



# Codingal

Where kids love AI & coding



**AP Computer Science A**

**Grades 9 - 12**

**Hello ! Young Coders**

# Get ready to fall in love with AI & coding

Accredited by



Excellent by



Backed by





# About Codingal

**Our Mission: To inspire kids and teens to fall in love with AI & coding**

Codingal is a leading online after-school where kids & teens learn AI & coding from expert instructors through live, interactive classes. Our mission is to build the world's largest & most loved programming school for kids & teens, powered by human & AI tutors.

All our instructors come from Computer Science background, and they are rigorously vetted and trained. Every student gets a personalized learning path and individual attention in 1:1 private classes or small group classes with expert instructors. Students learn by building apps, games, animations, and websites in a fun & engaging way.

Kids find Codingal very fun & engaging. They have rated teachers at 4.9 out of 5. Curriculum content is rated at 4.8 out of 5.

Codingal is on a mission to inspire kids to fall in love with AI & coding, and provide the right education to them who will be able to create anything they can imagine and build the future when they grow up to become entrepreneurs, engineers, and scientists.





# Codingal empowers kids to become innovators of the future

## Why should kids learn AI & Coding?



Coding is the new literacy : Technology has become a core part of our lives, powering everything from websites to smart gadgets. With AI increasingly shaping the future, teaching kids coding and AI prepares them to thrive in a tech-driven world. These skills enable kids to innovate, solve problems, and succeed in a rapidly evolving landscape.

## What are the benefits of learning AI & Coding?



- Develops problem-solving skills
- Boosts analytical and data-driven thinking
- Enhances creativity and imagination
- Encourages innovative real-life solutions
- Builds resilience and adaptability

## Why this curriculum?



- Accredited by STEM.org
- Rated 4.5 out of 5 by students and parents on Trustpilot
- Based on BIDE (Broad, Inspiring, Deep and Efficient) model
- Focus on STEAM (Science, Technology, Engineering, Arts, Math) subjects
- Enhances cognitive, logical, and computational skills
- Makes learning highly effective, interactive, and fun



# Why learning to code is essential for every child in the age of AI



## AI development requires coding

Building AI requires coding, which provides instructions to make the system function properly, ensuring everything runs smoothly and behaves as intended.



## Augmenting human creativity

AI serves as a powerful tool for enhancing creativity, helping creators but still relying on human direction to produce unique and meaningful results.



## Coding as a foundation for AI literacy

Learning to code is essential for understanding technology, enabling effective communication with computers and empowering individuals to create and innovate.



## New jobs & industries

The rise of AI creates new opportunities in various fields, from developing AI tools to maintaining and improving systems, generating demand for skilled professionals.



## No-code/low-code platforms

No-code platforms simplify building applications with drag-and-drop tools, but coding knowledge is necessary for creating more customized, complex features and designs.

# AP Computer Science A

A course to advance your coding skills in Java programming and cover all relevant topics related to AP Computer Science A Exam.

48 Classes  
100+ Projects  
48 Quizzes



## Key learnings

- ✓ Foundation of Java
- ✓ Data Structures and Algorithms
- ✓ Learn to solve free response questions
- ✓ Object Oriented Programming
- ✓ Searching & Sorting Algorithms



## Top achievements

- ✓ Problem solving
- ✓ Critical thinking
- ✓ Confidence boost
- ✓ Hands on programming projects

AI

## Module

Platform used:

[VS Code](#), [GitHub](#),

Programming languages:

Java

| Module No. | Title & Description                                                                                                                                                                                                                       |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module 1   | <b>Introduction to Java</b><br>Learn the basics of the most popular language, i.e. Java, with the help of different activities. Learn about data types, conditionals, loops and functions. In addition, also learn to create patterns.    |
| Module 2   | <b>Object Oriented Programming Using Java</b><br>Continue your journey in java by working on OOPs concepts,i.e., Classes, Objects, Libraries, Polymorphism, Encapsulation, Inheritance, Abstraction and last but not least file handling. |



