



**AGE 9-12 YEARS**  
**GRADES 4+**

# Coding Warriors

Aryan Saxena

Learn sequences, commands, blocks, algorithms, variables, loops, functions, events and artificial intelligence to develop android and iOS mobile apps. Publish your apps on Play Store and App Store.



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

Coding Makes Kids Smarter!



Coding Warriors Certificate in  
with LEGO Education



## Our unique "5C" teaching methodology



**Connect**  
Real world examples



**Concept**  
Demystify the topics



**Code**  
Digital Creations



**Contemplate**  
Analyse viable 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** 



# Course Descriptor



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

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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.



Learn sequences, commands, blocks, algorithms, variables, loops, functions, events and sprites to develop basic mobile apps

## Coding Warriors Beginner 1-24 Sessions

#	Activity	Learning Outcome
1	Components	Code buttons and sounds
2	Components	Code colors in layouts
3	Operators	Code calculator
4	Inputs	Taking commands from users
5	Touch Inputs	Draw and paint on phone screen
6	Events	Code motions and animations in apps
7	Events	Make a mission based game
8	Project 1 - Game	Design and code your own game
9	Multimedia	Code sound from images
10	Variables	Code counters
11	Variables	Code counter logs
12	Component	Code user commanded designs
13	Sensor	Code conditions using accelerometer sensor
14	Variables	Code gallery of scenes
15	User Interface	Code MCQ quiz for users to answer
16	Logical Operators	Code answer keys for the quiz
17	Procedures	Code Scoring system in quiz
18	Counters	Code spooky sound app
19	Logical operators	Code personalized spooky sound
20	Logical operators	Code Random guess game
21	Variables	Code Age calculator app
22	Components	Code RGB color sliders to change screen background
23	Project 2 - Online Shopping	Code an e-commerce app
24	Project 2 - Online Shopping	Project report and Presentation

## Coding Warriors Beginner Plus 25-48 Sessions

#	Activity	Learning Outcome
25	Data Structures	Code lists
26	Project 3 - Game	Code a match and win game
27	Loops	Code forward and reverse counting
28	Loops	Code table generators
29	Loops	Code multiple table generators
30	Data Structures	Displaying sequential data with multiple lists
31	Data Structures	Displaying consolidated data with multiple lists
32	Data Structures & Loops	Code lists and nested loops together
33	Data Structures & Loops	Code dynamic lists and nested loops together
34	Operations	Code data abstraction with lists
35	Cloud Computing	Code sending, receiving and editing data on the cloud
36	Project 4 - Utility App	Code data operations
37	Data Structures & Operations	Code Quiz with lists
38	Events	Code Single and multiple timers
39	Project 5 - Game	Code a game with timer
40	Project 5 - Game	Code Arcade game user interface
41	Project 5 - Game	Code scoring system of the Arcade game
42	Project 5 - Game	Code Arcade game extensions
43	Events	Code Stopwatch
44	Navigation	Code screen navigation
45	Project 6 - Game	Code user interface of the touch game
46	Project 6 - Game	Code scoring system of the touch game
47	Project 7 - Game	Make your own game
48	Project 7 - Game	Project Report and Presentation

Learn Artificial Intelligence, Sensors, Databases, Cloud Computing, GPS, APIs and Commercialization. Publish your apps on Play Store and App Store.

## Coding Warriors

# Intermediate

49-72 Sessions

#	Activity	Learning Outcome
49	Animations	Code animations using lists and timer
50	Pop-up Messages	Code important messages in the app
51	Sensors	Code Gyroscope Sensor based mobile app
52	Project 8 - Game	Design a game
53	Project 8 - Game	Code the game
54	Project 8 - Game	Add extensions to the game
55	Project 9 - Game	Design a game
56	Project 9 - Game	Code a game
57	Project 9 - Game	Add extensions to the game
58	Barcode Scanner	Code barcodes
59	QR Code- Game	Code a game
60	QR Code- Game	Add extensions to the game
61	Database	Code databases
62	Security	Code login screen
63	Security	Code Sign-in screen
64	Artificial Intelligence	Code to take photos
65	Artificial Intelligence	Code to recognize images
66	Artificial Intelligence	Code to detect images
67	Multimedia	Code to make and use video and use in the apps
68	Project 10 - Artificial Intelligence	Code a camera app
69	Project 11 - Artificial Intelligence	Add extensions to the camera app
70	Project 12 - Artificial Intelligence	Design an app using camera, video and sensors
71	Project 12 - Artificial Intelligence	Code an app using camera, video and sensors
72	Project 12 - Artificial Intelligence	Project Report and Presentation

