



## **Coding Ninjas**

Your first step to coding!

Learn sequences, commands, blocks, algorithms, variables, loops, functions, events, sprites using kids friendly programming language developed by MIT and Google to create animations, games, stories and apps. Share your apps with friends & family.

#### Mentor Led, Interactive 1-on-1 live classes Course designed by IIT-IIM Alumni and PHD Professors

Coding Makes Kids Smarter!

App Coder Certificate in partnership with LEGO Education

# Our unique "5C" teaching methodology Connect Real world examples Concept Demystify the topics Concept Demystify the possibilities Continue Ideate & Practice possibilities Continue Ideate & Practice Learning



#### **Testimonials**

There were so many options available online, but only RoboGenius was able to explain me everything in simple words and answer all my questions. Together we identified the right fit course for my daughter. She is very happy learning coding here. I am glad that I went with RoboGenius.

Monika Sharma, Parent, India



My child has become more confident and is able to articulate things in a better manner to solve problems.

Abdul Rashid, Parent, UAE



I have learnt a lot about coding Artificial Intelligence systems and look forward to applying this knowledge in my projects.

Ayomide Ladele, Student, U.K.



Great course, excellent faculty. My kid loves robogenius coding classes.

Kasturi Vivek, Parent, India





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Learn sequences, commands, blocks, algorithms, artificial intelligence, variables, loops, functions, events, sprites using kids friendly programming language.

**Coding Ninjas** 

#### **Beginner**

1-24 Sessions

## Coding Ninjas Intermediate 25-48 Sessions

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#	Activity	Learning Outcome
1	Sprite Movements	Coding multiple sprites and backdrops
2	Patterns	Code beautiful patterns
3	Shapes	Code to convert sprite into pen to draw shapes
4	Audio	Code to add audio
5	Animations	Code Visual effects in animation
6	Game	Code Creating a maze solver game
7	Game	Creating a game with score
8	Artificial Intelligence Algorithm	Code to convert text to speech
9	Animation	Code backdrop and dance movements
10	Interactive Animation	Code Keyboard controlled animation
11	Game	Code Multiple levels to a game
12	STEM	Pollination Process
13	Game	Code Decision making based on score
14	Game	Control appearance of sprites
15	STEM	Mathematical operations
16	Game	Code Classic Pong game sprite interactions
17	Interactive Animation	Code Line following robot simulation
18	Game	Cloning concept of sprites
19	Game	Extending previous game project
20	Game	Code racing game
21	Interactive Animation	Manipulating the background and creating quiz game
22	STEM	Working of digital clock
23	Animation	Creating sprite backdrops for chosen project
24	Animation	Completing the code for the project

#	Activity	Learning Outcome
25	Game	Code with Conditional Statements and Operators
26	Game	Code Game based on Sense Block
27	Function	Code user defined My block
28	Game	List to store multiple objects
29	App Creation	Scratch code to HTML App
30	Animation Project	Communication, Synchronization and Parallelism
31	STEM	Analog watch showing current time
32	Game	Enemy and reward management
33	Challenge	Adding multiple levels to the previous project
34	Interactive Animation	Password matching with database
35	Game	Pong Game against Computer
36	Animation	Games with Enhanced Logical decisions
37	Challenge	Code And Test Spiral Maker
38	Interactive Animation	Sprite Interaction using list
39	STEM	Calculator With Numeric Keypad
40	STEM	Calculator With Numeric Keypad
41	Game	Code Calculator
42	Game	Code Dodge The Ball
43	Interactive Animation	Crack The Code For Multiple Levels
44	Game	Code a platformer game
45	STEM	Building Solar System with planet info
46	Revision	Revision of concepts learned
47	Project	Designing and programing a project
48	DIY project contd.	Contemplating & extending the project

### Create Artificial Intelligence powered apps and share your apps with friends & family.

**Coding Ninjas** 

#### **Advanced**

49-72 Sessions



#	Activity	Learning Outcome
49	4-in-1	Multiple Sprites controlled by Broadcast message block
50	4-in-1	Multiple programs in one program
51	4-in-1	Program combination
52	4-in-1	Creating complex programs
53	Art Effect	Changing the sprite color effects using conditional blocks
54	Interactive Arts	Mouse control and changing the effects of Shapes
55	Mouse Effect Interactive Arts	Adding more effects using conditional programs
56		Draw shapes in Random sizes
57	3D Images	Code using operator block and conditional blocks
58	Arrow Effect	Changing the effect and rotation style of arrow
59	Drawing Board	Designing the Drawing Board and colorful sprites
60	Drawing Board	Code using Broadcast message block and conditional block.
61	Arithmetic Operations	Code addition
62	Arithmetic Operations	Code Subtraction
63	Quiz based on Numbers	Code quiz
64	Quiz based on Numbers	Add based on mathematical operations to the quiz
65	Math race	A race of snails based on the user Answer
66	Factorial Tower	Program based on Factorial concept
67	Number Train	Program Based on series generator
68	Number Train	Number Train extensions
69	Speed Up flower	Animation to create flowers
70	Speed Up flower	Speedup colors
71	Mini Project	Code puzzle
72	Mini Project	Solve the puzzle

#	Activity	Learning Outcome
73	Cross the river story	Design the story
74	Cross the river story	Code the story
75	Cross the river story	Add extensions to the story
76	Cross the river story	Validate the algorithm
77	Planet gravity	Finding weight on other planets
78	Planet gravity	Validate the algorithm
79	Habitat	Match the habitat of different animals
80	Habitat	Validate the algorithm
81	Water cycle	Code animation of water cycle process
82	Water cycle	Validate the algorithm
83	Earthquake simulator	Effects of different magnitude of earthquake on environment
84	Earthquake simulator	Validate the algorithm
85	Basketball Game	Program based on broadcasting
86	Basketball Game	Validate the algorithm
87	Football game	Two Player Football game
88	Football game	Validate the algorithm
89	Fruit Ninja	Code slicing fruit game
90	Fruit Ninja	Validate the algorithm
91	Game	Cross multiple stages to reach the destination
92	Game	Validate the algorithm
93	Mega Project - App	Design
94	Mega Project - App	Code
95	Mega Project - App	Extend
96	Mega Project - App	Test & Present





#### Give your child the RoboGenius Online Advantage!

RoboGenius Academy is India's first company to establish world class labs to teach Coding, Robotics and Artificial Intelligence to kids. Coding courses at RoboGenius are designed by team of Engineers, PhD professors, IIT-IIM Alumni and is enriched with our experience of more than a decade in teaching coding to kids.

Our Unique 5C teaching methodology, well-structured curriculum and mentors who are engineers make coding fun to learn and easy to understand. Kids at RoboGenius become creative and innovative problem solvers using A.I. technologies of today and tomorrow.

RoboGenius Kids are smarter and successful.

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SCO 39, Sector 56, Gurgaon-122001, Haryana, India

robogenius.in | online@robogenius.in