



Zestminds Academy

Python Training Syllabus

45 Days | 3 Months | 6 Months Python Pro Track

Zestminds Academy, Mohali

Training Mode	Offline classroom training in Mohali
Program Options	45 Days Python Training, 3 Months Python Program, 6 Months Python Pro Track
Batch Timings	10:00 AM - 1:00 PM / 2:00 PM - 5:00 PM
Fees	INR 7,000 for 45 Days / INR 4,000 per month for 3 and 6 Months
Suitable For	B.Tech, BCA, MCA, diploma students, final-year students, freshers and beginners
Contact	+91-9056277961 Zestminds Academy, Mohali

This syllabus is designed to help students understand what they will learn in each Python training track before joining. Exact module depth, assignments and project scope may vary by batch, student readiness and selected duration.

No fake placement or salary guarantee is claimed. The focus is practical learning, assignment practice, project guidance, GitHub documentation and interview preparation support.

OVERVIEW

Python Training Overview

The Python Training program at Zestminds Academy is built for students who want practical coding confidence, not only theory. Students learn Python step by step through guided assignments, debugging practice, file handling, OOP, backend exposure and project-style work.

Program Options

45 Days Python Training Short-duration practical training for students who want quick Python confidence with assignments, debugging, file handling and OOP basics.	3 Months Python Program Structured Python learning for beginners and freshers with fundamentals, data structures, OOP, Git basics and starter project exposure.
6 Months Python Pro Track First 3 months for Python learning and backend foundation. Next 3 months for major project development with GitHub documentation.	Offline Classroom Mode Students learn in Mohali with mentor support, doubt discussion, assignments and practical coding practice.

Students Will Learn

- Python programming fundamentals and logic building
- Variables, data types, operators, conditions and loops
- Strings, lists, tuples, sets and dictionaries
- Functions, reusable code and modular programming
- File handling, CSV basics and exception handling
- Object-Oriented Programming with classes and objects
- Debugging and code improvement habits
- Git and GitHub basics
- Database, APIs and backend exposure for longer tracks
- Major project planning and GitHub documentation in the 6-month track

45 Days Python Training

Short-duration practical Python course for students who want coding confidence through guided assignments, debugging, file handling and OOP basics.

Duration: 45 Days | Fee: INR 7,000 | Mode: Offline Classroom

Module 1: Python Basics Refresh

- What is Python and where it is used
- Python installation and editor setup
- Variables, data types and operators
- Input/output and type conversion
- Common beginner mistakes

Module 2: Conditions and Loops

- If, elif, else and nested conditions
- Comparison and logical operators
- For loop and while loop
- Break and continue
- Loop-based logic practice

Module 3: Python Data Handling

- Strings and string methods
- Lists, tuples, sets and dictionaries
- Nested data structures
- Searching, filtering and sorting basics
- Small data-handling tasks

Module 4: Functions and Code Structure

- Function creation
- Parameters and return values
- Scope and reusable code
- Breaking larger problems into smaller functions
- Function-based assignments

Module 5: File Handling and Exceptions

- Reading and writing text files
- Working with file paths
- Try-except blocks
- Handling user input errors
- Debugging file-related issues

Module 6: OOP Basics and Assignments

- Classes and objects
- Methods and constructors
- Attributes
- Basic inheritance
- OOP assignment review

45 Days Practical Assignments

- Calculator program
- Number guessing game
- Student marks calculator
- Simple contact book
- File-based notes app
- List and dictionary practice tasks
- Basic OOP assignment
- Debugging exercises

3 Months Python Program

Structured Python program for beginners and freshers who want fundamentals, regular practice, Git basics and starter project exposure.

Duration: 3 Months | Fee: INR 4,000/month | Mode: Offline Classroom

Module 1: Python Foundation

- Python introduction and setup
- Syntax and indentation
- Variables, data types and operators
- Input/output and type casting
- Basic coding standards

Module 2: Control Flow and Logic Building

- If-else and nested conditions
- Loops and range function
- Break and continue
- Pattern problems
- Real-world decision examples

Module 3: Data Structures in Python

- Strings and string methods
- Lists, tuples, sets and dictionaries
- Nested lists and dictionaries
- Searching, filtering and sorting
- Data structure assignments

Module 4: Functions and Modular Code

- Function creation
- Parameters and arguments
- Return values
- Default and keyword arguments
- Reusable code and function-based practice

Module 5: File Handling and Error Handling

- File read/write operations
- CSV basics
- Try, except and finally
- Custom error messages
- File-based mini tasks