## Coding Warriors

# Advanced

73-96 Sessions

#	Activity	Learning Outcome
73	Artificial Intelligence	Code speech recognition
74	Speech recognition	Code to add speech recognition outputs to database
75	Speech recognition	Improve speech recognition and databases
76	Project 13 - Artificial Intelligence	Design an A.I. powered app
77	Project 13 - Artificial Intelligence	Code an A.I. powered app
78	Project 13 - Artificial Intelligence	Add extensions to the A.I. powered app
79	Computer Networking	Code internet capabilities into an app
80	APIs	Code an app using web enabled API keys
81	APIs	Code to fetch data from web
82	Project 14 - Database	Design database service
83	Project 14 - Database	Code database service
84	Project 14 - Database	Add extensions to database service
85	Commercialization - Mobile Ads	Code advertisements into apps to earn money
86	Project 15 - Cloud Computing	Design a weather app
87	Project 15 - Cloud Computing	Code the app to access cloud database
88	Project 15 - Cloud Computing	Add extensions to the weather app
89	Sensors	Code location detection
90	Project 16 - GPS	Design location detection system
91	Project 16 - GPS	Code to record location history in the database
92	Project 16 - GPS	Add extensions to the location detection system app
93	Project 17	Design an App
94	Project 17	Code an app
95	Project 17	Test and extend the app
96	Project 17	Project Report and Presentation

Learn advanced web API, Location awareness, QR codes and real time databases. Innovate your own new apps of commercial value and societal impact.

## Coding Warriors

# Advanced Plus

97-120 Sessions

#	Activity	Learning Outcome
97	Web API	Personality App
98	Web API	Weather App
99	Web API	Musical App
100	2D animation	Mario Game
101	2D animation	Mario Game
102	Web API	Playing Cards Game
103	Web API	Playing Cards Game
104	Web API	Location Tracker
105	Web API	Location Tracker
106	Web API	Lost and Found App
107	Web API	Lost and Found App
108	Web API	COVID Tracker App
109	Web API	COVID Tracker App
110	Web API	Restaurant App
111	Web API	Restaurant App
112	GPS	To Do List App
113	GPS	To Do List App
114	GPS	To Do List App
115	GPS	To Do List App
116	QR Code	QR code scanner app
117	QR Code	QR code scanner app
118	Project 18	Project-Location aware app
119	Project 18	Project-Location aware app
120	Project 18	Project-Location aware app

## Coding Warriors

# Expert

121-144 Sessions

#	Activity	Learning Outcome
121	Innovation Project 1	Topic Identification, Brainstorming and Wireframes
122	Innovation Project 1	User Interface and Database
123	Innovation Project 1	Coding Logic
124	Innovation Project 1	Testing & Error Handling
125	Innovation Project 2	Topic Identification, Brainstorming and Wireframes
126	Innovation Project 2	User Interface and Database
127	Innovation Project 2	Coding Logic
128	Innovation Project 2	Coding Logic
129	Innovation Project 2	Testing & Error Handling
130	Innovation Project 3	Topic Identification, Brainstorming and Wireframes
131	Innovation Project 3	User Interface and Database
132	Innovation Project 3	Coding Logic
133	Innovation Project 3	Coding Logic
134	Innovation Project 3	Testing & Error Handling
135	Innovation Project 4	Topic Identification, Brainstorming and Wireframes
136	Innovation Project 4	User Interface and Database
137	Innovation Project 4	Coding Logic
138	Innovation Project 4	Coding Logic
139	Innovation Project 4	Testing & Error Handling
140	Innovation Project 5	Topic Identification, Brainstorming and Wireframes
141	Innovation Project 5	User Interface and Database
142	Innovation Project 5	Coding Logic
143	Innovation Project 5	Coding Logic
144	Innovation Project 5	Testing & Error Handling



### **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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