Creative Thinkers Wanted

Introducing
AP® Computer Science Principles

The Power of Computer Science

The Innovation Engine

Wherever you look in today's industries, computer science is there. Whether it's 3-D animation, engineering, transportation, sports science, medicine, visual design, finance, or statistical analysis, computer science powers the technology, productivity, and innovation that drive the world.

Ideas Come to Life

The AP® Computer Science Principles course introduces students to the essential ideas of computer science and helps them to understand how computing and technology can influence the world around them. As part of this course, students will be exposed to a broad range of computing tools and skills while creatively addressing real-world issues and concerns.

Students will conceive and implement digital projects, utilizing some of the same processes that writers, programmers, engineers, designers, and other creators use to bring their ideas to life.

Beyond Computing

AP Computer Science Principles can help students prepare for success not only in computer science majors and careers but also throughout a broad range of other fields and interests. Along with the fundamentals of computing, students will learn:

→ Creative problem solving
→ How to apply computational processes to analyze large data sets
→ Internet structures and important cyber security issues
→ Programming and global impacts of computing

Students will have an opportunity to:

→ Use computer science to address real-world issues that interest them
→ Create programs or technology that have practical impact
→ Gain skills relevant across other disciplines and industries

Why should students take AP Computer Science Principles?

Almost every field today — including business, law, medicine, and science — requires an understanding of computing. The skills students learn in the course can be applied across a wide range of careers and disciplines.

Do students have to know how to code?

No, previous experience with coding is not required. While programming is taught in the course, it's only one among many aspects of computing that students will learn.

What will students do in class?

Students will learn the skills needed to create digital projects — from simple games and apps to programs that can analyze large data sets or inspire the creation of visual art and music.

What if students know some coding?

Great. Those students can build on the skills they already have and apply them to exciting and relevant projects.

> "I think the students liked the use of creativity. They liked the relevance and the ability to research things that excited them."
>
> —Barbara Froehlich
> AP Computer Science Principles Teacher

What do students need to take the class?

Successful completion of Algebra I is highly recommended. A home computer, while a good idea, is not required to take this course.

What's the difference between AP Computer Science Principles and AP Computer Science A?

AP Computer Science A is a problem-solving and programming-focused course using Java as the specific coding language. AP Computer Science Principles is built around other fundamentals of computing, and teachers will select the programming language(s) used in class. This course also includes problem solving, working with data, and understanding the structure of the Internet and how it works.

> "AP Computer Science Principles opened my mind to just about everything. I learned that computer science and programming is not just for some people — it's for anybody."
>
> —Mikiyah Smith, Sophomore

Create the Future

Ask a school counselor or AP Coordinator whether AP Computer Science Principles will be offered at your school and how to enroll.

For more information, visit **collegeboard.org/CSP**

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