

Python Level 1 - Course Structure (45 Sessions)

Designed for kids to build strong foundational coding skills through fun, interactive learning.

Module 1: Getting Started with Python (Sessions 1–4)

1. Welcome to Python Programming
2. Exploring Basic Operations
3. Playing with Text (Strings)
4. Working with Lists (Collections 1)

Module 2: Data Structures & Logic Building (Sessions 5–10)

5. **Mini Project**
6. Understanding Tuples & Sets
7. Getting to Know Dictionaries
8. Introduction to Conditional Thinking
9. Fun Logic Challenges – 1
10. **Mini Project**

Module 3: Control Structures & Looping (Sessions 11–14)

11. Mastering Loops in Python
12. Dive into Nested Loops
13. Building Flow with Loops
14. **Assessment 1**

Module 4: Patterns & Functions (Sessions 15–20)

15. Drawing with Code – Patterns
16. Logic Challenges – 2
17. Learning About Functions
18. Variables That Travel – Scope
19. Logic Challenges – 3
20. **Mini Project**

Module 5: Advanced Functionality (Sessions 21–26)

21. Going Deeper with Recursion
22. Reading & Writing Files
23. Debugging – Handling Errors
24. **Major Project 1**
25. Project Enhancement Techniques
26. **Assessment 2**

Module 6: Modular Programming & OOP (Sessions 27–31)

27. Modules & Python Libraries
28. Introduction to OOP – Part 1
29. OOP – Part 2: Classes in Action
30. **Mini Project**
31. **Assessment 3**

Module 7: GUI & Visual Programming (Sessions 32–39)

32. Drawing with Turtle
33. Intro to GUI with Tkinter
34. Creating Themed Widgets
35. Buttons, Labels, Entries
36. More GUI Elements
37. **Mini Project**
38. Advanced Widgets & Features
39. Interactive Dialog Boxes

Module 8: Event Handling & Canvas (Sessions 40–45)

40. Widgets for Layout and Structure
41. User Events & Interactions
42. Drawing with Canvas
43. **Major Project 2**
44. Polishing the Project
45. **Final Assessment**