

**Beginner Level****Who should join?**

These classes are designed for individuals who are completely new to coding. This includes people who have no prior experience with programming languages and are interested in starting their journey in this field. It's also suitable for people who have basic knowledge but want to strengthen their fundamentals.

**Curriculum**

Week 1: Basics of programming, why coding, Demonstration: Doing "Hello World" Assignment • Week 2: Understanding syntax, Variables, Expressions • Week 3: Conditional Code • Week 4: Functions • Week 5: Loops and Iteration • Week 6: Strings and Lists • Week 7: Dictionaries and Tuples • Week 8: Graduation

**Outcome**

After completing these classes, the participants will gain a fundamental understanding of programming. They'll be proficient in Python, understand the syntax, variables, expressions, conditional code, functions, loops, iteration, strings, lists, dictionaries, and tuples. They'll be ready to start working on basic projects and have the skillset needed to transition to intermediate classes.

## Intermediate Level

### Who should join?

These classes are designed for people who have a basic understanding of coding principles and have completed the beginner classes. This includes individuals who are comfortable with basic Python and have a basic understanding of HTML. They should be interested in learning more about backend development and are ready to delve into projects that apply their knowledge.

### Curriculum

Week 1: Getting Familiar with HTML - creating simple web pages • Week 2-4: Basics of Object-Oriented Programming • Week 5-6: Algorithm • Week 7-8: Deep dive into Python or Java Script - Introduction to backend development with Node.js or Django • Week 9-10: Projects

### Outcome

After completing these classes, the participants will have a deeper understanding of coding principles and backend development. They'll be proficient in HTML, Object Oriented Programming, and Algorithms. They'll have the choice of specializing in either Python or JavaScript for backend development with Node.js or Django. They'll also have the experience of working on projects, which will equip them with the skills to start working on more advanced projects or even start their coding career.

## Advanced Level

### Who should join?

For the Advanced Classes on Algorithms, Data Structures, and Backend Development, the participants should ideally be individuals who have a foundational understanding of programming and are looking to deepen their knowledge in these areas. This could include software developers, computer science students, or IT professionals who are interested in advancing their technical skills.

### Curriculum

Week 1-2: Advanced Algorithms & Data Structures, Dive deeper into complex algorithms and data structures, including trees, graphs, hash maps, and more. Explore sorting and searching algorithms, recursion, and dynamic programming. • Week 3-4: Advanced Backend Development • Week 5-8: Continue the exploration of Node.js or Django, learning more complex features and structures. Learn about server-side rendering, security protocols, and database interactions.

### Outcome

These classes are designed to provide hands-on experience and practical knowledge that can be applied to real-world software development challenges. Participants will leave with a stronger skill set and the ability to implement advanced programming techniques in their projects