



## SCRATCH (BEGINNER)

Exploring Scratch, where creativity sparks through engaging block-based coding and learn concepts in logic, design, and problem-solving.

### CORE FEATURES

- **Computational Foundations:** Scratch activities nurture essential coding practices and computational thought. Focused on logical, creative, and sequential thinking.
- **30 Sessions, 30+ Quizzes, Activities and Projects.**

### CONCEPTS COVERED

#### Fundamental Coding Constructs:

- Sequencing and Ordering of Events
- Basic Loops and Iteration
- Debugging
- Problem Resolution
- Conditional Statements
- Decision Making

#### Creative Expression and Interaction:

- Character Animation
- Storytelling Basics
- Interactive Game Creation
- Introduction to Graphical Effects

#### Structured Learning and Exploration:

- Flowchart Design for Visual Planning
- Parallel Execution in Coding Projects
- Custom Blocks

#### Scratch Programming Basics:

- Motion and Event Blocks
- Appearance Blocks
- Sound Blocks
- Control Structures
- Sensing Blocks
- Pen Blocks
- Operators for Math and Logic
- Variables
- Data Management Basics

#### Mathematical Concepts and Logic:

- Coordinate Systems
- Spatial Relationships
- Mathematical Operations
- Data Handling
- Visual Problem-Solving

## PROJECT SHOWCASE



Astronaut's Journey



Space Program



Symphony



Digital Storybook



## SCRATCH (ADVANCED)

This program uses where block-based coding that becomes a canvas for innovation and complex problem-solving. This course bridges coding fundamentals to advanced applications, sparking creativity and analytical prowess.

### CORE FEATURES

- **Scratch Interactive Platform Mastery:** An immersive learning experience that harnesses the full potential of Scratch to develop students' proficiency in coding through interactive projects and games.
- **30 Sessions, 30+ Quizzes, Activities and Projects.**

### CONCEPTS COVERED

#### Design & Animation:

- Character Development
- Storyboarding
- Interactive Gameplay

#### Mathematics & Logic:

- Coordinates & Graphing
- Logic Puzzles
- Coding Mathematics

#### Computational Concepts:

- Algorithmic Sequences
- Debugging Strategies
- Conditional Logic
- Parallel Execution
- Custom Blocks
- Mathematical Operations

#### Enhanced Scratch Techniques:

- Motion Dynamics
- Event Triggers
- Visual Effects
- Sound Engineering
- Control Logic
- Sensory Perception
- Data Operations
- Variable Management

#### Project Building & Execution:

- Game Mechanics
- User Interface Design
- Project Planning

## PROJECT SHOWCASE



Maze Challenge



Broadcasting Tales



Debugging Project



Eco-Quest