, 2 hours per day (10 hours a week)
Weekend batch	19 weeks · Saturday and Sunday, 4 hours each day (8 hours a week)
Self-practice	about 96 hours in total (labs, assignments, revision)
Total effort	about 246 hours including self-practice
Mode	Live instructor-led online sessions · session recordings after each class · small batches
Trainer	Pratiksha
Batch start	Weekday: Mon 2 Nov 2026 and Mon 16 Nov 2026 · Weekend: Sat 21 Nov 2026
Batch timings	Morning and evening options
Course fee	Shared by our counselor (varies with current offers)

Who is this for?

Anyone looking to become a Python Developer, Automation Engineer, Data Analyst or Software Engineer.

Prerequisites

None. The program starts with Python Foundations.

What you will learn

- Everything in Python Foundations and Programming Essentials
- Automate real-world tasks with advanced Python
- Work with SQL databases from Python
- Build and consume REST APIs
- Use Git and GitHub
- Deliver a capstone project and prepare for interviews

Tools and technologies

Python · SQL · REST APIs · Git and GitHub · Automation · VS Code

Detailed syllabus

#	Module	Hours	Topics	Hands-on
1	Python Foundations (complete)	36	• Installation and tooling • Variables, data types, conditionals, loops • Lists, tuples, dictionaries, sets • Functions, lambda functions, exception handling	As per Python Foundations
2	File Handling (TXT, CSV, JSON)	5	• Reading and writing text files • Working with CSV and JSON • Context managers	Data processing scripts

#	Module	Hours	Topics	Hands-on
3	Object-Oriented Programming: Classes and Objects	6	• Classes, objects, attributes, methods • Constructors and special methods	Model real-world entities
4	Inheritance, Polymorphism and Encapsulation	6	• Inheritance and method overriding • Polymorphism • Encapsulation and access control	Class hierarchy exercise
5	Modules and Packages	3	• Creating and importing modules • Packages, pip and virtual environments	Package a small library
6	Mini Projects	4	• Planning and building a mini project • Code review and presentation	Mini project
7	Advanced Python and Automation	30	• Iterators, generators, decorators, regex • Excel, PDF and file automation • Web scraping and API automation • Scheduling, email and system automation • Testing and logging	Automation scripts and mini project
8	SQL and Database Connectivity	15	• Relational concepts and SQL • Joins, aggregation, subqueries • Python with MySQL/SQLite • CRUD applications	Python + SQL application
9	REST APIs	12	• HTTP and REST principles • Building APIs with Flask/FastAPI • Authentication basics • Consuming third-party APIs	Build and test an API
10	Git and GitHub	6	• Version control fundamentals • Branching, merging, pull requests • GitHub workflow	Collaborative repo exercise
11	Capstone Project	15	• Capstone planning and build • Code review and presentation	Capstone
12	Interview Preparation, Resume and Career Mentorship	12	• Python interview questions and coding practice • Resume and LinkedIn/GitHub profile • Mock interviews • Career guidance and mentorship	Mock interviews
	Total live hours	150		

Projects

- Mini projects
- Automation project
- REST API project
- Capstone project
- Project portfolio

Assessment

Assignments, module tests, mock interviews and capstone evaluation.

Certification

Course completion certificate and a project portfolio. Bonus: mock interviews and career guidance.

What is included

- Live instructor-led training
- Capstone project

- Mock interviews
- Career mentorship
- Session recordings after each class
- Small interactive batches

Our promise: we do not offer guaranteed-placement claims. We focus on building genuine skills so you are capable of clearing interviews and doing the job. Unpaid internship opportunities are available for practical exposure. Fees and batch dates vary with current offers, so please confirm them with our counselor. This syllabus is indicative and may be updated to reflect industry changes.

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