Java Programmer Certificate



# AP Computer Science A

| Module No.                                                                                                                  | Title & Description                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module 3                                                                                                                    | <b>Practice questions on OOPS</b><br>Learn to solve the free response question asked previously in the AP Computer Science A Exam about the OOPs concept.                                                                |
| Module 4                                                                                                                    | <b>Arrays, 2-D Arrays &amp; Arraylist in Java</b><br>In this module, we will elaborate on the concepts of arrays, 2d Arrays & ArrayList. That will help you to know how arrays get space in the heap and memory mapping. |
| Module 5                                                                                                                    | <b>Introduction to JavaScript</b><br>Get introduced to javascript with Syntax guide and commenting, Variables, Operators, Objects, Array, Method, Call Stack, Methods, Loops, Switch, and Functions.                     |
|  <b>Basic DSA Programmer Certificate</b> |                                                                                                                                                                                                                          |
| Module 6                                                                                                                    | <b>Introduction to Searching &amp; Sorting</b><br>Learn about Searching and Sorting algorithms, concepts and implementation using Java.                                                                                  |



# AP Computer Science A

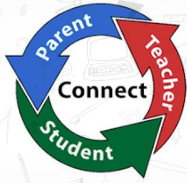
| Module No. | Title & Description                                                                                                                                              |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module 7   | <b>Introduction to Strings</b><br><br>Learn about Palindrome, Anagram, and Basic Problem Solving in strings.                                                     |
| Module 8   | <b>Practice Question on Arrays</b><br><br>Learn to solve the free response question asked previously in the AP Computer Science A Exam about the Arrays concept. |



**AP Computer Science A Champion Certificate**



# Top benefits of learning at Codingal



## 1. Regular PTM

Great opportunity for parents and teachers to open two-way communication and to share insights and information for the holistic development of a child.



## 2. Regular doubt session

After every module solve all your queries in this personalized session. The toughest problems addressed – concepts revised and doubts cleared!



## 3. Engaging quizzes

Quizzes are fun and help us remember important facts. These well-targeted and tailor-made quizzes will boost self-esteem and confidence among kids.



## 4. Thrilling competitions

Regular competitions are conducted to encourage students to showcase their skills and develop their ideas.

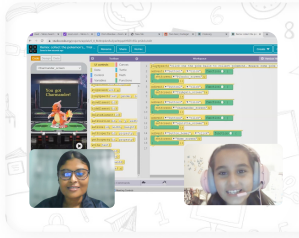


## 5. Learning Certificates

Show the world what you can do with a certificate for every amazing skill you master.



# Top benefits of learning at Codingal



## 6. Live personalized classes

Understand concepts faster with personal attention from teachers. Learn coding from highly qualified teachers trained to make learning effective and impactful.



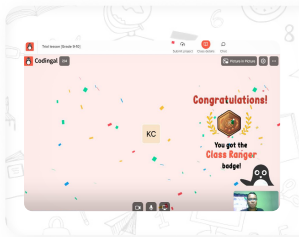
## 7. Lifetime access to class videos

Forgot what was taught in the last class? No worries. Watch the recorded class video anytime to refresh your memory.



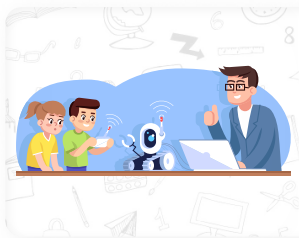
## 8. Lifetime access to resources

Get lifetime access to our exclusive learning content including DIY sheets, videos, and other resources.



## 9. Gamified learning

Codingal makes learning fun with gamification. Students can take quizzes or complete projects to earn points, badges, and rewards.



## 10. After class projects

For each class, students have the opportunity to complete an after-class project, enabling them to apply what they've learned, test their skills, and receive valuable feedback from their teacher.



