



Coding Syllabus!



Grade 6

- Introduction to Computers
 - Basics of Hardware and Software.
 - Understanding Operating Systems.
- Block-Based Programming
 - Introduction to Scratch.
 - Creating Animations and Simple Games.
- Algorithms and Flowcharts
 - Understanding Steps in Problem Solving.
 - Drawing Basic Flowcharts for Simple Processes.
- Computational Thinking
 - Sequencing, Patterns, and Debugging.
 - Introduction to Logical Thinking with Puzzles.

Grade 7

- Block-Based Programming (Advanced)
 - Advanced Scratch Concepts (Loops, Conditionals).
 - Creating Interactive Stories and Games.
- Python Basics
 - Introduction to Python Programming.
 - Variables, Input/Output, and Basic Data Types.
- Algorithms and Logical Thinking
 - Designing Simple Algorithms.
 - Introduction to Conditionals and Loops.
- Emerging Technologies
 - Basics of Artificial Intelligence Concepts.

Grade 8

- Python Programming
 - Conditional Statements and Loops.
 - Functions and Simple Programs.
- Web Development Basics
 - Introduction to HTML (Tags, Basic Structure).
 - Understanding Web Page Layouts.
- Problem Solving Techniques
 - Modular Programming.
 - Debugging Simple Programs.
- Introduction to Game Development
 - Basics of 2D Game Design Using Tools like Pygame or Block Editors.

Grade 9

- Python Programming (Intermediate)
 - Lists, Tuples, and Dictionaries.
 - File Handling Basics.
- Web Development
 - CSS for Styling Web Pages.
 - Basics of JavaScript for Interactivity.
- Databases
 - Introduction to SQL and Simple Queries.
 - Understanding Tables and Relationships.
- Computational Thinking
 - Algorithm Optimization.
 - Real-World Problem Solving Projects.

Grade 10

- Advanced Python Programming
 - Object-Oriented Programming (OOP) Concepts.
 - Advanced File Handling.
- Full-Stack Web Development
 - HTML, CSS, and JavaScript.
 - Basics of Backend Development (e.g., Flask or Django).
- Data Structures and Algorithms
 - Introduction to Sorting and Searching Algorithms.
 - Basics of Recursion.
- Emerging Technologies
 - Basics of Machine Learning.
 - Introduction to Mobile App Development Using Platforms like MIT App Inventor.

The syllabus will be customized based on the student's board and individual needs.