



Age 13-18 YEARS
Grade 8+

Coding Masters

Develop strong foundations in building complex Artificial Intelligence Systems that think and act like humans.

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

Coding Makes Kids Smarter!

Python for A.I. Coder Certificate in
partnership 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

Develop strong foundations in building complex Artificial Intelligence Systems that think and act like humans.

Google Colab and Spyder IDE for coding A.I. in Python Programming Language

MySQL Workbench and SQL databases.



HTML, CSS and JavaScript.

Collect, Process, Store and Visualize high quality data

Code A.I. powered games, chatbots, prediction and forecasting tools and web apps.



Develop strong foundations in **building complex Artificial Intelligence Systems** that think and act like humans

Coding Masters

Beginner

1-24 Sessions

#	Activity	Learning Outcome
1	Data Outputs	Printing outputs on the console
2	Data Types and Variables	Store data in the correct form
3	Data Inputs & Type Casting	Take data inputs from user
4	IF Statements	Make Simple Decisions
5	Project 1	Create a Game
6	Artificial Intelligence	Steps to create A.I. and Data Preperation
7	Machine Learning & Prediction	Building classifier and predicting answers
8	Project 2	Basic chatbot to predict answers
9	Arithmetic Operators	Do Simple Calculations
10	Operations and Libraries	Use libraries and modules for productivity
11	Loops	Repeat fixed number of times
12	Loops	Repeat within a repeating block
13	Project 3	Play a Game fixed number of times
14	Loops	Repeat unknown number of times
15	Loops	Repeat within a repeating block
16	Project 4	Play a Game as long as the user wants
17	Project 4	Maintain a Game Score Card
18	Strings	Dealing with and manipulating text data
19	Strings	Solve Challenges
20	Functions	Encapsulate task for multiple use
21	Turtle	Designing 2D arcade games
22	Project 5	Controlling game objects and characters
23	Project 5	Adding sound and score cards to the Game
24	Project 5	Project Report & Presentation

Coding Masters

Intermediate

25-48 Sessions

#	Activity	Learning Outcome
25	Data Structures	Store and manipulate multiple values in lists
26	Data Structures	Stroing and manipluting data in tables / matrices
27	Project 6	Create utility tool
28	Data Structures	Storing multiple values in immutable tuples
29	Data Structures	Store and manipulate multiple values in Sets
30	Data Structures	Solve challenges
31	Data Structures	Storing and manipulating data as key-value pairs
32	Data Structures	Slove Challenges
33	Project 7	Create Translator
34	Project 8	Analyze frequencies
35	Project 9	Find Trends
36	High Performance	Counting hashable objects
37	High Performance	Storing and manipulating ordered key-value pairs
38	High Performance	Faster adds and removes with deque
39	Project 10	Analyze frequencies and trends with High Performance
40	Resursion	Functions that call themselves
41	Exception & Errors	Prevent codes from crashing
42	Exception & Errors	Solve Challenges
43	Files	Read and Write data into files for long term storage
44	Files	Solve Challenges
45	Project 11	Design Algorithm
46	Project 12	Trasform unstructured data into a strucutre of A.I.
47	Project 13	Validate and store data into files
48	Project 14	Project Report & Presentation

Learn HTML, CSS, JavaScript, SQL, Python and code powered games, chatbots, prediction and forecasting tools and web apps

Coding Masters

Advanced

49-72 Sessions

#	Activity	Learning Outcome
49	Object Oriented Programming	Define a class and run its instances
50	Object Oriented Programming	Add attributes, methods and relationships
51	Project 15	Create your own class
52	Object Oriented Programming	Inherit attributes and methods of another class
53	Project 16	Create blueprint of a new system
54	Project 16	Implement features / operations
55	Project 16	Read and store data
56	Project 16	Test and validate solution
57	Search	Binary Search, Selection Sort
58	Sort	Bubble Sort, Insertion Sort
59	Sort	Merge Sort
60	Sort	Solve Challenges
61	NumPy	Arrays and data types
62	NumPy	Operations and manipulations
63	Visualization	Line & Scatter plots
64	Visualization	Stacked & Bar Charts
65	Visualization	Histogram, Pie Charts and Images
66	Web Scrapping	Fetch data from websites
67	Web Scrapping	Parse HTML, XML and data files on websites
68	Project 17	Write algorithm to create Chatbot / Google Search tool
69	Project 17	Scrap and parse data from web
70	Project 17	Store and query database file
71	Project 17	Add user interaction and test
72	Project 17	Project Report & Presentation

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Expert

73-96 Sessions

#	Activity	Learning Outcome
73	HTML	Create webpages
74	HTML	Add images, videos, and tables to webpages
75	CSS	Add styles to webpage
76	CSS	Create webpage templates
77	JavaScript	Code JavaScript
78	JavaScript	Code & use JavaScript APIs
79	BootStrap	building responsive, mobile-first websites
80	Project 18	Create blueprint for your website
81	Project 18	Code your own website
82	Project 18	Make your website live for people to access
83	Database	MySQL Database Management System
84	Database	Access, create, and update data stored in a database.
85	Database	Perform more complex queries by keywords and functionality
86	Database	Functions for performing complex database operations
87	Database	Creating and manipulate databases with multiple related
88	Mega Project - Web App	Identify Project Website e.g., Amazon or Google
89	Search Setup and Get-to-know Django	Code location detection
90	Mega Project - Web App	MVC model, Views and URL Mappings
91	Mega Project - Web App	Create Templates and Forms
92	Mega Project - Web App	Create Models and Make SQL Connections
93	Mega Project - Web App	HTTP Request/Response implementation
94	Mega Project - Web App	Perform database queries and retrieve data for the user
95	Mega Project - Web App	User Authentication
96	Mega Project - Web App	Testing and Validation on Intranet



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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