## Students and parents love Codingal



**Ray**

Japan

“ I love learning with Codingal. It's always fun and the teacher is nice and kind.



**Lavanya**

India

“ The courses develop multiple skills and ensure maximum clarity of coding concepts.



**Billie**

Kenya

“ Codingal classes are so much fun. I've started to really enjoy creating things with code.



**Elara Dalton**

USA

“ I referred Codingal to my friend, and now we're both into coding! She joined the classes too. Plus, Codingal gave me a whole month of free coding classes.



TrustScore **4.8** | **863** reviews



4.6 out of 5



5 out of 5

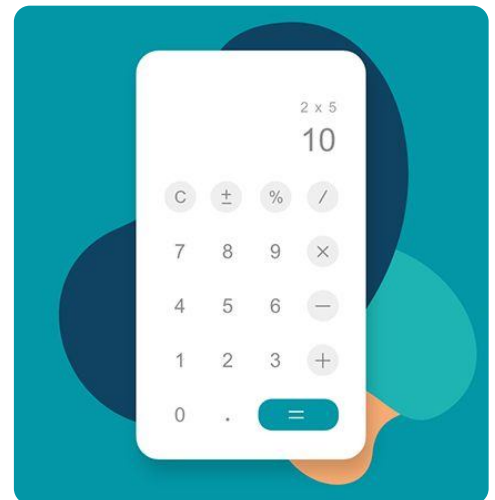


# Unlock your child's potential in Math & Science with AI and Coding



**In Science, AI and Coding enable simulations and data analysis.** Students use AI models to predict outcomes in biology, chemistry, and climate science, learning how coding drives scientific discovery and accelerates problem-solving in real-world applications.

**Learning AI and Coding help students apply mathematical concepts like linear algebra and statistics to real-world problems.** Coding AI models allows them to visualize math, make predictions, and see how math powers data analysis and decision-making.



**Our teachers provide individual attention to kids, customize projects based on their interests and make them fall in love with AI & Coding, enabling them to also perform well in other subjects in school.**



# Foundation of Codingal's curriculum

## **BLOOM**

Bloom's Taxonomy is a standard guideline for K-12 content development, which includes 6 stages of learning: Remember, understand, apply, analyze, evaluate and create.

## **BIDE**

The BIDE (Broad, Inspiring, Deep and Efficient) model has been developed by Codingal in-house to ensure that our curriculum caters to the unique learning style of every child.

## **STEAM**

STEAM is an approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking.



## AI & Coding - Gateway to success in the future



**Now is a great time to be entering the coding world because technology will change more in the next 10 years than it has in the last 50.**

**- Bill Gates**



**Whether you want to uncover the secrets of the universe, or you just want to pursue a career in the 21st century, basic computer programming is an essential skill to learn.”**

**- Stephen Hawking**



## A note from Codingal Founders



Teaching coding and AI to kids is a profound responsibility. Our dedicated educators and meticulously crafted curriculum reflect our deep understanding and commitment to nurturing future innovators.

### **Vivek Prakash**

Co-founder & CEO  
B.Tech & M.Tech, IIT Roorkee



Learning to code is not just about reaching new heights like going to Mars or the moon. Coding, along with AI, equips kids with the skills to think critically and creatively, empowering them at multiple levels.

### **Satyam Baranwal**

Co-founder & COO  
B.Tech, IIT Dhanbad





Begin your child's AI & coding journey today

Is your child ready for the future?

Visit [www.codingal.com](http://www.codingal.com)

Try a free lesson!

# Thank You

Built by alumni of

Google amazon



IIT Roorkee



IIT Dhanbad

In partnership with



IIT Bombay



IIT Guwahati



Hewlett Packard  
Enterprise



BITS Pilani

Accredited by STEM.org



Backed by



Combinator



REBRIGHT  
PARTNERS

Got questions?  
Contact us  
anytime.

Send us a message



[support@codingal.com](mailto:support@codingal.com)



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