Module 6: Object-Oriented Programming

- Classes and objects
- Constructors
- Instance and class variables
- Inheritance, encapsulation and polymorphism basics
- OOP-based assignments

Module 7: Git, GitHub and Project Structure

- What is Git and GitHub
- Repositories and commits
- README basics
- Folder structure
- Presenting beginner projects

Module 8: Starter Project Exposure

- Project planning
- Feature breakdown
- Writing project files
- Debugging project errors
- Basic project explanation

3 Months Practical Assignments

- Contact management system
- Student record system
- To-do list application
- File-based expense tracker
- Quiz application
- Library record assignment
- OOP-based mini project
- GitHub project upload for starter project exposure

6 Months Python Pro Track

First 3 months for Python learning and backend foundation. Next 3 months for major project development with GitHub documentation.

Duration: 6 Months | Fee: INR 4,000/month | Mode: Offline Classroom | Includes project-focused internship training

6-Month Track Structure

First 3 Months	Python learning, backend foundation, assignments, file/CSV practice, database CRUD, REST API basics and debugging.
Next 3 Months	Major project development with GitHub documentation, README writing, testing, improvement, project explanation and interview preparation.

First 3 Months: Python Learning and Backend Foundation

- Python fundamentals revision
- Logic building and problem solving
- Data structures and functions
- File handling and exception handling
- Object-Oriented Programming
- Advanced Python basics
- Git and GitHub basics
- Database basics
- Flask or Django introduction
- REST API basics
- Debugging and code improvement

First 3 Months Practical Assignments

1. Python Automation Scripts Students practice small scripts for file organization, text processing, basic data cleanup, simple report generation or repetitive task automation.	2. File and CSV-Based Application Students build a small application using file handling and CSV data to understand reading, writing, updating and managing structured data.
3. Database CRUD Application Students build a database-driven application to practice create, read, update and delete operations using Python and a database.	4. REST API Assignment Students practice GET, POST, PUT and DELETE operations to understand request-response flow, JSON data, backend logic and API testing.

Next 3 Months: Major Project with GitHub Documentation

The last 3 months of the 6-month Python training are focused on a guided major project. Students apply Python, backend concepts, database logic, APIs, debugging and project structure in a more complete project workflow.

Major Project Work Includes

- Project idea discussion
- Requirement understanding
- Feature planning
- Folder structure
- Backend logic
- Database integration
- API or web workflow
- Authentication basics, if suitable for the project
- Error handling
- Testing and debugging
- Code improvement
- GitHub documentation
- README file writing
- Project explanation practice
- Interview discussion preparation

Expected Major Project Outcomes

Working Project Structure Students learn how to organize files, folders, routes, models, templates or APIs based on the selected project type.	GitHub Repository Students upload and maintain project files in GitHub with proper folder structure and basic version history.
README Documentation Students prepare a README that explains project purpose, features, setup steps, tools used and project flow.	Project Explanation Students practice explaining the project for college review, interviews and portfolio discussions.

Tools Students May Use

- Python
- VS Code
- Git and GitHub
- Command line / terminal
- Browser
- Postman or API testing tool
- SQLite or MySQL basics
- Flask or Django basics
- NumPy and Pandas introduction for longer track, if suitable

Practical Learning Focus

Students are trained to write code, debug errors, improve logic, organize projects and explain their work clearly. The focus is practical confidence and career readiness, not only completing topics.

Students Will Practice

- Writing Python programs
- Solving logic problems
- Debugging code
- Handling files and CSV data
- Building functions
- Creating classes and objects
- Working with data structures
- Creating small applications
- Using GitHub
- Explaining projects
- Preparing for interviews

Certificate and Internship Details

Certificate Support	Training completion certificate support may be available as per selected program, attendance, assignments and completion criteria.
Internship Training	Internship training is included with the 6 Months Python Pro Track. It is not included in the 45-day or 3-month Python program unless specifically confirmed during counselling.
Documentation	Students should confirm certificate and internship letter details during counselling before admission.

Career Direction After Python Training

- Python developer path
- Backend development
- Web development with Flask or Django
- API development
- Data analytics foundation
- AI/ML foundation
- Automation scripting
- Internship or fresher-level project preparation

Important Note

Zestminds Academy does not promise guaranteed jobs or salaries. The training supports practical learning, project work, GitHub presentation, interview preparation and career guidance. Final results depend on student practice, skill level, project quality, communication and interview performance.

Book Counselling	Call or WhatsApp +91-9056277961
Visit	Zestminds Academy, E-45, Industrial Area, Phase 8, Mohali
Best Next Step	Compare 45 Days, 3 Months and 6 Months tracks with a training counsellor before admission.

